Geisinger Lewistown Hospital

Community Health Needs Assessment

January 1, 2021 – December 31, 2023

Adopted December 2020

Geisinger

Contents

Our Commitment to Our Communities

Founded over a century ago as a single hospital in Danville, Pa., today Geisinger provides superior healthcare services to communities throughout central and northeast Pennsylvania. The nonprofit mission of the professionals at our nine hospital campuses and other locations is not only to meet the immediate healthcare needs of their region's residents, but to anticipate, identify and address future health issues and trends.

Our integrated healthcare system has become a nationally recognized model of care delivery. Together with our communities, we have a shared goal to help people stay well, not just through clinical treatment and positive patient experiences, but also through education and programs that help them prevent or manage disease and live healthier lives.

The community health needs assessment (CHNA) report is exactly what the name describes. Every three years we conduct a formal survey to identify the specific needs of the communities and regions we serve — and then we develop meaningful, measurable responses to those needs in conjunction with our communities.

Geisinger's well-being is closely tied to the health of our communities, and we remain committed to understanding and responding to identified community health needs. We have taken major steps toward constant improvement and more focused responsiveness to community needs at each of our campuses as demonstrated by this report.

We are 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 the communities where we live, work and play.

A Collaborative Approach to Community Health Improvement

CHNA Collaborating Health Systems

The 2021 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 15 counties across central and northeastern Pennsylvania, which represented the health systems' collective service areas. Collaboration in this way conserves vital community resources while fostering a platform for "collective impact" that aligns community efforts toward a common goal or action. To distinguish unique service areas among hospitals, regional research and reporting was developed.

2021 CHNA Geographic Regions and Primary Service Counties

Region	Primary Service Counties	Hospitals
Central	Columbia County Montour County Northumberland County Schuylkill County Snyder County Union County	Geisinger Bloomsburg Hospital Geisinger Medical Center Geisinger Shamokin Area Community Hospital Geisinger Encompass Health Rehabilitation Hospital Evangelical Community Hospital
North Central	Clinton County Lycoming County	Geisinger Jersey Shore Hospital Geisinger Medical Center Muncy (new)
Northeast Region	Lackawanna County Luzerne County Wayne County Wyoming County	Allied Services Rehab Hospital Geisinger Community Medical Center Geisinger South Wilkes-Barre Geisinger Wyoming Valley Medical Center Heinz Rehab Hospital
Western Region	Centre County Juniata County Mifflin County	Geisinger Lewistown Hospital

Geisinger Systemwide CHNA Approach

The 2021 CHNA focused on the primary service areas of each of Geisinger's nine hospital campuses. Understanding overlapping geographic boundaries, socioeconomics, and related community indicators, Geisinger hospitals were grouped into regions to allow for localized data comparisons.

Systemwide priorities were determined to address common needs across the whole service area, while individual hospital Implementation Plans outlined specific strategies to guide local efforts and collaboration with community partners.

The following pages describe the process, research methods, and findings of the 2021 CHNA.

2021 CHNA Executive Summary

CHNA Leadership

The 2021 CHNA was overseen by a Planning Committee of representatives from each health system, as well as a Regional Advisory Committee of hospital and health system representatives. Community health consultants assisted in all phases of the CHNA, including project management, data collection and analysis, and report writing.

CHNA Planning Committee

Rachel Manotti, Vice President Strategy and Market Advancement, Geisinger
Allison Clark, Community Benefit Coordinator, Geisinger
John Grabusky, Senior Director Community Relations, Geisinger
Barb Norton, Director Corporate & Foundation Relations, Allied Services Integrated Health System
Sheila Packer, Director Community Health and Wellness, Evangelical Community Hospital

CHNA Regional Advisory Committee

David Argust, Vice President, Allied Services Integrated Health System
Jordan Barbour, Operations Director, Geisinger Marworth Treatment Center
Renee Blakiewicz, Administrative Director, Geisinger Community Medical Center
Julie Bordo, Vice Presidents, Geisinger Wyoming Valley Medical Center/Geisinger South Wilkes-Barre
Jim Brogna, Vice President, Allied Services Integrated Health System
Lissa Bryan-Smith, Vice President, Geisinger Bloomsburg Hospital
Sherry Dean, Operations Manager, Geisinger Community Medical Center
Stephanie Derk, Specialist Community Engagement, Geisinger
John Devine, MD, Vice President, Evangelical Community Hospital
Kristin Dobransky, Administrative Fellow, Geisinger Holy Spirit*
Brian Ebersole, Senior Director, Geisinger
Eileen Evert, Senior Director, Geisinger Health Plan
Starr Haines, Communications Specialist, Geisinger
Allison Hess, Vice President, Geisinger Health Plan
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Rebecca Ruckno, Director, Geisinger
Brock Trunzo, Communications Specialist, Geisinger Jersey Shore Hospital
Tina Westover, Senior Tax Accountant, Geisinger
Amy Wright, Business Development Director, Geisinger Encompass Health Rehabilitation Hospital
Randy Zickgraf, Director, Geisinger
Amy Zumkhawala-Cook, Administrative Director, Operations, Geisinger Holy Spirit*

*Geisinger Holy Spirit representatives served on the RAC through November 1, 2020, the effective date for the hospital's transfer of ownership to Penn State Health.

Consulting Team

Catherine Birdsey, MPH, CHES, Baker Tilly
Colleen Milligan, MBA, Community Research Consulting

CHNA Methodology

The 2021 CHNA was conducted from July to December 2020. Quantitative and qualitative methods, representing both primary and secondary research, were used to illustrate and compare health and social trends and disparities across each region and hospital service area. The following research methods were used to determine community health needs:

- Statistical analysis of health and socioeconomic data indicators; a full listing of data references is included in Appendix A, and a summary of data findings is included in Appendix B
- Electronic survey of key stakeholders, including experts in public health and individuals representing medically underserved, low-income and minority populations; a list of key informants and their respective organizations is included in Appendix C
- Discussion and prioritization of community health needs to determine the most pressing health issues on which to focus community health improvement efforts

Community Engagement

Community engagement was an integral part of the 2021 CHNA. A Virtual Town Hall was held in August 2020 to announce the onset of the CHNA and encourage broad stakeholder participation. A Key Informant Survey was sent to nearly 1,000 community stakeholders to solicit input on health disparities, opportunities for collaboration, COVID-19 response, community health priorities, among other insights. Continued community engagement activities are planned to ensure ongoing dialogue and a forum for addressing community health needs.

Prioritized Community Health Needs

To work toward health equity, it is imperative to prioritize resources and activities toward the most pressing and cross-cutting health needs within the community. Priorities were jointly determined by the CHNA collaborating health systems using feedback from community stakeholders. Through this process, CHNA partners affirmed the following priority health needs:

- **Access to Care**
- **Behavioral Health**
- **Chronic Disease Prevention and Management**

These priorities are consistent with those determined in the previous FY2019 CHNA and reflect complex needs requiring sustained commitment and resources.

Maternal and child health needs are also prevalent across the service area. While CHNA partners did not identify maternal and child health as a priority issue due to the need to focus available resources, many of the hospitals support maternal and child health strategies as part of their Implementation Plan. These strategies include free or low-cost classes and support groups for pregnant and new mothers, lactation consultation, treatment and support services for mothers in recovery, social assistance, and postpartum depression screening, among others.

CHNA Implementation Plan

To direct community benefit and health improvement activities, CHNA partners created individual hospital Implementation Plans to detail the resources and services that will be used to address health priorities. The Implementation Plans build upon previous health improvement activities and take into consideration new health needs and the changing health care delivery environment as detailed in the 2021 CHNA.

Board Approval

The 2021 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.

The CHNA report was presented to the Geisinger Board of Directors and approved in December 2020. Geisinger is committed to advancing initiatives and community collaboration to support the issues identified through the CHNA.

Following the Board's 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.

Geisinger's prior CHNA was adopted in June 2018, consistent with their fiscal tax year beginning July 1 and ending the following June 30. Starting in 2021, Geisinger will transition its year-end to a calendar year. Due to the change in year-end, the 2021 CHNA and Implementation Plan adopted for Geisinger Lewistown Hospital will be in effect from January 1, 2021 through December 31, 2023.

For questions regarding the CHNA or Geisinger's commitment to community health, please contact Allison Clark, Community Benefit Coordinator, Strategy & Market Advancement, Geisinger at aclark1@geisinger.edu.

Western Region Summary of Findings

Population Trends

The Western Region is predominantly rural. The total population of the region is approximately 240,000; 70% of the total population is located within Centre County, driven predominantly by State College, home to Penn State University (PSU) Main Campus and the largest municipal population density in the Western Region. The Centre County population is projected to continue to grow by 3.5% through 2025.

Centre County's population is economically and demographically impacted by PSU. Age stratification and racial diversity in Centre County reflect this impact. Centre County has a significantly lower median age than both the state and nation and nearly 1 in 3 residents is age 15 to 24 years. Centre County also benefits from more ethnic and racial diversity than surrounding counties with about 7% Asian (higher than state (4%) and nation (6%)); almost 4% Black; and 3% Latinx populations.

Juniata County has the largest Latinx population in the Western Region at 4.5% and it is projected to increase to 5.5% by 2025

The smallest of the three counties that make up the Western Region, Juniata County, experienced the largest population growth from the FY2019 CHNA and—consistent with strong historical growth trends—growth is anticipated through 2025. Mifflin and Mifflintown are the largest population density centers in Juniata County. Of particular note is the growth of the Latinx population within Juniata County, which at 4.5% is the highest in the Western Region and projected to increase to 5.5% by 2025.

Mifflin County has the oldest population in the Western Region with approximately 22% of residents age 65 or older, compared to Centre (14%), Juniata (20%), the state (19%), and the nation (17%). The total Mifflin County population declined approximately 1% since the FY2019 CHNA and is expected to continue to decline 0.5% through 2025.

The Western Region is home to the largest Amish population in the CHNA service area with 8,642 Amish residents, about 3.5% of the region's total population. Mifflin County has the largest settlement with 4,089 Amish, making up nearly 9% of the county population. The cloistered tendencies of Amish and other Plain populations make tracking health trends—and responding to needs—more challenging.

Socioeconomic Trends

Education attainment in Mifflin and Juniata counties is nearly half the state and national averages, while Centre County exceeds these benchmarks

The Western Region is predominantly rural and has a long heritage of agriculture and manufacturing. Centre County differs from Mifflin and Juniata counties with a higher percentage of workers in the healthcare and education sectors. The region has a predominantly blue-collar workforce, with the exception of State College (Centre County), driven directly by PSU Main Campus. Education attainment in Mifflin and Juniata counties is

approximately half the state and national averages, while Centre County exceeds these benchmarks.

About 40% of Key Informant Survey respondents named poverty among the top three contributing factors to health concerns, ranking it as the #1 contributor in the region. Related socioeconomic factors, including transportation options and affordable housing, were also indicated as top community needs.

The population of students and young people living on or near PSU Main Campus impacts economic measures for Centre County, which reports 18% of the total population living in poverty. A closer look at data for State College and neighboring communities reveals that this percentage is likely driven by a more diverse, younger population, versus permanent fulltime residents. The percentage of children in poverty is a more reliable data point by which to compare.

Nearly 24% of Mifflin County children live in poverty; the Amish population likely contributes to this disparity

Nearly 24% of Mifflin County children live in poverty compared to 18.5% of children in Juniata County, 12% in Centre County, 18% in the state, and 19.5% in the nation. The Amish population in Mifflin County likely contributes to the high percentage of children living in poverty.

Juniata and Mifflin county residents are more likely to own their home, and homes are generally more affordable when compared to the state and nation, with fewer residents considered housing cost burdened. Housing cost burden is defined as spending 30% or more of household income on rent or mortgage expenses. Centre County housing is the newest and most expensive, although homeowners are the least likely within the region to be housing cost burdened. Both rentals and rental housing cost burden are higher in Centre County than state and national averages, driven predominantly by PSU.

Unemployment more than doubled in the Western Region due to COVID-19

As a result of the COVID-19 pandemic, the Western Region unemployment rate more than doubled from May 2019 to May 2020. As of May 2020, unemployment rates among Western Region counties (8%-11%) were lower than the state and nation (13%).

Racial and ethnic socioeconomic disparities exist across the Western Region, although findings should be interpreted with caution due to low population counts and the impact of PSU. Most notably, Black residents in Centre County and Latinx residents in Juniata and Mifflin counties are among the most likely to live in poverty and least likely to attain higher education.

Health Trends

Access to Healthcare

Juniata County is a HPSA for primary, dental, and mental healthcare

Generally, more healthcare providers and social services are available in Centre County than Juniata and Mifflin counties. The Centre County primary and mental health provider density rates

are more closely aligned with the state and nation. Mifflin and Juniata counties' primary care provider rates are approximately 25 to 50 points (respectively) below Centre County, and mental health provider rates are more than 100 points lower. Juniata and Mifflin counties are mental Health Professional Shortage Areas (HPSAs); Juniata County is also a primary care HPSA. Of note, all three counties have fewer dental providers and are dental HPSAs for low-income residents.

Key Informant Survey respondents affirmed the need for additional behavioral health services, particularly mental health services. Mental health services were the top ranked missing resource in the region, identified by 66% of respondents. Substance use disorder services were the sixth ranked missing resource, potentially indicating an awareness of capacity among existing providers.

The total uninsured population continued to decline across the region, although Juniata (10.5%) and Mifflin (12.5%) counties have a higher percentage of uninsured than Centre County (5.5%), the state (6%), and the nation (9%). Juniata and Mifflin counties have a higher percentage of uninsured residents across all age bands, with the highest disparity in children under age 6.

Nearly 23% of all children under age 6 in Mifflin County and nearly 20% in Juniata are uninsured, compared to 5% statewide

Latinx residents are more likely to be uninsured than Whites in all counties

Nearly 23% of all children under age 6 in Mifflin County and nearly 20% in Juniata are uninsured, compared to 5% statewide. The prominent Amish population—which is less likely to participate in health insurance programs—impacts this disparity, however Latinx residents in these counties are more likely to be uninsured than Whites. In Centre County, Black and/or Latinx residents are more likely to be uninsured than Whites.

<u>Chronic Disease Prevention and Management</u>

In general, Centre County residents report better overall health measures than residents in Juniata and Mifflin counties, which is consistent with socioeconomic findings. However, obesity continues to be a concern across the region. Adult obesity has been steadily decreasing over the past four years in Centre and Juniata Counties, while Mifflin County has been mostly climbing and is the highest of the counties at 35% of adults. Mifflin County adult obesity exceeds state and national (31%) averages.

23%-27% of youth in Juniata County are obese compared to 17%-19.5% statewide

Mifflin County has historically had a higher percentage of obese youth. Prior to the 2017-2018 school year, 18% of students in grades K-6 and 24% of students in grades 7-12 were obese, higher than the state averages of 16% and 19%, respectively. Youth obesity has been steadily rising in Juniata County since 2013 and is currently the highest in the region, affecting 23% of students in grades K-6 and 27% of students in grades 7-12. Centre County youth obesity has historically been lower than state averages,

but increased for youth in grades 7-12. Key informants saw health habits as a top contributing factor to adult and youth obesity, as well as other regional health concerns.

In line with the state and the nation, tobacco use was declining across the Western Region; however, there was an uptick in tobacco use from 2016-2017 in PA and the Western Region, while the nation continued to decline. This reverse trend may be related to the popularity of e-cigarettes. Mifflin County has the highest rate of adult smoking at 19%, consistent with the state, while Juniata (18%) and Centre (17%) counties are below the state.

Data for tobacco use among youth is limited across the Western Region, but statewide trends show a steady increase in e-cigarettes and vaping since 2015 with nearly 20% of students using e-cigarettes in the past 30 days. In Centre County, this statistic is about 15%, but increased 4 percentage points from 2017.

Tobacco use is increasing among adults and youth in PA and the Western Region

These risk factors may contribute to higher death rates from chronic disease. Heart disease and cancer continue to be the leading causes of death in the Western Region and the state and nation. The heart disease death rate has been variable within the Western Region, but both Centre and Juniata counties saw recent increases. The cancer death rate declined in all counties, but remains higher in Mifflin County than the state and nation. Centre County has higher breast and prostate cancer incidence rates, but lower death rates, indicating positive screening practices for early detection and treatment.

In Juniata County, diabetes prevalence nearly doubled from 10% to 18% from 2016 to 2017; the diabetes death rate per age-adjusted 100,000 (26.6) exceeds both the state (20.5) and nation (21.3). Reflective of having the highest tobacco use in the Western Region, Mifflin County has a higher death rate due to chronic lower respiratory disease and lung cancer.

In Juniata County, diabetes prevalence nearly doubled from 10% to 18% from 2016 to 2017

Higher poverty rates, lower educational attainment, and rural geographies consistent with much of the Western Region contribute to health disparities and reduce residents' ability to access needed health and social services. People of color historically and frequently experience a higher incidence of poor health and socioeconomic status than White people. While the Western Region is significantly less diverse compared to the state and nation, growing racial and ethnic populations should be continually evaluated to identify and address health disparities.

<u>Behavioral Health</u>

Behavioral health was seen as a top community health need by Key Informant Survey respondents. Behavioral health needs are particularly evident in Mifflin County, where historic economic downturn has had a reciprocal impact on poorer behavioral

The hospitalization rate for mental health disorders in Mifflin County is more than 40 points higher than the state rate; suicide is also higher and increasing

health measures. While the economy is growing today, behavioral health needs continue to be a pressing concern. At 130.9 per 10,000 residents, the hospitalization rate for mental health disorders in Mifflin County is more than 40 points higher than the state rate of 88.8 and significantly higher than Centre (60.4) and Juniata (74.1) counties. Mifflin County also has a higher rate of death due to suicide compared to the state and nation, and the rate is increasing. Compounding demonstrated behavioral health needs, Juniata and Mifflin counties are HPSAs for mental healthcare.

Hospitalizations for opioid overdose across PA decreased by 23.8% from 2017 (3,500) to 2018 (2,667). During this time, overdoses from pain medication increased 8 percentage points while heroin overdoses decreased 8 points. Opioid overdose hospitalizations were more prevalent in areas of socioeconomic distress.

Overdose deaths in Centre County declined in the past two years

In Centre County, overdose deaths dropped from a high of 22 in 2018 to 7 as reported in August 2020. While recent data are not reported for Juniata and Mifflin counties, these counties had fewer deaths than Centre County in previous years. As of August 2019, Neonatal abstinence syndrome (NAS) rates per 1,000 births in Centre (4.8) and Mifflin (4.9) counties were less than half of the state rate (13.8). While these findings are indicative of improved access to care and treatment for substance use disorder, they should continue to be monitored, particularly in light of COVID-19. The American Medical Association (AMA) stated in October 2020 that it, “Is greatly concerned by an increasing number of reports from national, state and local media suggesting increases in opioid- and other drug-related mortality—particularly from illicitly manufactured fentanyl and fentanyl analogs.”

While adult drinking is increasing across the Western Region, DUI deaths are decreasing

Nationally, statewide, and across the Western Region, adults reported more excessive drinking compared to the FY2019 CHNA report, with the highest percentage still among Centre County adults. Despite increased consumption, driving deaths due to alcohol impairment declined across all geographies, except Juniata County where it increased by 15 points, reflecting 11 total deaths from 2014-2018.

Centre and Juniata county youth report lower and/or declining substance use, including alcohol and marijuana, than youth statewide. Youth in the two counties are also less likely to report feelings of depression and attempted suicide, although it is worth noting that more than 1 in 4 youth report depression and nearly 1 in 10 report attempted suicide.

Public health data for youth behavioral health measures are not available for Mifflin County. Adult behavioral health data trends suggest behavior health needs are likely prevalent among youth and should be examined through health and social service provider data.

Maternal & Child Health

The birth rate in Juniata and Mifflin counties has historically outpaced Centre County and the state. Consistent with more favorable socioeconomic factors, women in Centre County tend to have better health outcomes than women in Juniata and Mifflin counties. While none of the counties, nor the state (74%), meet the national average (77.5%) for prenatal care in the first trimester, Centre County (76%) is closest compared to Juniata (68%) and Mifflin (65%) counties.

Despite disparities in early prenatal care, the Western Region has fewer low birth weight and preterm births than the state and nation

Despite disparities in early prenatal care, all three counties report fewer low birth weight and preterm births than the state and nation and meet Healthy People 2020 goals. Additionally, nearly 90% of Centre County mothers are breastfeeding their infants at hospital discharge, compared to 83% in Juniata County and 79% in Mifflin County and a statewide average of 82%.

Consistent with higher smoking rates across PA, more mothers in the Western Region smoke during pregnancy than the national average. Mifflin County has the lowest percentage of mothers who report *not* smoking (83%) compared to Centre (91%) and Juniata (90%) counties, the state (90%), and the US (93.5%).

The Mifflin County infant death rate is nearly twice the state and national rates. Mifflin County also has a higher percentage of births to teens compared to the state and other Western Region counties. Mifflin County's four-year average for teen births is about 5.3% compared to 4.5% statewide.

In Mifflin County, the infant death rate and percentage of teen births are higher than the state

Senior Health

Juniata and Mifflin counties are aging faster than the population statewide and nationally, and seniors tend to be less healthy overall. While some senior health measures improved from the previous CHNA, these seniors still experience more chronic conditions than state and national averages and are more likely to be socially isolated.

Approximately 77% of Juniata and Mifflin county seniors have chronic condition comorbidities compared to 71% in Centre County, 72% in PA, and 69% in the US. Despite having an increased number of conditions, annual Medicare spending among Western Region senior Medicare beneficiaries is generally lower than state and national spending, which may reflect an overall lower cost of living.

Senior Medicare Beneficiaries in Juniata and Mifflin counties experience more chronic disease than state and national averages

Centre County (189.5) had the steepest increase in the Alzheimer's disease death rate (calculated per 100,000 people) over the past five years and has a higher rate than PA (180.8), but a lower rate than the nation (233.2). Mifflin County's rate (121.6) has been variable, but lower than the benchmarks during this time. Rates are not available for Juniata County.

Complicating the challenge of chronic disease management, more seniors live alone in PA (13%) than the national average (11%). Mifflin (13%) and Juniata (12%) are consistent with PA, while Centre County (9%) has the lowest percentage of seniors living alone. Living alone is a key driver for social isolation, which is associated with poor mental and physical health among seniors.

COVID-19 Statistics

Coronaviruses are a large family of viruses which may cause illness in animals or humans. COVID-19, named as a novel coronavirus discovered in Wuhan China in December 2019, caused a worldwide pandemic, resulting in nearly one million deaths worldwide (as of the printing of this report) and global economic impact. New insights are derived daily during this dynamic situation and we will continue to learn from data collected throughout the pandemic. As of October 2020, Centre County had 3,614 cases and 14 deaths; Juniata County had 205 cases and 8 deaths; and Mifflin County had 292 cases and 3 deaths due to COVID-19.

Responses from the Key Informant Survey indicated that community representatives were "somewhat" to "moderately" worried about the long-term impact of COVID-19 on communities and residents. They were most concerned about the impact on the mental and emotional health of residents and community financial health. Most agencies had effectively transitioned to using technology and social media to provide virtual learning and services, although key informants acknowledged an increased need for safety net services. They encouraged increased cross-sector collaboration to disseminate services and consistent communication.

Racial and Ethnic Disparities

Historical public policies and systematic inequities have perpetuated stark and persistent racial disparities in wealth, education attainment, health, power distribution, and nearly every measure of well-being for people of color. While efforts to reconcile these disparities are being made, people of color in the Western Region continue to experience these inequities, as demonstrated by disproportionate poverty levels, lower education attainment, and related socioeconomic measures. These social determinants of health directly drive decreased access to healthcare, higher death rates, and overall lower life expectancy. About 39% of key informants indicated that social and community context, including perceptions of discrimination and equity, declined in the past 3-5 years.

About 39% of key informants indicated that social and community context declined in the past 3-5 years

Across the state and nation, and demonstrated where data is available for the Western Region, Black and Latinx residents historically experience disproportionately high death rates due to chronic conditions. Women of color and their babies also experience poorer maternal and birth outcomes.

Because the Western Region is less racially and ethnically diverse, these disparities can be difficult to demonstrate due to low numbers for data collection. To ensure disparities are

quantified and reconciled, it is imperative that patient outcome data is carefully tracked and regularly reviewed for patients of color to ensure equitable healthcare access and outcomes.

Rural Health Factors

Approximately one-third of key informants perceived that economic stability had declined across the region. Rural communities have been particularly impacted due to decreased availability of services, as well as increased travel time and distance to health and social services. These factors can delay or deter residents' ability to receive care when they need it.

Generally, more healthcare providers and social services are available in Centre County than Juniata and Mifflin counties. Juniata County is a HPSA for primary care, and both Juniata and Mifflin counties are HPSAs for mental healthcare. Data demonstrate increased health and social need in Juniata and Mifflin counties, which is consistent with higher socioeconomic needs and reduced access to care.

Telehealth and other virtual services are increasing and can be a successful way to mitigate rural health disparities. Internet service and smart devices are essential tools for successful utilization of these services. In the Western Region, residents in Juniata (79%) and Mifflin (77.5%) counties are less likely to own a computer or smart phone compared to Centre County (91%), the state (86.5%), and national (89%) averages. Approximately 72% of households in Juniata County and 66.5% in Mifflin County have a broadband internet subscription, compared to 81% in Centre County and about 80% statewide and nationally.

Only 72% of households in Juniata County and 66.5% in Mifflin County have a broadband internet subscription

Community Engagement and Collaboration

Among questions on the Key Informant Survey, respondents were asked about their partnerships with health providers and community engagement of diverse stakeholders and residents. Approximately 78% of respondents indicated that they regularly partnered with hospitals on health improvement initiatives. About 64% of respondents thought that these types of partnerships were effective at addressing health needs, while 20% of informants thought there was room for improvement. Similarly, 20% of informants thought that healthcare providers could do better to garner resident feedback or engage residents when developing health improvement initiatives.

Using shared data or measurement tools; demonstrating outcomes; and aligning service areas were seen as the top ways that healthcare and social service providers could improve effective collaboration. Multiple respondents referenced "silos" that keep community-based organizations from effectively collaborating on community initiatives. Other recommendations included working to set aside competing agendas. Sufficient resources and formal structure were noted as needed factors to foster accountable leadership and advance discussion and planning.

A full summary of CHNA research findings and comparisons to state and national benchmarks follows.

Full Report of CHNA Research Findings

Secondary Data Profile

Background

Secondary data, including demographic, socioeconomic, and public health indicators, were analyzed for the Western Region and Geisinger Lewistown Hospital service area to measure key data trends and priority health issues identified in the FY2019 CHNA, and to assess emerging health needs. Data were compared to Pennsylvania (PA) and United States (US) benchmarks and Healthy People 2020 (HP2020) goals, as available, to assess areas of strength and opportunity for the region. Healthy People 2020 is a US Department of Health and Human Services health promotion and disease prevention initiative that sets science-based, 10-year national objectives for improving the health of all Americans.

All reported demographic and socioeconomic data were provided by ESRI Business Analyst, 2020 and the US Census Bureau, American Community Survey, unless otherwise noted. 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 use disorder, and maternal and child 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.

Age-adjusted rates are referenced throughout the report to depict a comparable 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 of residents age 18 or over conducted nationally by states as required by the CDC. A consistent survey tool is used across the US to assess health risk behaviors, prevalence of chronic health conditions, access to care, preventive health measures, among other health indicators. BRFSS data indicators are referenced throughout the public health data analysis.

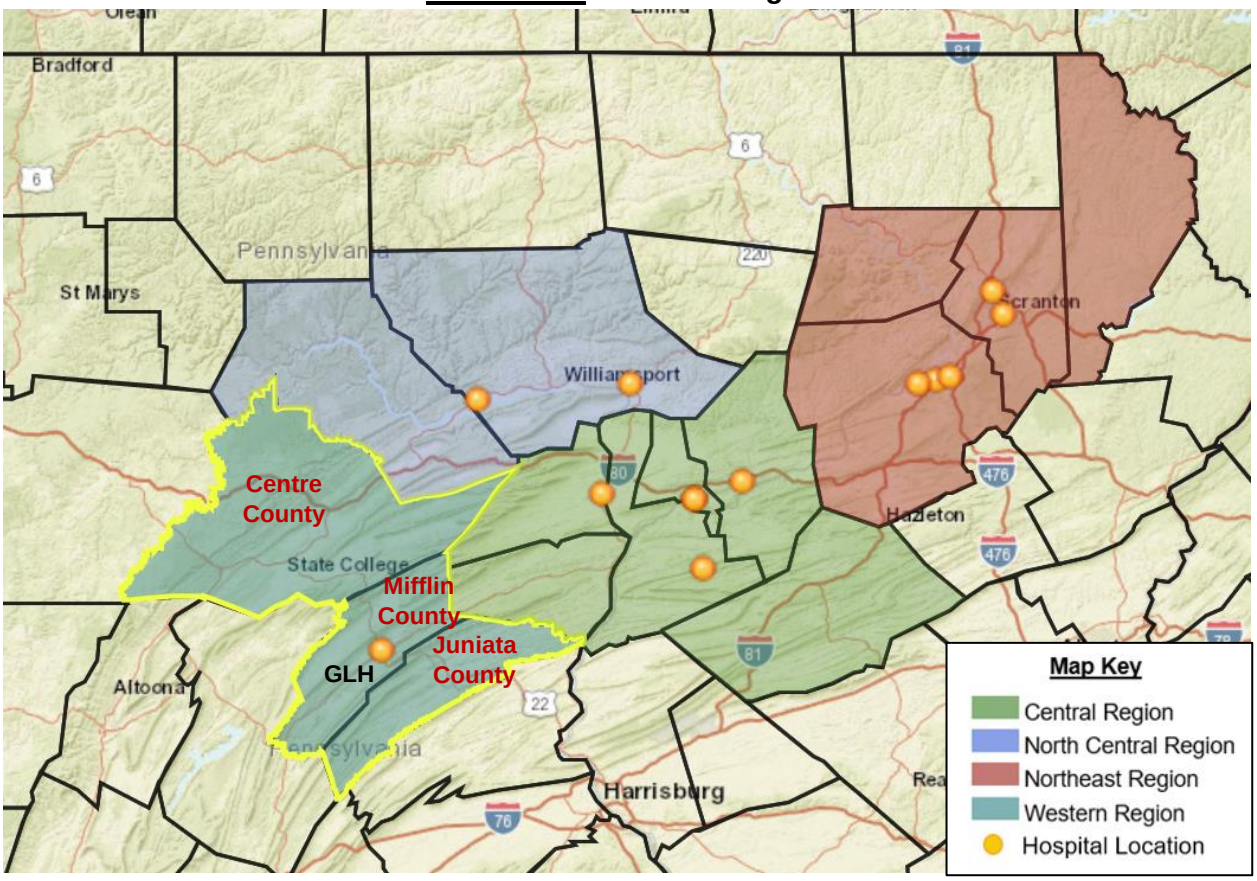
A summary of public health data findings is included in Appendix B. The summary provides a snapshot of areas of strength and opportunity for the region in comparison to state and national benchmarks.

Western Region Service Area

For purposes of the CHNA, Geisinger and its CHNA partners, Allied Services Integrated Health System and Evangelical Community Hospital, focused on their collective primary service areas comprising 15 counties across Pennsylvania. To better understand the strengths and challenges of unique communities across this wide geography, CHNA partners grouped communities into four regional service areas based on common political jurisdictions, geographical considerations, population trends, and related factors.

The Western Region is comprised of three counties and is primarily served by Geisinger Lewistown Hospital (GLH), as shown on the map below.

2021 CHNA 15-County Service Area
Focus Area: Western Region



Western Region Population Trends

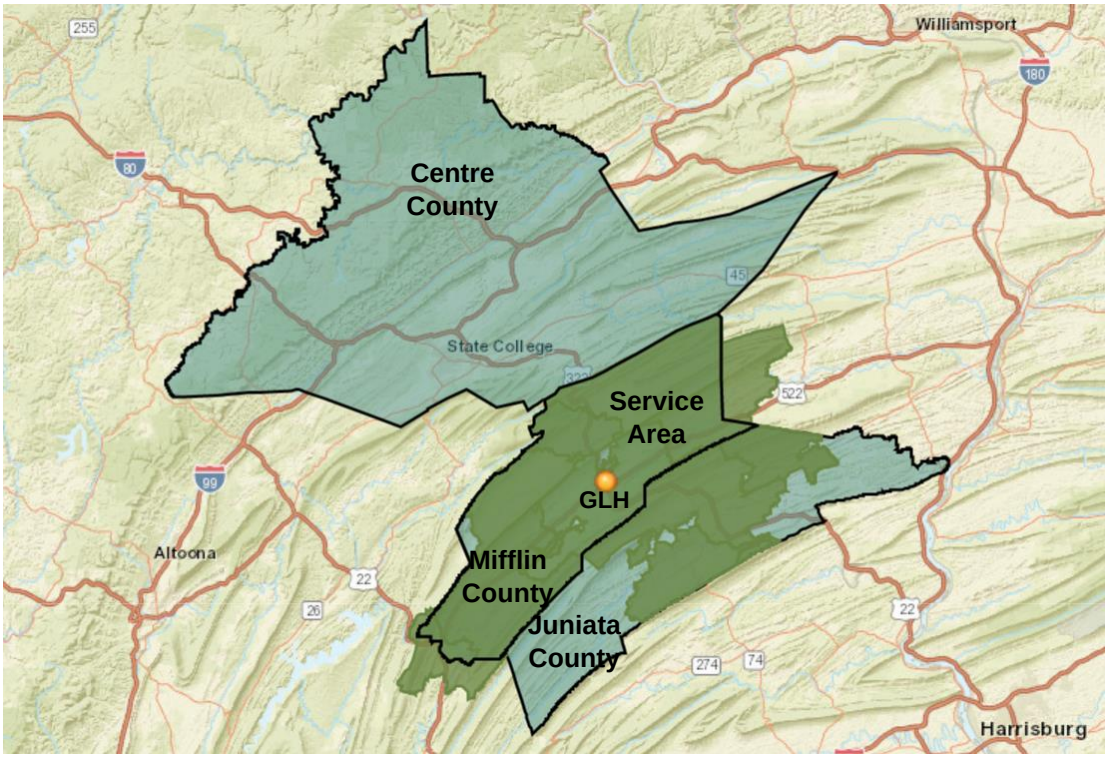
	2017 Population*	2020 Population	Growth 2017-2020	Growth by 2025
Centre County	164,029	167,509	2.1%	3.5%
Juniata County	24,936	25,729	3.2%	1.5%
Mifflin County	47,650	47,107	-1.1%	-0.5%
Total Population	**236,615**	**240,345**	**1.6%**	**2.5%**

*Population as measured at the time of the FY2019 CHNA.

Geisinger Lewistown Hospital Service Area Description

For the purposes of the 2021 CHNA, GLH defined its primary service area as 11 zip codes, primarily within the Western Region and shown in the map below. The primary service area was identified based on the patient zip codes of origin comprising 80% or more of hospital discharges in fiscal year 2019.

GLH Service Area



GLH Service Area Zip Codes

Zip Code	County
17004, Belleville	Mifflin
17009, Burnham	Mifflin
17044, Lewistown	Mifflin
17049, McAlisterville	Juniata
17051, McVeytown	Mifflin
17059, Mifflintown	Juniata
17063, Milroy	Mifflin
17066, Mount Union	Huntingdon
17082, Port Royal	Juniata
17084, Reedsville	Mifflin
17841, McClure	Mifflin

Population Overview

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 data indicators for five socioeconomic barriers:

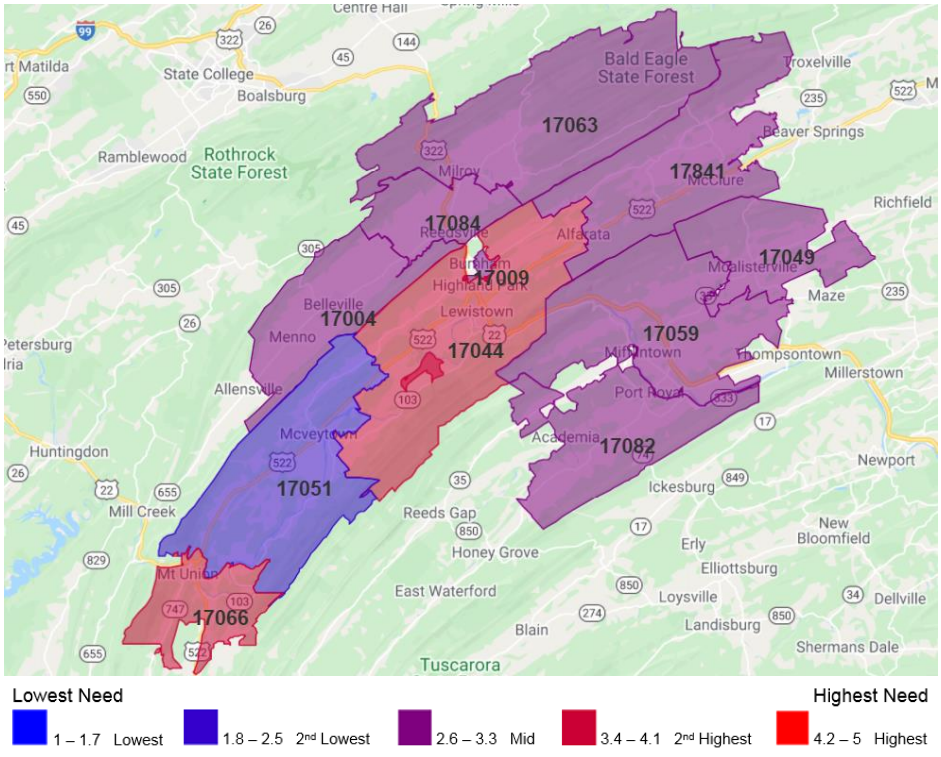
- Income: Poverty among elderly households, families with children, and single female-headed families with children
- Culture/Language: Minority populations and English language barriers
- Education: Population over 25 years without a high school diploma
- Insurance coverage: Unemployment rate among population 16 years or over and population without health insurance
- Housing status: Householders renting their home

The weighted average CNI score for GLH's service area is 3.0, indicating moderate overall community need. CNI scores by service area zip code are shown in the map below.

The CNI score increased in 6 out of the 9 GLH primary service area zip codes trended from the FY2019 CHNA

The CNI score increased in six out of the nine service area zip codes with available trending data from the FY2019 CHNA. Zip code 17044, Lewistown continues to have one of the highest CNI scores in the service area (3.4), along with zip code 17066, Mount Union (3.6), a new primary service area zip code for the 2021 CHNA.

GLH Service Area Community Needs Index



The following tables analyze demographic characteristics for GLH's service area, as well as select social determinants of health contributing to zip code CNI scores. Cells highlighted in yellow are at least 3 percentage points *higher* than the state and nation.

The GLH service area comprises a majority White population with little racial or ethnic diversity. Exceptions include a higher proportion of Black residents in zip code 17066, Mount Union, and a higher proportion of Latinx residents in zip code 17059, Mifflintown. Of note, zip code 17066 has the highest CNI score in the service area; 22% of residents live in poverty.

The GLH service area population is older than the state overall with 22% of residents age 65 or over. Zip code 17044, Lewistown, the home zip code of GLH, has one of the oldest populations in the service area. The overall service area population is projected to remain stable through 2025 with varying growth trends across zip codes.

GLH Service Area 2020 Population (pop.) Demographics

	Total Pop.	Pop. Growth by 2025	Asian	Black	White	Latinx (any race)	Under Age 18	Age 65 or Over
17004	4,985	-0.7%	0.3%	0.8%	97.4%	1.4%	29.0%	24.0%
17009	1,842	-2.0%	0.4%	0.5%	97.1%	2.3%	18.7%	18.7%
17044	21,324	-0.7%	0.9%	1.3%	95.1%	2.5%	18.9%	23.4%
17049	3,544	0.5%	0.3%	0.8%	96.3%	2.5%	21.7%	19.9%
17051	4,828	-1.0%	0.4%	0.5%	97.4%	1.4%	20.5%	20.8%
17059	8,072	2.0%	1.0%	0.6%	93.3%	7.9%	22.3%	21.0%
17063	3,547	1.3%	0.6%	0.2%	98.1%	0.4%	22.4%	21.4%
17066	5,292	-1.5%	0.4%	5.5%	89.7%	2.0%	21.8%	21.0%
17082	3,554	0.9%	0.5%	1.4%	93.8%	4.1%	20.9%	19.0%
17084	4,576	0.3%	0.8%	0.2%	98.0%	0.6%	22.3%	20.5%
17841	4,684	0.9%	0.2%	0.6%	97.1%	1.1%	22.6%	19.2%
GLH Service Area	**66,248**	**0.0%**	**0.6%**	**1.2%**	**95.3%**	**2.7%**	**21.4%**	**21.6%**
PA	**--**	**0.9%**	**3.8%**	**11.4%**	**78.5%**	**8.2%**	**19.9%**	**19.3%**
US	**--**	**3.6%**	**5.9%**	**13.0%**	**69.4%**	**18.8%**	**22.0%**	**16.6%**

Source: Esri

Social determinants of health indicators for the GLH service area are largely consistent with the state or nation, with the exception of a higher proportion of residents who do not have a bachelor's degree and/or are uninsured. The GLH service area is home to a prominent Amish population that likely affects these statistics.

GLH Service Area Social Determinants of Health Indicators

	2014-2018 Households in Poverty	2020 No High School Diploma	2014-2018 No Health Insurance	2014-2018 Renter Households	2020 CNI	2017 CNI*
17004	11.1%	30.6%	40.1%	31.0%	2.8	2.6
17009	9.6%	9.6%	3.2%	35.5%	2.8	2.4
17044	15.2%	9.2%	5.1%	39.4%	3.4	3.4
17049	15.2%	14.8%	13.3%	24.7%	3.0	NA
17051	9.3%	12.9%	8.6%	21.0%	2.2	2.4
17059	12.0%	13.7%	10.5%	29.6%	3.0	2.8
17063	9.9%	14.5%	11.0%	24.8%	2.6	2.2
17066	22.0%	10.8%	7.2%	36.7%	3.6	NA
17082	10.6%	12.1%	7.4%	26.3%	2.6	2.8
17084	13.6%	17.3%	26.9%	24.8%	3.0	2.6
17841	10.8%	15.4%	11.8%	24.1%	2.6	2.4
GLH Service Area	**13.6%**	**13.3%**	**11.6%**	**31.8%**	**--**	**--**
PA	**12.3%**	**8.7%**	**6.2%**	**31.0%**	**--**	**--**
US	**13.4%**	**11.3%**	**9.4%**	**36.2%**	**--**	**--**

Source: Esri & Dignity Health

*CNI score reported at the time of the FY2019 CHNA. Zip codes without a reportable CNI score were not included in the FY2019 CHNA service area.

Regional Demographics and Socioeconomics

Analyses of demographic and socioeconomic data are essential in understanding health trends and determining key drivers of health status. Socioeconomic indicators play a significant role in community and individual health. Known as **social determinants of health**, they are defined as factors within the environment in which people live, work, and play that can affect health and quality of life. Social determinants of health are often the root causes of **health disparities**.

Demographic Key Findings

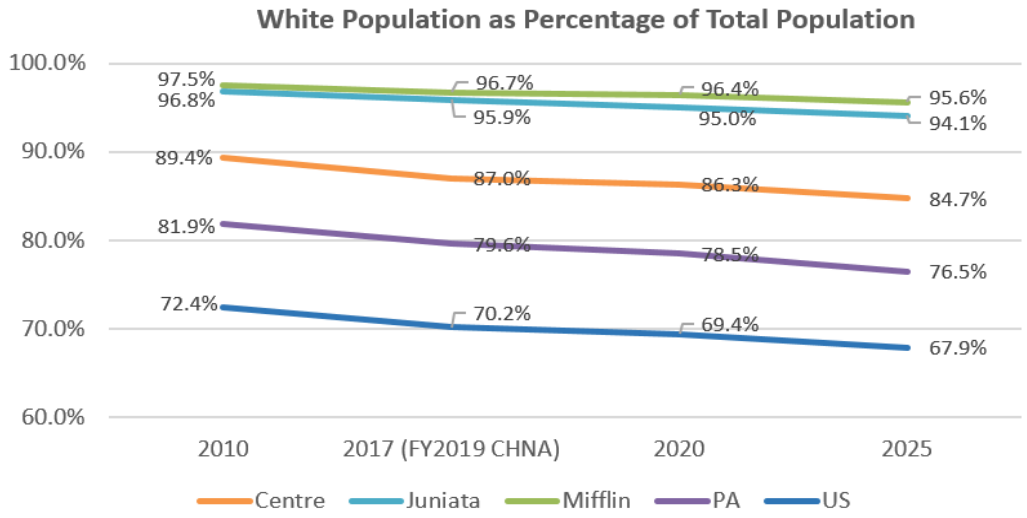
- The Pennsylvania population as a whole is less diverse and older than the population nationwide. Residents of Juniata and Mifflin counties are less diverse and older than the state with approximately 95% of residents identifying as White and 1 in 5 residents age 65 or over. Senior population growth in Juniata and Mifflin counties is projected to outpace both the state and nation through 2025.
- Juniata and Mifflin county seniors are less healthy than their peers statewide and nationally. Approximately 37% of Mifflin County seniors and 40% of Juniata County seniors have a disability compared to 34%-35% across PA and the US. Seniors in both counties have a higher prevalence of hearing disabilities; Juniata County seniors also have a higher prevalence of vision, cognitive, self-care, and independence disabilities.
- Centre County's population continues to be greatly impacted by Pennsylvania State University (PSU) students and staff. The county is slightly more diverse than Juniata and Mifflin counties, most notably among the Asian population, and has a significantly lower median age than both the state and nation. Nearly 1 in 3 Centre County residents is age 15 to 24. Consistent with an overall younger and healthier population, fewer Centre County residents experience disability compared to the state and nation.
- While the Western Region population is less diverse, consistent with the FY2019 CHNA, diversity is increasing. By 2025, the White population as a percentage of the total population will decline another 1-2 percentage points in all counties. Growth is primarily expected among Asian and Latinx populations.
- The Amish are a prominent population within the Western Region, particularly Mifflin County. From 2017 to 2020, the estimated Amish population for the region grew from 8,224 to 8,642 with 4,089 residing in Mifflin County.
- Computer and internet access varies widely between Centre County and neighboring Juniata and Mifflin counties. While more than 90% of Centre County households have a computer device, fewer than 80% of Juniata and Mifflin county households have one. Similarly, only 73% of Juniata County households and 68% of Mifflin County households have an internet subscription compared to 82% of Centre County households. Juniata and Mifflin county households are more likely to have dial-up internet service than residents statewide and nationally.

Demographic Data Summary

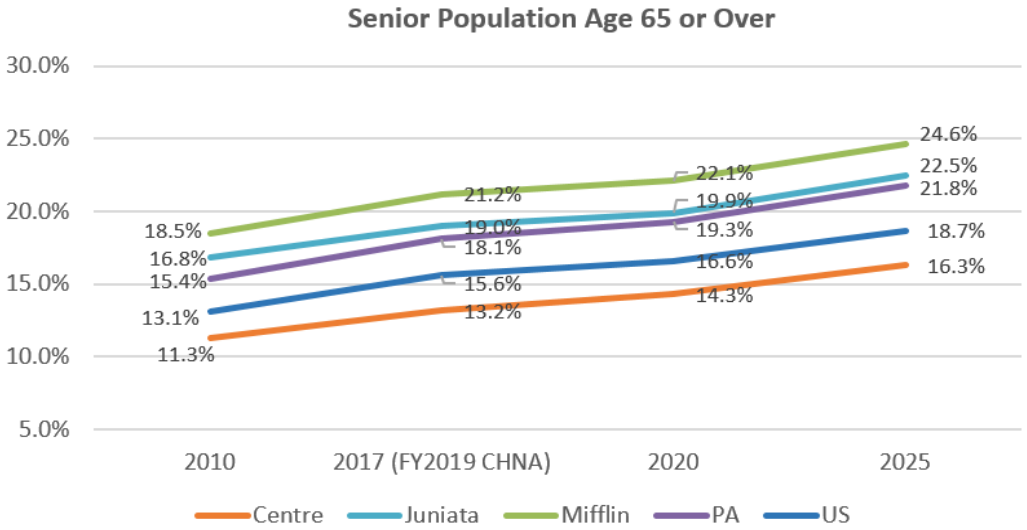
Yellow highlighting indicates a percentage that is at least 3 points *higher* than the state and nation.
Grey highlighting indicates a percentage that is at least 3 points *lower* than the state and nation.

	Centre County	Juniata County	Mifflin County	PA	US
Racial and Ethnic Diversity (ESRI)					
2020 Asian	6.9%	0.6%	0.7%	3.8%	5.9%
2025 Projection	7.8%	0.8%	0.8%	4.5%	6.5%
2020 Black	3.9%	0.8%	0.9%	11.4%	13.0%
2025 Projection	4.4%	0.8%	1.1%	11.8%	13.1%
2020 White	86.3%	95.0%	96.4%	78.5%	69.4%
2025 Projection	84.7%	94.1%	95.6%	76.5%	67.9%
2020 Latinx, any race	3.2%	4.5%	1.8%	8.2%	18.8%
2025 Projection	3.7%	5.5%	2.2%	9.8%	20.1%
Primary language other than English (2014-2018)	11.6%	9.4%	8.8%	11.3%	21.5%
Age Distribution (ESRI, 2020)					
Under 15 years	12.3%	18.2%	17.6%	16.5%	18.4%
15-24 years	30.1%	10.5%	10.3%	12.7%	13.0%
25-34 years	12.8%	11.9%	11.5%	12.8%	14.0%
35-54 years	19.8%	25.1%	24.2%	24.6%	25.0%
55-64 years	10.6%	14.4%	14.3%	14.2%	13.0%
65+ years	14.3%	19.9%	22.1%	19.3%	16.6%
Median Age	30.7	42.7	44.4	41.6	38.5
Disability Status (US Census Bureau, 2014-2018)					
Total population	9.6%	14.1%	16.2%	13.9%	12.6%
Under 18 years	4.2%	3.3%	5.8%	5.3%	4.2%
65+ years	29.4%	40.1%	36.7%	34.1%	35.0%
Ambulatory	16.7%	22.2%	18.6%	21.2%	22.2%
Independent Living	12.0%	17.2%	11.2%	14.2%	14.5%
Hearing	13.3%	19.6%	19.8%	14.1%	14.6%
Cognitive	6.3%	11.8%	7.4%	8.0%	8.8%
Vision	4.6%	10.8%	6.0%	5.7%	6.4%
Household Internet/Digital Access (US Census Bureau, 2014-2018)					
Computer device (1+)	91.1%	79.0%	77.5%	86.5%	88.8%
Desktop/laptop	85.9%	69.2%	65.8%	76.6%	77.9%
Smartphone	76.1%	59.0%	58.4%	70.9%	75.9%
Other	62.3%	45.2%	47.4%	57.9%	61.5%
Internet subscription	82.1%	73.3%	67.8%	79.9%	80.9%
Dial-up only	0.7%	1.6%	1.3%	0.7%	0.5%
Broadband	81.4%	71.7%	66.5%	79.2%	80.4%

Notable Demographic Trends



Source: Esri Business Analyst



Source: Esri Business Analyst

Estimated Amish Population (pop.) by Settlement

County	Settlements	2017 Pop.	2020 Pop.	% Change
Centre	Aaronsburg, Brush Valley/Rebersburg, Penns Valley, Nittany Valley/Howard*	3,110	3,317	6.7%
Juniata	Mifflintown/Port Royal	1,209	1,236	2.2%
Mifflin	Big Valley/Belleville	3,905	4,089	4.7%
Western Region		8,224	8,642	5.1%
Pennsylvania		74,251	81,499	9.8%

Source: Elizabethtown College, Young Center for Anabaptist and Pietist Studies
*The Nittany Valley/Howard settlement includes portions of both Centre and Clinton counties.

Socioeconomic Key Findings

- Across the region, the percentage of people living in poverty and food insecure generally declined. Centre County continues to be a more affluent area with fewer permanent residents living in poverty and an overall highly educated population. Juniata and Mifflin counties reflect blue-collar workforce trends with lower median incomes than the state and nation, modest poverty rates, and lower educational attainment.
- Within Mifflin County, children are more at risk for socioeconomic disparity with nearly 20% food insecure and 24% living in poverty; however, the data may be skewed by the Amish population. While a higher percentage of Amish individuals are considered to live in poverty based on national thresholds, their engagement in barter and sharing economies and a simpler lifestyle contribute to a lower cost of living.
- COVID-19 has increased unemployment rates. While the Western Region has lower unemployment than the state and nation, rates more than doubled from May 2019 to May 2020.
- Juniata and Mifflin county residents are more likely to own their home, and homes are generally more affordable with fewer residents considered housing cost burdened compared to the state and nation. Centre County housing is the newest and most expensive, although homeowners are the least likely within the region to be considered housing cost burdened.
- Pennsylvania's housing stock is older than the nation's housing stock with 70% of homes built before 1980. Mifflin County has the oldest housing stock in the region with 73% of homes built before 1980. In general, occupants of older housing have higher rates of chronic disease and accidental injury.
- Racial and ethnic socioeconomic disparities exist across the Western Region, although findings should be interpreted with caution due to low population counts. Most notably, Black residents in Centre County and Latinx residents in Juniata and Mifflin counties are among the most likely to live in poverty and least likely to attain higher education.

Socioeconomic Data Summary

Red highlighting indicates potential *disparity* based on at least a 3-point difference from the state and nation.
Green highlighting indicates potential *strength* based on at least a 3-point difference from the state and nation.

	Centre County	Juniata County[1]	Mifflin County[1]	PA	US
Income and Poverty (US Census Bureau, 2014-2018)					
Median household income	$58,055	$52,765	$47,526	$59,445	$60,293
All people in poverty	18.4%[2]	11.9%	14.4%	12.8%	14.1%
Asian	41.9%[2]	21.1%	2.3%	14.3%	11.5%
Black	35.2%[2]	9.9%	19.1%	26.9%	24.2%
White	16.1%[2]	11.7%	14.1%	10.0%	11.6%
Latinx, any race	28.1%[2]	21.6%	41.0%	29.4%	21.0%
Children in poverty	11.8%	18.5%	23.6%	18.1%	19.5%
Seniors in poverty	4.6%	8.3%	7.4%	8.1%	9.3%
Households with SNAP[3]	6.8%	10.1%	15.9%	13.2%	12.2%
Food Insecurity (Feeding America, 2018)					
All people	8.8%	10.1%	12.0%	10.9%	11.5%
Children	10.9%	15.6%	19.2%	15.1%	15.2%
Unemployment (US Bureau of Labor Statistics)					
May 2019	3.3%	3.7%	3.9%	4.0%	3.4%
May 2020	8.2%	8.8%	10.9%	13.2%	13.0%
Housing (US Census Bureau, 2014-2018)					
Renters	38.2%[2]	23.9%	29.6%	31.0%	36.2%
Cost burdened[4]	57.0%[2]	41.5%	43.0%	48.4%	50.2%
Owners	61.8%[2]	76.1%	70.4%	69.0%	63.8%
Median home value	$220,500	$145,300	$109,900	$174,100	$204,900
Cost burdened[4]	21.9%	26.5%	24.0%	26.0%	28.7%
Housing built before 1980	54.0%	63.3%	73.5%	70.1%	54.2%
Education (ESRI, 2020; US Census Bureau, 2014-2018 race/ethnicity data)					
No high school diploma	4.9%	15.4%	13.4%	8.7%	11.3%
Bachelor's degree or higher	46.6%	15.3%	13.4%	32.3%	33.1%
Asian	79.5%	39.1%	27.4%	55.4%	53.5%
Black	32.2%	26.2%	24.6%	18.5%	21.1%
White	43.5%	14.1%	12.5%	31.7%	32.9%
Latinx, any race	37.9%	8.1%	17.8%	15.8%	15.8%

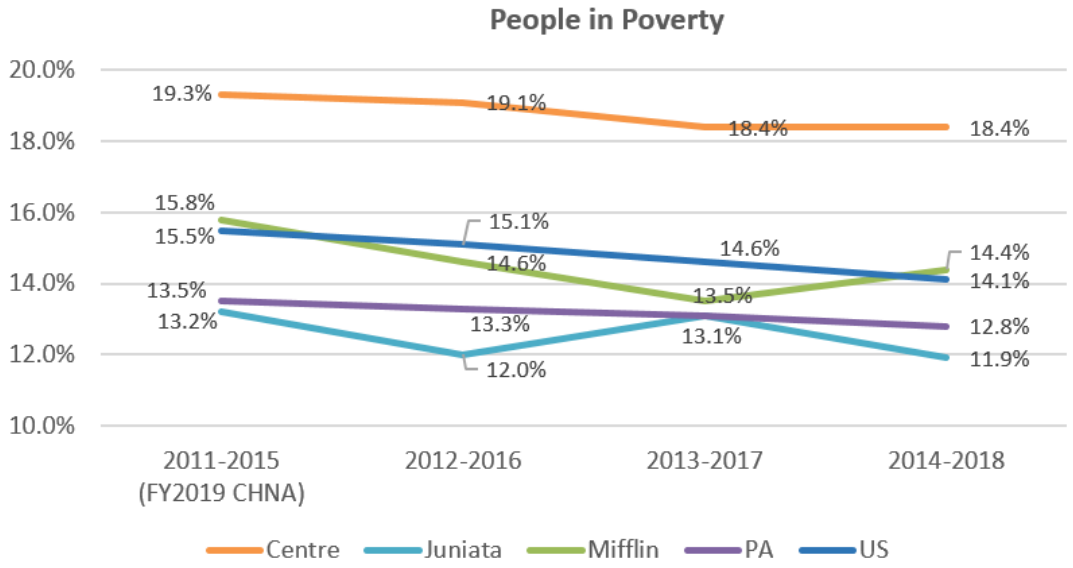
[1] Juniata and Mifflin county race/ethnicity data are based on small counts; interpret data findings with caution.

[2] Percentages are skewed by PSU students and are not identified as socioeconomic strengths or disparities.

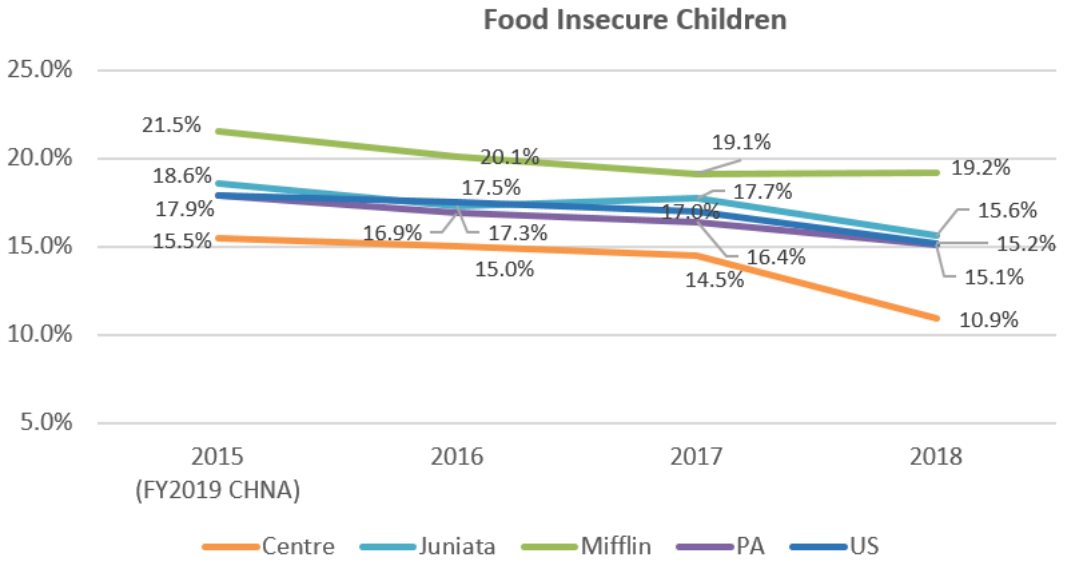
[3] Supplemental Nutrition Assistance Program.

[4] Housing cost burden is defined as spending 30% or more of household income on housing-related costs.

Notable Socioeconomic Trends



Source: US Census Bureau



Source: Feeding America

Public Health Data Analysis

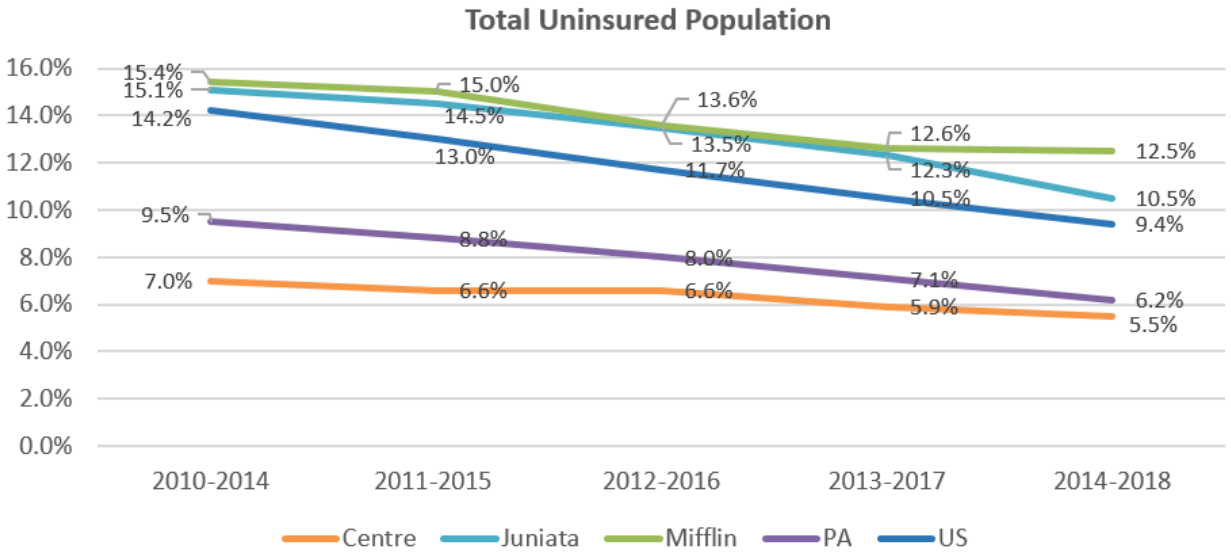
Public health data supports that the FY2019 CHNA priorities of Access to Care, Behavioral Health, and Chronic Disease Prevention and Management continue to be community health needs within the Western Region. These priorities reflect complex needs requiring sustained commitment and resources.

The following sections highlight key public health data findings by topic area, with a focus on priority health needs and vulnerable and high-risk populations.

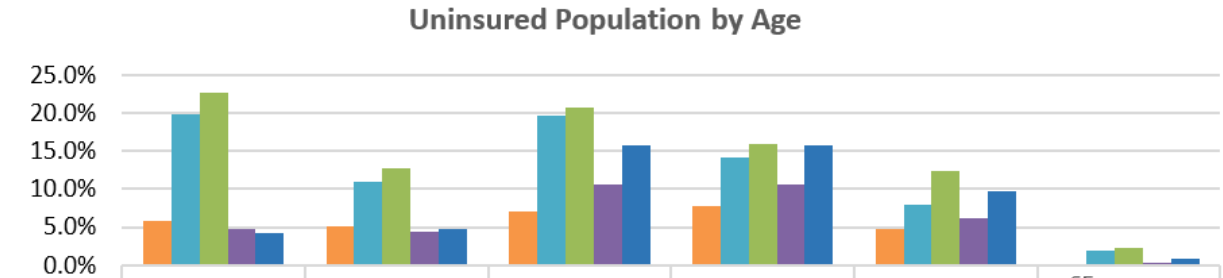
Healthcare Access Key Findings

- The total uninsured population continued to decline across the region, although Juniata and Mifflin counties maintain a higher uninsured percentage than the state and nation. Within Juniata and Mifflin counties, approximately 20% of children under age 6 are uninsured compared to 5% statewide. This finding is likely due in part to a prominent Amish population that is less likely to participate in insurance programs.
- Uninsured rates among Black and Latinx residents declined statewide and nationally, but continue to be disproportionately higher compared to Whites. Similar disparities are seen across the Western Region, particularly among Latinx residents. Results should be interpreted with caution due to small population counts.
- Employer-based insurance continues to be the majority coverage type among Western Region residents, but wide differences exist across counties. Centre County residents are the most likely to have employer-based insurance, while Mifflin and Juniata counties have a higher percentage of Medicare and Medicaid insured residents. The percentage of Medicaid insured residents increased in all counties from the FY2019 CHNA.
- Centre County has a similar primary care provider rate as the state and nation. Both Juniata and Mifflin counties have lower primary care provider rates; Juniata County is a Health Professional Shortage Area (HPSA) for primary care.
- All three counties have fewer dentists than the state and nation and are dental HPSAs for low-income residents. The mental health provider rate increased across Centre County, the state, and the nation, but remained stagnant in Juniata and Mifflin counties. Juniata and Mifflin counties are mental health HPSAs.
- Potentially preventable hospitalizations are inpatient stays that might have been avoided with effective primary or preventative care. Western Region counties have a lower rate of preventable hospitalizations than the state, but rates are higher in Juniata and Mifflin counties.
- COVID-19 has highlighted long-standing, systemic health and socioeconomic disparities among minority populations, particularly Black residents. Across PA, the COVID-19 death rate is more than 3 times higher among Black residents as White residents. While the Western Region has seen low COVID-19 death counts overall, statewide findings are indicative of broader health disparities affecting all geographies.

Health Insurance Coverage Data



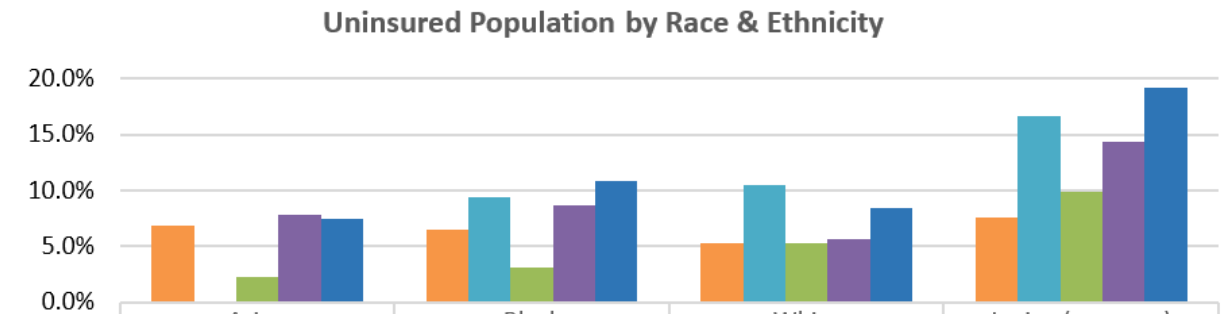
Source: US Census Bureau



	Under 6 years	6-18 years	19-25 years	26-44 years	45-64 years	65 years or over
Centre	5.9%	5.2%	7.0%	7.7%	4.8%	0.2%
Juniata	19.8%	10.9%	19.6%	14.1%	8.0%	1.9%
Mifflin	22.7%	12.8%	20.7%	15.9%	12.4%	2.3%
PA	4.7%	4.4%	10.6%	10.7%	6.1%	0.4%
US	4.2%	4.7%	15.8%	15.7%	9.8%	0.8%

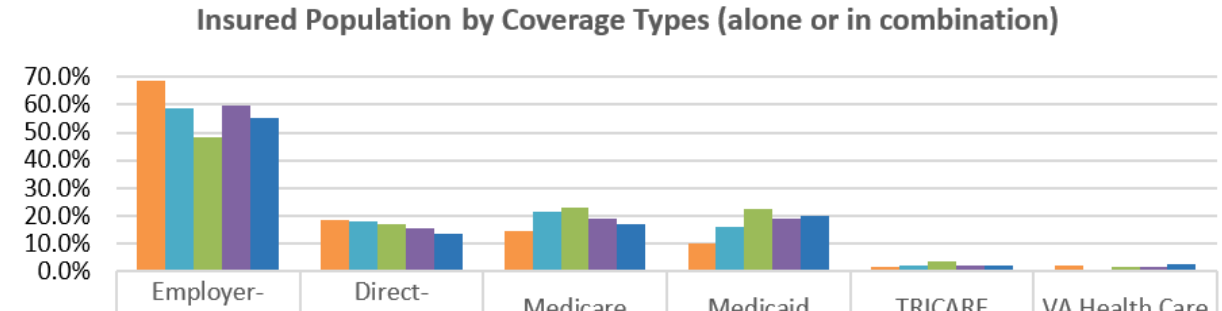
Source: US Census Bureau, 2014-2018

Health Insurance Coverage Data



	Asian	Black	White	Latinx (any race)
Centre	6.9%	6.5%	5.3%	7.6%
Juniata	0.0%	9.4%	10.5%	16.7%
Mifflin	2.3%	3.1%	5.3%	9.9%
PA	7.8%	8.7%	5.6%	14.4%
US	7.5%	10.8%	8.4%	19.2%

Source: US Census Bureau, 2014-2018

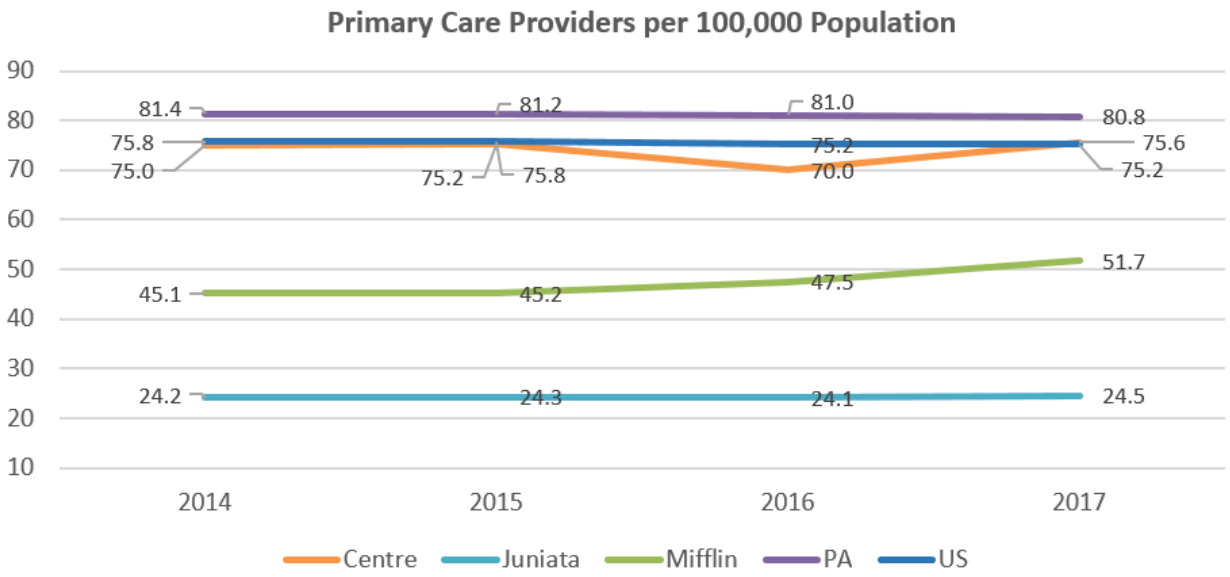


	Employer-based	Direct-purchase	Medicare	Medicaid	TRICARE	VA Health Care
Centre	68.6%	18.3%	14.6%	9.9%	1.6%	2.3%
Juniata	58.5%	17.9%	21.3%	16.1%	2.0%	0.6%
Mifflin	48.4%	17.1%	22.9%	22.6%	3.6%	1.4%
PA	59.6%	15.7%	19.2%	18.9%	2.1%	1.4%
US	55.0%	13.6%	16.9%	20.1%	2.3%	2.7%

Source: US Census Bureau, 2014-2018

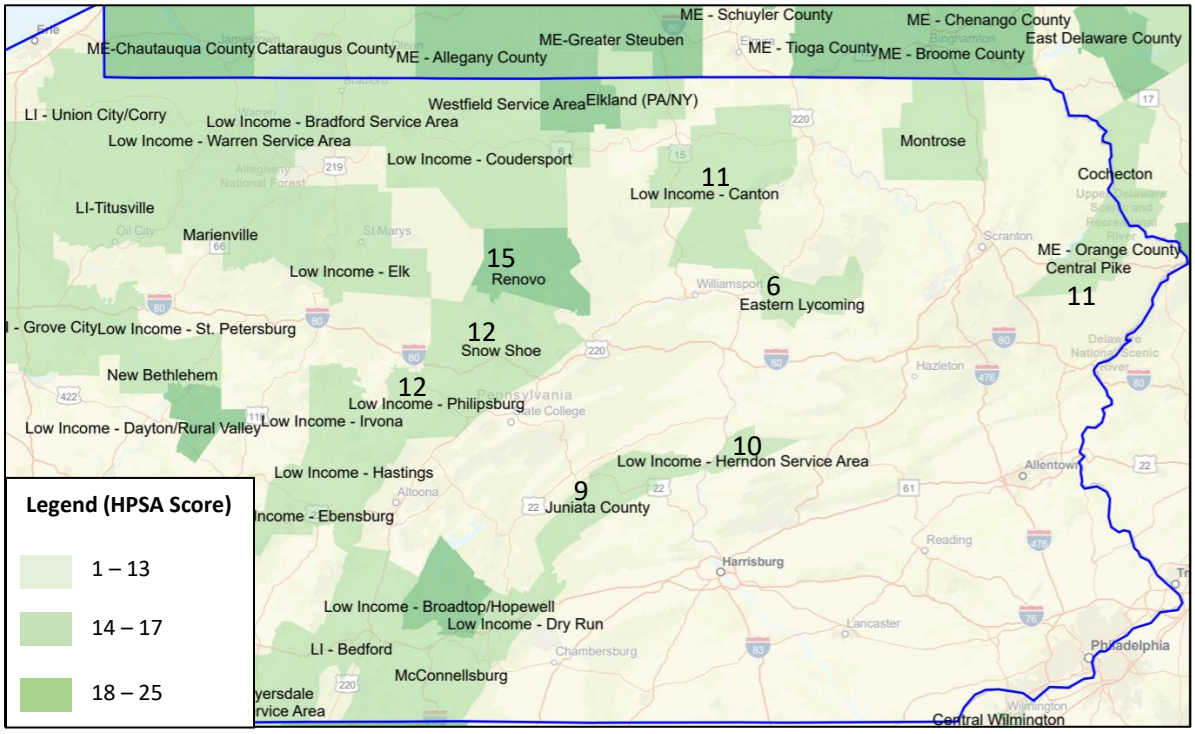
Provider Availability Data

Note: Providers are identified based on their preferred business mailing address; provider rates do not take into account providers that serve multiple counties or satellite clinics.



Source: Health Resources & Services Administration

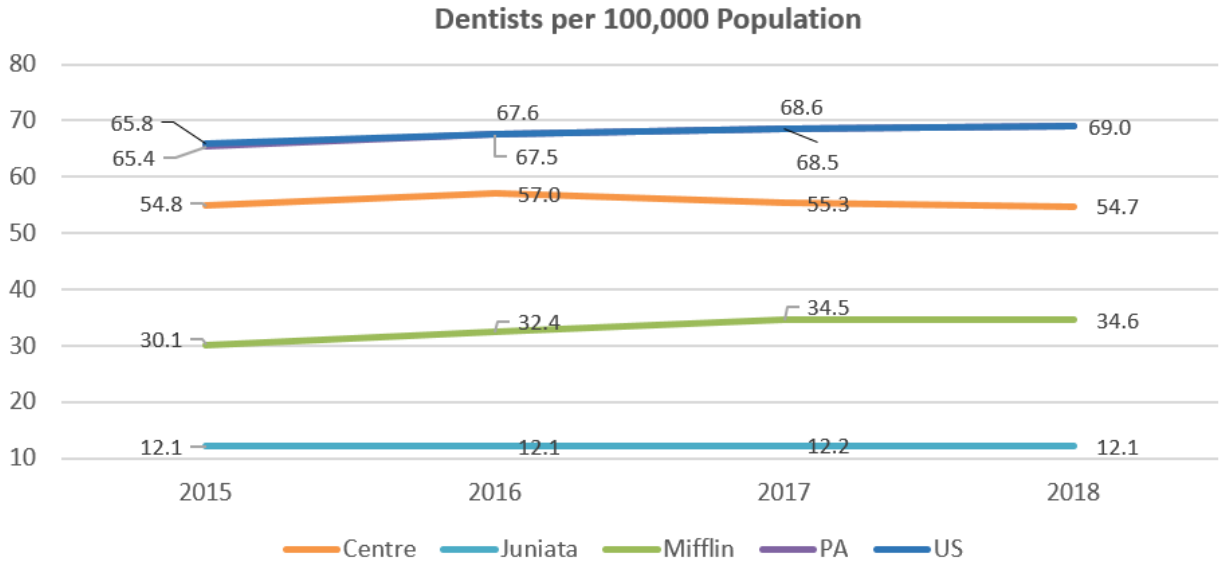
Primary Care Health Professional Shortage Areas (HPSA)
HPSA Scores Noted within CHNA Service Counties



Source: Health Resources & Services Administration

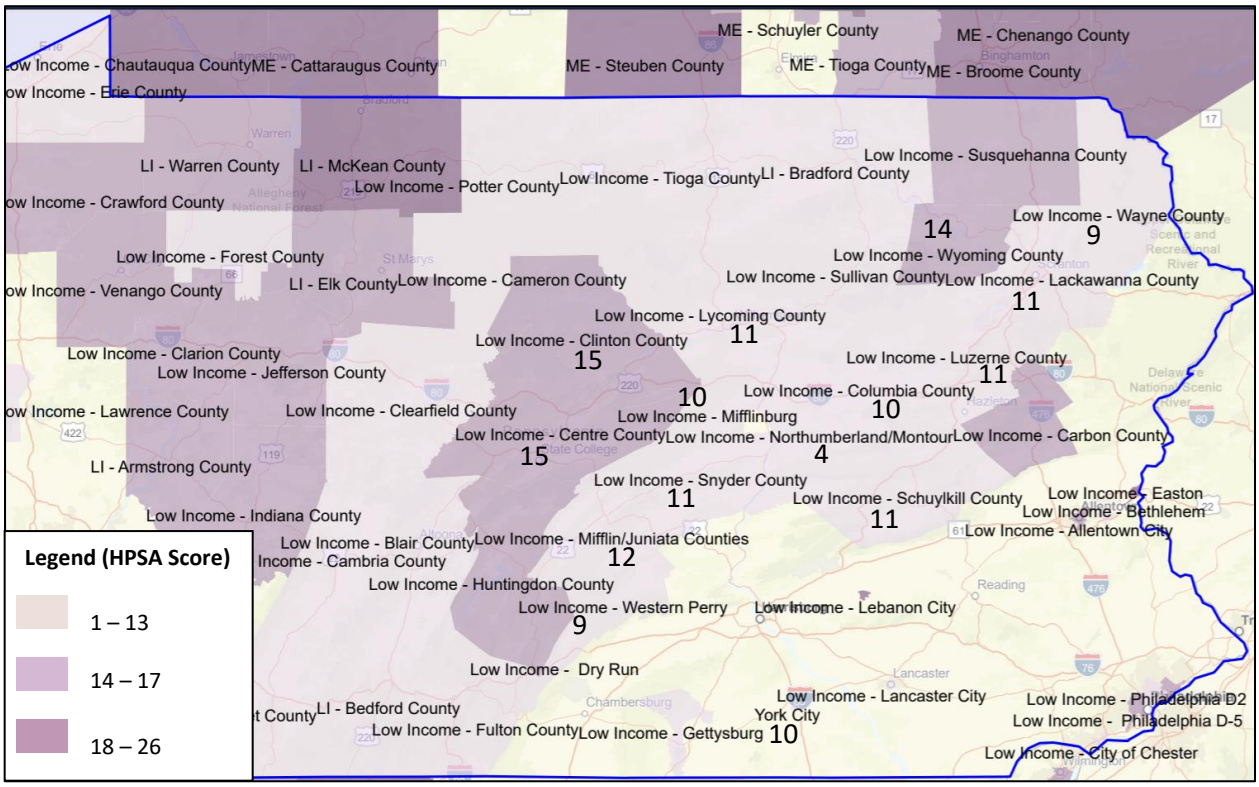
*Primary care HPSAs can receive a score between 0-25 with 25 indicating the highest need.

Provider Availability Data



Source: Health Resources & Services Administration

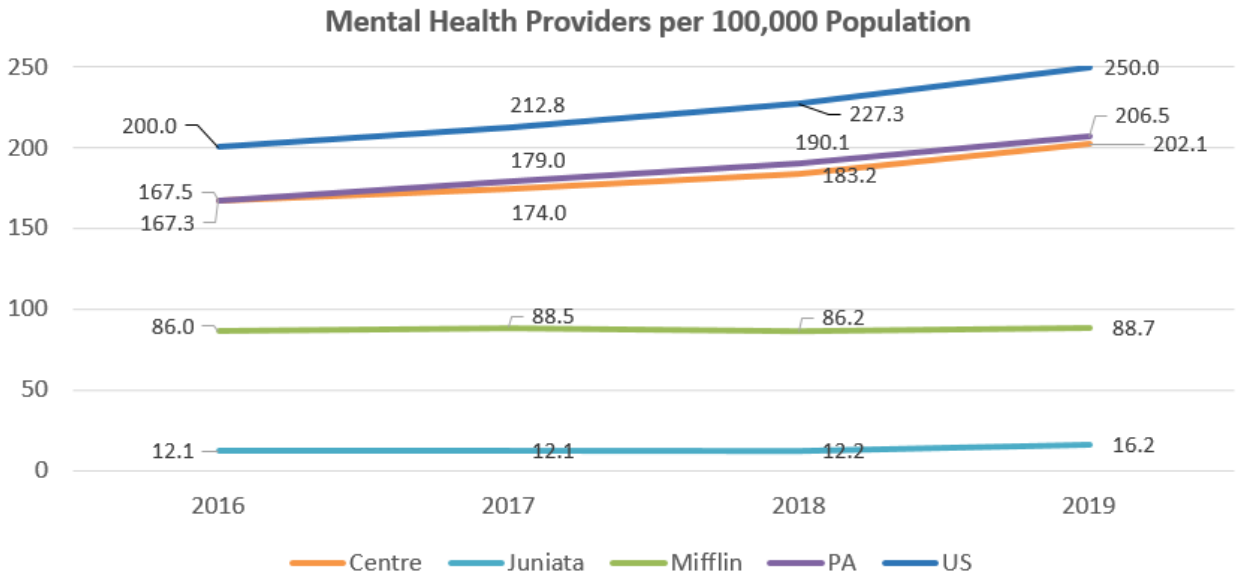
Dental Care Health Professional Shortage Areas (HPSA)
HPSA Scores Noted within CHNA Service Counties



Source: Health Resources & Services Administration

*Dental care HPSAs can receive a score between 0-26 with 26 indicating the highest need.

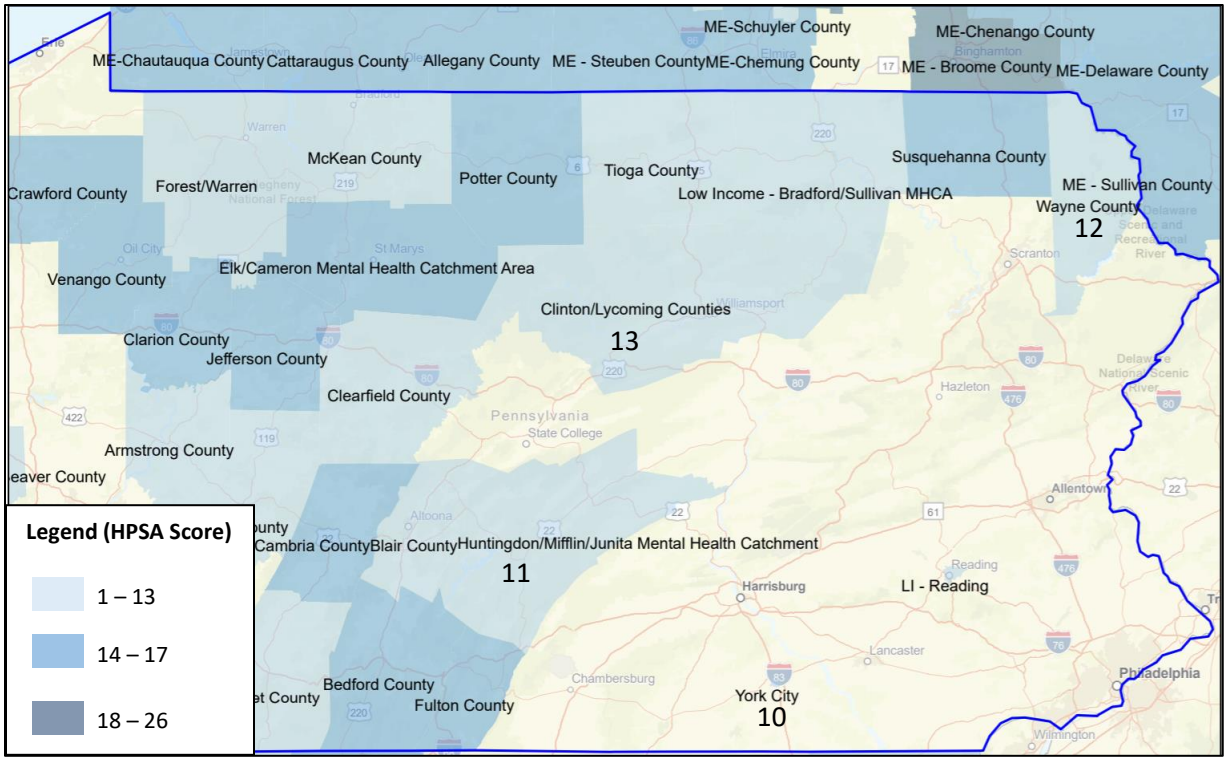
Provider Availability Data



Source: Centers for Medicare and Medicaid Services

*Mental health providers include psychiatrists, psychologists, licensed clinical social workers, counselors, and mental health providers that treat alcohol and other drug abuse, among other providers.

Mental Health Professional Shortage Areas (HPSA)
HPSA Scores Noted within CHNA Service Counties

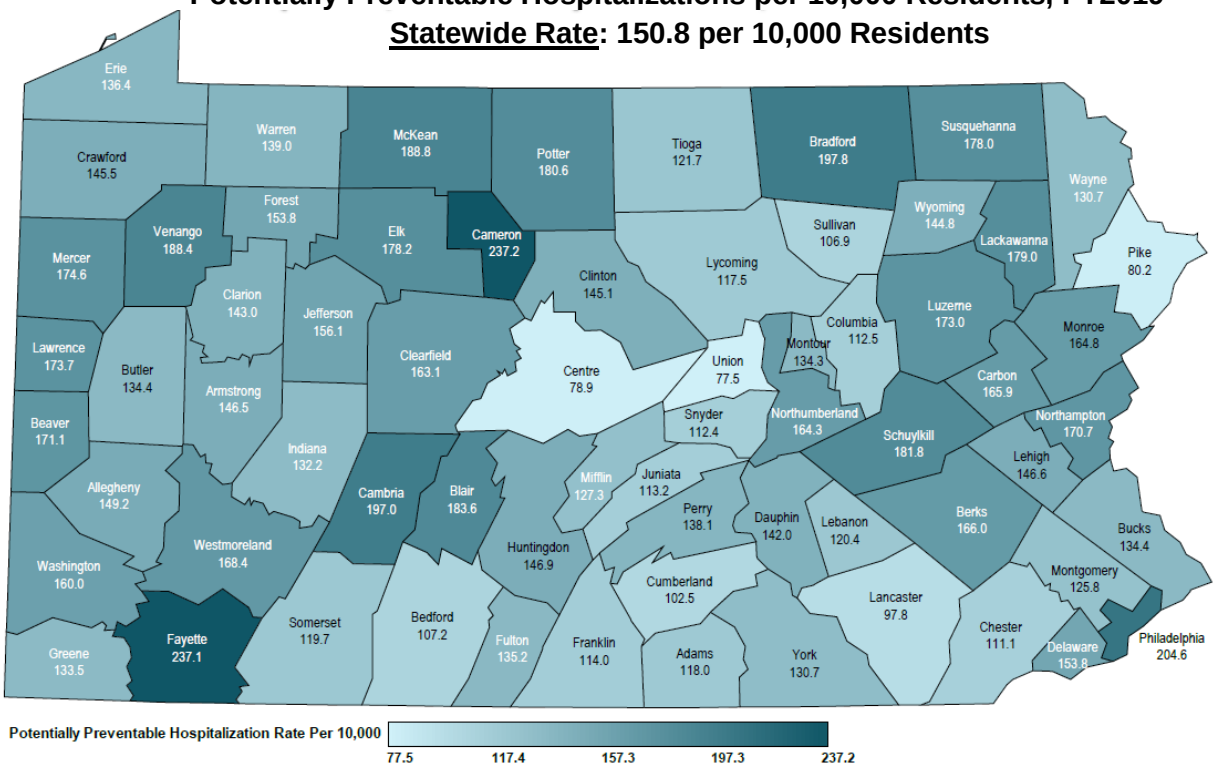


Source: Health Resources & Services Administration

*Mental health HPSAs can receive a score between 0-25 with 25 indicating the highest need.

Preventable Hospitalizations Data

Potentially Preventable Hospitalizations per 10,000 Residents, FY2019
Statewide Rate: 150.8 per 10,000 Residents



Source: Pennsylvania Health Care Cost Containment Council (PHC4), July 1, 2018-June 30, 2019

*PHC4 defines potentially preventable hospitalizations as, "Inpatient stays for select conditions that might have been avoided with effective primary or preventive care—thereby avoiding the need for a more expensive hospital admission."

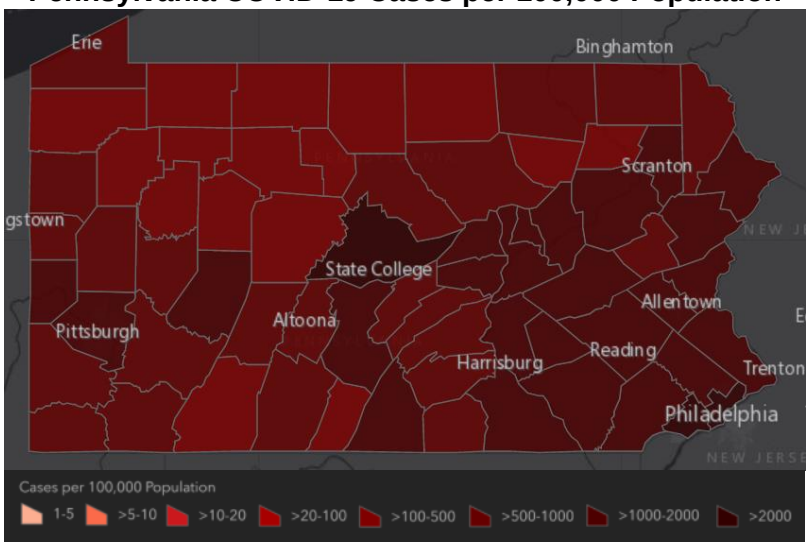
Statewide Potentially Preventable Hospitalizations by Condition, FY2019

	Number of Cases	Percent of Cases	Total Number of Hospital Days
Heart Failure	54,676	35.7%	284,232
COPD or Asthma (adults age 40+)	28,742	18.8%	116,136
Pneumonia	20,472	13.4%	87,354
Urinary Tract Infection	13,974	9.1%	51,454
Diabetes – Long-term Complications	10,641	6.9%	61,254
Diabetes – Short-term Complications	8,387	5.5%	29,718
Hypertension	6,142	4.0%	19,430
Diabetes – Uncontrolled	4,824	3.1%	16,288
Lower Extremity Amputation	3,876	2.5%	41,393
Asthma (adults age 18-39)	1,502	1.0%	4,039
Total	**153,236**	**100%**	**711,298**

Source: Pennsylvania Health Care Cost Containment Council (PHC4), July 1, 2018-June 30, 2019

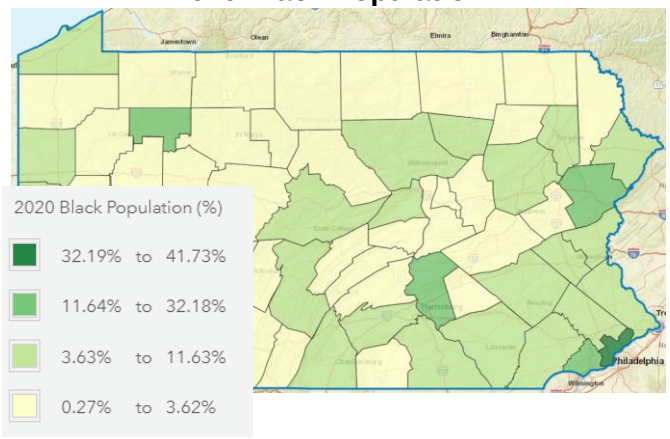
COVID-19 Data

Pennsylvania COVID-19 Cases per 100,000 Population

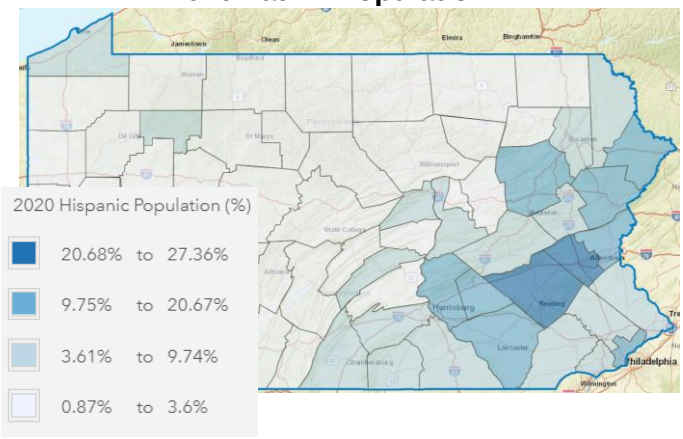


Source: Pennsylvania Department of Health, October 15, 2020

2020 Black Population



2020 Latinx Population



COVID-19 Age-Adjusted Death Rate per 100,000 by Race and Ethnicity

	Black	Latinx	White	Asian
PA	147.7	121.2	43.5	57.1
US	131.3	125.1	38.4	49.7

Source: American Public Media Research Lab, September 15, 2020

Western Region COVID-19 Cases

	Cases	Cases per 100,000	Deaths	Deaths per 100,000
Centre County	3,614	2,219.8	14	8.6
Juniata County	205	829.8	8	32.4
Mifflin County	292	631.7	3	6.5

Source: Pennsylvania Department of Health, October 15, 2020

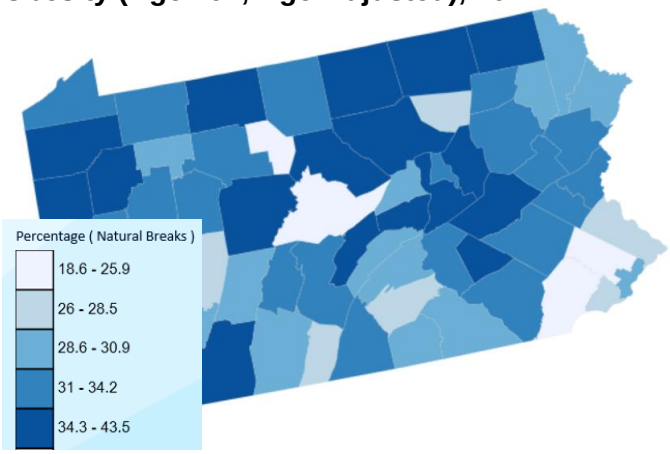
Chronic Disease and Health Risk Factors Key Findings

- Socioeconomic barriers have a direct impact on health. Pennsylvania counties with a lower median income and fewer opportunities for physical activity generally have higher rates of obesity and conditions like diabetes and heart disease. This trend is reflected in the Western Region with better overall health reported among Centre County residents than Juniata and Mifflin county residents.
- Adult obesity decreased in Centre and Juniata counties, contrary to state and national trends, and both counties currently meet the Healthy People 2020 goal. However, while obesity declined in Juniata County, diabetes prevalence nearly doubled from 2016 to 2017 and the diabetes death rate exceeds both the state and nation. Juniata County also has a higher percentage of obese youth at approximately 25%, which may indicate a reverse trend in adult obesity and growing diabetes concerns.
- Mifflin County saw a sharp decline in adult obesity and diabetes from 2016 to 2017, but continues to exceed state and national benchmarks for both indicators. Mifflin County also generally has a higher percentage of obese youth, despite a recent decline among students in grades 7-12. Youth type II diabetes prevalence is 5 times higher than the state, although based on a small count.
- While adult smoking continued to decline across the nation, PA and the Western Region saw an increase from 2016 to 2017. This trend may be due in part to vaping and e-cigarette use. Mifflin County has the highest rate of adult smoking, exceeding the state and nation, and an elevated death rate due to chronic lower respiratory disease and lung cancer.
- Youth are particularly vulnerable to vaping/e-cigarette trends, as illustrated in Centre County, where there was a 4-point increase in use from 2017 to 2019. Statewide, nearly 1 in 5 youth report vaping/e-cigarette use.
- Heart disease and cancer continue to be the leading causes of death regionally, statewide, and nationally. While the heart disease death rate increased in nearly all Western Region counties, the cancer death rate decreased in all counties. Across the state and nation, Black residents continue to have disproportionately higher death rates due to heart disease and cancer, among other chronic conditions.
- Centre County has higher breast and prostate cancer incidence rates, but lower death rates when compared to other counties and the state and nation. This finding is indicative of positive screening practices for early detection and treatment.
- Asthma is the most prevalent chronic condition among youth. Approximately 6%-8% of Western Region youth have asthma, lower than the state average of 11%.

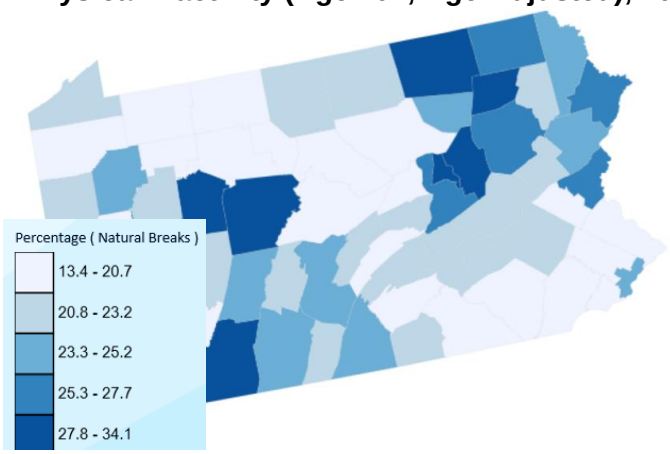
Health Risk Factors Data

Residents with fewer socioeconomic barriers and residing in counties with greater access to physical activity have fewer health risk factors

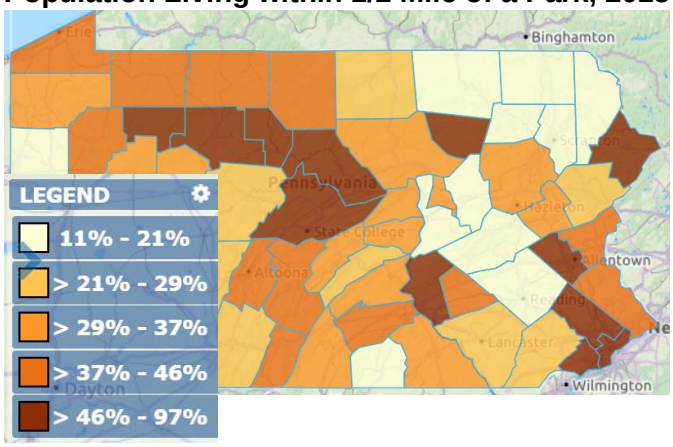
Obesity (Age 20+, Age-Adjusted), 2017



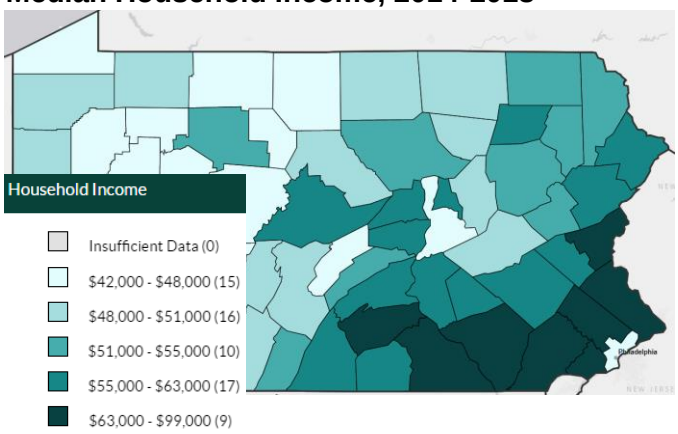
Physical Inactivity (Age 20+, Age-Adjusted), 2017



Population Living within 1/2 Mile of a Park, 2015



Median Household Income, 2014-2018



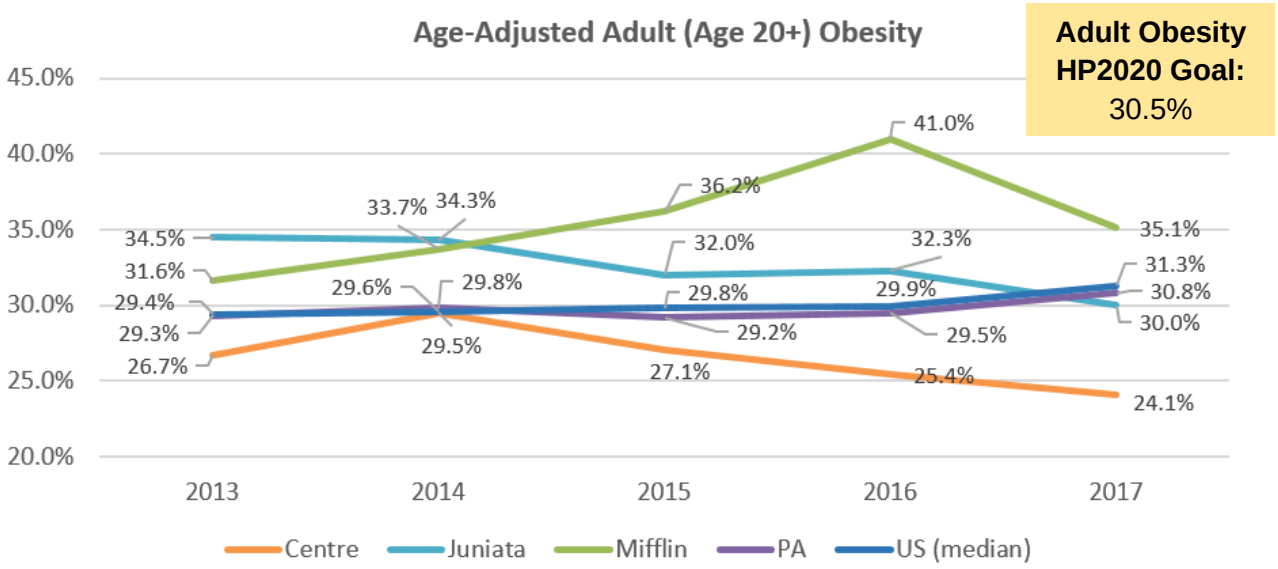
Age-Adjusted Adult (Age 20+) Health Risk Factors and Social Determinants of Health

	Centre County	Juniata County	Mifflin County	PA	US (median)
Obesity	24.1%	30.0%	35.1%	30.8%	31.3%
Physical inactivity	18.3%	17.0%	21.0%	23.9%	25.6%
Population living with 1/2 mile of a park	59%	24%	34%	47%	NA
Median household income	$58,055	$52,765	$47,526	$59,445	$60,293

Source: Centers for Disease Control and Prevention

*Green highlighting indicates positive socioeconomic *and* health outcomes in comparison to the state and nation; red highlighting indicates negative outcomes.

Health Risk Factors Data



Source: Centers for Disease Control and Prevention

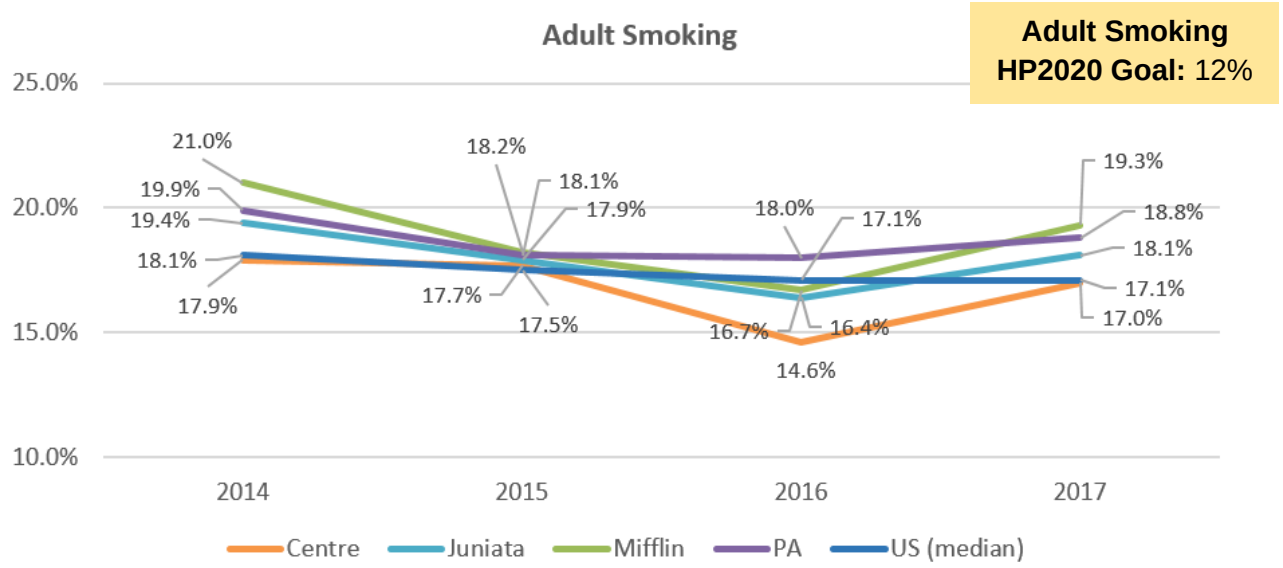
Youth Obesity by School Year

	Centre County	Juniata County	Mifflin County	PA
Grades K-6				
2017-2018	12.9%	23.1% ▲	19.1%	16.8%
2016-2017	14.6%	21.5%	17.9%	16.4%
2015-2016	13.8%	21.4%	18.3%	16.7%
2014-2015	13.7%	21.2%	16.7%	16.5%
2013-2014	13.7%	20.5%	18.1%	16.3%
Grades 7-12				
2017-2018	17.0% ▲	26.6%	13.2% ▼	19.5%
2016-2017	17.9%	28.1%	24.3%	18.9%
2015-2016	16.9%	27.8%	28.3%	19.1%
2014-2015	15.7%	26.4%	23.0%	18.6%
2013-2014	14.8%	25.4%	15.9%	18.2%

Source: Pennsylvania Department of Health

*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 percentage points since 2013-2014.

Health Risk Factors Data



Source: Centers for Disease Control and Prevention

Youth Tobacco Use (Grades 6, 8, 10, 12)

	Centre County	Juniata County	PA
Cigarette use within Past 30 Days			
2019	2.5% ▼	NA	3.5%
2017	4.5%	7.4%	5.6%
2015	5.2%	NA	6.4%
Vaping/E-cigarette use within Past 30 Days			
2019	14.4% ▲	NA	19.0%
2017	10.2%	6.8%	16.3%
2015	12.1%	NA	15.5%

Source: Pennsylvania Commission on Crime and Delinquency

*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 percentage points since 2015.

**Mifflin and Juniata county data are not reported or are limited due to low school district participation.

Chronic Disease Data

Leading Chronic Disease Causes of Death, Age-Adjusted Death Rates per 100,000

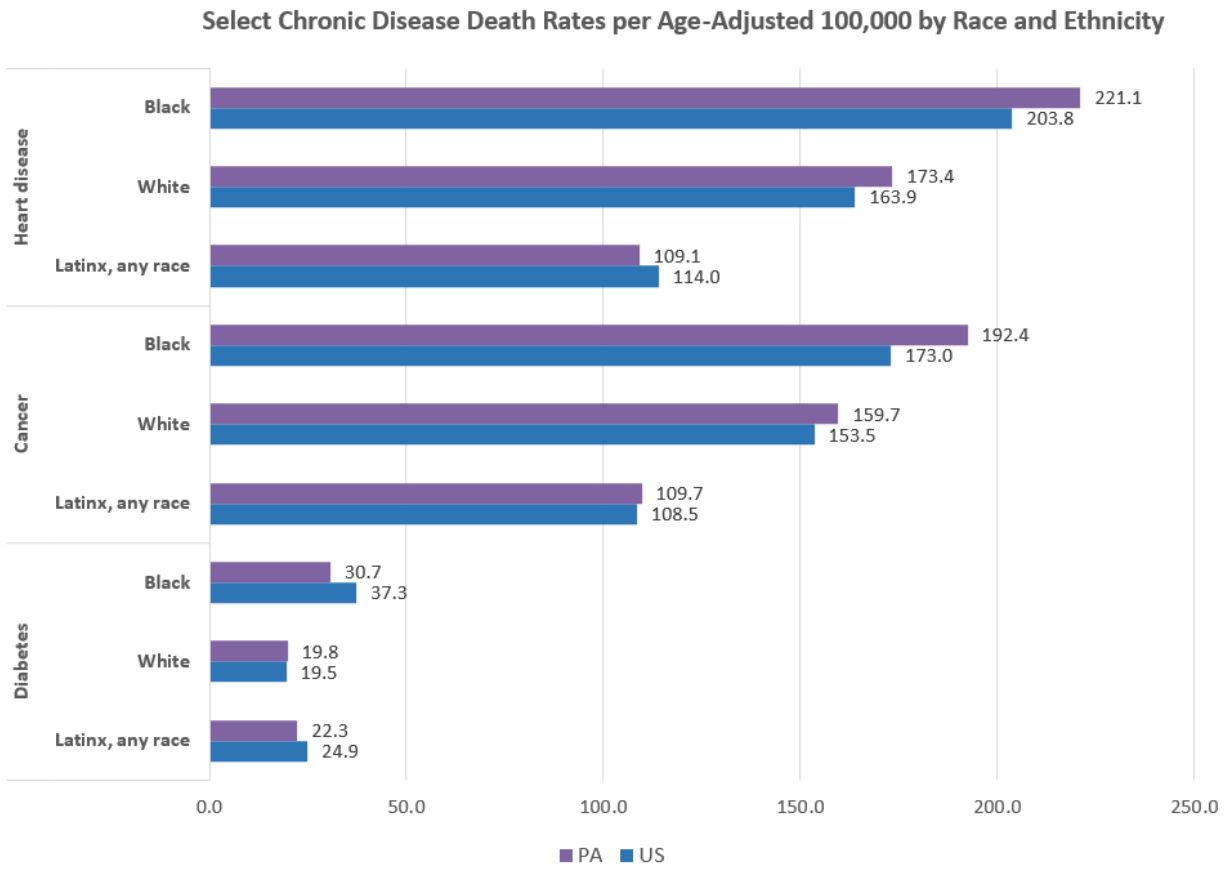
	Centre County	Juniata County	Mifflin County	PA	US
Heart Disease					
2018	156.5 ▲	185.9 ▲	168.7 ▼	176.1	163.6
2017	154.2	176.0	151.2	176.0	165.0
2016	145.0	147.2	175.4	176.2	165.5
2015	155.7	157.7	160.5	177.8	168.5
2014	153.9	155.3	180.3	175.8	167.0
Cancer					
2018	114.2 ▼	116.1 ▼	170.6 ▼	156.6	149.1
2017	121.6	134.8	167.1	161.0	152.5
2016	124.4	155.9	145.5	164.7	155.8
2015	135.7	171.3	218.0	167.2	158.5
2014	136.4	189.4	195.7	169.6	161.2
Chronic Lower Respiratory Disease (CLRD)					
2016-2018	24.9	36.1 ▼	39.9 ▼	36.3	40.4
2015-2017	26.1	38.3	40.7	37.3	41.0
2014-2016	24.7	39.1	47.7	37.3	40.9
Stroke					
2016-2018	31.1 ▼	31.3	32.3	36.2	37.3
2015-2017	32.9	30.9	31.7	37.4	37.5
2014-2016	33.2	33.1	31.3	37.5	37.2
Diabetes					
2016-2018	10.9	26.6 ▼	18.9	20.5	21.3
2015-2017	9.6	28.7	17.0	21.1	21.2
2014-2016	9.7	30.7	20.0	21.5	21.1

Source: Centers for Disease Control and Prevention

*Death rates for CLRD, stroke, and diabetes are shown as a 3-year aggregate due to lower death counts.

**Green highlighting indicates a lower rate than the state and nation; red highlighting indicates a higher rate. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 points since 2014/2014-2016.

Chronic Disease Data



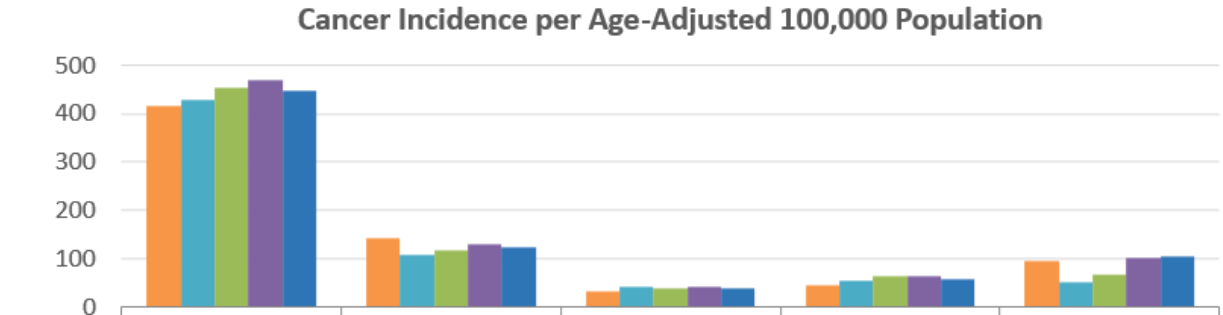
Source: Centers for Disease Control and Prevention, 2016-2018
*Data for Western Region counties are not reported due to low death counts.

Youth Chronic Disease Prevalence

	Centre County	Juniata County	Mifflin County	PA
Asthma				
Total students	1,040	204	418	206,712
Percent	7.5%	6.4%	7.9%	11.3%
Type II Diabetes				
Total students	9	3	16	1,052
Percent	0.06%	0.09%	0.30%	0.06%

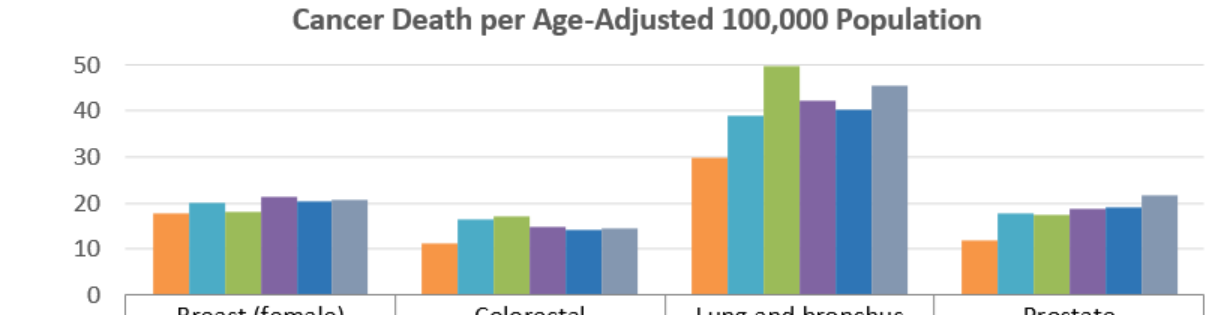
Source: Pennsylvania Department of Health, 2017-2018
*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage.

Chronic Disease Data



	All Cancers	Breast (female)	Colorectal	Lung and bronchus	Prostate
Centre	417.0	141.3	34.4	45.3	97.0
Juniata	427.2	107.0	42.1	54.2	52.1
Mifflin	454.3	118.4	39.7	65.8	69.0
PA	470.8	131.6	40.9	63.1	101.4
US	448.0	125.2	38.7	59.2	104.1

Source: Pennsylvania Department of Health, 2013-2017; Centers for Disease Control and Prevention, 2012-2016 (most recent available)

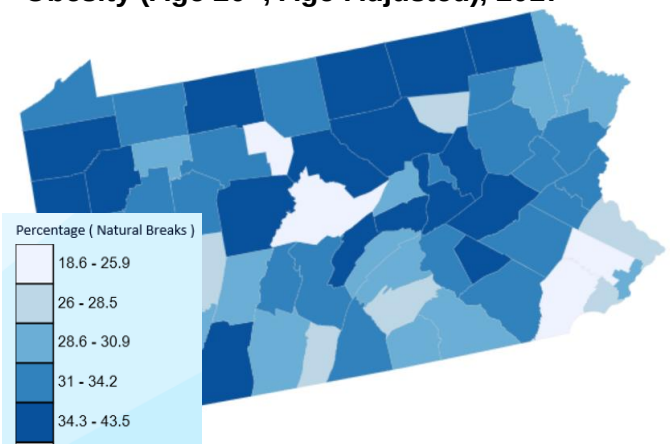


	Breast (female)	Colorectal	Lung and bronchus	Prostate
Centre	17.6	11.2	29.7	11.8
Juniata	20.1	16.4	39.1	17.7
Mifflin	18.1	17.1	49.7	17.3
PA	21.2	14.9	42.2	18.7
US	20.3	14.1	40.1	19.0
HP2020	20.7	14.5	45.5	21.8

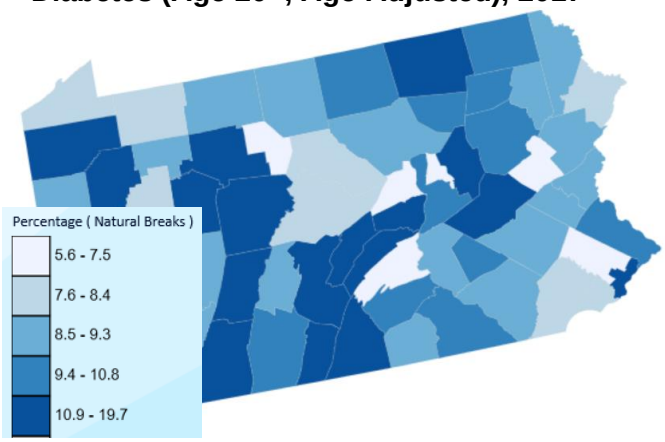
Source: Pennsylvania Department of Health, 2013-2017; Centers for Disease Control and Prevention, 2013-2017

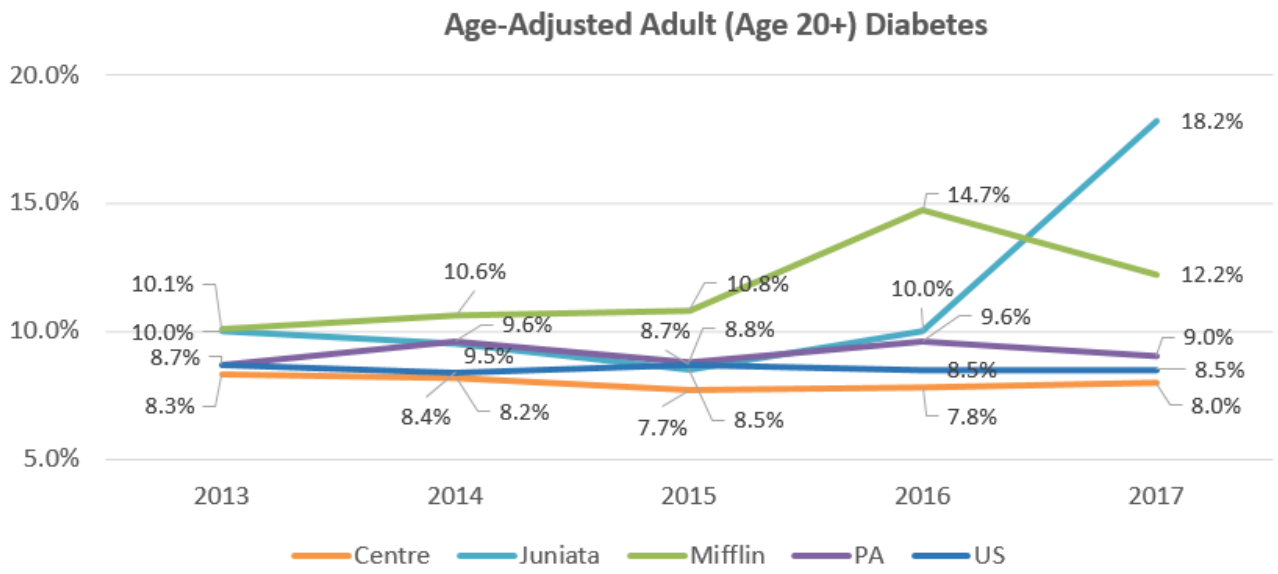
Chronic Disease Data

Obesity (Age 20+, Age-Adjusted), 2017



Diabetes (Age 20+, Age-Adjusted), 2017





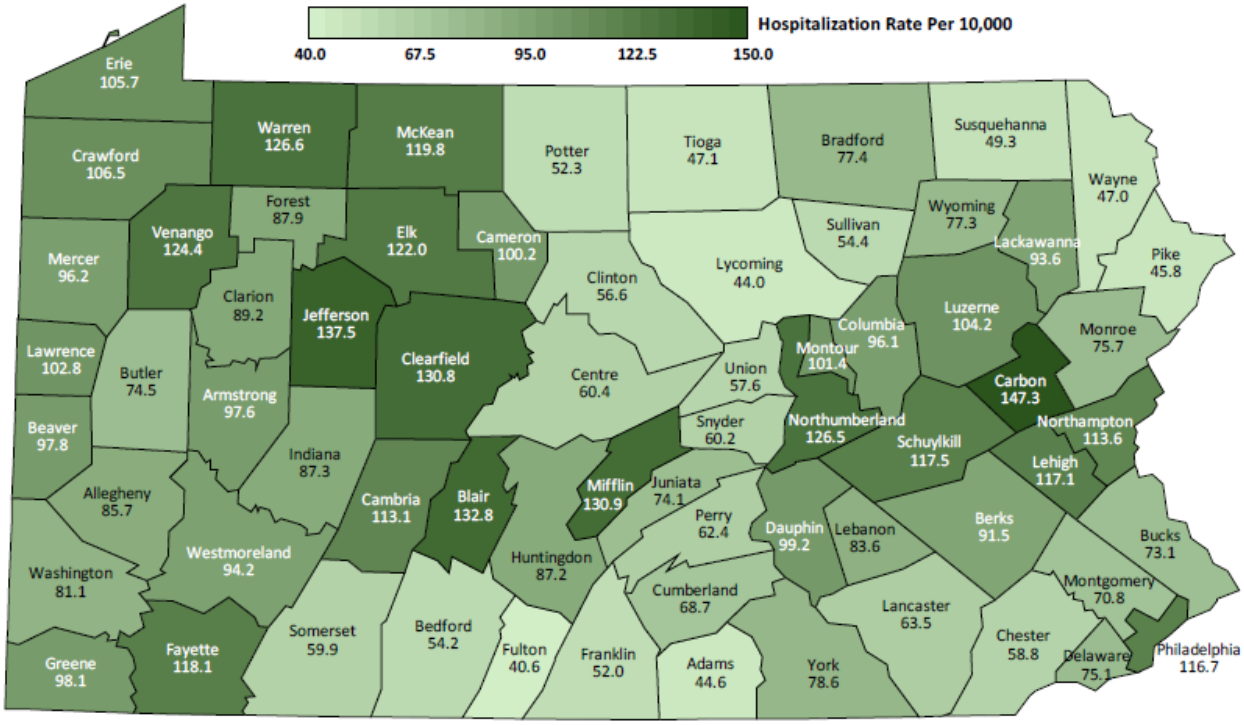
Source: Centers for Disease Control and Prevention

Behavioral Health Key Findings

- Across the state in 2018, there were 113,704 hospital stays for mental disorders for a rate of 88.8 per 10,000 residents. Centre and Juniata counties have a lower rate of hospitalizations than the state, but the Mifflin County rate is nearly 50% higher. Mifflin County also has a higher, increasing rate of death due to suicide compared to the state and nation. Mental distress in Mifflin County may be partially attributed to socioeconomic barriers. Statewide, mental disorder hospitalization rates were approximately 3 times higher in areas of high poverty and low educational attainment.
- Across the state in 2018, depression diagnoses accounted for nearly 44% of all mental disorders hospitalizations. About half of all patients were between the ages of 18-44 and one-third were ages 45-64.
- The PA Health Care Cost Containment Council reports that across PA from 2016 to 2017, “the number of hospitalizations for opioid overdose increased from 3,342 to 3,500—a 4.7% increase. In 2018, the number dropped to 2,667—a 23.8% decrease from 2017.” The percentage of overdoses due to pain medication increased from 2017 to 2018, while the percentage due to heroin decreased. Opioid overdose hospitalizations were more prevalent in areas of socioeconomic distress.
- Opioid overdose hospitalizations are not reported for Western Region counties due to low counts. In 2018, overdose deaths totaled 39 across the region with the majority (22) in Centre County. Overdose deaths declined significantly in Centre County in 2019 and 2020, totaling 16 over both years combined. Neonatal abstinence syndrome rates are also low among Western Region counties, falling below the state rate.
- The percentage of adults who report excessive drinking increased in all Western Region counties from the FY2019 CHNA; the Centre County percentage exceeds state and national averages by approximately 5 points.
- While self-reported excessive drinking increased across all Western Region counties, driving deaths due to alcohol impairment declined in all counties except Juniata. The percentage of alcohol-impaired driving deaths in Juniata increased from 25% at the time of the FY2019 CHNA to 41%; the current percentage reflects 11 total deaths.
- Centre and Juniata county youth report lower and/or declining substance use, including alcohol and marijuana, than youth statewide. Youth in the two counties are also less likely to report feelings of depression and attempted suicide, although it is worth noting that more than 1 in 4 youth report depression and nearly 1 in 10 report attempted suicide. Data for Mifflin County are not available.

Behavioral Health Data

Hospitalizations for Mental Disorders per 10,000 Residents, 2018
Statewide Rate: 88.8 per 10,000 Residents



Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Mental Disorders Hospitalizations per 10,000 by Socioeconomic Factors, 2018

	Pennsylvania
Poverty Rate	
Areas of high poverty (>25% of population)	163.3
Areas of low poverty (≤5% of population)	53.0
Education	
Areas of low education (≤10% with a bachelor's degree)	159.4
Areas of higher education (≥40% with a bachelor's degree)	58.4
Race/Ethnicity	
Black, Non-Hispanic	154.0
White, Non-Hispanic	81.7
Hispanic/Latinx	67.9

Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Behavioral Health Data

Mental Disorders Hospital Stays, 2018

	Pennsylvania (Total Hospital Stays: 113,704)
Treatment Setting	
Acute care hospital	56.4%
Psychiatric hospital	43.6%
Average Length of Stay	
Acute care hospital	8.6 days
Psychiatric hospital	12.3 days
Type of Mental Disorder	
Depression	44.0%
Schizophrenia	20.7%
Bipolar	20.2%
Other (conduct, anxiety, somatic, miscellaneous)	7.3%
Suicidal	4.2%
Trauma (adjustment, post-traumatic stress and dissociative disorders)	3.6%
Patient Age	
Under 18 years	14.8%
18-44 years	50.8%
45-64 years	27.2%
65-74 years	4.7%
75 years or over	2.6%

Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Suicide Death
HP2020 Goal: 10.2

Suicide Death per Age-Adjusted 100,000 Population

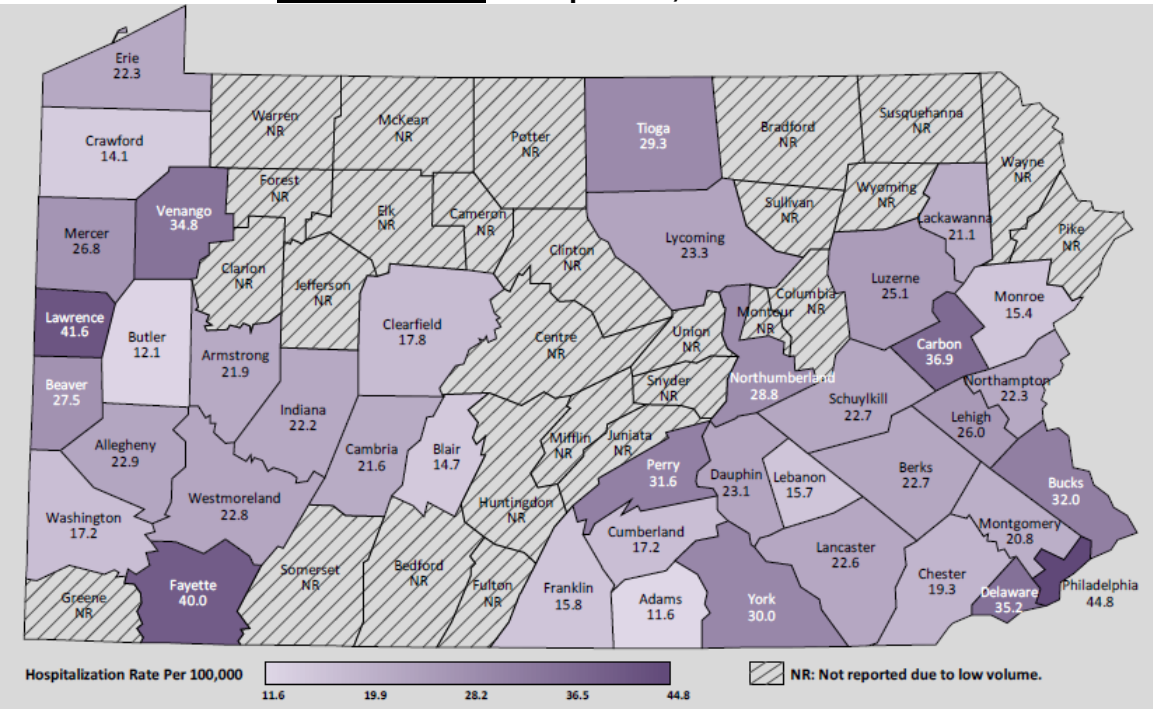
	Centre County	Juniata County	Mifflin County	PA	US
2016-2018	10.9	NA (n=15)	22.8 ▲	14.9	13.9
2015-2017	11.4	NA (n=16)	19.1	14.6	13.6
2014-2016	10.5	NA (n=10)	17.7	14.0	13.2

Source: Centers for Disease Control and Prevention
*Green highlighting indicates a lower rate than the state and nation; red highlighting indicates a higher rate. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 points since 2014-2016.

Behavioral Health Data

Opioid Overdose Hospitalizations per 100,000 Residents, 2018

Statewide Rate: 25.1 per 100,000 Residents



Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Opioid Overdose Hospitalizations, 2018

	Pennsylvania
Total Hospitalizations	
2018	2,667
2017	3,500
2016	3,342
Heroin Overdose Admissions	
2018	1,115 (41.8%)
2017	1,753 (50.1%)
2016	1,555 (46.5%)
Pain Medication Overdose Admissions	
2018	1,552 (58.2%)
2017	1,747 (49.9%)
2016	1,787 (53.5%)

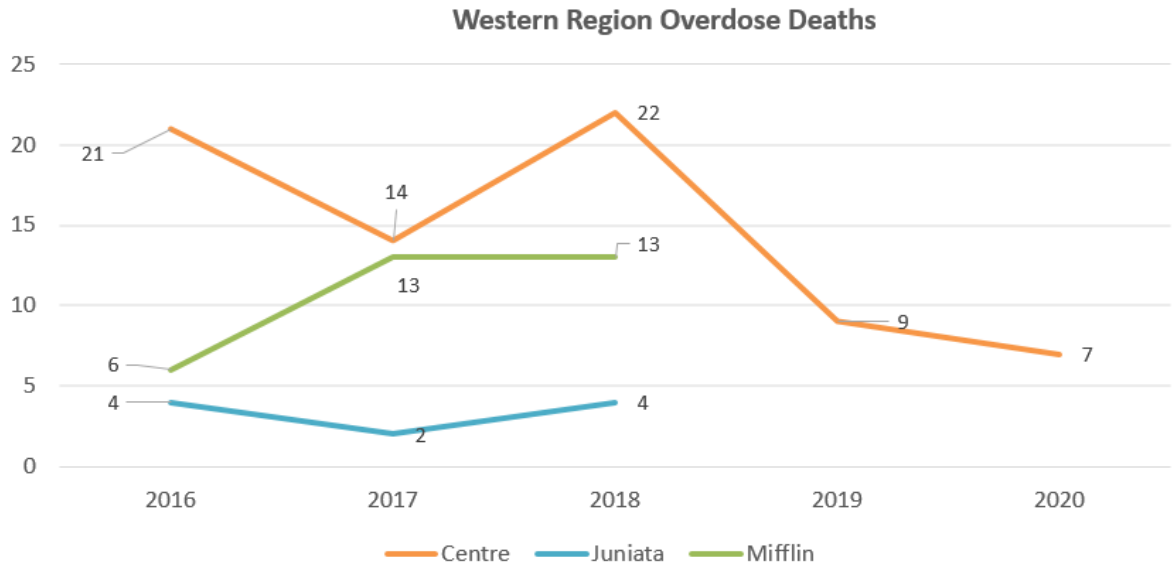
Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018

Behavioral Health Data

Opioid Overdose Hospitalizations per 100,000 by Socioeconomic Factors, 2018

	Pennsylvania
Income	
Low-income areas (avg. less than $30,000)	54.4
High-income areas (avg. $90,000 or higher)	17.3
Education	
Areas of low education (≤10% with a bachelor's degree)	46.2
Areas of higher education (≥60% with a bachelor's degree)	14.6
Race/Ethnicity	
Black, Non-Hispanic	28.9
White, Non-Hispanic	25.2
Hispanic/Latinx	20.0

Source: Pennsylvania Health Care Cost Containment Council (PHC4), 2018



Source: OverdoseFreePA

*Data are not reported as available through 2020; 2020 counts reflect deaths reported as of August.

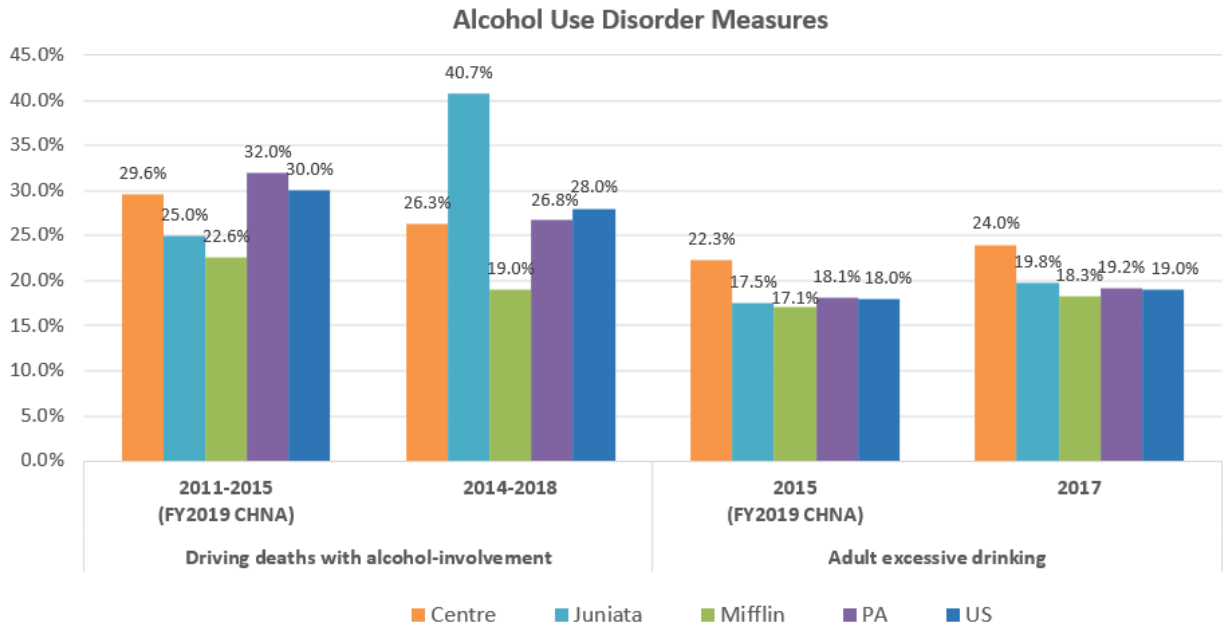
Neonatal Abstinence Syndrome (NAS), FY2019

	Centre County	Juniata County	Mifflin County	PA
Number of NAS stays	NA	NA	NA	1,733
Rate per 1,000 newborn stays	4.8	NA	4.9	13.8

Source: Pennsylvania Health Care Cost Containment Council (PHC4), July 1, 2018-June 30, 2019

*PHC4 defines NAS as "An array of withdrawal symptoms that develops soon after birth in newborns exposed to addictive drugs (e.g., opioids) while in the mother's womb."

Behavioral Health Data



Source: Centers for Disease Control and Prevention & National Highway Safety Administration

Youth Behavioral Health Measures (Grades 6, 8, 10, 12)

	Centre County	Juniata County	PA
Sad or Depressed Most Days in the Past Year			
2019	28.4%	NA	38.0%
2017	29.3%	33.8%	38.1%
2015	29.2%	NA	38.3%
Attempted Suicide			
2019	6.7%	NA	9.7%
2017	7.0%	8.4%	10.0%
2015	6.5%	NA	9.5%
Alcohol Use within Past 30 Days			
2019	12.9% ▼	NA	16.8%
2017	14.9%	14.7%	17.9%
2015	15.0%	NA	18.2%
Marijuana Use within Past 30 Days			
2019	5.9%	NA	9.6%
2017	7.6%	3.4%	9.7%
2015	6.0%	NA	9.4%

Source: Pennsylvania Commission on Crime and Delinquency

*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 percentage points since 2015.

**Mifflin and Juniata county data are not reported or are limited due to low school district participation.

Maternal and Child Health Key Findings

- The birth rate continued to decline statewide, as well as in Centre County. The birth rate for Juniata County increased, consistent with higher reported population growth from 2017 to 2020. While the birth rate for Mifflin County has historically been higher than the state, the total population declined, indicating that the birth rate does not exceed the death rate and/or out-migration of residents. Consistent with the region's demographics, the majority (85% or more) of births were to White mothers.
- The percentage of births to teens has generally been lower in Centre and Juniata counties and higher in Mifflin County compared to the state. Teen births declined overall, despite year-to-year variability.
- The current percentage of pregnant women receiving first trimester prenatal care is generally consistent with the percentage reported at the time of the FY2019 CHNA. Juniata and Mifflin counties continue to have fewer women receiving early prenatal care compared to the state and nation, while Centre County nearly meets the Healthy People 2020 goal.
- All Western Region counties have a lower percentage of low birth weight and preterm births compared to the state and nation and meet Healthy People 2020 goals. Of note, while low birth weight percentages continued to decline in Juniata and Mifflin counties, preterm births increased in recent years.
- Nearly 90% of Centre County mothers breastfeed, exceeding state and national benchmarks. Juniata County saw a notable decline in breastfeeding from 2017 to 2018 that should continue to be monitored. Breastfeeding in Mifflin County has been declining since 2016 and is lower than state and national averages.
- More women smoke during pregnancy in Pennsylvania than the nation overall, although the percentage is declining. Within Centre and Juniata counties, approximately 10% of mothers report smoking during pregnancy. Juniata County saw significant improvement in this measure with a 7-point decline from 2014 to 2018. Approximately 17% of pregnant women in Mifflin County report smoking; the percentage declined from 2014 to 2017, but increased in 2018.
- Mifflin County overall experiences poorer maternal and child health outcomes compared to other Western Region counties and continues to be challenged by a higher rate of infant death. The county's 2016-2018 infant death rate, while lower than the prior three years, was double the national rate.
- Reportable racial and ethnic differences in maternal and child health outcomes are limited within the Western Region due to low birth counts among minority populations. Across the state and nation, there are wide disparities, particularly affecting Black and Latina mothers. Of grave concern, as a national average, Black mothers are more than 2.5 times as likely as White and/or Latina mothers to die due to pregnancy-related causes.

Maternal and Child Health Data

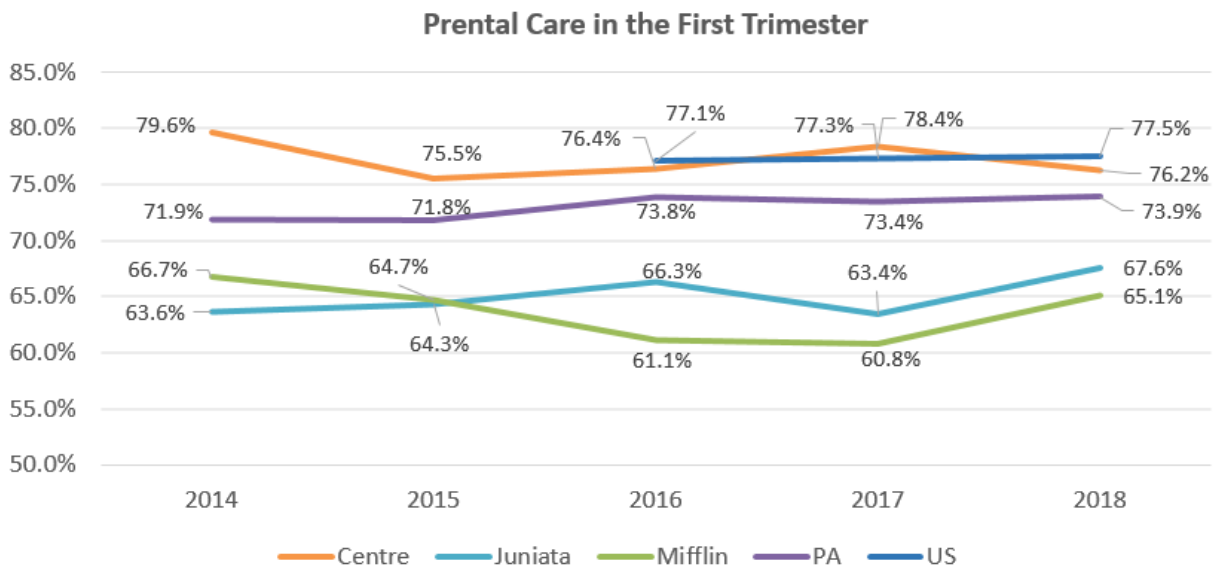
Total Births

	Centre County	Juniata County	Mifflin County	PA
Birth Rate per 1,000				
2018	15.2	23.8 ▲	25.9	20.8
2017	15.2	22.8	24.8	21.1
2016	15.8	23.2	23.5	21.4
2015 (FY2019 CHNA)	16.7	21.7	25.5	21.5
2018 Births by Race and Ethnicity				
Total	1,173	293	610	135,677
Asian	8.0%	0.3%	0.2%	4.6%
Black	1.1%	1.7%	0.7%	13.9%
White	85.3%	91.8%	96.9%	70.1%
Latinx	3.5%	6.1%	1.8%	11.6%
Births to Teens				
2018	2.1%	3.4%	5.1%	4.1%
2017	1.2%	4.7%	4.3%	4.3%
2016	1.4%	3.5%	5.6%	4.6%
2015 (FY2019 CHNA)	2.7%	4.1%	6.3%	5.1%

Source: Pennsylvania Department of Health

*Green highlighting indicates a lower percentage than the state; red highlighting indicates a higher percentage. Trending denoted as increasing (▲) or decreasing (▼) by ≥2 points since 2015.

Maternal and Child Health Data



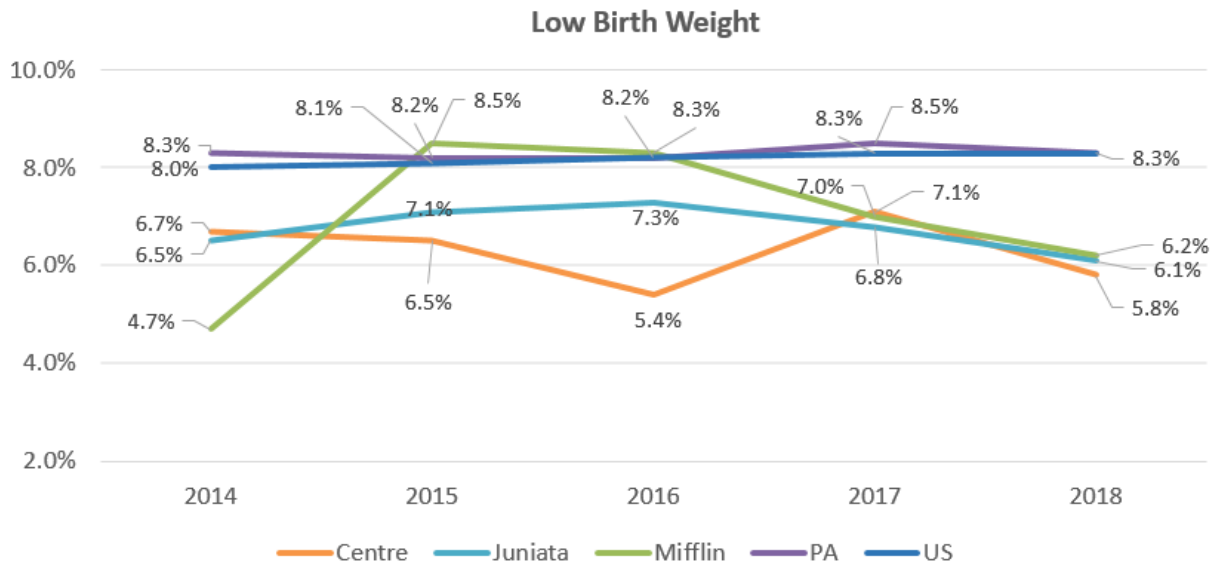
Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention
*Starting in 2016, all of the US reported data based on the 2003 US Certificate of Live Birth, providing national indicators.

Prenatal Care in the First Trimester by Race and Ethnicity

	Total Births	Asian	Black	White	Latina
Centre County	76.2%	69.1%	84.6%	77.3%	66.7%
Juniata County	67.6%	NA	NA	68.1%	66.7%
Mifflin County	65.1%	NA	NA	65.2%	NA
PA	73.9%	73.0%	64.6%	77.3%	65.3%
US	77.5%	81.8%	67.1%	82.5%	72.7%
HP2020	77.9%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
*Green highlighting indicates a higher percentage than state and national benchmarks; red highlighting indicates a lower percentage.

Maternal and Child Health Data



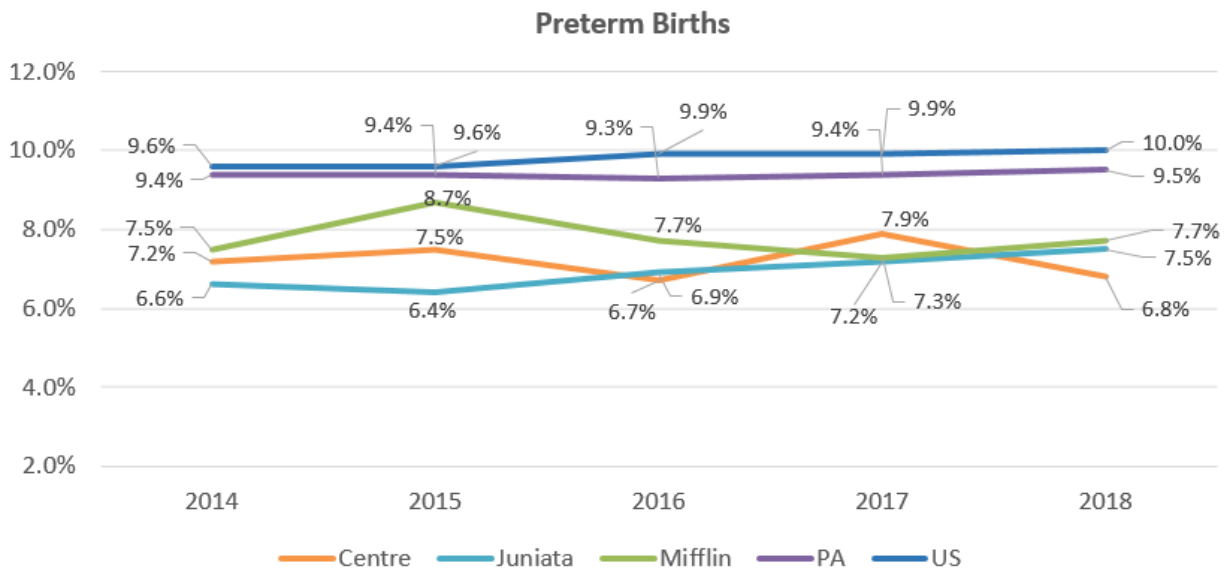
Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention

Low Birth Weight by Race and Ethnicity

	Total Births	Asian	Black	White	Latinx
Centre County	5.8%	11.7%	NA	5.0%	NA
Juniata County	6.1%	NA	NA	6.3%	NA
Mifflin County	6.2%	NA	NA	5.9%	NA
PA	8.3%	8.8%	13.9%	7.0%	9.0%
US	8.3%	8.6%	14.1%	6.9%	7.5%
HP2020	7.8%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
*Green highlighting indicates a lower percentage than state and national benchmarks; red highlighting indicates a higher percentage.

Maternal and Child Health Data



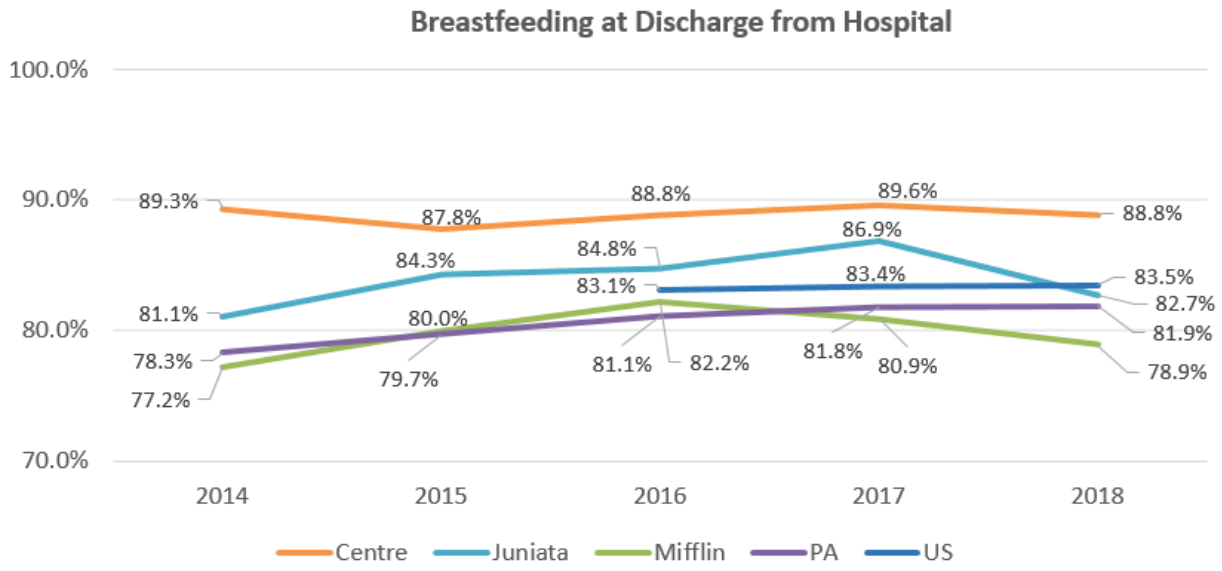
Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention

Preterm Births by Race and Ethnicity

	Total Births	Asian	Black	White	Latinx
Centre County	6.8%	NA	NA	6.5%	NA
Juniata County	7.5%	NA	NA	7.1%	NA
Mifflin County	7.7%	NA	NA	7.3%	NA
PA	9.5%	8.1%	13.6%	8.7%	10.0%
US	10.0%	8.6%	14.1%	9.1%	9.7%
HP2020	9.4%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
*Green highlighting indicates a lower percentage than state and national benchmarks; red highlighting indicates a higher percentage.

Maternal and Child Health Data



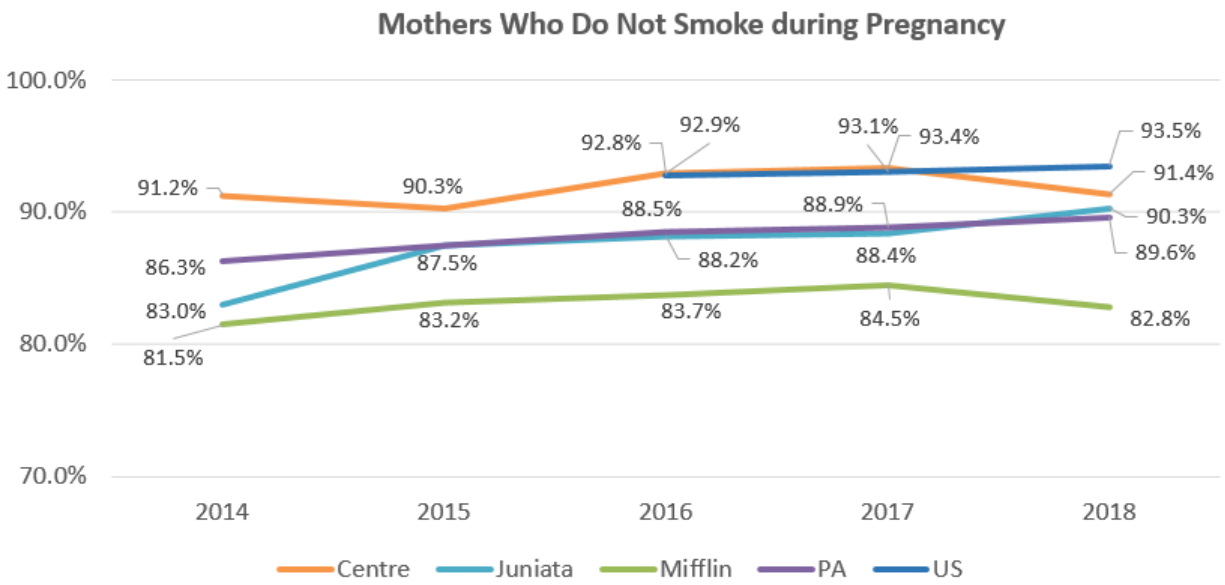
Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention
*Starting in 2016, all of the US reported data based on the 2003 US Certificate of Live Birth, providing national indicators.

Breastfeeding at Discharge from Hospital by Race and Ethnicity

	Total Births	Asian	Black	White	Latina
Centre County	88.8%	95.7%	83.3%	88.4%	82.5%
Juniata County	82.7%	NA	NA	82.8%	77.8%
Mifflin County	78.9%	NA	NA	79.4%	NA
PA	81.9%	92.1%	76.7%	82.4%	80.6%
US	83.5%	90.9%	72.3%	84.9%	87.1%
HP2020	81.9%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
*Green highlighting indicates a higher percentage than state and national benchmarks; red highlighting indicates a lower percentage.

Maternal and Child Health Data



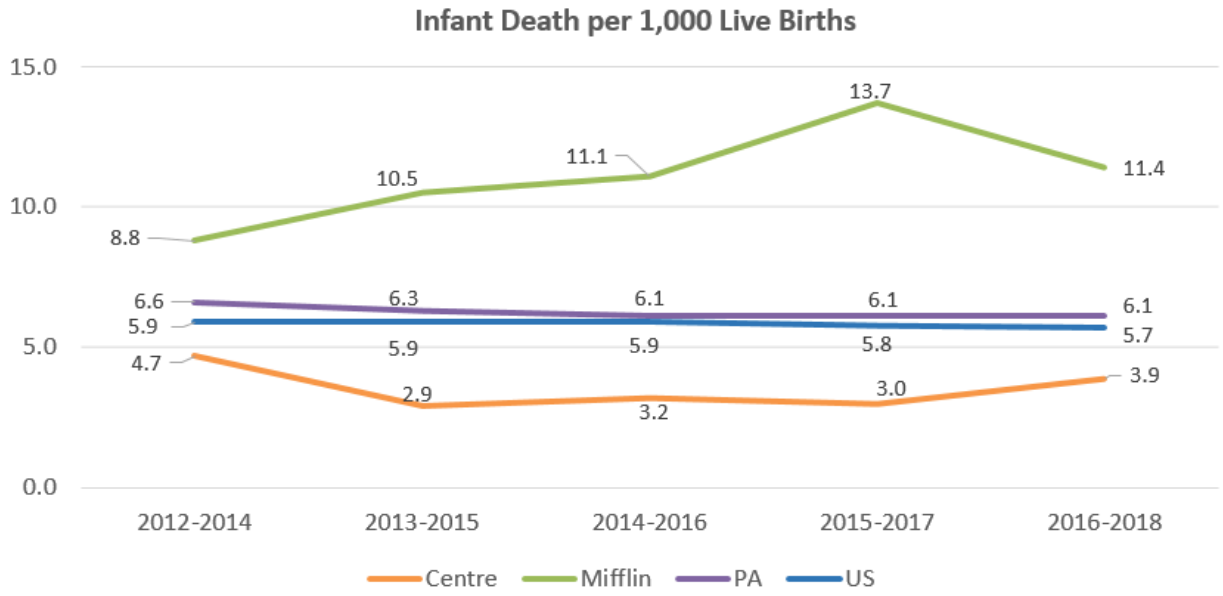
Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention
*Starting in 2016, all of the US reported data based on the 2003 US Certificate of Live Birth, providing national indicators.

Mothers Who Do Not Smoke during Pregnancy by Race and Ethnicity

	Total Births	Asian	Black	White	Latina
Centre County	91.4%	100%	84.6%	90.4%	95.1%
Juniata County	90.3%	NA	NA	89.9%	94.4%
Mifflin County	82.8%	NA	NA	83.2%	90.9%
PA	89.6%	99.2%	91.8%	88.1%	94.6%
US	93.5%	99.5%	94.8%	90.5%	98.3%
HP2020	98.6%	--	--	--	--

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
*Green highlighting indicates a higher percentage than state and national benchmarks; red highlighting indicates a lower percentage.

Maternal and Child Health Data



Source: Pennsylvania Department of Health & Centers for Disease Control and Prevention
*Juniata County data are not reported due to low death counts.

Maternal Death per 100,000 Live Births

	Total Deaths	Total Death Rate	Black Death Rate	White Death Rate	Latina Death Rate
PA	19	14.0	NA	NA	NA
US	658	17.4	37.1	14.7	11.8

Source: Pennsylvania Department of Health, 2018 & Centers for Disease Control and Prevention, 2018
*Maternal deaths include deaths of women while pregnant or within 42 days of termination of pregnancy, from any cause related to pregnancy or its management.

Aging Population Key Findings

- Juniata and Mifflin counties are aging faster than the population statewide and nationally, and seniors are less healthy overall. The percentage of Juniata and Mifflin county senior Medicare beneficiaries with multiple chronic conditions (comorbidities) declined from the FY2019 CHNA, but remains higher than the state and nation. Currently, 77% of Juniata and Mifflin county seniors have comorbidities compared to 72% statewide and 69% nationally. In Centre County, the percentage of seniors with chronic condition comorbidities is similar to the state and nation at 71%.
- Seniors spend more money on healthcare than any other age group, and spending increases with a higher reported number of chronic conditions. Across the Western Region, senior Medicare beneficiaries with 6 or more chronic conditions have more than $25,000 in annual Medicare expenses, with the highest spending in Centre County. Seniors in Juniata and Mifflin counties generally have lower spending averages than the state or nation.
- Consistent with having a higher prevalence of comorbidities, senior Medicare beneficiaries in Juniata and Mifflin counties have a higher prevalence of nearly all reported chronic condition types in comparison to the state and nation, particularly for high cholesterol, hypertension, and diabetes. Notably, all Western Region counties have a higher prevalence of asthma and depression among senior Medicare beneficiaries in comparison to the state and nation.
- Alzheimer's disease death rates among seniors increased statewide and nationally before leveling off in recent years. Some of the increase in death rates may be due to reclassification of cause of death to Alzheimer's disease as the primary cause of death rather than the resulting acute condition e.g. pneumonia or heart failure. The Centre County Alzheimer's disease death rate is similar to the state, while death rates in Juniata and Mifflin counties are notably lower than the state and nation.
- 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 who live alone. The percentage of seniors living alone increased statewide and nationally with a higher percentage in PA (13%) versus the US (11%). Within the Western Region, the percentage of seniors living alone remained largely stable with a lower percentage in Centre County (9%) and higher percentages in Juniata and Mifflin counties (12%-13%).

Aging Population Data

2017 Chronic Conditions among Medicare Beneficiaries 65 Years or Over

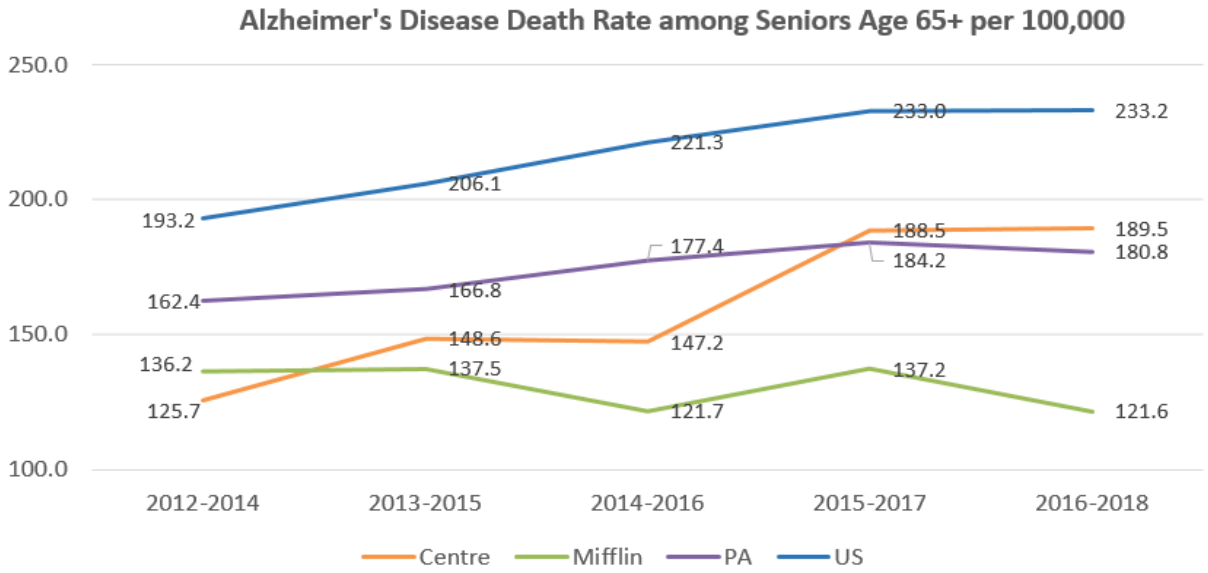
	Centre County	Juniata County	Mifflin County	PA	US
Multiple Chronic Conditions (Comorbidities)					
2 to 3 Conditions	32.2%	29.3%	30.6%	31.1%	29.6%
2015 (FY2019 CHNA comparison)	31.5%	28.9%	31.0%	31.1%	30.0%
4 to 5 Conditions	21.7%	25.5% ▼	24.9%	22.9%	21.8%
2015 (FY2019 CHNA comparison)	22.2%	26.6%	24.2%	22.9%	21.6%
6 or More conditions	17.2%	22.2%	21.7% ▼	18.2%	17.4%
2015 (FY2019 CHNA comparison)	17.5%	22.7%	23.5%	17.6%	16.2%
Per Capita Standardized[1] Spending					
2 to 3 Conditions	$5,133	$4,445	$4,339	$5,141	$5,392
4 to 5 Conditions	$10,061	$8,289	$8,782	$10,117	$10,475
6 or More conditions	$29,161	$25,027	$26,027	$29,184	$29,004
Chronic Condition Prevalence by Type					
Alzheimer's Disease	11.1%	12.1%	11.4%	12.2%	12.1%
Arthritis	34.3%	32.5%	32.5%	36.1%	34.2%
Asthma	6.9%	5.5%	8.8%	4.9%	4.6%
Cancer	10.3%	NA	9.3%	10.1%	9.2%
COPD	11.0%	14.4%	15.7%	11.2%	11.6%
Depression	17.3%	18.7%	19.1%	16.1%	15.4%
Diabetes	24.9%	30.8%	29.3%	26.6%	27.4%
Heart Failure	13.7%	15.8%	15.7%	14.4%	14.5%
High Cholesterol	46.9%	61.2%	58.3%	47.6%	43.0%
Hypertension	59.4%	66.2%	66.9%	62.3%	59.9%
Ischemic Heart Disease	24.7%	33.5%	31.4%	29.9%	28.8%
Stroke	3.8%	5.2%	4.6%	4.6%	4.0%

Source: Centers for Medicare & Medicaid Services, 2015 & 2017

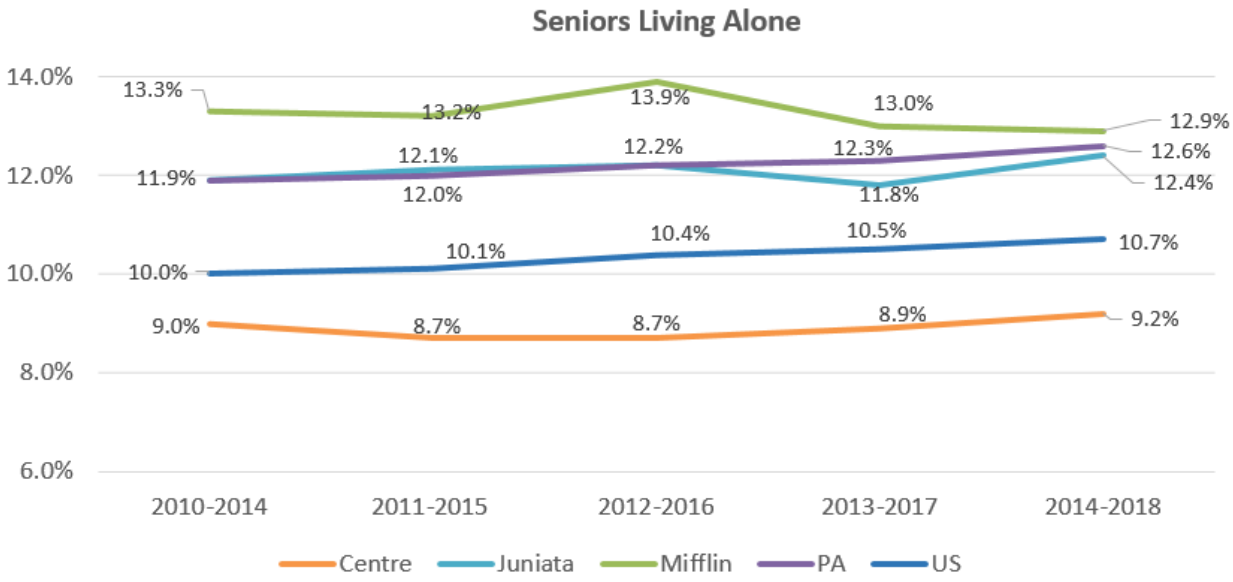
*Green highlighting indicates a lower burden of disease than the state and nation; red highlighting indicates a higher burden. Trending denoted as increasing (▲) or decreasing (▼) by ≥1 percentage point since 2015.

[1] Standardized spending takes into account payment factors that are unrelated to the care provided (e.g. geographic variation in Medicare payment amounts)

Aging Population Data



Source: Centers for Disease Control and Prevention
*The Juniata County 2016-2018 death rate was 134.2; data are not trended due to low death counts.



Source: US Census Bureau

Key Informant Survey Findings

Background

A Key Informant Survey was conducted with community representatives of the Western Region to solicit information about health needs among residents. A total of 41 individuals responded to the survey, including health and social service providers; community and public health experts; civic, religious, and social leaders; policy makers; and others representing diverse populations including minority, low-income, and underserved residents. A list of the represented community organizations and the key informants' respective titles is included in Appendix C. Key informant names are withheld for confidentiality.

These key informants were asked a series of questions about their perceptions of community health including health drivers, barriers to care, community infrastructure, and needed services within the community. Following is a summary of findings from their responses.

Summary of Findings

- Key informants identified the Western Region's top community strengths as access to healthcare and social services (37%) and safe neighborhoods (34%).
- Mental health conditions were seen as a top community health concern by nearly two-thirds (63%) of key informants. Other health concerns that were named among the respondents' top three perceived issues were overweight/obesity (46%), substance use disorder (39%), and aging-related problems and diabetes (29%).
- Social determinants of health were recognized as the top contributors to regional health concerns. About 40% of key informants named poverty among their top three factors that contribute to health concerns, ranking it as the #1 contributor. Approximately one in four participants also saw lack of transportation and health literacy. Transportation was also seen as the #2 missing resource in the region.
- Consistent with the top health concerns for the region, 66% of respondents named mental health services as a missing community resource. While SUD was the third ranked health concern, it was the sixth ranked missing resource. This finding may indicate an awareness of available capacity among existing SUD services.
- Affordable housing is a primary need for the Western Region. Approximately 34% of informants identified affordable housing as a missing resource (#3 ranking). Similarly, 27% of informants thought that housing opportunity—including quality, cost, and availability—declined in the region over the past 3-5 years.

- About 60% of key informants saw overall quality of life in the Western Region as “staying the same” over the past 3-5 years; 20% saw it as “improving.” Social determinants of health are key indicators of quality of life. Informants perceived the greatest improvement in “neighborhood and built environment” and “health and healthcare” and the greatest decline in “social and community context” and “economic stability.” These findings may be indicative of the economic impact of COVID-19 and the acknowledgement of historical and systemic racial inequities.
- Nearly 80% of informants “agreed” or “strongly agreed” that they regularly partner with hospital providers on health improvement initiatives. Some informants commented that more work is needed to ensure effective collaboration to address health needs and to engage residents when developing health initiatives.
- About 50% of key informants perceived that a top barrier to health and social service partnerships was lack of shared data or measurement tools. Other top identified barriers included ability to demonstrate outcomes (35%) and inconsistent service areas or geographic boundaries (30%). Verbatim comments by key informants reinforced the need for better communication among partners and commitment to a collective agenda.
- Key informants were “somewhat” to “moderately” worried about the long-term impact of COVID-19 on communities and residents. They were most concerned about the impact on the mental and emotional health of residents and community financial health.
- When asked to share how their organization is effectively engaging community residents during COVID-19, many informants spoke to the increased use of technology and social media to provide virtual learning and service environments, community education and awareness campaigns, increased support for social needs and safety net providers, more programs and services offered within the community, and cross-sector partnerships to better understand COVID-related needs and disseminate available information and resources.

Survey Participants

Key informants represented diverse organizations and populations across the Western Region. The table below shows the breakdown of survey participants by county, with the highest number of responses from Mifflin County. Approximately 32% of key informants indicated that they served all populations. The most commonly served special population groups were low-income/poor, children/youth, and families.

Western Region Counties Served by Key Informants

	Percent of Informants*	Number of Informants
Mifflin County	87.8%	36
Juniata County	65.9%	27
Centre County	48.8%	20

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

Populations Served by Key Informants

	Percent of Informants*	Number of Informants
Low-Income/Poor	53.7%	22
Children/Youth	48.8%	20
Families	46.3%	19
Seniors/Elderly	41.5%	17
Not Applicable (serve all populations)	31.7%	13
Homeless	29.3%	12
Hispanic/Latinx	26.8%	11
Uninsured/Underinsured	26.8%	11
Emotionally or Physically Disabled	22.0%	9
Women	22.0%	9
Veteran	22.0%	9
Black/African American	19.5%	8
LGBTQ+	19.5%	8
Men	17.1%	7
Other**	17.1%	7
Immigrant/Refugee	14.6%	6
Asian/Pacific Islander	9.8%	4
American Indian/Alaska Native	7.3%	3

*Key informants were able to select multiple populations. Percentages do not add up to 100%.

**Other populations included: Plain community; individuals with substance use disorder; individuals with serious mental illness and/or intellectual disabilities; business and industry owners/employers

Community Health and Well-Being

An asset-based approach to health improvement planning acknowledges and makes visible the strengths, resources, and potential in communities. This approach helps community planners to identify the existing factors that support resident health and well-being to better mobilize stakeholders.

Community Strengths

Choosing from a wide-ranging list of environmental, health, and social resources, key informants were asked to select the top three strengths in the communities they serve. An option to “write in” any resource not included on the list was provided. The top responses are depicted in the table below. The table is rank ordered by the percentage of respondents that selected the resource as a top three community strength.

Access to healthcare services and available social services were most commonly seen as the top strengths in the Western Region. Safe neighborhoods and community connectedness were also seen as top community strengths by one-quarter to one-third of informants.

Top Community Strengths

Ranking	Community Strength	Informants Selecting as a Top 3 Community Strength	
		Percent*	Count
1	Access to healthcare services	36.6%	15
1	Available social services	36.6%	15
3	Safe neighborhoods	34.2%	14
4	Community connectedness	26.8%	11
5	Access to healthy foods	19.5%	8
6	Good schools	17.1%	7
7	Strong family life	14.6%	6
7	Resources for seniors	14.6%	6
9	Clean environment	12.2%	5
9	Employment opportunities	12.2%	5
9	Recreation resources	12.2%	5

*Key informants were able to select up to three community strengths. Percentages do not add up to 100%.

Health Concerns

Key informants were asked to similarly select what they perceived as the top three health concerns and contributing factors impacting the population(s) they serve. An option to "write in" any health issue or contributing factor not included on the lists was provided. The top responses are depicted in the tables below. The tables are rank ordered by the percentage of respondents that selected the issue or contributing factor as a top three concern.

Just over 63% of informants selected mental health conditions among their top three community health concerns. Overweight/Obesity was the next most commonly selected concern (46%), followed by substance use disorder (39%). Aging-related problems and diabetes were the fourth ranked health concerns with 29% of informants selecting these concerns in their top three.

Top Health Concerns Affecting Residents

Ranking	Health Concern	Informants Selecting as a Top 3 Health Concern	
		Percent*	Count
1	Mental health conditions	63.4%	26
2	Overweight/Obesity	46.3%	19
3	Substance use disorder	39.0%	16
4	Aging-related problems	29.3%	12
4	Diabetes	29.3%	12
6	Dental problems	14.6%	6
6	Vaping/E-cigarette use	14.6%	6
8	Heart disease and stroke	12.2%	5
9	Cancers	7.3%	3
9	Racial/Ethnic disparities	7.3%	3

*Key informants were able to select up to three health concerns. Percentages do not add up to 100%.

A similar percentage of key informants (34%-39%) identified poverty, health habits (e.g. diet, physical activity), and drug/alcohol use as top contributing factors to health concerns. Agreement on other significant factors was less consistent for the fourth and lower rankings. About 27% of informants selected transportation and 22% selected health literacy as top needs.

Top Contributing Factors to Community Health Concerns

Ranking	Contributing Factor	Informants Selecting as a Top 3 Contributor	
		Percent*	Count
1	Poverty	39.0%	16
2	Health habits (diet, physical activity)	36.6%	15
3	Drug/Alcohol use	34.2%	14
4	Lack of transportation	26.8%	11
5	Health literacy (ability to understand health information)	22.0%	9
6	Ability to afford healthcare	19.5%	8
7	Availability of healthcare providers	14.6%	6
7	Housing quality/stability	14.6%	6
9	Availability of health and wellness programs	12.2%	5
9	Food insecurity	12.2%	5
9	Lack of health insurance	12.2%	5
9	Lack of social support (family, friends, social network)	12.2%	5

*Key informants were able to select up to three contributing factors. Percentages do not add up to 100%.

Missing Resources

Key informants were asked what resources are missing in the community that would help residents optimize their health. Respondents could choose as many options as they saw as needed. An option to “write in” any resource not included on the list was provided.

Consistent with mental health conditions as the top identified community health concern for the region, mental health services were named by 66% of respondents as a missing resource. Substance use disorder (SUD) was the third ranked health concern with 39% of respondents choosing it, but fewer (27%) of informants named SUD services among their top three missing resources in the community. This trend may indicate respondents’ awareness of available capacity for these services.

Nearly half (49%) of informants qualified a need for transportation options (#2 ranking) and 34% indicated a need for affordable housing (#3 ranking). Other top identified missing resources included health and wellness education and programs, dental care, and community support groups.

Top Missing Resources within the Community to Optimize Health

Ranking	Resource	Percent of Informants	Number of Informants
1	Mental health services	65.9%	27
2	Transportation options	48.8%	20
3	Affordable housing	34.2%	14
3	Health and wellness education and programs	34.2%	14
5	Dental care	29.3%	12
6	Community support groups	26.8%	11
6	Substance use disorder services	26.8%	11
8	Healthy food options	22.0%	9
9	Multi-cultural or bilingual healthcare providers	19.5%	8
9	Social services assistance (housing, electric, food, clothing)	19.5%	8

Social Determinants of Health

The US Department of Health and Human Services' Healthy People initiative defines social determinants of health (SDoH) as, "The conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality of life outcomes and risks."

Informants were asked to rate select SDoH dimensions, as well as overall quality of life, based on perceived trends in the community over the past 3-5 years. Statements were rated on a scale of (1) "declined" to (3) "improved." Key informants' responses are outlined in the table below; SDoH are rank ordered by mean score.

According to survey responses, overall quality of life in the Western Region has been largely consistent (58.5%) or improving (19.5%) over the past 3-5 years. Survey participants perceived the greatest progress in "neighborhood and built environment" and "health and healthcare." Approximately one-quarter of respondents indicated that these dimensions improved over the past 3-5 years.

Other SDoH dimensions were largely seen as staying the same or declining. "Social and community context" was identified as declining by 39% of informants. "Housing opportunity" and "economic stability" were seen as declining by 27% and 34% of informants, respectively. These findings may be indicative of the recent emphasis on historical and systemic racial inequities, the economic impact of COVID-19, and a growing need for affordable housing.

Quality of Life and Social Determinants of Health: Perceived Trends

	Improved (3)	Stayed the Same (2)	Declined (1)	Don't Know/NA	Mean Score
Quality of Life, defined as the general well-being of individuals and communities	19.5%	58.5%	9.8%	12.2%	1.85
Social Determinants of Health					
Neighborhood and built environment (access to healthy foods, sidewalks, open spaces, transportation)	26.8%	56.1%	7.3%	9.8%	2.00
Health and healthcare (access, cost, availability, quality)	22.0%	63.4%	7.3%	7.3%	2.00
Education (high school graduation, enrollment in higher education, language/literacy, early childhood education and development)	7.3%	63.4%	22.0%	7.3%	1.71
Economic stability (poverty, food security, employment, housing stability)	17.1%	39.0%	34.2%	9.8%	1.63
Housing opportunity (quality, cost, availability)	2.4%	58.5%	26.8%	12.2%	1.51
Social and community context (social cohesion, civic participation, perceptions of discrimination and equity, incarceration/ institutionalization)	9.8%	41.5%	39.0%	9.8%	1.51

Informants were asked to share open-ended feedback regarding community health and well-being for the populations they serve. Many informants spoke to the impact of COVID-19 on the community, as well as social determinants of health, particularly affordable housing. Verbatim comments by key informants are included below.

- *"COVID has seriously affected social interaction, exercise, and healthy eating."*
- *"I definitely believe we must help people to be the best they can be by helping them realize their potential through healthy lifestyles, higher wages, adequate housing, easy access to healthcare and education."*
- *"I think housing is becoming more expensive and more difficult to find."*
- *"The opioid epidemic has stunted efforts being made to improve health and wellness in our region."*
- *"These reflect my overall thoughts over the past 3-5 years. However, more recently COVID-19 has changed access to many resources for many people. The pandemic has affected everyone in one way or another. I don't know that we will fully understand this impact for quite some time."*
- *"We need more intergenerational opportunities."*

Community Engagement and Partnerships

Key informants were asked to rate their agreement to statements pertaining to community partnerships and engagement of diverse stakeholders and residents. Statements were rated on a scale of (1) “strongly disagree” to (5) “strongly agree.” Key informants’ responses are outlined in the table below in rank order by mean score.

Nearly 78% of informants “agreed” or “strongly agreed” that they regularly partner with hospitals on health improvement initiatives. Approximately 70% of informants “agreed” or “strongly agreed” that health and social service providers welcome partnership opportunities with area hospitals, and vice versa. These factors received the highest mean scores by key informants.

Approximately 64% of key informants “agreed” or “strongly agreed” that health and social service providers effectively collaborate to address health needs, while 20.5% of informants “disagreed” that providers effectively collaborate. Similarly, 20.5% of informants “disagreed” that partners garner resident feedback or engage residents when developing health improvement initiatives. These factors received the lowest mean scores by key informants.

Community Engagement and Partnership Indicators in Descending Order by Mean Score

	Strongly Disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly Agree (5)	Mean Score
My organization regularly partners with the local hospital(s)/health system(s) on health improvement initiatives.	2.5%	7.5%	12.5%	50.0%	27.5%	3.93
Health and social service providers in the community I serve welcome partnership opportunities with surrounding hospital(s)/health system(s).	0.0%	5.0%	25.0%	47.5%	22.5%	3.88
The hospital(s)/health system(s) located in the community I serve welcome partnership opportunities with surrounding health and social service providers.	2.5%	10.0%	20.0%	40.0%	27.5%	3.80
If I want to collaborate with the hospital(s)/health system(s) located in the community I serve, I know who to contact.	2.5%	20.0%	10.0%	35.0%	32.5%	3.75
Health and social service partners in the community I serve effectively collaborate to address health needs.	0.0%	20.5%	15.4%	51.3%	12.8%	3.56
Health and social service partners in the community I serve garner resident feedback or engage residents when developing health improvement initiatives.	0.0%	20.5%	33.3%	41.0%	5.1%	3.31

Key informants were asked what they perceived as barriers to health and social service partnerships within their communities. Respondents could choose as many barriers as applied. Lack of shared data or measurement tools was the #1 perceived barrier, identified by 50% of informants. Other top identified barriers included ability to demonstrate outcomes and inconsistent service areas or geographic boundaries.

Top Perceived Barriers to Community Collective Impact Partnerships

Ranking	Barrier	Percent of Informants	Number of Informants
1	Lack of shared data or measurement tools	50.0%	20
2	Ability to demonstrate outcomes	35.0%	14
3	Inconsistent service areas or geographic boundaries	30.0%	12
4	Lack of consistent or timely communication	27.5%	11
4	Ability to get local leaders to work together (competition, varying agendas)	27.5%	11
4	Lack of operating support	27.5%	11
7	Lack of agreement on partnership structure or roles	22.5%	9
8	Lack of agreement on the functions or management of the partnership	17.5%	7
9	Lack of backbone structure or leadership	15.0%	6
10	Lack of agency leadership engagement (support, commitment to act)	12.5%	5

Informants provided the following comments related to community partnerships and engagement:

- *"I feel we have great partnerships. It's always good to have more!"*
- *"I think with better communication among agencies, access to services would increase. I see many agencies operating in "silos," not aware of what others are doing."*
- *"Many of the agencies are willing to work together. However we need to do a better job on the measurement of outcomes."*
- *"Our legislature and Governor and local leaders need to work better together to help people instead of focusing on what works best for them in their positions. People need to be more open to change and have more commitment to help others."*
- *"Partnership for true community based quality improvement issues is vital. Often that is challenged by the ability of partners and providers to have the structure and resources necessary to do so effectively. Within our scope of focusing on those 65+ and particularly those with cognitive concerns, we know there are well-documented challenges in detection and diagnosis, particularly in primary care and community settings. Geisinger's Memory Clinic staff have been incredibly engaged leaders and partners but overall sites and departments throughout the system are not and quite often any willingness or responsiveness to further discussions is met with silence or significant institutional barriers that make true partnerships difficult to advance."*

COVID-19 Response and Recovery

COVID-19, named as a novel coronavirus discovered in Wuhan China in December 2019, caused a worldwide pandemic, resulting in nearly one million deaths worldwide (as of the printing of this report) and global economic impact. New insights are derived daily during this dynamic situation and the CHNA partners will continue to learn from data collected throughout the pandemic.

Key informants were asked to rate the extent to which their organization is worried about the long-term impact of the COVID-19 health crisis on communities and residents. Ratings were based on a scale of (1) "not at all worried" to (5) "very worried." Key informants' responses are outlined in the table below in rank order by mean score.

Mean score findings indicate that key informants were generally "moderately" worried about the long-term impact of COVID-19 on communities and residents. All factors received rounded mean scores of 3.9 or higher, with the exception of "trust in public health institutions and information" rated at a mean score of 3.1. Key informants were most concerned about the impact of COVID-19 on the mental and emotional health of residents and community financial health. More than half of informants indicated that they were "very worried" about these two items.

Perceived Level of Worry for the Long-Term Impact of COVID-19 on Communities and Populations in Descending Order by Mean Score

	Not At All Worried (1)	Slightly Worried (2)	Somewhat Worried (3)	Moderately Worried (4)	Very Worried (5)	Mean Score
Mental and emotional health of residents	0.0%	2.6%	10.3%	28.2%	59.0%	4.44
Community financial health	0.0%	2.6%	15.4%	25.6%	56.4%	4.36
Well-being of the elderly	0.0%	2.6%	20.5%	30.8%	46.2%	4.21
Well-being of healthcare workers	0.0%	5.1%	15.4%	33.3%	46.2%	4.21
Well-being of young people	0.0%	10.3%	23.1%	38.5%	28.2%	3.85
Well-being of racial and ethnic minority groups	2.6%	7.7%	20.5%	41.0%	28.2%	3.85
Trust in public health institutions and information	15.4%	20.5%	25.6%	18.0%	20.5%	3.08

COVID-19 has created new challenges for engaging residents in their health and well-being, and has highlighted longstanding inequities that perpetuate disparities among people of color and within vulnerable communities. Health and social service providers have the opportunity to apply lessons learned from COVID-19 to future efforts to better engage residents and promote sustained changes for community health.

Key informants were asked to share how their organization is effectively engaging community residents during COVID-19. Many informants spoke to the increased use of technology and social media to provide virtual learning and service environments, community education and awareness campaigns, increased support for social needs and safety net providers, more programs and services offered in the community, and cross-sector partnerships to better understand COVID-related needs and disseminate available information and resources.

- *"All services of the MACC (Middlecreek Area Community Center) are opened so that we can support the physical fitness, food insecurity, childcare, medical outreach, and family activity needs of our community in a manner consistent with the orders and guidance from the state."*
- *"Clinics, testing sites, media, social media, providers, etc."*
- *"Communications through Facebook, newsletters, and mailings."*
- *"Community service announcements, availability of testing, keeping families informed, announcements on patient portals, and extremely active and advanced team of laboratory clinicians using the most sophisticated and rapid testing, and so on."*
- *"Continuing services and charitable contributions."*
- *"Financial support. Free Mobile Food Pantry. Online programs. Senior Exercise. In-person drop-in programs to begin soon with restrictions."*
- *"Launched several initiatives aimed at helping businesses, schools, and community organizations reopen, as well as served as the trusted healthcare partner to disseminate info on COVID."*
- *"Many public discussions in local news media. Modeling proper behaviors during COVID-19. Distribution of federal grants to local organizations."*
- *"Over the summer we did a lot of virtual programming for our campers to increase engagement."*
- *"Partnering with local nursing homes for support. Masking education provided to community."*
- *"Providing programming and services to help meet the needs of patients, members, and communities to help them successfully navigate through this challenging time. Engaging with CBOs and forming partnerships and formalized referral options in conjunction with newly introduced tech support (Neighborly). Doing "check in" appointments and making sure we are embedding questions during appointments to better understand if any concerns or issues."*
- *"Public awareness, open access meetings for the community, signage in medical practices and facilities, public access to COVID-19 hotline. Health and wellness coaches engaging community residents. Mobile bus bringing services to the community (lab testing, flu vaccine, diabetes screening)."*
- *"Staying connected virtually the best we can and assisting with finding resources, but getting food for them is challenging. Since the family is at home more, it requires more food than the food pantry and WIC allows."*

- *"Telehealth and face-to-face contact with screening and proper safety protocols."*
- *"Telephonic support and in-person support."*
- *"The use of digital media, press releases, and virtual community forums."*
- *"We are back in operation at 75 percent capacity. We are using virtual methods to assist with volunteering e.g., college student reading book to children, virtual play and learn sessions."*
- *"We are hosting a Self-Care Workshop with a local Counseling Center, focusing on self-care during COVID-19."*
- *"We are transparent in our efforts to mitigate risk. We take a strong stand and enforce social distancing, mask wearing, and hand washing. We reduce risk when consumers need our services by first making every effort to meet their needs by phone. If that's not possible we have a designated area that we meet consumers, require face masks, and staff wear appropriate PPE and thoroughly sanitize the space after each use. Not all senior centers reopened, but those that are follow all CDC and PDA guidelines. If unwilling to follow guidelines we offer participant "pick-up and go" meals and provide telephone checks. Participants not following guidelines may not attend a center. Should a staff member or participant show symptoms and are awaiting tests we close the center until it is aired and sanitized. If test results are positive, we cooperate with public health authorities. We communicate with participants and consumers by phone, electronically, and through public media."*
- *"We collaborate with all of our community partners to provide as many services as possible. We take the programs and services to the individuals."*
- *"We have raised over $250,000 to provide grants to non-profits to help them pay the costs to keep their clients protected from the virus."*
- *"We have taken great steps to make our families feel safe in sending their children to our facilities. We have increased cleaning, temperature taking, social distancing, mask wearing, etc. to keep our children healthy. We continuously follow guidelines and stay up-to-date on the latest COVID-19 information. We periodically send information out to our families on staying healthy."*
- *"We pivoted to offer more virtual content. We also increased no-cost outreach programming."*

Additionally, informants were asked to share how hospitals and community partners can effectively collaborate to address health and social disparities highlighted by COVID-19. Informants provided the following suggestions:

- *"Access to testing for all individuals."*
- *"Available education to community groups, public access to COVID-19 hotline, availability of testing centers on public transportation routes."*
- *"By working together and not trying to outdo each other. Competition is good, but do we need all the hospitals we are going to have here?"*

- *"Continued synergy is critical as we look to continue to provide services and programs to meet the needs for our communities."*
- *"Do more community events for mental health support that families could walk to. Transportation is always an issue in our area."*
- *"Find the truth and report factual accurate information. With not being able to partner in person, using virtual is assisting with on-going communication, referrals, etc."*
- *"Follow through with services, instead of just discussing the issues."*
- *"Geisinger launched Neighborly as an easy-to-use social care platform that can help connect our neighbors to free and reduced-cost programs and services in the community. Since March 2020, over 600 people from various community organizations participated in training regarding the platform."*
- *"I feel that telehealth is key for our communities in this period of time. It allows access to healthcare without risk to others."*
- *"More mental health services are needed."*
- *"Our community center strives to meet the needs of the community as best we can. I would recommend starting collaboration by understanding what hospital community services and benefits might best be delivered via a community center setting. The Evangelical Hospital mobile unit comes to our facility on a regular basis. Red Cross comes for blood drives and provides some educational classes like CPR and first aid. There may be others including on-site doctor visits or physical therapy or diet programs where the community center provides the facility and perhaps some staffing, but the hospital provides the programs and expertise."*
- *"Outreach to communities of color, different modalities of communication especially to those without internet access, outreach to rural communities, providing solid scientifically evidenced-based advice to schools, businesses, and others."*
- *"Perhaps the Chamber could partner with another virtual workshop focusing on COVID-19 issues!"*
- *"Prepare surge ICU and ventilator capacity for major spikes. Educate the public on proper behaviors. Provide low cost/no cost health services for the unemployed and those without health insurance."*
- *"Provide testing with quick results."*
- *"Setting competition aside - taking away workers and patients from each other for a brief moment."*
- *"Share data and then use evidence-based criteria."*
- *"Structure is needed to better develop accountability."*
- *"The partners need to provide the education and PPE needed in the communities."*

- *“There first must be agreement on what these disparities are. Then, develop a collaborative task force to address these concerns.”*
- *“There is so much conflicting information out about COVID-19 that it would be nice to have hospitals and community partners on the same page. Keeping everyone informed about the rate of spread would also help. Again, numbers continuously differ so that it is difficult to know who to believe or trust.”*
- *“There needs to be open and constant communications between hospitals and regional agencies to ensure each entity is aware of what the other is doing and to identify any areas of potential collaboration with the intent of bolstering each other's services.”*
- *“We all need to work together to make sure that our communities are strong. Maybe have a community forum (via zoom) to get input from various organizations.”*

Evaluation of Impact from Prior CHNA Implementation Plan

Background

In FY2019, GLH completed a CHNA and developed a supporting Implementation Plan 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 FY2019 CHNA and input from key community stakeholders, Geisinger leadership identified the following priorities to be addressed by the Implementation Plan:

- 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)

Geisinger's timeline for completing the FY2019 CHNA was consistent with their fiscal tax year, beginning July 1 and ending June 30. Starting in 2021, Geisinger will transition its year-end to a calendar year. Due to the change in year-end, the Implementation Plan initiated by GLH was in effect from July 1, 2018 to December 31, 2020. The hospital's new Implementation Plan will be effective January 1, 2021 through December 31, 2023.

FY2019-CY2020 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 the status and outcomes from the implemented strategies.

Access to Care

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

Objective #1: Increase the number of residents who have a regular primary care provider (PCP).	
Strategies	**Status**
1. Partner with the Primary Health Network to increase availability of primary and specialty care services for uninsured and underinsured residents.	Achieved
2. Screen patients who access services at the ED to determine if they have a medical home and assist those that do not in finding a PCP.	Achieved
3. Assist residents with eligibility determination and enrollment in subsidized health insurance programs to increase provider options.	Achieved
Additional Information	
• As of January 2020, the Primary Health Network (PHN) reported that there were no wait times for appointments at the Lewistown Community Health Center. In 2019, PHN sought to recruit new family practice providers, with support from GLH. • GLH ED staff screen patients to determine if they have a PCP, and assist individuals without a PCP to obtain a medical home. Patients without a PCP are provided a list of Geisinger and PHN medical providers that are accepting new patients. • During the 2019 health insurance open enrollment period, GLH staff assisted 44 patients obtain health insurance, one of the hospital's highest enrollment counts to date. GLH has been successful in publicizing this service throughout the community and received a number of referrals through word of mouth advertising. GLH staff are in the process of being recertified to assist patients during the 2021 open enrollment period. Geisinger has contracted with Health Fund Solutions to provide virtual assistance if needed.	

Objective #2: Increase access to primary and specialty care providers.	
Strategies	**Status**
1. Recruit primary care and specialists to area, targeting Health Professional Shortage Areas in Mifflin and Juniata Counties.	Achieved
2. Continue outreach to Amish communities to promote access to care.	Achieved
3. Maintain and promote a dental resource guide within the community.	Deferred
4. Explore telemedicine options to provide services to MUAs and HPSAs.	Achieved
Additional Information	
• GLH recruited one new physician to its Mifflintown clinic and four new physicians to the Juniata clinic. Additional recruitment efforts are ongoing. • GLH staff continue to meet regularly with the Amish community to assess their healthcare needs and establish treatment plans consistent with cultural norms and values. A walk-in clinic in Belleville is open the first Wednesday of every month and primarily serves Amish residents. • GLH increased telemedicine options as a result of COVID-19, including at home options and in-office "Health Hubs" for patients without internet or computer access. GLH is currently piloting Health Hubs in Lewistown and Scenery Park with plans to expand in the future.	

Objective #3: Reduce barriers to receiving care for residents without transportation.	
Strategies	**Status**
1. Partner with Geisinger Health Plan and local agencies to expand transportation services to access health and social services.	Active
2. Explore telemedicine options to address transportation barriers to care.	Achieved
3. Explore ways to increase broadband coverage.	Active
4. Explore options and partners to provide home-based care services.	Achieved
Additional Information	
• GLH serves on the Call-A-Ride Coalition to improve transportation services within the Western Region. The coalition was successful in working with the local transportation provider, Call-A-Ride Service (CARS), to expand their service hours. As of 2019, CARS is available weekdays from 8am-6pm and offers weekend service. CARS partners with LIFE Geisinger to assist with transportation of discharged patients from the hospital, including same day service. Transportation is also provided free of charge for PHN appointments and Geisinger ancillary services. As of January 2020, GLH provided approximately 8,000 rides to patients. The Call-A-Ride Coalition continues to work collaboratively to address other transportation barriers in the region. • GLH increased telemedicine options as a result of COVID-19, including at home options and in-office "Health Hubs" for patients without internet or computer access. GLH has seen a decrease in patient no-show rates as a result of using telemedicine. • GLH participated in a broadband internet study for Mifflin County and continues to advocate for regional coverage expansion. • GLH started offering the Geisinger at Home program. Available to Geisinger Gold members, the program provides regular home visits to members with complex, difficult to manage health conditions. The program has seen a 43% reduction in ED visits and a 48% reduction in hospital admissions among program participants.	

Objective #4: Promote awareness of available options for assistance to pay for health care needs.	
Strategies	**Status**
1. Develop a communication strategy to promote awareness of the Financial Assistance Policy.	Active
2. Improve literacy level and language availability of the Financial Assistance Policy (FAP) to improve readability by patients.	Active
Additional Information	
• Geisinger offers payment plans and financial assistance to eligible patients who are struggling financially or who are uninsured. Geisinger's financial assistance application, brochures, policy, and participating provider list are available in the following languages: English, Spanish, Arabic, Chinese, Nepali, and Vietnamese. The brochure is written at a fifth-grade reading level. Financial counselors are available to assist patients with payment options.	

Objective #5: Foster pursuit of health careers and ongoing training of health professionals.	
Strategies	**Status**
1. Provide professional training and education for nursing and allied health students.	Achieved
2. Implement Family Medicine Residency Program.	Achieved
3. Encourage pursuit of careers in the health field.	Active
Additional Information	
• The GLH School of Nursing is an affordable, fully accredited nursing degree program with RN and LPN advanced placement programs. The school grew from an initial 41 students to 60 students currently, and continues to be ranked as the second best nursing program in the state. GLH is evaluating plans to expand the school. • The GLH Family Medicine Residency Program is in its third year with 12 students. With assistance from grant funding secured in partnership with PHN, the program plans to expand with the addition of eight residents each year for the next three years. • GLH's Volunteer Coordinator worked with local high schools to develop a job-shadowing program for students. The program, anticipated to launch in April 2020, was postponed due to COVID-19. GLH will reevaluate the program for 2021. • GLH collaborates with the Geisinger Commonwealth School of Medicine to enroll medical students in the Abigail Geisinger Scholars Program. The program aims to help students achieve their professional goals without financial burden, while promoting needed medical specialty areas, including primary care and psychiatry. Participant scholars graduate from medical school without tuition debt and receive a $2,000 monthly stipend. Upon completion of residency training, scholars become Geisinger-employed physicians with a two-year minimum employment requirement.	

Objective #6: Promote partnerships with social service agencies to address socio-economic needs of residents.	
Strategies	**Status**
1. Provide case management services within the hospital ED to identify patients with social service needs and connect them with partner organizations in the community.	Achieved
Additional Information	
• GLH Case Management staff are available in the ED from 8am to 8pm on weekdays, and are on call on Saturdays. Staff see approximately 8-10 patients per day and work in partnership with community organizations to facilitate service referrals.	

Behavioral Health

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.

Objective #1: Advance local and state dialogue to address behavioral health needs.	
Strategies	**Status**
1. Convene partners or participate in existing coalitions to identify and address gaps in services (e.g. MJ Path and Tri-County Drug and Alcohol Board).	Deferred
2. Advocate to remove regulatory barriers to the provision of behavioral health services.	Achieved
Additional Information	
• Due to COVID-19, a number of regulatory barriers to providing telepsychiatry care were removed, resulting in improved access to services for residents. GLH currently offers telepsychiatry and has seen a decrease in patient no-show rates as a result of the program. • GLH Case Management staff assist ED and acute care patients with behavioral health needs to identify and connect with available community services. Other partnership opportunities to address behavioral health service gaps are on hold and will be reevaluated in 2021.	

Objective #2: Foster integration of behavioral and primary health care.	
Strategies	**Status**
1. Integrate primary and behavioral healthcare within PCP practices for adult and pediatric patients.	Achieved
2. Partners with the Primary Health Network to integrate behavioral health services within Federally Qualified Health Center locations.	Achieved
Additional Information	
• In 2019, GLH implemented integrated care services at its clinics in Scenery Park, Grays Woods, and Lewistown. Adult and pediatric psychiatric providers were added to the Lewistown and Grays Wood locations; a neuropsychiatrist was added to the Scenery Park location. GLH is in the process of recruiting a licensed social worker to serve these clinics. • In 2020, PHN recruited a full-time psychiatrist that is anticipated to start seeing patients in November or December. The Family Practice Center also added an integrative behavior specialist.	

Objective #3: Provide education to increase residents' awareness of behavioral health issues and reduce stigma associated with behavioral health conditions.	
Strategies	**Status**
1. Provide a Chronic Pain Support Group for patients and their caregivers.	Achieved
2. Offer the medication take-back program in partnership with retail locations.	Achieved
3. Explore opportunities to provide subsidized Mental Health First Aid training in partnership with Juniata Valley Behavioral and Developmental Services.	Deferred
4. Partner with Mifflin County Mental Health Program to promote telephone and mobile crisis intervention services available to residents.	Deferred
5. Establish Corporate Communications efforts via local media, screenings, activities, etc.	Achieved
Additional Information	
• GLH established an interdisciplinary pain clinic to better serve residents addicted to pain medication. The interdisciplinary team, comprised of a physician, pharmacist, physical therapist, and licensed clinical social worker, began seeing patients in 2019. The team has not pursued a Chronic Pain Support Group, opting for other evidence-based practices to address chronic pain. • Geisinger implemented a medication takeback box on the GLH campus to provide a mechanism for community members to dispose of unwanted medications, including controlled substances. The program was expanded in 2019 to area partners, including police stations and Weis Markets. • GLH published several articles and provided screenings and activities related to the following community health topics: vaping, obesity, suicide prevention, and depression.	

Objective #4: Increase access to behavioral health services.	
Strategies	**Status**
1. Promote the Geisinger psychiatry residency program, and continue to develop residency experiences in the community setting.	Deferred
2. Explore telemedicine options to provide services to MUAs and HPSAs.	Achieved
3. Improve Inpatient placement times.	Achieved
Additional Information	
• The Geisinger psychiatry residency program is currently available in the Central Region. GLH will continue to evaluate the expansion of the program into the Western Region. • Due to COVID-19, a number of regulatory barriers to providing telepsychiatry care were removed, resulting in improved access to services for residents. GLH currently offers telepsychiatry and has seen a decrease in patient no-show rates as a result of the program. PHN also offers outpatient telepsychiatry. • GLH refined its inpatient placement process, allowing for hospital and community providers to contact a GLH psychiatrist directly for immediate inpatient admission. This process has significantly reduced placement times.	

Chronic Disease Prevention and Management

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

Objective #1: Encourage community initiatives that support access to and availability of healthy lifestyle choices.	
Strategies	**Status**
1. Support community races, fun runs, walks and other events that promote physical activity.	Achieved
2. Participate in or host free community health fairs targeting diverse populations.	Achieved
3. Conduct other community outreach as identified.	Achieved
Additional Information	
• GLH supported and/or participated in the following community events, providing health education and materials: Festival of Ice, First Night in State College, Kid Connection, Senior Games, Sleep Talks in Huntingdon, Heart Walk, Arthritis Walk, and Suicide Awareness Walk. • GLH participated in 165 health fairs and events from July 2019 to October 2020. Note: Several programs and events were cancelled in 2020 due to COVID-19.	

Objective #2: Initiate early stage interventions for individuals at high risk for chronic disease.	
Strategies	**Status**
1. Provide free cancer education programs and screenings.	Achieved
2. Provide free diabetes prevention and management education and screenings.	Achieved
3. Promote and support the Geisinger Fresh Food Farmacy initiative.	Achieved
Additional Information	
• GLH provided free skin cancer screenings by the dermatology department, as well as breast cancer awareness community articles. • GLH offered a series of diabetes education classes taught by diabetes educators. Diabetes educators continue to be on the GLH staff and are available to patients. • The Geisinger Fresh Food Farmacy initiative began seeing patients at the PHN Lewistown Community Health Center in 2019. The initiative began with 30 patients in October 2019 and expanded to 108 patients as of October 2020. Lewistown's Fresh Food Farmacy enrolls patients with uncontrolled Type 2 diabetes who are food insecure. Patients enrolled in the program are matched with a care team and together they work on meeting goals to control their diabetes through dietary and lifestyle changes. At no cost to the patient, the Farmacy provides food for patients and their households to make 10 meals per week. Patients select from fresh fruits, vegetables, whole grains, lean meats, and other staple items.	

Board Approval and Next Steps

The GLH 2021 CHNA final report was reviewed and approved by the Geisinger Board of Directors in December 2020. Following the Board's approval, the CHNA report was made available to the public via the Geisinger website at https://www.geisinger.org/about-geisinger/in-our-community/chna.

Questions or comments regarding the 2021 CHNA or Geisinger's commitment to community health can be directed to Allison Clark, Community Benefit Coordinator, Strategy & Market Advancement, Geisinger at aclark1@geisinger.edu.

Geisinger is committed to our not-for-profit mission and an evolution of caring. Everything we do is about caring for our patients, our members, our students, our Geisinger family, and our communities. Founded more than 100 years ago by Abigail Geisinger for her central Pennsylvania community, Geisinger has expanded and evolved to meet regional needs and developed innovative, national programs in the process.

The organizations throughout northeast and central Pennsylvania are strong representations of what makes our community unique. We are proud to foster partnerships that focus on strengthening our communities - whether directly health care related or not. We welcome community organizations to engage with us as we work to address the region's top health issues and implement a plan for community health improvement.

Appendix A: Public Health Secondary Data References

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Appendix B: Public Health Data Summary

The following table highlights key public health data findings for the Western Region. A "red" finding indicates an area of opportunity, while a "green" finding indicates an area of strength, in comparison to state and national benchmarks. Arrows indicate increasing (▲) or decreasing (▼) trends, as demonstrated in this report.

Public Health Data Summary

	Centre County	Juniata County	Mifflin County	PA	US
Access to Healthcare (**FY2019 CHNA Priority Area**)					
Total Uninsured (2014-2018)	5.5% ▼	10.5% ▼	12.5% ▼	6.2%	9.4%
Black uninsured	6.5%	9.4%	3.1%	8.7%	10.8%
Latinx uninsured	7.6%	16.7%	9.9%	14.4%	19.2%
Medicaid insured (2014-2018)	9.9%	16.1%	22.6%	18.9%	20.1%
Primary care providers per 100,000 (2017)	75.6	24.5	51.7 ▲	80.8	75.2
Dentists per 100,000 (2018)	54.7 ▼	12.1	34.6 ▲	69.0	69.0
Potentially Preventable Hospitalizations per 10,000 (FY2019)	78.9	113.2	127.3	150.8	NA
Chronic Disease and Health Risk Factors (**FY2019 CHNA Priority Area**)					
Adult smoking (2017)	17.0% ▲	18.1% ▲	19.3% ▲	18.8%	17.1%
Adult obesity (2017)	24.1% ▼	30.0% ▼	35.1% ▼	30.8%	31.3%
Adult physical inactivity (2017)	18.3%	17.0%	21.0%	23.9%	25.6%
Adult diabetes (2017)	8.0%	18.2% ▲	12.2% ▼	9.0%	8.5%
Heart disease death[1] (2018)	156.5 ▲	185.9 ▲	168.7 ▼	176.1	163.6
Black (2016-2018)	NA	NA	NA	221.1	203.8
Latinx (2016-2018)	NA	NA	NA	109.1	114.0
Cancer death[1] (2018)	114.2 ▼	116.1 ▼	170.6 ▼	156.6	149.1
Black (2016-2018)	NA	NA	NA	192.4	173.0
Latinx (2016-2018)	NA	NA	NA	109.7	108.5
CLRD[2] death[1] (2016-2018)	24.9	36.1 ▼	39.9 ▼	36.3	40.4

[1] Death per age-adjusted 100,000.

[2] Chronic Lower Respiratory Disease (e.g. asthma, COPD, emphysema).

Public Health Data Summary, cont'd

	Centre County	Juniata County	Mifflin County	PA	US
Behavioral Health (**FY2019 CHNA Priority Area**)					
Mental health providers per 100,000 (2019)	202.1 ▲	16.2 ▲	88.7	206.5	250.0
Mental disorders hospitalizations per 10,000 (2018)	60.4	74.1	130.9	88.8	NA
Suicide death[1] (2016-2018)	10.9	NA	22.8 ▲	14.9	13.9
Adult excessive drinking	24.0% ▲	19.8% ▲	18.3% ▲	19.2%	19.0%
Opioid overdose hospitalizations per 10,000 (2018)	NA	NA	NA	25.1	NA
Maternal and Child Health					
Teen births (2018)	2.1%	3.4%	5.1%	4.1%	4.7%
First trimester care (2018)	76.2%	67.6%	65.1%	73.9%	77.5%
Black	84.6%	NA	NA	64.6%	67.1%
Latina	66.7%	66.7%	NA	65.3%	72.7%
Low birth weight (2018)	5.8%	6.1% ▼	6.2% ▼	8.3%	8.3%
Preterm births (2018)	6.8%	7.5% ▲	7.7%	9.5%	10.0%
Breastfeeding (2018)	88.8%	82.7% ▼	78.9% ▼	81.9%	83.5%
Non-smoking during pregnancy (2018)	91.4%	90.3% ▲	82.8%	89.6%	93.5%
Aging Population Age 65 or Over					
Two or more chronic conditions (2017)	71.1%	77.0% ▼	77.2% ▼	72.2%	68.8%
Alzheimer's disease	11.1%	12.1%	11.4%	12.2%	12.1%
Depression	17.3%	18.7%	19.1%	16.1%	15.4%
Diabetes	24.9%	30.8%	29.3%	26.6%	27.4%
High cholesterol	46.9%	61.2%	58.3%	47.6%	43.0%
Hypertension	59.4%	66.2%	66.9%	62.3%	59.9%
Living alone (2014-2018)	9.2% ▲	12.4%	12.9% ▼	12.6%	10.7%
Youth Health					
Obesity (Grades 7-12, 2017-2018)	17.0% ▲	26.6%	13.2% ▼	19.5%	NA
Asthma diagnosis (2017-2018)	7.5%	6.4%	7.9%	11.3%	NA
Sad or depressed most days (2019)	28.4%	NA	NA	38.0%	NA
E-cigarette use (2019)	14.4% ▲	NA	NA	19.0%	NA
Alcohol use (2019)	12.9% ▼	NA	NA	16.8%	NA

[1] Death per age-adjusted 100,000.

Appendix C: Key Informants

A Key Informant Survey was conducted with 41 community representatives. The organizations represented by key informants, and their respective role/title, included:

Key Informant Organization	Key Informant Title/Role
Allied Services Integrated Health System	Assistant Vice President, In-Home Care
Allied Services Integrated Health System	Vice President, Home Care Services
Alzheimer's Association	Executive Director
Camp Victory	Camp Director
Centre County Government	Commissioner
Evangelical Community Hospital	President/Chief Executive Officer
Geisinger Health Plan	Senior Director, Health and Wellness
Geisinger Health System	Administrative Fellow
Geisinger Health System	Chief Administrative Officer
Geisinger Health System	Community Benefit Coordinator
Geisinger Health System	Community Specialist
Geisinger Health System	Director Patient Access
Geisinger Health System	Director Tax Services
Geisinger Health System	Marketing Specialist
Geisinger Health System	Vice President, Health Innovation
Geisinger Holy Spirit	Associate Chief Medical Informatics Officer
Geisinger Jersey Shore Hospital	Associate Vice President, Nursing and Clinic Operations
Harrisburg Area YMCA	Executive Director of Chronic Disease
Juniata River Valley Chamber of Commerce	Executive Director
Juniata Valley Behavioral and Developmental Services	Mental Health Coordinator
Middlecreek Area Community Center	Executive Director
MidPenn Legal Services	Coordinated Intake
MidPenn Legal Services	Staff Attorney
Mifflin County Communities That Care	Coordinator
Mifflin County Government	Commissioner
Mifflin Juniata Human Services	Director
Mifflin Juniata Human Services	Healthy Communities Coordinator
Mifflin Juniata Regional Services	Executive Director
New Roots Recovery Support Center	Outreach Director
Penn State Extension/Nutrition Links	Nutrition Education Adviser
Pennsylvania Office of Rural Health	Director and Outreach Associate Professor of Health Policy and Administration
Primary Health Network	Executive Director of Behavioral Health
Regional Engagement Center	President
SUMMIT Early Learning	Data & Quality Assurance Coordinator
SUMMIT Early Learning	Family Engagement Manager
SUMMIT Early Learning	Site Supervisor
SUMMIT Early Learning	Family Community Engagement Director
The Children's Museum	Director

Key Informant Organization	Key Informant Title/Role
The Foundation for Enhancing Communities	President and CEO
Tuscarora Intermediate Unit #11-Juniata County Early Childhood Services	RN/Health Specialist
United Way of Mifflin-Juniata	Executive Director