A FIVE-COUNTY COMMUNITY HEALTH NEEDS ASSESSMENT FULL REPORT

Berks | Cumberland | Dauphin | Lancaster | Lebanon

Conducted on behalf of:

Penn State Health Milton S. Hershey Medical Center

Penn State Health St. Joseph Medical Center

Pennsylvania Psychiatric Institute

PennState Health

August 2018

Table of Contents

Our Commitment to Community Health

For its 2018 Community Health Needs Assessment (CHNA), Penn State Health formed a collective workgroup that included Penn State Health Milton S. Hershey Medical Center (PSHMC), Penn State Health St. Joseph Medical Center (PSHSJ), Pennsylvania Psychiatric Institute (PPI), and key community stakeholders to identify and address the needs of residents living in Berks, Cumberland, Dauphin, Lancaster, and Lebanon counties.

This was the third CHNA conducted by entities of Penn State Health. Previous assessments in 2012 and 2015 involved a different consortium of health care institutions and study area. For the 2018 CHNA, Penn State Health opted to conduct a systemwide assessment, focusing on the collective areas served by its hospitals and affiliated health providers.

The comprehensive CHNA was conducted from January to August 2018 with Baker Tilly as our consulting partner. The study included an in-depth review of primary and secondary data for the five counties comprising Penn State Health's primary geographic service area. More than 1,500 community members participated in the CHNA process by completing Key Informant and Community Member surveys, attending forums and participating in focus groups.

Experts in community health from each health care institution, as well as key community stakeholders, participated in the 2018 CHNA workgroup to guide the process and review findings. The study culminated with the identification and prioritization of the most pressing health issues that impact residents within our five-county service area. Information collected through the CHNA is used to inform our community benefit investments, guide our health improvement initiatives and advance our population health management strategies.

Collectively as Penn State Health, we are committed to enhancing the quality of life through improved health, the professional preparation of those who will serve the health needs of others and the discovery of knowledge that will benefit all.

Through dedication and hard work, as well as careful strategic planning, Penn State Health will successfully improve health outcomes in the community and create lasting, positive change. As a regional health system, we are committed to addressing the needs of the community and to promoting sustainable and collective action. As we continue our efforts, we invite our partners to collaborate with us to strengthen our community together. We encourage you to visit our websites to learn more about our CHNA and community health activities.

Regards,

Judy Dillon
Community Health Director
Penn State Health
Hershey Medical Center CHNA Website

Mary Hahn, Vice President, Ambulatory Services & Business Development
Penn State Health St. Joseph
St. Joseph Medical Center CHNA Website

Ruth Moore, Director, Business Development & Admissions
Pennsylvania Psychiatric Institute
PPI CHNA Website

The 2018 CHNA Collaborating Partners

Penn State Health
Penn State Health was formed in 2015 and is a multi-hospital system serving the population of central Pennsylvania. The system includes the Penn State Health Milton S. Hershey Medical Center, Penn State Children's Hospital, Penn State Cancer Institute, Penn State Health St. Joseph Medical Center, Penn State Health Medical Group and joint ventures consisting of the Penn State Health Rehabilitation Hospital and the Pennsylvania Psychiatric Institute. It employs more than 14,000 people and supports ambulatory and hospital-based services throughout central and central eastern Pennsylvania.

Penn State Health continues to expand its services to meet the needs of central Pennsylvania residents, with a number of primary care and specialty practices recently joining the system. In June 2018, Penn State Health announced the construction of the Penn State Health Hampden Medical Center in Cumberland County, featuring 108 private inpatient beds, an emergency department, physician offices, various specialty inpatient services and imaging and lab services. Construction of the hospital is slated to begin in 2019.

Penn State Health Milton S. Hershey Medical Center
PSHMC was founded in 1963 through a gift from The Milton S. Hershey Foundation. With this grant and $21.3 million from the U.S. Public Health Service, a medical school, teaching hospital and research center was built, with the groundbreaking in 1966. Penn State College of Medicine opened its doors to its first class of students in 1967. PSHMC accepted its first patients in 1970. Today, PSHMC is one of the leading teaching and research hospitals in the country.

While most academic health centers subscribe to three common missions—education, research and patient care—PSHMC has gone a step further in the adoption of a fourth mission: community health. Just as it is impossible to separate cutting-edge science and medical education from practice, it is equally impossible to separate the principles that guide these three missions from the compassion that drives community health improvement.

Penn State Health St. Joseph Medical Center
St. Joseph Hospital opened its door to all people regardless of race, color or creed in 1873. Since the beginning, reverence, integrity, compassion and excellence have been the core values guiding its work.

In 2015, Penn State Health acquired St. Joseph Regional Health Network from Catholic Health Initiatives. The nonprofit network consists of Penn State Health St. Joseph Medical Center, St. Joseph Downtown Reading Campus, satellite locations throughout Berks County, St. Joseph Medical Group and St. Joseph Provider Hospital Organization. The St. Joseph network provides a full range of outpatient and inpatient diagnostic, therapeutic, medical and surgical services.

Pennsylvania Psychiatric Institute (PPI)

PPI was formed in 2008 as a partnership between PSHMC and PinnacleHealth (now UPMC Pinnacle) and is dedicated to promoting recovery from behavioral health illnesses by providing high-quality care to people across central Pennsylvania. Its programs and services are designed to meet the needs of individuals, to support the critical work of providers, to advance best practices through the use of evidence-based models of care and to deliver excellent service to consumers. PPI partners with PSHMC's Department of Psychiatry for psychiatrists and substance use disorder (SUD) physicians and serves as the primary training site for the department's medical students, residents and fellows in psychiatry.

Our Consulting Partner

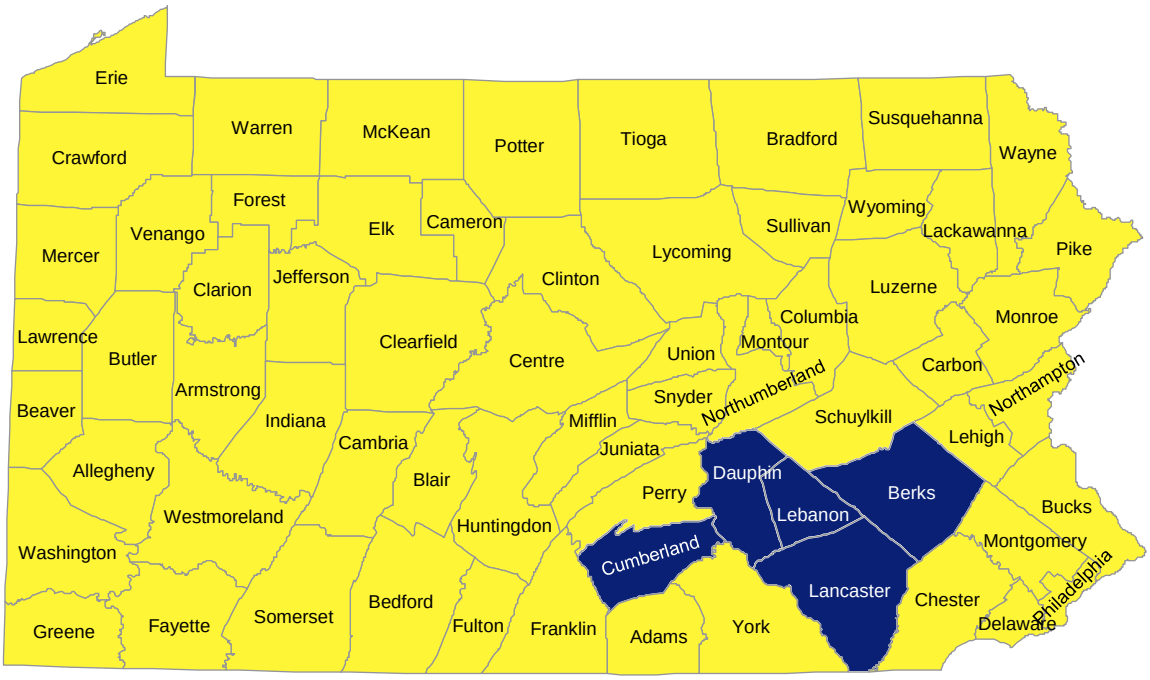
Baker Tilly assisted in all phases of the CHNA including project management, quantitative and qualitative data collection, small and large group facilitation, and report writing. The firm's CHNA team is recognized as a national leader in community and stakeholder data collection and has worked with more than 100 hospitals and thousands of community partners across the nation to assess health needs and develop actionable plans for community health improvement.

Executive Summary of CHNA

CHNA Service Area Description

The service area defined for purposes of the CHNA encompasses 222 zip-codes in five Pennsylvania counties: Berks, Cumberland, Dauphin, Lancaster, and Lebanon. These five counties represent the community where healthcare resources are available and provided by the partnering Penn State Health organizations. The counties are also home to the majority of Penn State Health's patient population. A total of 1.6 million people live in this 3,200 square mile service area. The map below shows the location of the five-county service area within Pennsylvania.

2018 CHNA Five-County Service Area



By taking a system-wide approach to data collection and community health planning, Penn State Health will leverage system assets across the service area to address prioritized health needs. We will seek to collaborate with health and other community based organizations to address common issues as well as unique community disparities. Ultimately we aspire to foster collective impact to improve health across the region and reduce health disparities. The following pages describe the process and methods used in the 2019 CHNA and our findings on the health status of the communities we serve.

2018 CHNA Process and Overview

CHNA Leadership

The 2018 CHNA was overseen by a Planning Committee of representatives from Penn State Health Milton S. Hershey Medical Center, Penn State Health St. Joseph, and Pennsylvania Psychiatric Institute, as well as the Community Health Team Advisory Board made up of local partners. Planning Committee members are listed below, along with Baker Tilly consultant team members. Community Health Team Advisory Board members are listed in Appendix A.

CHNA Planning Committee

Austin Cohrs, Research Project Manager, Penn State College of Medicine
Judy Dillon, Community Health Director, Penn State Health
Jim George, Director of Community Relations, Penn State Health
Mary Hahn, VP, Ambulatory Services & Business Development, Penn State Health St. Joseph
Ruth Moore, Director, Business Development & Admissions, Pennsylvania Psychiatric Institute
Gail Snyder, Senior Instructor, Penn State College of Medicine
Susan Sullivan, VP, Mission and Ministry, Penn State Health St. Joseph

Consulting Team

Catherine Birdsey, MPH, Research Manager
Jessica Losito, BS, Research Consultant
Colleen Milligan, MBA, Director, CHNA Project Manager

CHNA Methodology

The 2018 CHNA was conducted from January to August 2018 and used both primary and secondary study methods to compare health trends and disparities across the region and solicit community input. Primary study methods were used to solicit input from healthcare consumers and key community stakeholders representing the broad interests of the community, including experts in public health and individuals representing medically underserved, low-income, and minority populations. Secondary study methods were used to identify and analyze health trends across the hospital service areas.

Specific CHNA study methods included:

- An analysis of existing secondary data sources, including public health statistics, demographic and social measures, and healthcare utilization, from across the region
- A Key Informant Survey with 254 community leaders and representatives across the five-county service area
- A Community Survey with 1,354 individuals from the five-county service area
- Partner Forums with representatives from diverse community based organizations to gather insight on community health needs and foster collaboration toward community health improvement
- Focus Groups with underserved populations to explore challenges, experiences, preferences and recommendations related to accessing and receiving healthcare
- Prioritization of identified community health needs to determine the most pressing issues on which to focus community health improvement efforts

The 2018 CHNA built upon the hospitals' previous CHNAs and subsequent Implementation Plans. The CHNA was conducted in a timeline to comply with IRS Tax Code 501(r) requirements to conduct a CHNA every three years as set forth by the Affordable Care Act (ACA). The findings will be used to guide community benefit initiatives for the hospitals and engage local partners to collectively address identified health needs.

Prioritized Community Health Needs

Through multiple methods of community engagement, facilitated dialogue with community health experts and a series of criteria-based voting exercises, the most significant issues to focus systemwide health improvement efforts over the three-year cycle from 2019 to 2022 are Behavioral Health, Healthy Lifestyles and Disease Management. Addressing access to care and social determinants of health were seen as cross-cutting strategies needed to improve outcomes across all priority areas.

To direct community benefit and health improvement activities, Penn State Health medical centers and PPI will create an Implementation Plan that detail the resources and services to be used to address the identified health priorities.

Board Approval

The 2018 CHNA final report and corresponding implementation plans were reviewed and approved by the Penn State Health Board of Directors in April 2019. Following the Boards' approval, all were made available to the public via each hospital's website:

Penn State Health Hershey Medical Center:
http://hmc.pennstatehealth.org/community/community-outreach

Penn State Health St. Joseph Medical Center:
https://www.thefutureofhealthcare.org/

Pennsylvania Psychiatric Institute:
https://www.ppimhs.org/about-us/community-programs

Summary of CHNA Findings in Support of Priority Areas

Penn State Health Hershey Medical Center and St. Joseph Medical Center will focus system-wide health improvement efforts over the next three-year cycle on the identified priorities areas of Behavioral Health, Disease Management, and Healthy Lifestyles. The following section summarizes key CHNA findings and community health needs related to the priority areas for the five-county region. Recognizing the relationship between social determinants of health and health status, demographic and socioeconomic measures for the region are also presented.

Demographic and Socioeconomic Indicators

The five-county region has a total population of approximately 1.6 million people. The population is projected to grow at a faster rate than the state over the next five years. Cumberland County will experience the greatest population growth, followed by Lancaster County.

The population of the region is primarily White, but diversity is increasing. Cumberland and Lancaster Counties will experience the greatest growth in the Black/African American population, while Berks and Lebanon Counties will experience the greatest growth in the Hispanic/Latino population.

The median age of residents of Pennsylvania and all five counties is higher than the national median age. Cumberland and Lebanon Counties have the highest median resident age and the highest percentage of residents age 65 or over.

The diversity of the region is increasing as minority racial and ethnic populations grow

Social determinants of health are factors within the environment in which people live, work, and play that can affect health and quality of life, and are often the root cause of health disparity. Poverty and education are key social determinants and predictors of health status. All counties have a lower overall poverty rate than the nation, however, approximately one-fifth of children in Berks and Dauphin Counties live in poverty. Across the region, a higher percentage of individuals do not have at least a high school diploma.

Berks and Dauphin County residents experience greater socioeconomic disparity and potential for health disparity

Health disparities are defined by Healthy People 2020 as a “health difference that is closely linked with social, economic, and/or environmental disadvantage.” Identifying the potential for health disparity helps direct resources where they are most needed to improve health.

Zip code of residence is one of the most important predictors of health disparity; where residents live plays a part in determining their health. The Community Need Index (CNI) illustrates the potential for health disparity at the zip code level by scoring zip codes on a scale of 1.0 (low need) to 5.0 (high need) based on select socioeconomic indicators. The zip codes within the region that have the highest CNI scores are displayed in the chart below. Berks and Dauphin County zip codes comprise seven of the top 10 zip codes.

Top 10 CNI Scores for Five County Region (Highest level of socioeconomic barriers)

Zip Code	CNI Score	Population	City	County
19602	5	18,062	Reading	Berks
19601	4.8	32,683	Reading	Berks
19604	4.8	27,642	Reading	Berks
17101	4.8	2,297	Harrisburg	Dauphin
17104	4.8	21,696	Harrisburg	Dauphin
19611	4.4	10,731	Reading	Berks
17103	4.4	12,055	Harrisburg	Dauphin
17602	4	54,002	Lancaster	Lancaster
17046	4	30,470	Sand Hill	Lebanon
17603	3.8	64,870	Lancaster	Lancaster

Access to Care

Access to care can be measured by health insurance coverage and provider availability, among other factors. The percentage of residents without health insurance exceeds the state percentage in all counties except Cumberland. Lancaster County has the highest uninsured rate, particularly among children.

All counties except Cumberland have a higher uninsured rate than the state

Provider rates are measured as the number of providers in an area per 100,000 people. The rate of primary care providers increased across the service area from 2010 to 2014. Dauphin County experienced the greatest increase in the rate. However, despite increasing rates, Berks, Lancaster, and Lebanon Counties all have provider rates lower than the state and the nation as highlighted in red in the chart below.

	No Health Insurance, 2012-2016	Primary Care Provider Rate (per 100,000 Population), 2014
Berks County	8.55%	77.59
Cumberland County	6.34%	94.76
Dauphin County	8.13%	150.67
Lancaster County	12.32%	83.06
Lebanon County	10.79%	64.54
Pennsylvania	7.95%	98.87
United States	11.70%	87.77

Access to care is also impacted by social determinants of health, particularly poverty. Key informants surveyed during the CHNA identified “the inability to afford healthcare” as the top contributor to health conditions among residents. One commented “Although patients may have health insurance coverage, they often have high deductibles or copays or have difficulty finding a provider who takes their insurance.”

Among the Community Survey respondents, 23% indicated they could not see a doctor in the past 12 months due to cost. Berks County respondents were most likely not to see a doctor due to cost, followed by Dauphin County respondents. Survey respondents identifying as racial or ethnic minorities were disproportionally affected; 30% indicated they were not able to see a provider within the past 12 months due to cost.

30% of minority respondents to the community survey could not afford to see a doctor in the past 12 months

Related to poverty barriers is the availability of providers who accept Medicaid, a joint federal and state insurance program that provides health insurance to some low-income individuals and families, families, based on eligibility. Less than 25% of Key Informant Survey respondents agreed that a sufficient number of Medicaid-accepting providers are available in the service area.

Access to care was ranked as the #3 top health need by participants at the Hershey Partner Forum; and ranked as the #5 health need at the Reading Partner Forum. Partner Forum participants identified the following additional concerns related to access to care.

Key Concerns Related to Access to Care
> Seniors, homeless women and children, immigrant/undocumented populations, LGBTQ+ community, and minorities are most impacted by ability to access care > Available and convenient transportation presents a barrier to receiving care, particularly in areas outside of city centers > Primary care providers, clinics, and other healthcare offices hours of operation are limited > Language, cultural norms and values, and health literacy present significant challenges to receiving care, particularly among vulnerable populations > Follow through to overcome patient barriers to filling prescriptions is needed; barriers include cost, transportation, language, and literacy

Behavioral Health

Mental health and substance use disorder were identified as top health concerns for the region by Key Informant Survey respondents and Partner Forum participants. “Behavioral health is on the rise and there are not enough providers in the area to help those who need help. Substance Abuse issues lead to mental health concerns and the opioid epidemic is causing a rise in community issues and concerns.”

14% of Community Survey respondents reported that they needed, but did not receive, mental health services in the past year

Among Community Survey respondents, 54% reported having poor mental health on at least one day in the past month; 24% reported having poor mental health on seven or more days in the past month. Approximately 28% of respondents received services or treatment for a mental health issue in the past 12 months. An additional 14% of respondents indicated that they needed, but did not receive services. Respondents from Dauphin County were the most likely not to receive services when needed.

Young people who consistently feel depressed or sad may be at risk for self-harm and risky behaviors. Data collected by the 2017 PA Youth Survey (PAYS) among 6th, 8th, 10th, and 12th graders were analyzed for results within the five-county service area. Among students who participated in the study within the service area, 15%-17% reported being bullied through texting or social media. The percent of students that reported being bullied increased across all service area counties. Similarly, 2017 data indicated that the percentage of students feeling sad or depressed on most days also increased, affecting more than one-third of all students. Nearly 20% of students in the service area said they had considered suicide.

Nearly 20% of service area students included in the 2017 PA Youth Survey have considered suicide

Nearly all service area counties saw an increase in the percentage of adults who report excessive drinking and the number of overdose-related deaths. Of the five counties, Lancaster had the highest percentage of adults who report excessive drinking and saw the greatest percent increase for excessive drinking over the past three years.

The rate of drug-related overdose death increased for all counties except Lebanon. Dauphin County had the highest rate of overdose death, while Berks and Lancaster Counties had the highest number of deaths. The 2016 overdose death rate was higher than the national rate for all counties except Lebanon.

Rank and Rate of Drug-Related Overdose Deaths per 100,000

	2015 Count	2015 Rate	2016 Count	2016 Rate
Berks County	69	16.6	117	28.4
Cumberland County	41	16.6	58	24.6
Dauphin County	82	30.0	84	31.3
Lancaster County	80	14.9	116	22.3
Lebanon County	20	14.6	16	12.0
Pennsylvania	3,264	26.3	4,642	37.9
United States	52,898	16.3	63,600	19.8

Community Survey respondents were asked to rate the availability of recreational drugs within their community. Marijuana was rated as the most accessible drug with 46% of respondents stating it is “easy” or “very easy” to obtain. Prescription opioids were rated as the least accessible with 73% of respondents stating it is “difficult” or “very difficult” to obtain.

Nearly three-quarters of key informants thought that residents did not receive behavioral health treatment when they needed it

Nearly three-quarters of Key Informant respondents thought that residents did not receive mental health or substance use disorder treatment when they needed it and agreed that there are an insufficient number of providers in the community. One commented, “Culturally sensitive and appropriate mental health services are not easily accessible to the populations we serve.” Another noted, “While there are mental health providers in the area, most residents cannot afford the necessary amount of treatment needed.”

All service area counties except Lebanon have a lower rate of mental healthcare providers than the nation. Berks and Lancaster Counties also have a lower rate of providers than the state as indicated in red in the chart below.

Mental Health Provider Rate (per 100,000 Population)	
Berks County	118.4
Cumberland County	180.5
Dauphin County	195.9
Lancaster County	114.3
Lebanon County	225.1
Pennsylvania	171.5
United States	202.8

Multiple Key Informant Survey participants acknowledged stigma as a barrier for people to access mental health and substance use disorder services when they need it. One Key Informant noted, “Stigma related to substance abuse and mental health supports deter people from utilizing the services if available.”

Key Concerns Related to Behavioral Health

- Lack of providers, especially psychiatrists
- Denial, stigma, finances, and lack of resources keep people from receiving care
- We separate treatment for “physical” health and “mental” health
- Language and cultural barriers multiple environmental challenges to receiving care
- Lack of transportation to services and long waiting lists reduce timely care
- Primary care providers increasingly are treating behavioral health needs when specialists are not available; some PCPs are not comfortable treating behavioral health conditions, while some patients require specialty care for more complex conditions
- Schools need more mental health resources for students
- Illicit drugs are too often easily accessible and used to self-medicate; perpetuating avoidance of treatment for root causes of conditions
- Children often witness parents’ substance use which models risk behaviors and contributes to adverse childhood experiences (ACE)
- All populations are affected by substance use disorder but it is more visible in vulnerable and poor populations
- There is a lack of community engagement and not enough police resources to deter substance use
- There is a “drug culture” that considers drug use normal

Healthy Lifestyles

County Health Rankings is published annually to measure and compare the health of counties across the nation. Health Outcomes, one of the rankings within the report, is a key indicator of overall health status, measuring length of life and quality of life. The 2018 Health Outcomes Rankings for the region (out of 67 counties in Pennsylvania) are shown below.

Overall County Health Outcomes Rankings

#6 Cumberland County
#8 Lancaster County
#15 Lebanon County
#32 Berks County
#43 Dauphin County

Individual health behaviors impact overall health status and have been shown to contribute to or reduce the chance of chronic disease. One indicator of poor health behaviors is obesity. Obesity was ranked by Key Informant Survey participants as the #2 top health condition affecting residents across the service area. Statewide, 30% of adults and 17%-19% of youth are obese. Berks, Dauphin, and Lebanon Counties have the highest obesity rates among the five service area counties as highlighted in red below.

Obesity among Adults and Youth

	Berks County	Cumberland County	Dauphin County	Lancaster County	Lebanon County	PA
Adult Obesity (2014)	32.0%	30.0%	31.0%	28.0%	28.0%	30.0%
Youth Grades K-6 Obesity (2015-2016)	18.1%	14.2%	17.3%	15.2%	19.4%	16.7%
Youth Grades 7-12 Obesity (2015-2016)	20.2%	17.4%	22.2%	18.0%	20.8%	19.1%

While many factors can contribute to obesity, healthy eating and physical activity have been proven to reduce the likelihood of overweight and obesity. Healthy eating and physical activity are impacted by a variety of social factors including access to healthy food, income, transportation, health literacy, as well as personal choice.

Vulnerable populations, including low-income and minority populations, are most at-risk for poor health habits related to eating and physical activity. One Key Informant Survey respondent noted, “The health of our most vulnerable community members continues to languish. Until we do a better job of ensuring that all individuals have access to affordable housing, family-sustaining wages, affordable child care, and benefits like paid family leave and sick days, it will be difficult to promote healthy lifestyle choices.”

Fewer than 35% of Community Survey respondents met federal guidelines for nutrition; fewer than 30% met physical activity guidelines

Fewer than 35% of respondents to the Community Survey met federal guidelines for fruit and vegetable consumption and fewer than 30% of respondents met physical activity guidelines.

Healthy food consumption may be impacted by access to food or food insecurity. Across the service area, 23% of residents have low access to food, higher than both the state (21%) and the nation (22%). Dauphin County has the highest percentage of residents with low access to food (38%), followed by Cumberland County (27%).

Food Insecurity is defined as being without a consistent source of sufficient and affordable nutritious food

Food insecurity is defined as being without a consistent source of sufficient and affordable nutritious food. One Key Informant Survey comment about the potential impact of food insecurity stated, “The client population we serve struggles with hunger and food insecurity…they are disproportionately represented with heart disease, high blood pressure, diabetes and a host of other health issues that are not helped by poor nutritional habits.”

Food insecurity increased among students in all service area counties from 2013-2017

One participant in the Focus Groups had a son who required a special diet due to a medical condition. The mother explained the challenge of food insecurity and disease management. “I’m on food stamps and they do not cover everything. By the time I buy food to meet my son’s diet, they are gone.”

Almost 18% of students in Berks County and 14-16% of students in Dauphin and Lebanon Counties reported being worried about running out of food, higher than the state average. The percentage of food insecure students increased in all service area counties from 2013-2017.

Food Insecurity (6, 8, 10, and 12th Grades), PAYS 2017

	Worried about running out of food one or more times in the past year		
	2013	2015	2017
Berks County	17.3%	18.9%	17.7%
Cumberland County	9.5%	10.9%	10.8%
Dauphin County	11.1%	14.4%	14.0%
Lancaster County	11.1%	14.6%	12.9%
Lebanon County	12.4%	14.4%	15.7%
Pennsylvania	9.5%	13.7%	13.4%

Among Community Member Survey respondents, 18% reported being worried about running out of food within the past 12 months. Dauphin and Berks County respondents were the most likely to report being worried about running out of food.

Food Insecurity among Community Survey Participants, 2018

	Worried about running out of food within the past 12 months
Berks County	17.3%
Cumberland County	13.8%
Dauphin County	26.2%
Lancaster County	8.1%
Lebanon County	13.8%

Regular dental care is a key component of a healthy lifestyle. The rate of dental care providers increased across the service area from 2010 to 2015. Cumberland County experienced the greatest increase in the provider rate. However, despite increasing rates, Berks, Lancaster, and Lebanon Counties all have lower provider rates than the state and the nation as highlighted in red in the table below.

Berks, Lancaster, and Lebanon have lower rates of both primary care and dental providers than the state and the nation

Access to Dentists (Rate per 100,000 Pop.)

	2010	2011	2012	2013	2014	2015
Berks County	47.6	48.7	49.6	50.8	52.5	52.3
Cumberland County	59.5	62.2	64.1	65.9	68.1	71
Dauphin County	67.5	65.8	66	67.5	67.8	69.2
Lancaster County	44.3	45.8	48.2	49.3	51.2	54.2
Lebanon County	41.9	43.9	44.4	44.3	46.9	46
Pennsylvania	57.4	59.1	60.6	62.5	64.4	65.4
United States	58.9	60.3	61.7	63.2	64.7	65.6

Fewer than 23% of key informants thought that residents receive dental care when they need it

Access to dental care is also impacted by the availability of dental insurance and the ability to afford services. One key informant stated, “Access to affordable dental care is important--dental insurance is not commonly available and only covers preventable and basic care--meaning more substantive problems are left untreated.” Less than 23% of key informants thought that residents can receive dental care when they need it.

Among community member survey respondents, 16% indicated that they do not seek dental care services and 42% had not visited a dentist or dental clinic within the past year. Respondents from Berks, Cumberland, and Dauphin were the least likely to receive dental care.

MOM-n-PA is an annual two-day free dental clinic for underserved Pennsylvanians in which dental treatment is provided by hundreds of volunteer dental professionals at no cost to individuals who cannot afford dental care. The 2018 clinic was held in Reading and was visited by more than 1,900 patients. Approximately 86% of patients were from Berks County. Nearly half of the patients had never seen a dentist or last saw a dentist more than two years ago. Similarly, 59% of patients had never had their teeth cleaned or last had their teeth cleaned more than two years ago. More than three-quarters of patients indicated that cost of care and/or lack of health insurance were the primary reasons they had not seen a dentist.

59% of Mom-n-PA free dental clinic patients had never had their teeth cleaned or last had them cleaned more than 2 years ago

"Healthy lifestyles" was ranked as the #5 top health need by participates at the Hershey Partner Forum and #4 at the Reading Partner Forum. Partner Forum participants discussed the following key themes that impact residents' adoption of healthy lifestyles.

Key Concerns Related to Healthy Lifestyles
> Lack of a feeling of "community"
> Lack of nutrition education and confusing messages over what foods are healthy
> Insufficient safe parks and open spaces in the city
> Economic ability to "afford a healthy lifestyle;" i.e., high cost of fruits and vegetables, time to exercise, transportation to resources; cost of memberships
> Health literacy
> Stigma surrounding food insecurity
> Transportation to get to medical appointments, community services, grocery stores, etc.
> Not enough providers available at free clinics
> Patient self-management information not literacy and culturally appropriate

Disease Management

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

Key Informant Survey respondents identified chronic diseases, including diabetes, cancer, and cardiovascular disease among the top 8 health conditions affecting service area residents. Diabetes and cardiovascular disease were ranked as top three health concerns by more than one in five key informants.

One in five key informants identified diabetes, cancer, and cardiovascular disease among the top health conditions affecting residents

High blood pressure and high cholesterol contribute to chronic conditions, particularly diabetes and cardiovascular disease. Older adults are among the most at risk for high blood pressure

and high cholesterol, and resulting chronic conditions. The following table presents the prevalence of high blood pressure and high cholesterol among Medicare Beneficiaries. Medicare is a federal health insurance program that primarily services adults aged 65 or older.

Across the region, more than 50% of Medicare Beneficiaries have been diagnosed with high blood pressure and/or high cholesterol. Beneficiaries in all service area counties except Dauphin have a higher prevalence of high blood pressure and high cholesterol compared to the state and the nation, as highlighted in red below.

Approximately 50% of Medicare Beneficiaries across all service counties have been diagnosed with high blood pressure and/or high cholesterol

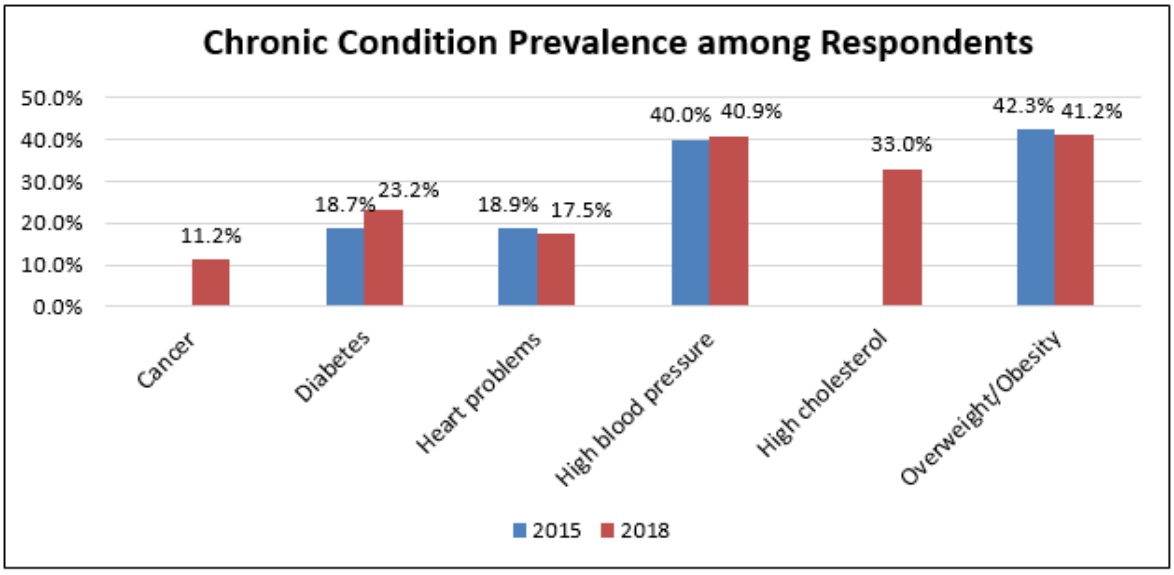
Berks County Medicare Beneficiaries have the highest prevalence of high blood pressure and high cholesterol, as well as one of the highest prevalence of diabetes. Dauphin County Beneficiaries have the highest prevalence of diabetes despite having the lowest prevalence of high blood pressure and high cholesterol.

Chronic Disease among Medicare Beneficiaries

	Percent with High Blood Pressure	Percent with High Cholesterol	Population with Diagnosed Diabetes, Age-Adjusted Rate
Service Area	58.60%	52.30%	9.05%
Berks County	60.27%	56.52%	9.60%
Cumberland County	59.64%	53.87%	8.20%
Dauphin County	56.14%	46.70%	10.60%
Lancaster County	57.56%	50.04%	8.40%
Lebanon County	59%	53.54%	8.40%
Pennsylvania	56.62%	48.85%	9.17%
United States	54.99%	44.61%	9.19%

High blood pressure and high cholesterol were among the most prevalent conditions reported by Community Member Survey respondents. One-third of respondents reported having at least one of these conditions. Nearly 25% (23.2%) of respondents reported having diabetes; 17.5% reported having heart problems; and 11.2% reported having cancer. In line with analysis of among Medicare Beneficiaries, Berks and Dauphin County respondents were most likely to report having a diabetes diagnosis.

Nearly one-quarter of Community Member Survey respondents reported having diabetes



Note: 2015 data comparisons are provided as available.

Cancer is a leading cause of death across the state and the nation. The following table illustrates cancer incidence rates for three of the leading cancer types: melanoma, breast (female), and prostate (male). All service area counties have a higher incidence of at least one cancer type when compared to the state, as highlighted in red below. Lancaster County has a higher incidence of melanoma among both men and women. Dauphin County shows higher incidence rates among men, while Lebanon County shows higher incidence rates among women.

Cancer Incidence: Age-Adjusted Rates per 100,000 (2015)

	Melanoma - Female	Melanoma - Male	Breast Cancer - Female	Prostate Cancer - Male
Berks County	19.5	26.3	122.7	117.3
Cumberland County	18.8	19.6	132.7	62.0
Dauphin County	20.5	35.8	129.3	108.5
Lancaster County	26.3	41.2	119.1	83.6
Lebanon County	27.1	27.1	163.5	91.3
Pennsylvania	21.8	31.4	131.2	104.4

Chronic disease management was ranked as the #3 top health need by participates at the Reading Partner Forum and #4 at the Hershey Partner Forum. Partner Forum participants discussed the following key themes that impact residents' ability to manage chronic conditions.

Key Concerns Related to Disease Management
> Lack of transportation to medical appointments and social services > Stigma related to diagnosis > Inequitable disbursement of disease support resources among neighboring zip codes > Lack of specialists and support services for less common diseases > Care coordination and transition between providers; agreement on treatment protocols > Patient compliance and self-management is impacted by language barriers, cultural habits, family support, denial, trust, cost to change habits, etc. > Difficulty in determining and leveraging motivation for patients for self-management > Patient self-management information is not literacy and culturally appropriate

A full report of CHNA data and findings grouped by study method follows.

Full Report of CHNA Data and Findings

Secondary Data Profile

Background

Secondary data, including demographic and public health indicators, were analyzed for the five-county service area consisting of Berks, Cumberland, Dauphin, Lancaster, and Lebanon Counties. Community drivers of health status, health and socio-economic trends, and emerging community needs were examined through data analysis. Data were compared to state and national benchmarks, as available, to identify areas of strength and opportunity for the region. Throughout the reporting, numbers in red indicate where a county fared worse than the state for a specific indicator.

The Demographic Analysis section provides data related to the social determinants of health. Social determinants include the conditions or environments in which people work, live, learn, and play that can greatly affect their health risks and outcomes. The data included in this section are provided by the U.S. Census Bureau and obtained via the Community Commons website. The county and zip code level demographic and socioeconomic data are reported from the 2012-2016 American Community Survey five-year estimates, 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, Community Commons, the University of Wisconsin County Health Rankings & Roadmaps program, among other sources. A comprehensive list of data sources can be found in Appendix B.

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

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

Summary of Secondary Data Findings

Service Area Demographics

- Cumberland County is expected to have the greatest annual growth rate of all five counties from 2017-2022.
- Lebanon County has the highest percentage of population age 65 or over; Lancaster County has the highest percentage age 0-17.
- The White population percentage is expected to decrease in all five counties over the next five years.
- Across the five-county service area, the percentage of individuals over age 25 without a high school diploma is higher than both the state and nation.
- In Berks County, the percentage of children under age 18 that are living in poverty is higher than both the state and the nation.

Service Area Strengths

- The uninsured rate among all ages continues to decline in all five counties.
- Drug-related overdose deaths declined in Lebanon County from 2015 to 2016.
- The percentage of adults reporting no leisure-time physical activity declined in all counties from 2010 to 2013.
- Adult obesity decreased in Dauphin and Lebanon Counties from 2010 to 2014.

Service Area Opportunities

- The uninsured rate among 0-18 year olds in Lancaster and Lebanon Counties is decreasing, but is significantly higher than the state and nation.
- From 2010-2015, the rate of primary care physicians decreased in Lebanon County. Physician rates for Berks, Lancaster, and Lebanon Counties remained steady, but are lower than state and national rates.
- More than one-third of students in all five counties reported feeling consistently sad or depressed in 2017.
- While cigarette use is declining among students and adults, approximately 14% of students reported vaping in 2017.
- Binge drinking among adults increased in all five counties from 2014 to 2016.
- The drug-related overdose death rate increased from 2015-2016 in all counties except in Lebanon County where it decreased.
- Adult obesity continued to increase from 2010-2014 in Berks and Cumberland Counties.
- From 2010 to 2015, the rate of available fitness and recreation facilities decreased in all five counties.
- In all counties except Dauphin, a higher percentage of Medicare fee-for-service patients have high blood pressure or cholesterol, compared to the state and nation.

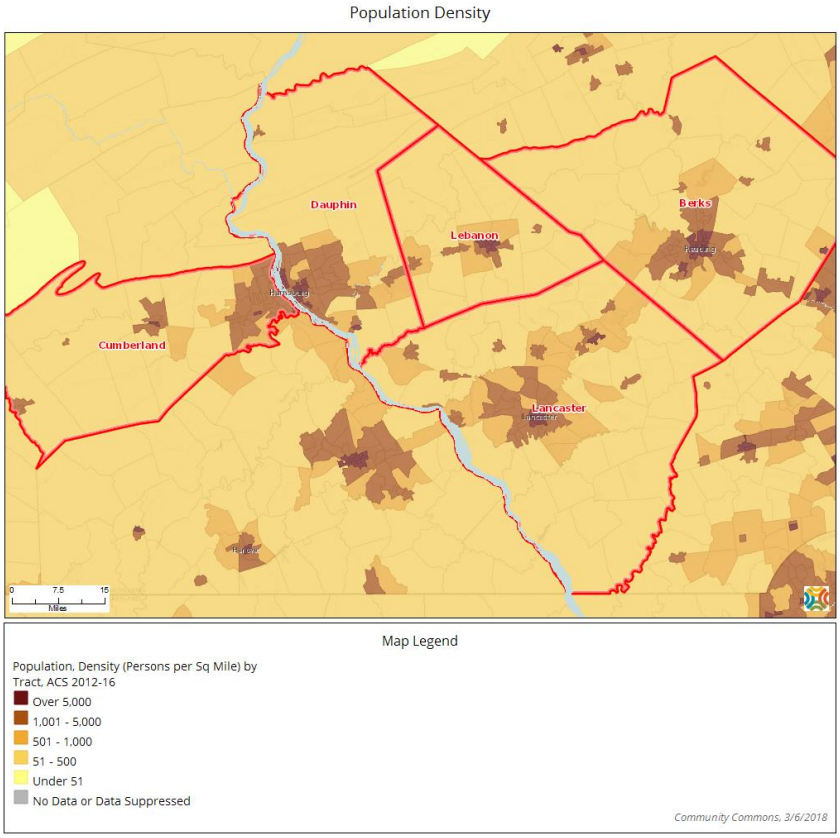
Full Demographic Analysis

Population

A total of 1,599,957 people live in the 3,233 square mile service area. The population density for this area, estimated at 494.94 persons per square mile, is greater than the state average population density of 285.72 as well as the national average population density of 90.19 persons per square mile. Lancaster County has the highest total population of 533,110, as well as the highest population density of 564.81 persons per square mile. Lebanon County has the lowest total population of the five-county region at 136,950, and the lowest population density of 378.49 persons per square mile.

Population Density, 2012-2016 5-year estimate

	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
Service Area	1,599,957	3,232.65	494.94
Berks County	414,097	856.39	483.54
Cumberland County	243,838	545.5	447
Dauphin County	271,962	525.06	517.97
Lancaster County	533,110	943.87	564.81
Lebanon County	136,950	361.83	378.49
Pennsylvania	12,783,977	44,742.38	285.72
United States	318,558,162	3,532,068.58	90.19



The populations of all five counties are expected to continue to grow from 2017 to 2022. Cumberland County is expected to have the greatest annual growth rate of 1.09%, which is greater than both the state and national averages. Berks County is expected to have the lowest annual growth rate of 0.3%, which is still greater than the state average but lower than the national average.

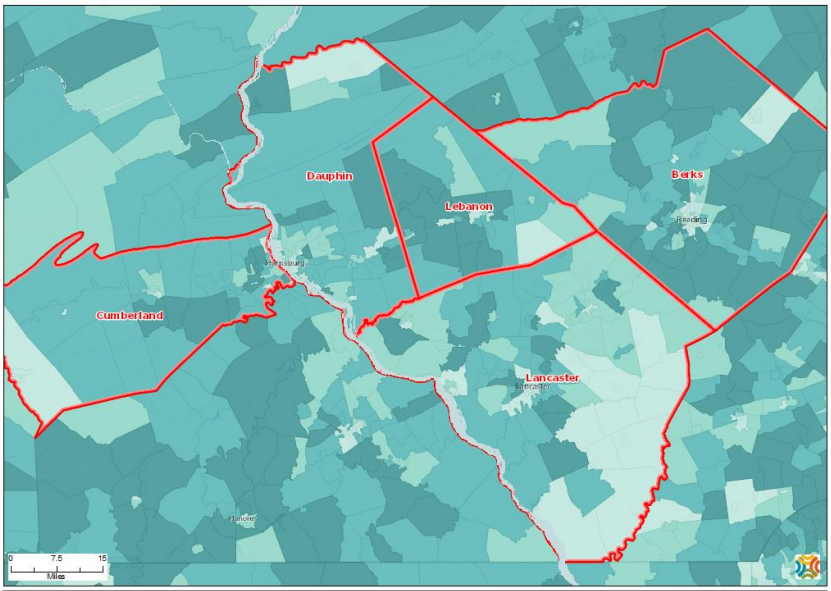
Population Projection and Growth Rate, 2017-2022

	Population 2017	Population Projection 2022	2017-2022 Annual Growth Rate
Berks County	420,497	426,817	0.3%
Cumberland County	253,836	267,919	1.09%
Dauphin County	276,447	282,518	0.44%
Lancaster County	546,551	565,637	0.69%
Lebanon County	139,912	144,470	0.64%
Pennsylvania	12,976,662	13,138,130	0.25%
United States	327,514,334	341,323,594	0.83%

The median age for the five-county region is greatest in Lebanon County (41.2) and lowest in Lancaster County (38.5). The median age of all five counties is greater than the median age of the United States (37.7). For the total service area, 22.9% of the population is 0-17 years of age, which is greater than the percentage for Pennsylvania (21.2%), but lower than the United States (23.1%). Lancaster County has the greatest percentage (24.1%) of residents age 0-17, which is significantly greater than both the state and nation. Cumberland County has the lowest percentage (20.4%) of residents age 0-17, which is lower than both the state and nation.

For the service area, 16.3% of the population is greater than 65 years of age, which is lower than the percentage for Pennsylvania (16.7%), but higher than the United States (14.5%). Cumberland County and Lebanon County have the highest percentages of residents greater than age 65 in the service area (17.1% and 18.2%, respectively).

Median Age



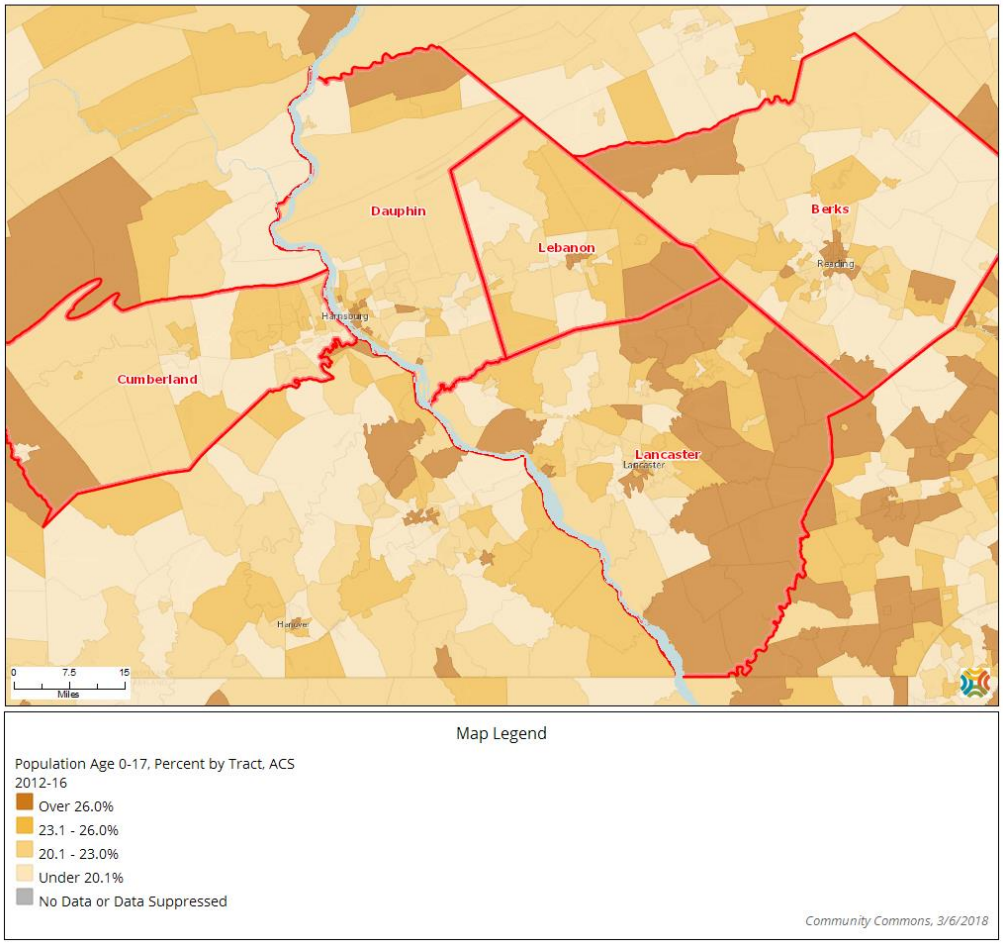
Map Legend

Median Age by Tract, ACS 2012-16
- Over 45.0
- 40.1 - 45.0
- 35.1 - 40.0
- Under 35.1
- No Data or Data Suppressed

Community Commons, 3/6/2018

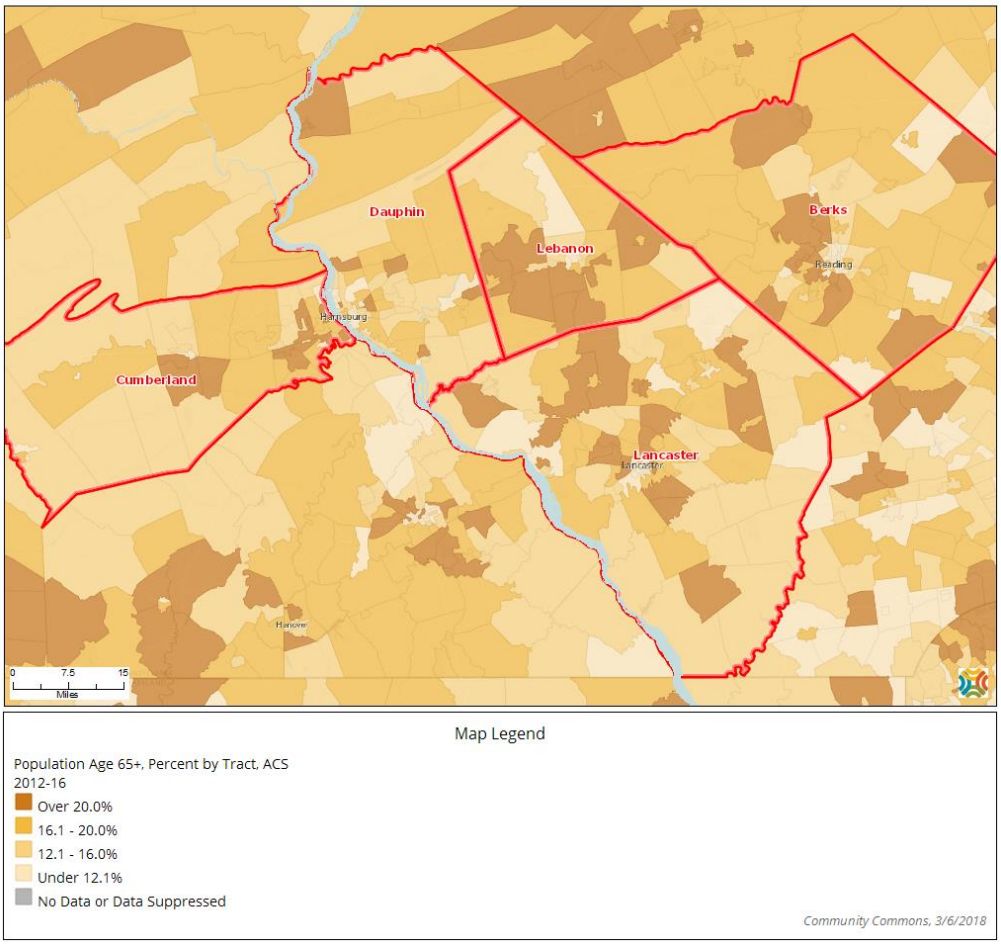
	Median Age
Berks County	39.8
Cumberland County	40.7
Dauphin County	39.6
Lancaster County	38.5
Lebanon County	41.2
Pennsylvania	40.6
United States	37.7

Population Under 18 Years Of Age



	Population Age 0-17	Percent Population Age 0-17
Service Area	365,840	22.9%
Berks County	94,844	22.9%
Cumberland County	49,680	20.4%
Dauphin County	61,236	22.5%
Lancaster County	128,533	24.1%
Lebanon County	31,547	23.0%
Pennsylvania	2,704,268	21.2%
United States	73,612,438	23.1%

Population Greater Than 65 Years Of Age



Map Legend

Population Age 65+, Percent by Tract, ACS 2012-16

- Over 20.0%
- 16.1 - 20.0%
- 12.1 - 16.0%
- Under 12.1%
- No Data or Data Suppressed

Community Commons, 3/6/2018

	Population Age 65+	Percent Population Age 65+
Service area	260,974	16.3%
Berks County	65,593	15.8%
Cumberland County	41,584	17.1%
Dauphin County	41,492	15.3%
Lancaster County	87,338	16.4%
Lebanon County	24,967	18.2%
Pennsylvania	2,133,247	16.7%
United States	46,180,632	14.5%

The majority of the population in the five-county region identifies as White (84.5%), which is higher than both the state (81.4%) and nation (73.4%). In Cumberland County, 89.1% of people reporting only one race are White, the highest percentage for the service area. For the overall five-county region, 6.5% of the population is Black, which is lower than both the state (11.0%) and nation (12.6%). Dauphin County has the greatest percentage (18.3%) of people identifying as Black. For the service area, 11.1% of the population identify as being Hispanic or Latino,

which is higher than the state (6.6%), but lower than the nation (17.3%). Berks County has the highest percentage (18.8%) of Hispanic or Latino residents, and Cumberland County has the lowest percentage (3.4%).

The percentage (5.5%) of the population in the service area over the age of 5 that has limited English proficiency is higher than Pennsylvania (4.2%), but lower than the United States (8.5%).

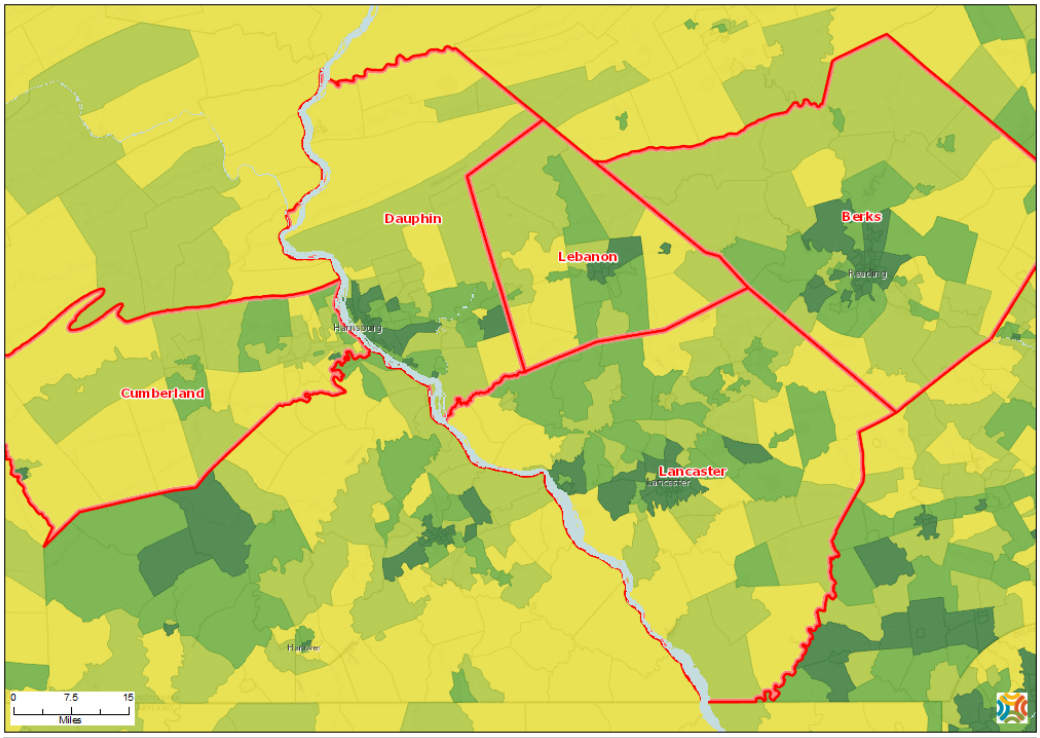
Population by Race and Ethnicity, 2012-2016

	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Service Area	84.45%	6.46%	2.35%	0.34%	0.02%	3.28%	3.09%
Berks County	83.62%	4.83%	1.38%	0.86%	0.04%	4.21%	5.05%
Cumberland County	89.08%	3.55%	3.70%	0.08%	0.01%	1.23%	2.36%
Dauphin County	71.77%	18.33%	3.78%	0.23%	0.02%	2.67%	3.19%
Lancaster County	88.56%	4.13%	2.06%	0.17%	0%	2.98%	2.09%
Lebanon County	87.94%	2.06%	1.21%	0.09%	0.03%	6.50%	2.16%
Pennsylvania	81.37%	11.03%	3.14%	0.20%	0.03%	1.98%	2.24%
United States	73.35%	12.63%	5.22%	0.82%	0.18%	4.75%	3.06%

Race and Ethnicity Growth Rate, 2017-2022

	White Population % Change	Black Population % Change	Hispanic Population % Change
Berks County	-2.78%	0.35%	3.73%
Cumberland County	-2.39%	0.61%	0.93%
Dauphin County	-2.11%	-0.12%	2.05%
Lancaster County	-2.00%	0.51%	1.83%
Lebanon County	-2.53%	0.47%	3.54%

Hispanic or Latino Population



Map Legend

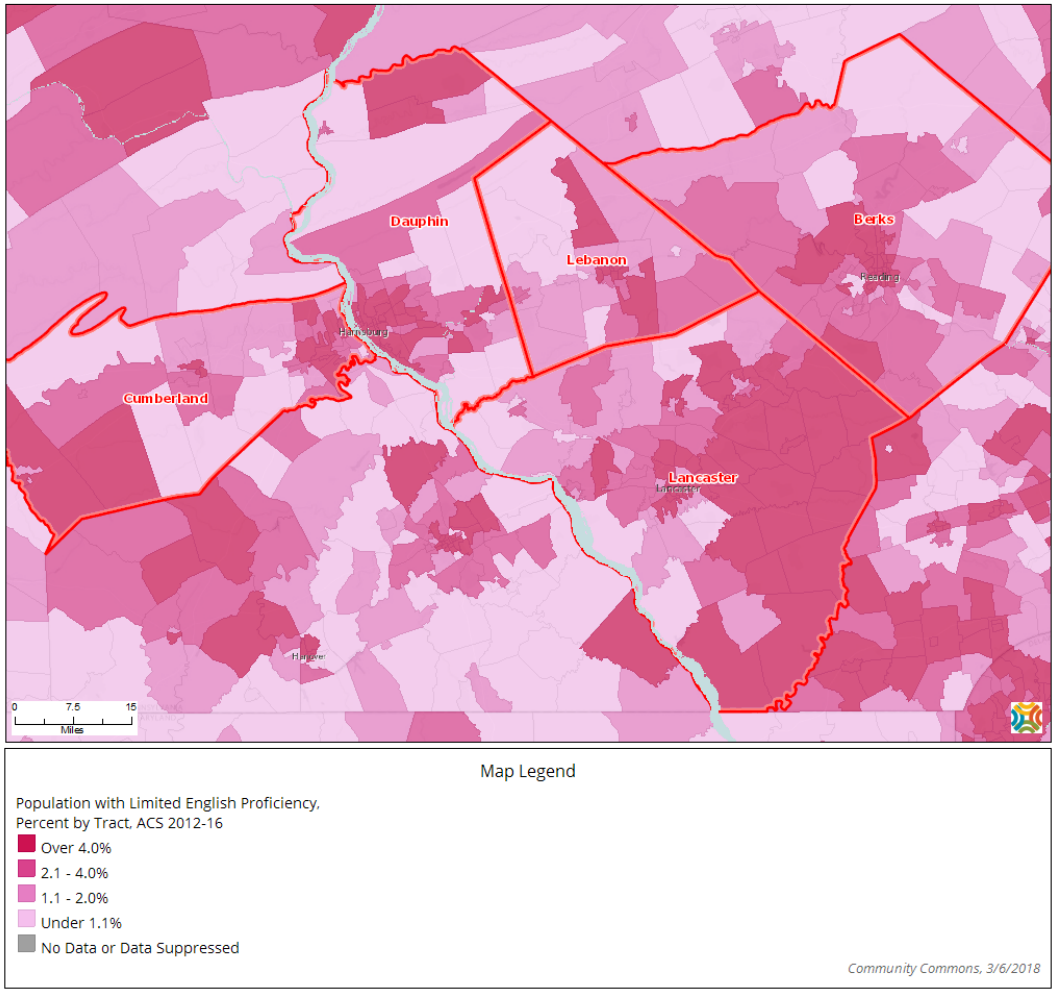
Population, Hispanic or Latino, Percent by Tract, ACS 2012-16

- Over 10.0%
- 5.1 - 10.0%
- 2.1 - 5.0%
- Under 2.1%
- No Hispanic Population Reported
- No Data or Data Suppressed

Community Commons, 3/6/2018

	Hispanic or Latino Population	Percent Population Hispanic or Latino
Service Area	176,733	11.05%
Berks County	77,946	18.82%
Cumberland County	8,282	3.40%
Dauphin County	22,415	8.24%
Lancaster County	52,083	9.77%
Lebanon County	16,007	11.69%
Pennsylvania	843,164	6.60%
United States	55,199,107	17.33%

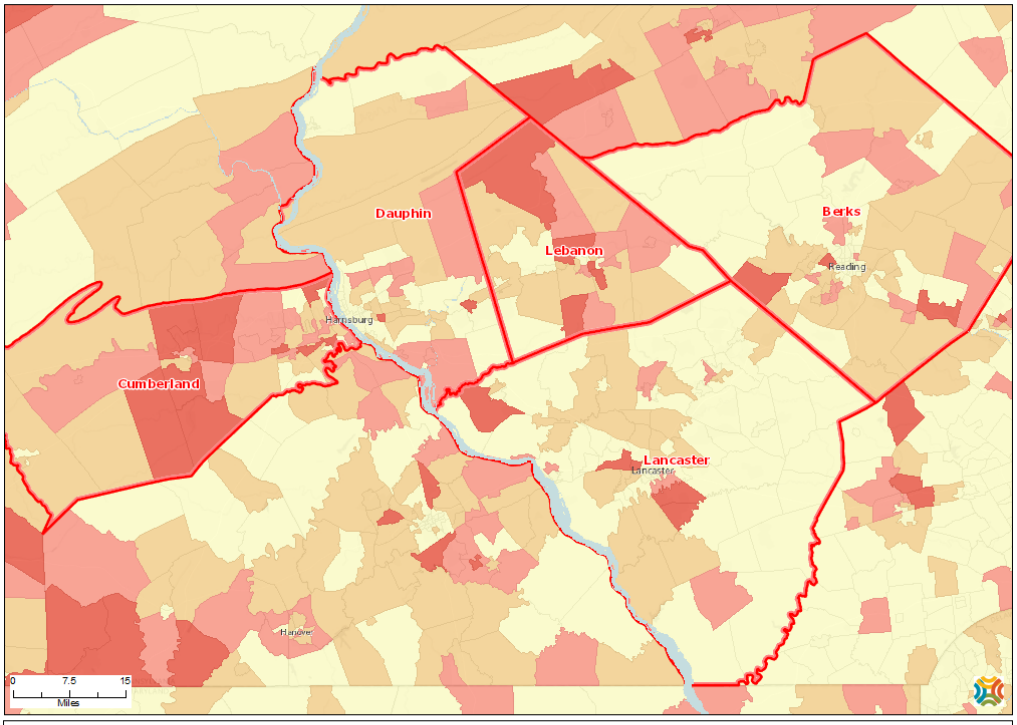
Limited English Proficiency



	Population Age 5+	Population Age 5+ with Limited English Proficiency	Percent Population Age 5+ with Limited English Proficiency
Service Area	1,501,194	81,958	5.46%
Berks County	389,562	28,024	7.19%
Cumberland County	230,704	7,309	3.17%
Dauphin County	254,899	12,070	4.74%
Lancaster County	497,591	28,938	5.82%
Lebanon County	128,438	5,617	4.37%
Pennsylvania	12,069,379	501,180	4.15%
United States	298,691,202	25,440,956	8.52%

The five-county region has a higher percentage (8.6%) of veterans than both Pennsylvania (8.3%) and the United States (8.0%). Cumberland County has the highest percentage (10.3%) of veterans in the five-county region, and Lancaster County has the lowest (7.8%).

Veteran Population



Map Legend

Veterans, Percent of Total Population by Tract, ACS 2012-16

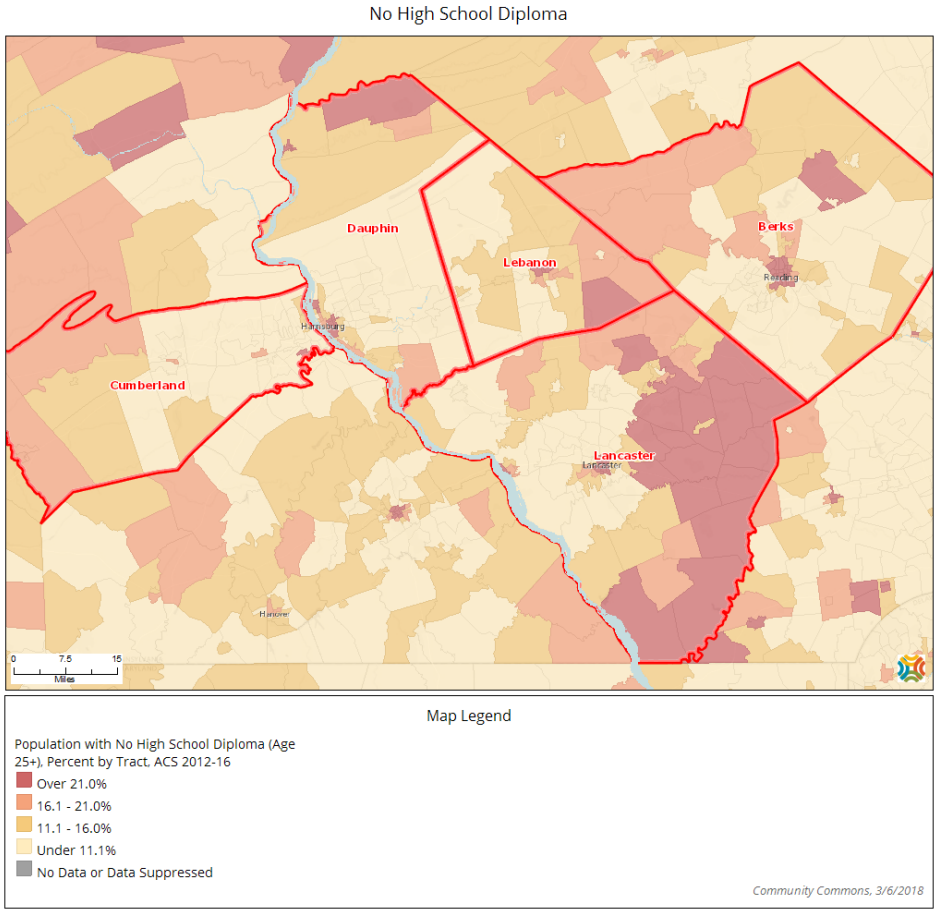
- Over 13%
- 11.1 - 13.0%
- 9.1 - 11.0%
- Under 9.1%
- No Data or Data Suppressed

Community Commons, 3/6/2018

	Total Population Age 18+	Total Veterans	Veterans, Percent of Total Population
Service Area	1,232,852	105,724	8.58%
Berks County	319,140	25,822	8.09%
Cumberland County	193,753	19,925	10.28%
Dauphin County	210,395	18,275	8.69%
Lancaster County	404,391	31,537	7.80%
Lebanon County	105,173	10,165	9.67%
Pennsylvania	10,074,933	840,258	8.34%
United States	243,935,157	19,535,341	8.01%

Social and Economic Factors

In the five-county region, the percentage of individuals greater than 25 years of age without a high school diploma (13.2%) is higher than both the state (10.5%) and nation (13.0%). Lancaster County has the highest percentage of population without a high school diploma (15.4%) and Cumberland County has the lowest (8.6%). Furthermore, only 26.5% of residents (age 25 or greater) across the service area have a bachelor's degree or higher, which is lower than both the state (29.3%) and nation (30.3%).

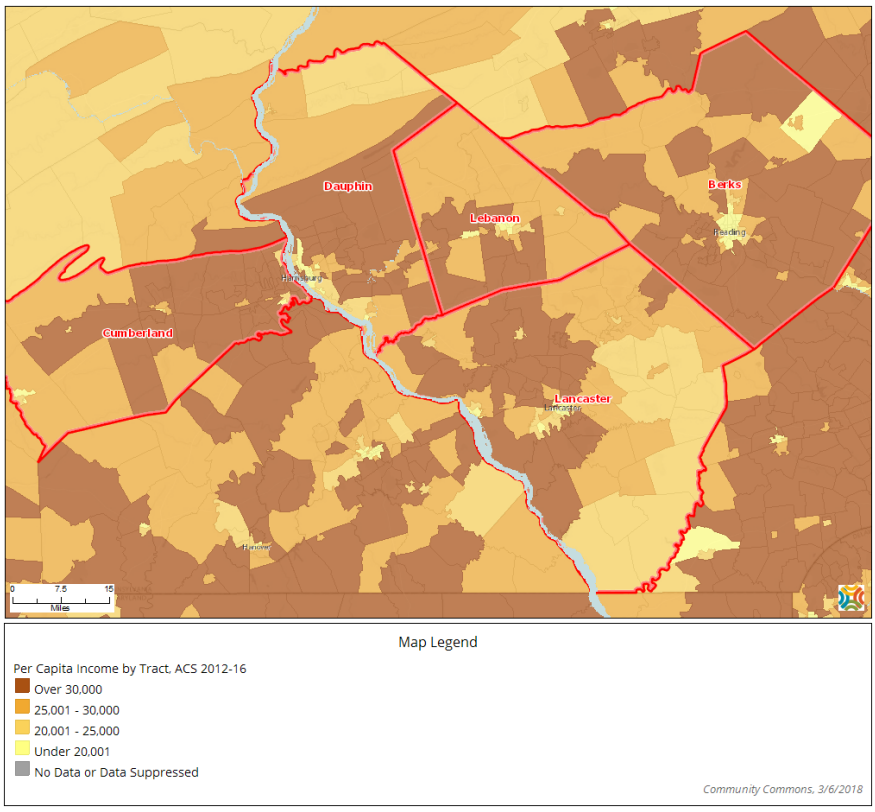


	Total Population Age 25+	Percent Population Age 25+ with No High School Diploma	Percent Population Age 25+ with Bachelor's Degree or Higher
Service Area	1,083,405	13.20%	26.52%
Berks County	278,049	14.47%	23.62%
Cumberland County	169,530	8.63%	33.64%
Dauphin County	187,723	10.92%	29.32%
Lancaster County	354,397	15.40%	25.65%
Lebanon County	93,706	13.97%	19.86%
Pennsylvania	8,849,846	10.46%	29.33%
United States	213,649,147	13.02%	30.32%

The per capita income for the five-county region is $29,054, which is less than both Pennsylvania ($30,136) and the United States ($29,829). Lebanon County has the lowest per capita income ($27,050) and Cumberland County has the highest ($33,078). Median family income is lower than the state ($69,960) in Lebanon ($67,325), Dauphin ($68,993), and Berks ($69,115) Counties.

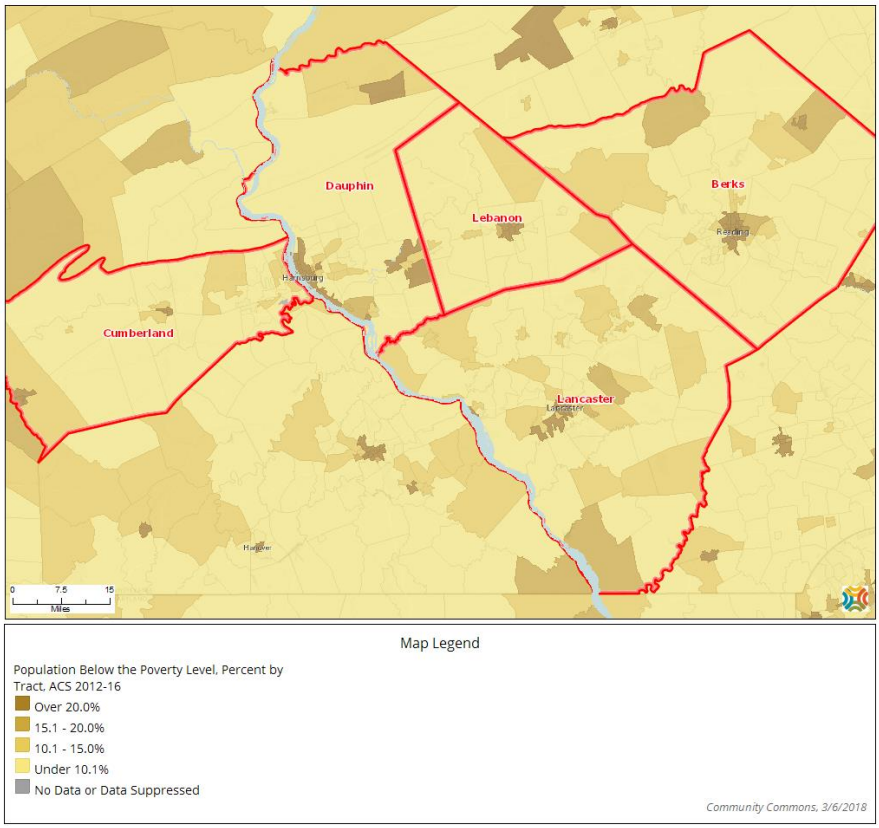
In the service area, 11.8% of the entire population is living in poverty, and 17.9% of children under the age of 18 are living in poverty. In Berks County, 22.6% of children under the age of 18 are living in poverty, which is higher than both the state (19.1%) and the nation (21.2%). The percent of children eligible for free lunch in Berks County increased over the past five school years, with 51.0% of children eligible in the 2015-16 year.

Per Capita Income



	Per Capita Income	Median Family Income
Service Area	$29,054	No Data
Berks County	$27,844	$69,115
Cumberland County	$33,078	$80,175
Dauphin County	$30,067	$68,993
Lancaster County	$28,151	$70,512
Lebanon County	$27,050	$67,325
Pennsylvania	$30,136	$69,960
United States	$29,829	$67,871

Below Poverty Level



Poverty – Below 100% FPL, 2012-2016

	Population in Poverty	Percent Population in Poverty	Percent Population Under Age 18 in Poverty
Service Area	183,377	11.82%	17.86%
Berks County	57,329	14.30%	22.57%
Cumberland County	19,828	8.61%	12.14%
Dauphin County	35,950	13.44%	20.37%
Lancaster County	55,977	10.79%	15.95%
Lebanon County	14,293	10.70%	15.67%
Pennsylvania	1,647,762	13.32%	19.07%
United States	46,932,225	15.11%	21.17%

Children Eligible for Free/Reduced Price Lunch

	2010-11	2012-13	2013-14	2014-15	2015-16
Service Area	35.65%	39.21%	41.31%	44.71%	45.74%
Berks County	40.51%	43.20%	46.46%	49.27%	51.01%
Cumberland County	21.26%	24.94%	25.76%	27.17%	28.36%
Dauphin County	41.27%	43.92%	46.82%	51.18%	47.89%
Lancaster County	34.54%	39.02%	39.87%	44.79%	47.01%
Lebanon County	33.10%	38.88%	41.51%	42.44%	47.80%
Pennsylvania	39.41%	41.52%	43.58%	45.63%	48.16%
United States	48.15%	51.32%	51.99%	51.80%	52.30%

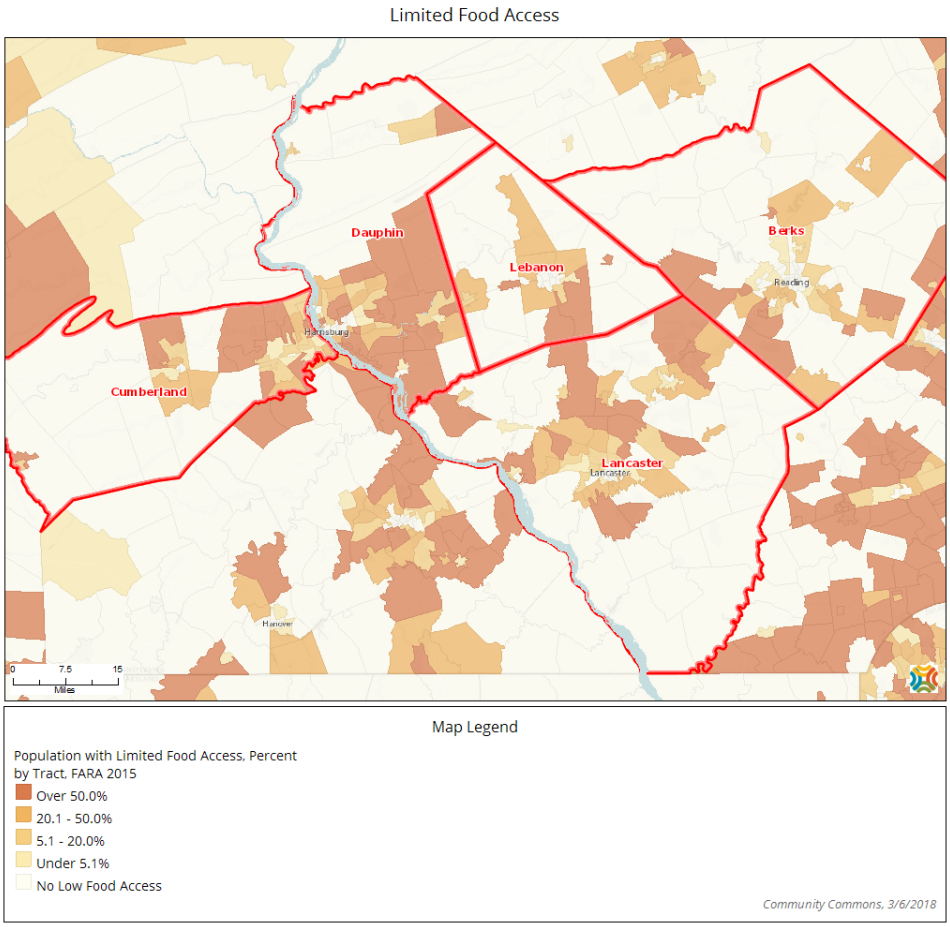
According to the Pennsylvania Youth Survey (PAYS), conducted biennially by the PA Commission on Crime and Delinquency, in 2017, almost 18% of students in Berks County and 14-16% of students in Dauphin and Lebanon Counties reported being worried about running out of food, higher than the state average. The percentage of students worried about running out of food increased in all counties from 2013-2017. In 2017, a higher percentage of students in Berks and Lebanon County also reported skipping a meal because of family finances.

Food and Stress (6,8,10, and 12th Grades)*

	Worried about running out of food*			Skipped a meal because of family finances*		
	2013	2015	2017	2013	2015	2017
Berks County	17.3%	18.9%	17.7%	7.5%	8.9%	8.7%
Cumberland County	9.5%	10.9%	10.8%	4.4%	4.9%	5.2%
Dauphin County	11.1%	14.4%	14.0%	5.1%	6.1%	6.5%
Lancaster County	11.1%	14.6%	12.9%	5.5%	7.2%	6.4%
Lebanon County	12.4%	14.4%	15.7%	5.5%	6.8%	7.7%
Pennsylvania	9.5%	13.7%	13.4%	4.4%	6.6%	6.8%

*One or more times in the past year

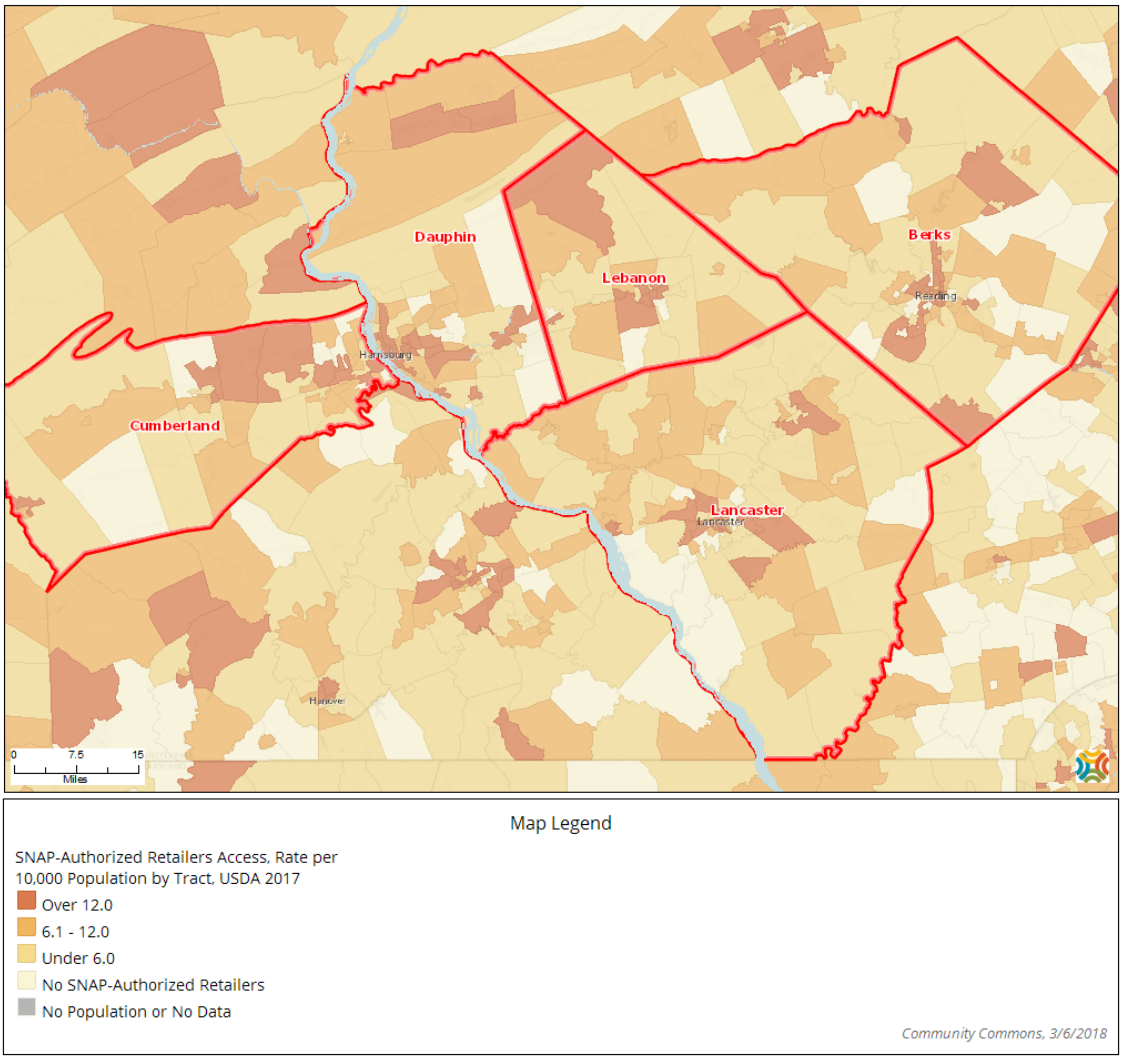
The percentage of residents in the five-county region that have low access to food (22.8%) is greater than both the state (21.1%) and nation (22.4%). Dauphin County has the highest percentage (37.7%) of residents with low access to food, followed by Cumberland County with 26.9% of residents with low access. The rate of Supplemental Nutrition Assistance Program (SNAP)-Authorized retailers is also lower in the service area (7.88) compared to Pennsylvania (8.07), with Lancaster County having the lowest rate (6.74).



Low Food Access, 2015

	Total Population	Population with Low Food Access	Percent Population with Low Food Access
Service Area	1,567,961	357,982	22.83%
Berks County	411,442	71,305	17.33%
Cumberland County	235,406	63,285	26.88%
Dauphin County	268,100	101,022	37.68%
Lancaster County	519,445	98,702	19%
Lebanon County	133,568	23,668	17.72%
Pennsylvania	12,702,379	2,682,905	21.12%
United States	308,745,538	69,266,771	22.43%

SNAP-Authorized Retailers



SNAP-Authorized Retailers, 2017

	Total Population	Total SNAP-Authorized Retailers	SNAP-Authorized Retailers, Rate per 10,000 Population
Service Area	1,567,961	1,235	7.88
Berks County	411,442	357	8.68
Cumberland County	235,406	164	6.97
Dauphin County	268,100	264	9.85
Lancaster County	519,445	350	6.74
Lebanon County	133,568	100	7.49
Pennsylvania	12,702,379	10,257	8.07
United States	312,411,142	257,596	8.25

Housing and Physical Environment

There are a total of 651,998 housing units in the five-county region, and 607,581 (93.2%) of them are occupied. Lancaster County has the most housing units (206,308) and Lebanon County has the fewest (56,176). The percentage of occupied housing units in all five counties is greater than the percentage of occupied housing units in both the state and nation.

Total Housing Units, 2012-2016

	Total Housing Units	Total Occupied Housing Units
Service Area	651,998	607,581
Berks County	164,853	152,451
Cumberland County	102,772	96,501
Dauphin County	121,889	110,211
Lancaster County	206,308	196,171
Lebanon County	56,176	52,247
Pennsylvania	5,592,175	4,961,929
United States	134,054,899	117,716,237

The percentage of occupied housing units with one or more substandard conditions is lower in the service area (29.7%) than in Pennsylvania (29.9%) and the United States (33.8%), but Berks (31.9%) and Lancaster (30.6%) Counties have higher percentages than the state.

Housing Units with Substandard Conditions, 2012-2016

	Occupied Housing Units with One or More Substandard Conditions	Percent Occupied Housing Units with One or More Substandard Conditions
Service Area	180,528	29.71%
Berks County	48,681	31.93%
Cumberland County	25,234	26.15%
Dauphin County	32,165	29.18%
Lancaster County	59,947	30.56%
Lebanon County	14,501	27.75%
Pennsylvania	1,485,705	29.94%
United States	39,729,263	33.75%

Cost burden is experienced when housing costs exceed 30% of total household income. The information provides a measure of affordability and excessive expenses. For households with mortgages, the service area has less housing cost burden (26.8%) than Pennsylvania (28.0%) and the nation (30.6%), but housing cost burden for rental households is higher for the service area (45.9%) than for rental households in the state (45.5%). More specifically, renters in Berks (49.9%) and Lancaster (47.6%) Counties have higher cost burden than the state and nation.

Cost Burdened Households, 2012-2016

	Rental Households	Percentage of Rental Households that are Cost Burdened	Owner Occupied Households With Mortgage	Percentage of Owner Occupied Households w/ Mortgages that are Cost Burdened
Service Area	189,680	45.86%	266,838	26.79%
Berks County	42,979	49.88%	70,734	29.18%
Cumberland County	28,383	41.63%	44,473	24.14%
Dauphin County	40,505	44.04%	44,464	24.89%
Lancaster County	61,916	47.60%	85,082	27.22%
Lebanon County	15,897	40.37%	22,085	26.61%
Pennsylvania	1,536,223	45.54%	2,090,142	27.95%
United States	42,835,169	47.27%	48,016,540	30.62%

Community safety was assessed by examining the violent and property crime offenses that occurred in the five-county region. According to the PA Uniform Crime Reporting System's annual reports, the crime rate per 100,000 population for the total service area (1,813.9) was lower than the crime rate of Pennsylvania (2,131.5), but Dauphin County has a higher crime rate (2,373.6) than the state. Although Lebanon County had the lowest number of crime offenses for the region, Cumberland County had the lowest crime rate (1,362.1).

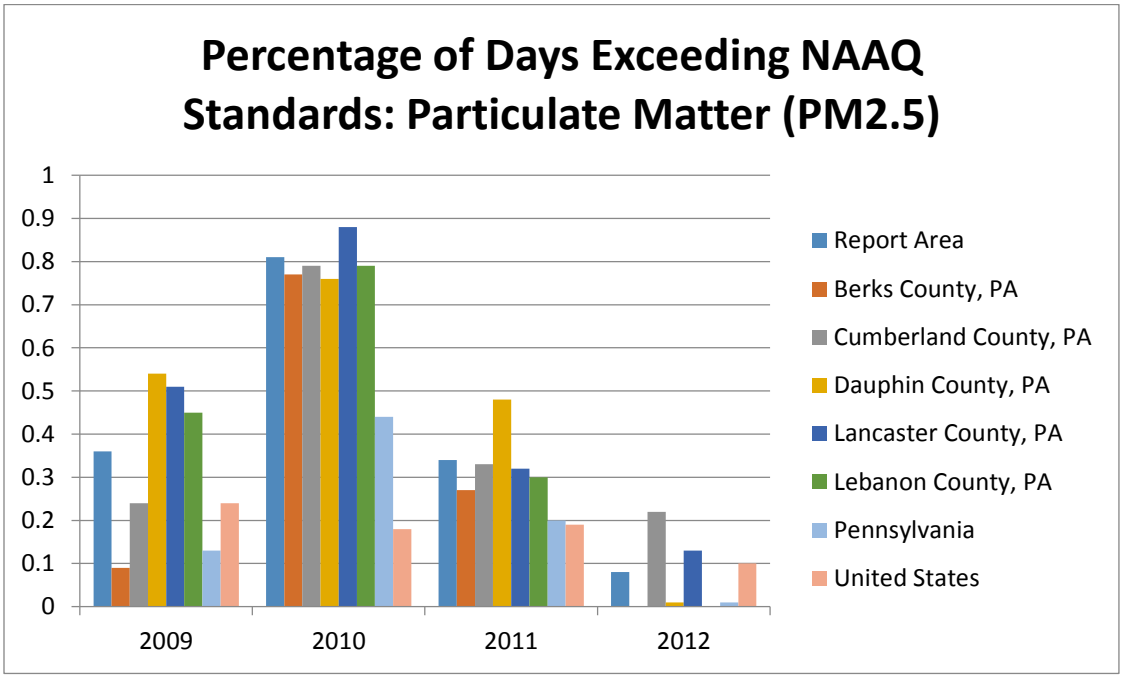
Total Crime Index, 2015

	Total Crimes	Crime Rate Per 100,000 Population	Violent Crimes	Property Crimes
Service Area	29,022	1,813.92	3,676	25,346
Berks County	8,300	2,004.90	1,282	7,018
Cumberland County	3,361	1,362.10	205	3,156
Dauphin County	6,460	2,373.60	981	5,479
Lancaster County	8,607	1,604.40	967	7,640
Lebanon County	2,294	1,674.70	241	2,053
Pennsylvania	272,880	2,131.50	40,186	232,694

Violent and Property Crimes, 2015

	Violent Crimes				Property Crimes			
	Murder	Rape	Robbery	Aggravated Assault	Burglary	Larceny Theft	Motor Vehicle Theft	Arson
Berks County	15	95	355	817	1452	5098	417	51
Cumberland County	2	53	67	83	394	2686	46	30
Dauphin County	18	126	285	552	1058	4176	194	51
Lancaster County	16	228	274	449	1138	6233	242	27
Lebanon County	4	24	39	174	334	1562	112	45
Pennsylvania	661	4266	12934	22325	39420	179397	12061	1816

Poor air quality can contribute to respiratory issues and overall poor health. The air quality can be measured via the percentage of days with particulate matter 2.5 levels above the National Ambient Air Quality (NAAQ) standard (35 micrograms per cubic meter) per year. From 2010-2012 the percentage of days with poor air quality had been steadily decreasing; however, as of 2012, Cumberland (0.22%) and Lancaster (0.13%) Counties still had higher percentages of poor air quality days than Pennsylvania (0.01%) and the United States (0.1%).



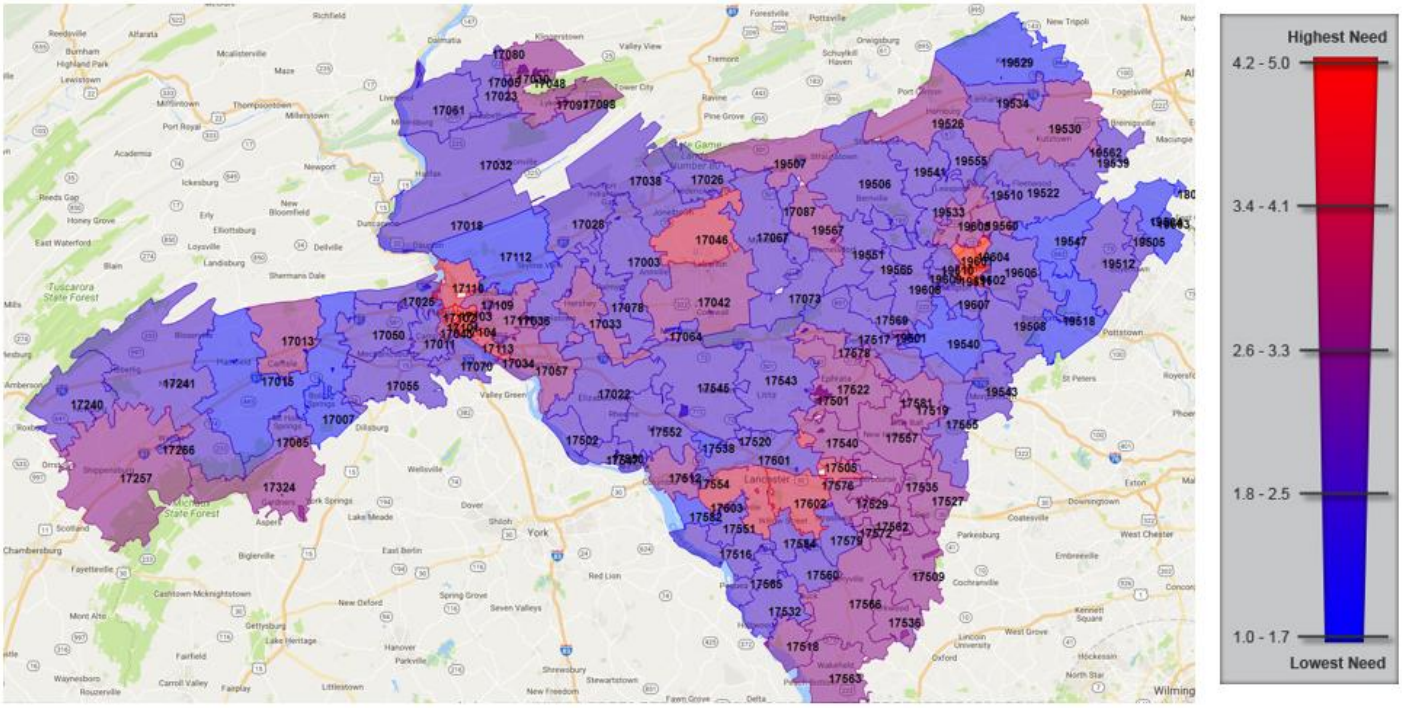
Percentage of (Pop. Adjusted) Days Exceeding NAAQ Standards: Particulate Matter (PM2.5), 2009 through 2012

	2009	2010	2011	2012
Service Area	0.36	0.81	0.34	0.08
Berks County	0.09	0.77	0.27	0
Cumberland County	0.24	0.79	0.33	0.22
Dauphin County	0.54	0.76	0.48	0.01
Lancaster County	0.51	0.88	0.32	0.13
Lebanon County	0.45	0.79	0.3	0
Pennsylvania	0.13	0.44	0.2	0.01
United States	0.24	0.18	0.19	0.1

Community Need Index

The Community Need Index (CNI) scores, developed jointly by Dignity Health and Truven Health, are important in the process of collecting socio-economic factors in the community. The CNI provides a score ranging from 1.0 to 5.0 for each zip code across the United States. The score is an average of five different socio-economic barriers listed below. A score of 1.0 indicates a zip code with the least need or lowest barriers to health, while a score of 5.0

represents a ZIP code with the most need or greatest barriers to health. The CNI score is strongly linked to variability in community healthcare needs and is a strong indicator of a community's demand for various healthcare services.



1. Income Barrier
    - % of households below poverty line, with head of household age 65 or more
    - % of families with children under 18 below poverty line
    - % of single female-headed families with children under 18 below poverty line
2. Cultural Barrier
    - % of population that is minority
    - % of population that speaks English poorly
3. Education Barrier
    - % of population without a high school diploma
4. Insurance Barrier
    - % of population without employment
    - % of population without health insurance
5. Housing Barrier
    - % of households renting

In reviewing the CNI scores for the five county region (see table below), the top five zip codes that face the most barriers to healthcare are located in Berks and Dauphin Counties. Zip code 19602 (Reading) has the overall highest score (5.0) in the five county region, followed by 19601 (Reading), 19604 (Reading), 17101 (Harrisburg), and 17104 (Harrisburg).

Highest CNI Scores for Five County Region (Highest level of socioeconomic barriers)

Zip Code	CNI Score	Population	City	County	Speaks English Poorly	No High School Diploma	Living in Poverty	No Health Insurance	Renter
19602	5	18062	Reading	Berks	44%	35%	42%	18%	64%
19601	4.8	32683	Reading	Berks	50%	36%	42%	17%	65%
19604	4.8	27642	Reading	Berks	46%	35%	35%	19%	49%
17101	4.8	2297	Harrisburg	Dauphin	34%	22%	35%	8%	96%
17104	4.8	21696	Harrisburg	Dauphin	49%	26%	37%	17%	59%
19611	4.4	10731	Reading	Berks	42%	16%	30%	8%	50%
17103	4.4	12055	Harrisburg	Dauphin	66%	17%	28%	16%	57%
17602	4	54002	Lancaster	Lancaster	39%	20%	22%	12%	49%
17046	4	30470	Sand Hill	Lebanon	44%	21%	18%	12%	39%
17603	3.8	64870	Lancaster	Lancaster	43%	15%	18%	9%	43%
17034	3.8	2207	Highspire	Dauphin	53%	13%	12%	12%	50%
17102	3.8	7939	Harrisburg	Dauphin	39%	12%	23%	16%	69%
17113	3.6	11402	Harrisburg	Dauphin	32%	12%	19%	9%	40%
17505	3.4	1832	Bird In Hand	Lancaster	17%	47%	14%	54%	35%
17110	3.4	25902	Harrisburg	Dauphin	42%	11%	14%	8%	37%

The zip codes with the lowest CNI scores that face the least barriers to healthcare are located in Cumberland, Berks, and Lancaster Counties. Zip code 17007 (Boiling Springs) has the lowest overall score (1.2) in the five county region, followed by 19529 (Kempton), 19504 (Barto), 19503 (Bally), 19518 (Douglassville), and 17538 (Landisville).

Lowest CNI Scores for the Five County Region (Lowest level of socioeconomic barriers)

Zip Code	CNI Score	Population	City	County	Speaks English Poorly	No High School Diploma	Living In Poverty	No Health Insurance	Renter
17064	1.6	327	Mount Gretna	Lebanon	<0.5%	5%	5%	4%	19%
17582	1.6	2071	Washington Boro	Lancaster	25%	8%	1%	3%	10%
19540	1.6	11752	Mohnton	Berks	47%	8%	8%	3%	15%
19547	1.6	4279	Oley	Berks	16%	6%	5%	6%	20%
18056	1.6	643	Hereford	Berks	41%	15%	6%	28%	3%
17015	1.6	23303	Carlisle	Cumberland	46%	5%	5%	5%	12%
17112	1.6	34796	Harrisburg	Dauphin	29%	6%	5%	4%	19%
17538	1.4	5881	Landisville	Lancaster	12%	2%	3%	5%	13%
19518	1.4	14775	Douglassville	Berks	34%	8%	5%	5%	17%
19503	1.4	1156	Bally	Berks	23%	11%	13%	4%	23%
19504	1.4	4903	Barto	Berks	19%	5%	7%	4%	11%
19529	1.4	3140	Kempton	Berks	15%	10%	7%	6%	18%
17007	1.2	5500	Boiling Springs	Cumberland	12%	3%	2%	3%	12%

Public Health Analysis

County Health Rankings

The University of Wisconsin County Health Rankings & Roadmaps program provides county-level rankings for nearly all counties in the nation to portray overall health and wellbeing of residents. Counties are ranked in comparison to other counties in their respective state with the healthiest county being ranked #1. The Health Factors ranking is based on four measures: health behaviors, clinical care, social and economic, and physical environment factors. The Health Outcomes ranking is based on two measures: length of life and quality of life.

	Health Factors Rank (out of 67 counties)			Health Outcomes Rank (out of 67 counties)		
	2016	2017	2018	2016	2017	2018
Berks County	27	33	29	25	24	32
Cumberland County	4	4	4	5	5	6
Dauphin County	26	28	26	51	39	43
Lancaster County	9	9	10	9	10	8
Lebanon County	10	12	9	16	19	15

Berks County fell in the Health Outcomes ranking from #24 in 2017 to #32 in 2018. Berks County had 16% of adults reporting fair or poor health in 2016, which was the greatest among the service area and greater than the state percent (15%). The number of physically and mentally unhealthy days reported in all five counties was similar to or lower than the state average; however, it's important to note that overall, there were more mentally unhealthy days reported than physically unhealthy days.

Percentage of Adults Reporting Fair or Poor Health (Age-Adjusted), 2014-2016

	2014	2015	2016
Berks County	17%	15%	16%
Cumberland County	12%	12%	13%
Dauphin County	16%	14%	15%
Lancaster County	15%	14%	13%
Lebanon County	16%	14%	13%
Pennsylvania	16%	15%	15%

Average Number of Physically Unhealthy Days Reported in Past 30 Days (Age-Adjusted)

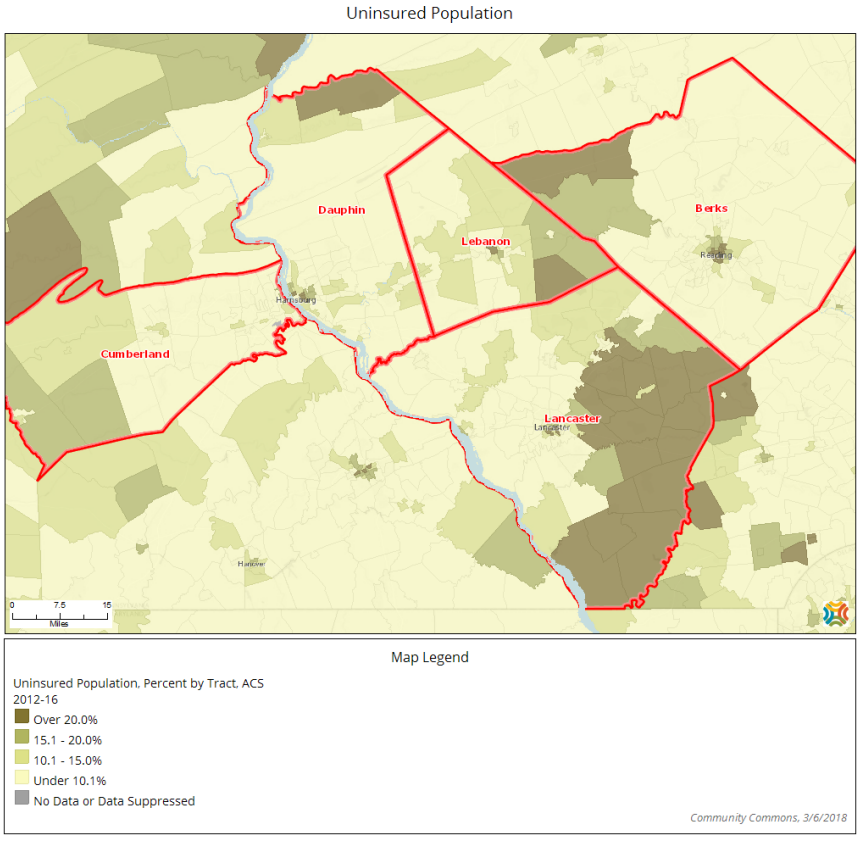
	2014	2015	2016
Berks County	3.7	3.5	3.8
Cumberland County	3.2	3.1	3.4
Dauphin County	3.7	3.5	3.5
Lancaster County	3.5	3.4	3.5
Lebanon County	3.5	3.5	3.3
Pennsylvania	3.8	3.5	3.9

Average Number of Mentally Unhealthy Days Reported in Past 30 Days (Age-Adjusted)

	2014	2015	2016
Berks County	3.9	3.7	4.2
Cumberland County	3.6	3.5	3.7
Dauphin County	4.0	3.7	4.1
Lancaster County	3.7	3.7	3.9
Lebanon County	3.7	3.7	3.8
Pennsylvania	4.1	3.9	4.3

Access to Clinical Care

The percentage of the population in the service area that does not have health insurance (9.6%) is higher than the state (8.0%), but lower than the nation (11.7%). Across the service area, the greatest percentage of uninsured individuals is in the 18-64 age group (11.9%). Only 1% of individuals greater than 65 do not have health insurance, and 9.4% of individuals less than 18 years of age do not have insurance. Lancaster County has the greatest percentage (12.3%) of the population that does not have health insurance, with 15.7% of those under age 18 not having insurance and almost 2% of those over the age of 65 not having insurance. Cumberland County has the lowest percentage (6.3%) of people without health insurance.



	Total Population (For Whom Insurance Status is Determined)	Total Uninsured Population	Percent Uninsured Population
Service Area	1,576,852	151,281	9.59%
Berks County	409,330	34,994	8.55%
Cumberland County	237,370	15,051	6.34%
Dauphin County	268,502	21,822	8.13%
Lancaster County	526,391	64,826	12.32%
Lebanon County	135,259	14,588	10.79%
Pennsylvania	12,579,598	1,000,216	7.95%
United States	313,576,137	36,700,246	11.70%

	No Health Insurance		
	Under Age 18	Age 18 - 64	Age 65 +
Service Area	9.35%	11.92%	1.01%
Berks County	5.56%	11.69%	0.52%
Cumberland County	5.36%	8.22%	0.58%
Dauphin County	4.55%	11.26%	0.54%
Lancaster County	15.66%	13.67%	1.99%
Lebanon County	10.58%	13.95%	0.40%
Pennsylvania	4.82%	10.99%	0.49%
United States	5.90%	16.37%	0.91%

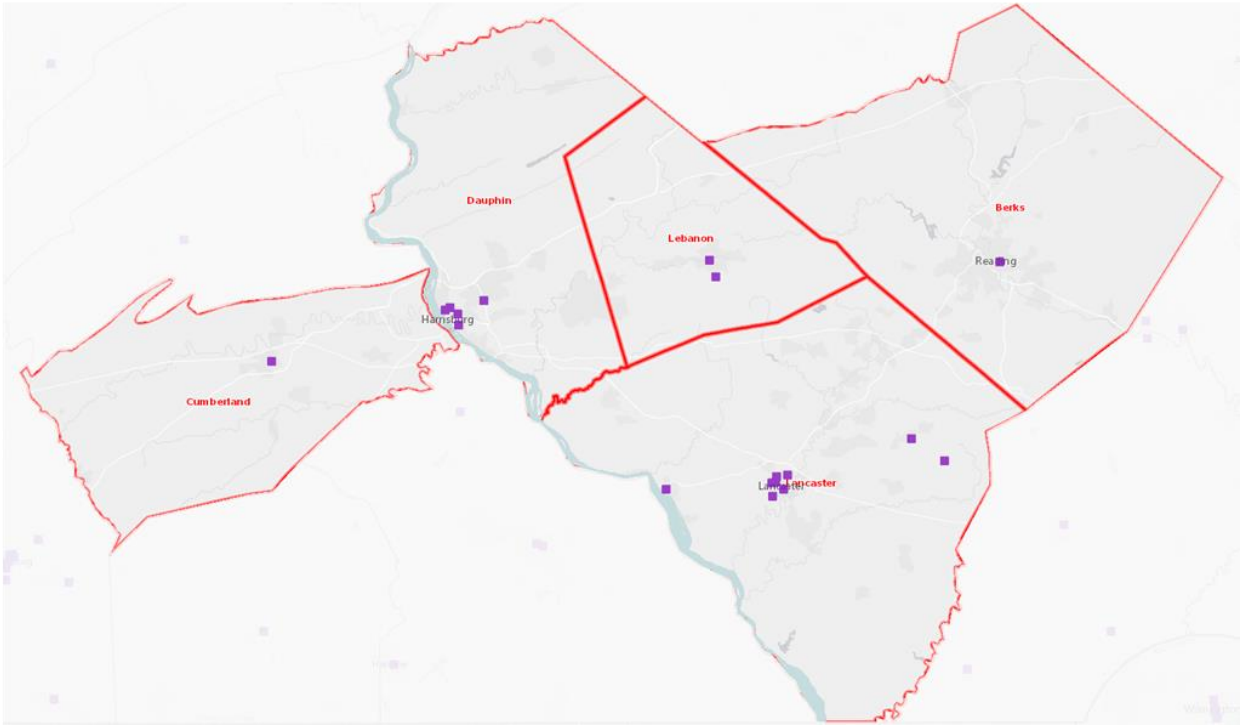
Federally Qualified Health Centers (FQHCs) are community assets that provide healthcare to vulnerable populations; they receive extra funding from the federal government to provide access to ambulatory care in areas designated as medically underserved.

As of March 2018, there were 18 FQHCs (including satellite locations) in the five-county region. Lancaster had the most FQHCs (9), and Berks and Cumberland Counties each only had one FQHC.

Federally Qualified Health Centers, Provider of Services March 2018

	Number of Federally Qualified Health Centers	Rate of Federally Qualified Health Centers per 100,000 Population
Service Area	18	1.15
Berks County	1	0.24
Cumberland County	1	0.42
Dauphin County	5	1.86
Lancaster County	9	1.73
Lebanon County	2	1.5
Pennsylvania	256	2.02
United States	8,329	2.67

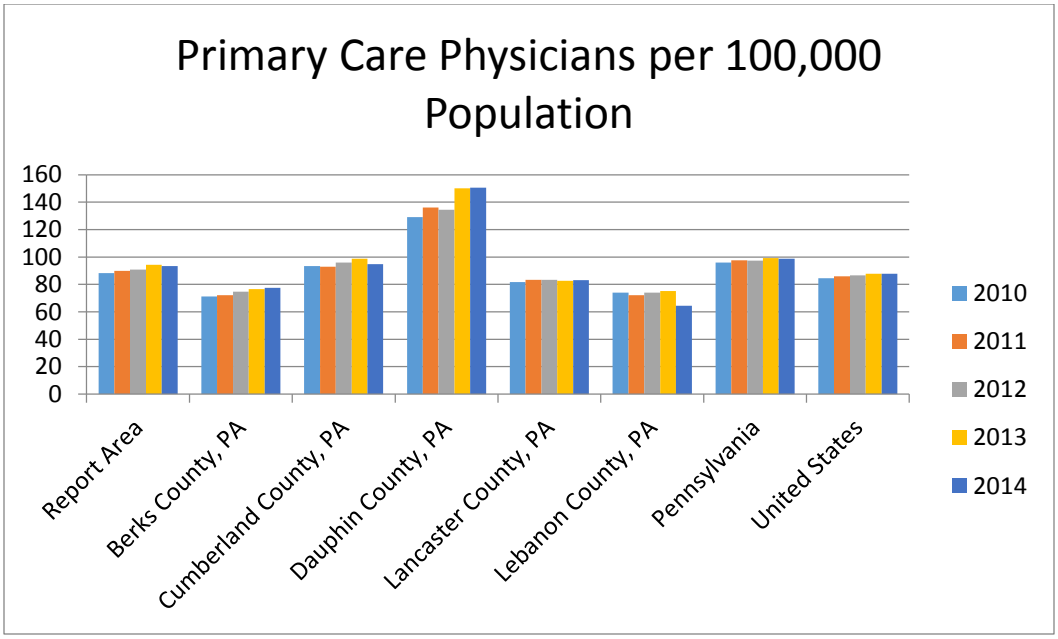
Federally Qualified Health Centers, 2018



A shortage of health professionals contributes to access and health status issues. Berks, Lancaster, and Lebanon Counties all have lower rates of primary care physicians than Pennsylvania and the nation. Lebanon County had the lowest rate, and the biggest drop from 2013-2014. All other counties are remaining fairly constant or increasing.

Access to Primary Care, Rate (Per 100,000 Pop.), 2010-2014

	2010	2011	2012	2013	2014
Service Area	88.2	89.89	90.92	94.42	93.33
Berks County	71.21	72.19	74.73	76.66	77.59
Cumberland County	93.46	92.9	95.97	98.67	94.76
Dauphin County	129.06	136.07	134.61	150.22	150.67
Lancaster County	81.82	83.27	83.33	82.7	83.06
Lebanon County	74.12	72.22	73.94	75.28	64.54
Pennsylvania	95.95	97.53	97.46	99.17	98.87
United States	84.57	85.83	86.66	87.76	87.77



Berks and Lancaster Counties, along with the service area, had lower rates of mental healthcare providers than Pennsylvania and the nation. Lebanon County had the highest rate of mental healthcare providers.

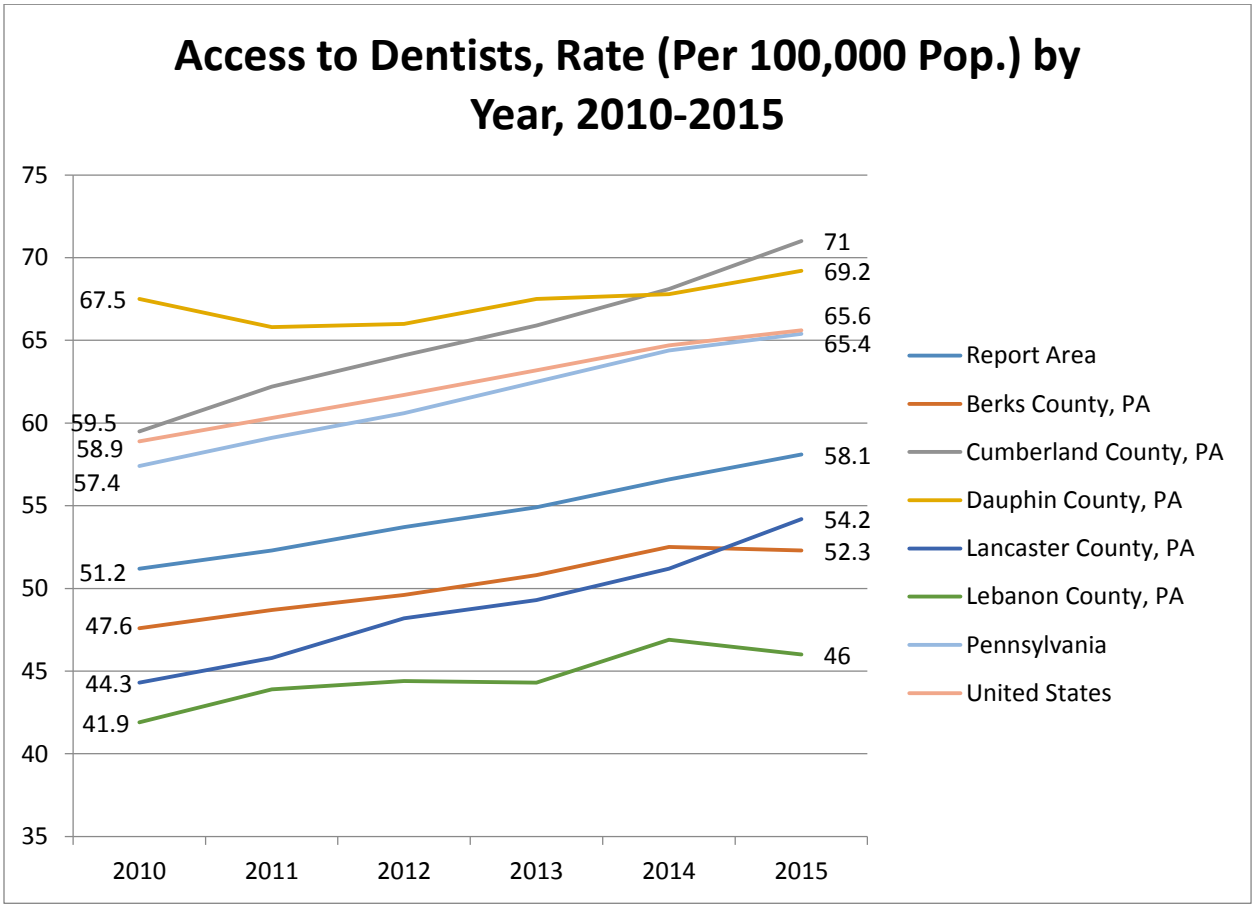
Access to Mental Healthcare Provider, 2017

	Estimated Population	Number of Mental Health Providers	Ratio of Mental Health Providers to Population (1 Provider per x Persons)	Mental Healthcare Provider Rate (Per 100,000 population)
Service Area	1,598,570	2,379	672	148.8
Berks County	413,677	490	844.2	118.4
Cumberland County	243,767	440	554	180.5
Dauphin County	271,456	532	510.3	195.9
Lancaster County	533,310	610	874.3	114.3
Lebanon County	136,360	307	444.2	225.1
Pennsylvania	12,782,379	21,927	583	171.5
United States	317,105,555	643,219	493	202.8

The rate of dental providers has continued to increase from 2010-2015, but the rates remain lower than the state and national rates in Berks, Lancaster, and Lebanon Counties, with Lebanon County having the lowest rate of dentists.

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

	2010	2011	2012	2013	2014	2015
Service Area	51.2	52.3	53.7	54.9	56.6	58.1
Berks County	47.6	48.7	49.6	50.8	52.5	52.3
Cumberland County	59.5	62.2	64.1	65.9	68.1	71
Dauphin County	67.5	65.8	66	67.5	67.8	69.2
Lancaster County	44.3	45.8	48.2	49.3	51.2	54.2
Lebanon County	41.9	43.9	44.4	44.3	46.9	46
Pennsylvania	57.4	59.1	60.6	62.5	64.4	65.4
United States	58.9	60.3	61.7	63.2	64.7	65.6



Supplemental Oral Health Data from MOM-n-PA Dental Clinic May 2018

MOM-n-PA is an annual two-day free dental clinic for underserved Pennsylvanians in which dental treatment is provided by hundreds of volunteer dental professionals at no cost to individuals who cannot afford dental care. Treatment is provided on a first-come, first-served basis. Dozens of community and national sponsors underwrite the cost of care. The Mom-n-PA Dental Ministries hosted their annual event in downtown Reading on May 18-19.

As part of the dental clinic, MOM-n-PA collected data on the number and types of patient visits and conducted a survey among attendees. The survey assessed the oral health needs of patients treated during the clinic and the satisfaction of services provided by MOM-n-PA. The following section summarizes findings from the survey.

During the Reading event, there were a total of 1,904 patient visits, including 1,642 comprehensive exams and 7,848 procedures (surgical, hygiene, etc.). Ninety-six percent of patients were first-time visitors to the clinic. Half of the patients were between the ages of 18 and 44, while 13% were under the age of 18. Approximately 86% of patients were from Berks County, however, patients came from as far away as New York and New Jersey. The majority of Berks County patients resided in Reading zip codes 19601 (n=384) and 19602 (n=208).

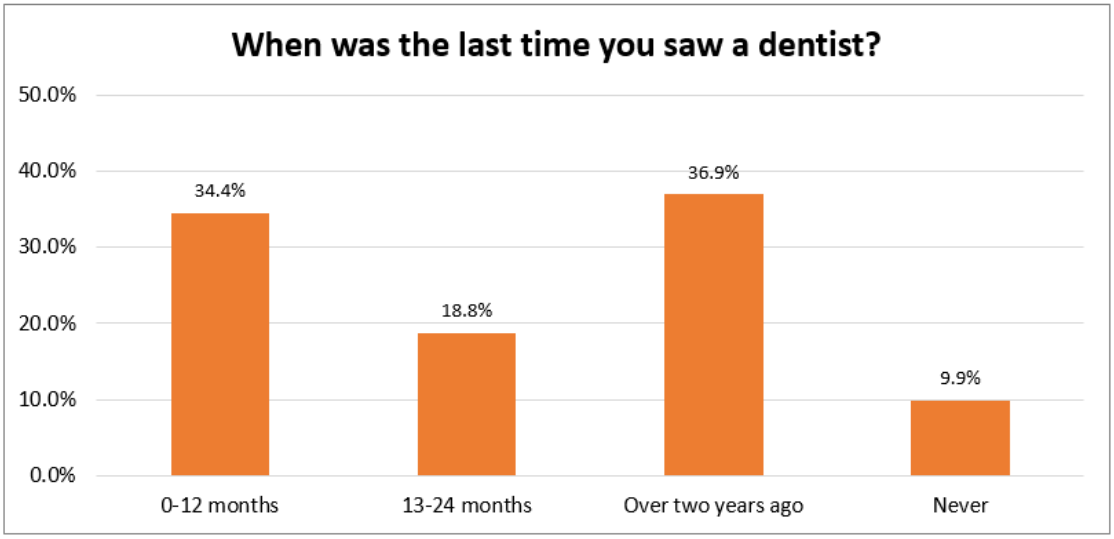
Patient Age

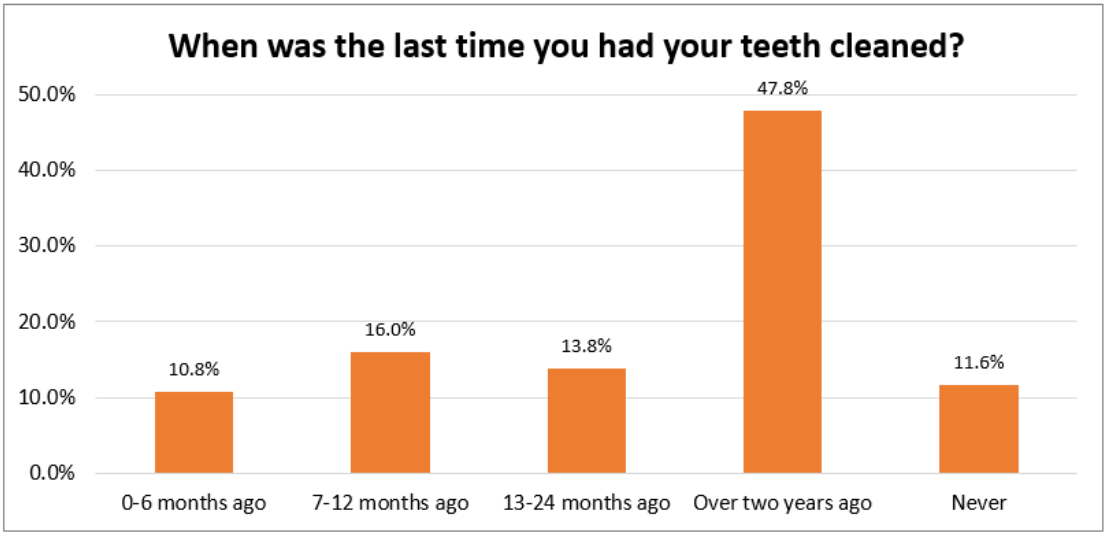
	Percent
Under 18	12.7%
18-24	8.1%
25-34	22.3%
35-44	19.5%
45-54	17.8%
55-64	12.8%
65 or over	6.9%

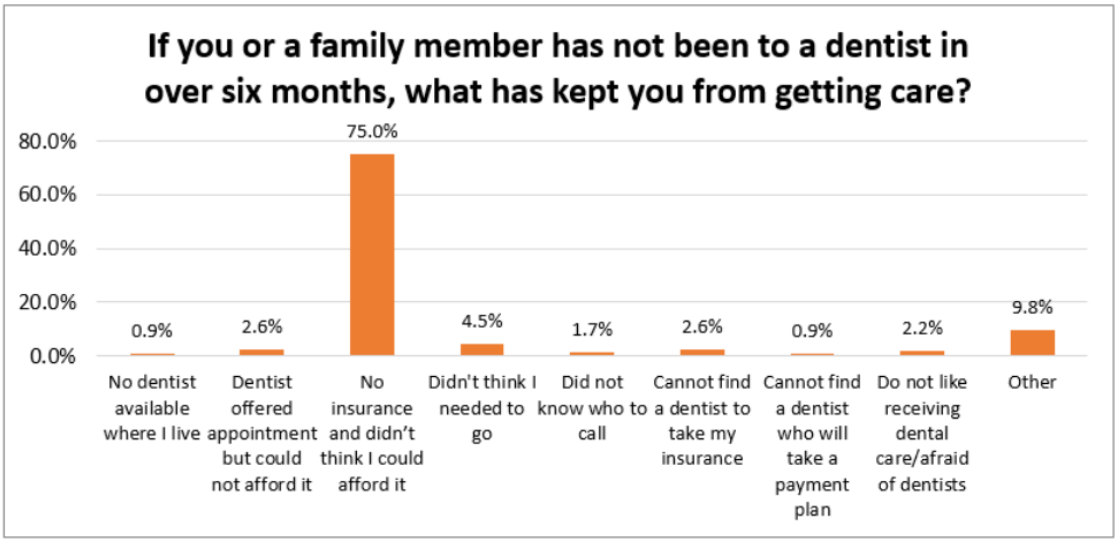
Patients primarily learned about the dental clinic from friends and family members (37%), media (newspaper/flyer/TV/radio) advertising (24%), and social media (16%).

Nearly half of the patients had never seen a dentist or last saw a dentist more than two years ago. Similarly, 59% of patients had never had their teeth cleaned or last had their teeth cleaned more than two years ago. More than three-quarters of patients indicated that cost of care and/or lack of health insurance were the primary reasons they had not seen a dentist. Eighty percent of patients did not have dental health insurance; 38% indicated they had a dental provider they could see for care after their Mom-n-PA visit.

Approximately 32% of patients reported being in dental pain prior to arriving at the clinic. Of the individuals who reported having dental pain, 38% had been in pain for more than a month and 28% had been in pain for more than six months. Eleven percent of all patients had visited an emergency room or emergency clinic for dental pain.


When was the last time you saw a dentist?
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
34.4%
18.8%
36.9%
9.9%
0-12 months
13-24 months
Over two years ago
Never


When was the last time you had your teeth cleaned?
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
10.8%
16.0%
13.8%
47.8%
11.6%
0-6 months ago
7-12 months ago
13-24 months ago
Over two years ago
Never


If you or a family member has not been to a dentist in over six months, what has kept you from getting care?
80.0%
60.0%
40.0%
20.0%
0.0%
0.9%
2.6%
75.0%
4.5%
1.7%
2.6%
0.9%
2.2%
9.8%
No dentist available where I live
Dentist offered appointment but could not afford it
No insurance and didn't think I could afford it
Didn't think I needed to go
Did not know who to call
Cannot find a dentist to take my insurance
Cannot find a dentist who will take a payment plan
Do not like receiving dental care/afraid of dentists
Other

Health Behaviors/Risk Factors and Health Outcomes

According to the Pennsylvania Youth Survey (PAYS), conducted biennially by the PA Commission on Crime and Delinquency, the percentage of students that reported being bullied through texting or social media increased in all counties from 2013-2017, with 15-17% reporting being bullied in 2017. More than a third of all students in all counties reported feeling sad or depressed most days, with Berks County having the highest percentage of students at almost 42%. The percentage of students feeling sad or depressed on most days also increased from 2013-2017.

The percentage of students that reported that they had considered suicide in the past year was highest in Lebanon County at 19%. Cumberland, Dauphin, and Lebanon Counties saw an increase from 2013-2017, while Berks and Lancaster Counties saw a decrease in students reporting having considered suicide.

Student Mental Health Indicators in the Past Year (6, 8, 10, and 12th Grades)

	Bullied through texting or social media*			Felt depressed or sad MOST days*			Considered Suicide*		
	2013	2015	2017	2013	2015	2017	2013	2015	2017
Berks County	14.8%	15.6%	15.1%	39.1%	42.9%	41.5%	18.7%	17.2%	16.9%
Cumberland County	14.5%	15.4%	17.7%	31.2%	33.3%	37.6%	15.6%	14.1%	16.8%
Dauphin County	12.5%	14.0%	15.9%	32.1%	38.2%	37.7%	14.6%	16.1%	17.1%
Lancaster County	12.7%	14.2%	15.3%	31.6%	35.7%	35.7%	16.3%	16.1%	15.7%
Lebanon County	13.6%	14.6%	16.8%	35.0%	38.5%	40.2%	14.7%	14.7%	18.8%
Pennsylvania	13.7%	16.3%	16.5%	31.7%	38.3%	38.1%	15.6%	16.0%	16.5%

The percentage of students using alcohol increased in Berks County between 2013 and 2015 but decreased in 2017, while the percentage of students using marijuana decreased in Berks County from 2013 to 2015 but increased slightly in 2017. All counties in the service area saw a decrease in marijuana use among students between 2013 and 2017.

Early Initiation and Higher Prevalence Drugs – 30-Day Use (6, 8, 10, and 12th Grades)

	Alcohol			Marijuana		
	2013	2015	2017	2013	2015	2017
Berks County	20.7%	21.0%	17.7%	11.7%	10.3%	10.5%
Cumberland County	17.1%	14.8%	15.5%	8.7%	7.0%	7.1%
Dauphin County	16.0%	15.6%	14.0%	9.8%	10.5%	8.1%
Lancaster County	15.0%	13.7%	12.2%	7.7%	7.4%	6.7%
Lebanon County	16.7%	12.9%	15.4%	10.9%	7.5%	9.2%
Pennsylvania	20.3%	18.2%	17.9%	10.3%	9.4%	9.7%

Cigarette use decreased in all counties from 2013-2017; however, in 2017, 11-17% of students reported vaping in the past 30-days in all counties, with Lebanon County having the highest percentage of students having reported vaping.

Tobacco and Vaping - 30-day use (6,8,10, and 12th Grades)

	Cigarettes			Vaping		
	2013	2015	2017	2013	2015	2017
Berks County	7.1%	5.0%	3.4%	n/a	16.6%	14.6%
Cumberland County	6.8%	5.1%	4.4%	n/a	12.9%	14.2%
Dauphin County	5.8%	5.2%	3.9%	n/a	13.4%	12.7%
Lancaster County	6.4%	5.1%	3.3%	n/a	13.6%	10.9%
Lebanon County	6.1%	3.6%	4.7%	n/a	14.2%	16.5%
Pennsylvania	8.0%	6.4%	5.6%	n/a	15.5%	16.3%

The percentage of students that reported that it would be sort of easy or very easy to access prescription drugs increased from 2013 to 2017 in Cumberland, Dauphin, and Lebanon Counties, but decreased in Berks and Lancaster Counties. Cumberland County had the highest percentage of students reporting that it would be sort of easy or very easy to access prescription drugs, which was also higher than the state.

Easy Access to Prescription Drugs (6, 8, 10, and 12th Grades)

	2013	2015	2017
Berks County	25.5%	27.5%	24.9%
Cumberland County	26.1%	27.2%	27.1%
Dauphin County	24.7%	28.7%	25.9%
Lancaster County	26.5%	26.1%	24.2%
Lebanon County	24.4%	22.0%	26.1%
Pennsylvania	24.3%	27.8%	25.5%

Of the students that had taken a prescription drug in the past year, the most common (~41%) source reported was “took from a family member in the home.” The next most common (~39%) source was “given by a friend or family member.”

Sources of Prescription Drugs (6, 8, 10, and 12th Grades)*

	Took From Family Member In Home	Took From Relative Not In Home	Took From Person Not Related	Given By Friend Or Family Member	Bought From Someone	Ordered Over The Internet
	2017	2017	2017	2017	2017	2017
Berks County	39.3%	8.8%	11.9%	34.9%	24.4%	7.8%
Cumberland County	38.4%	9.3%	12.7%	46.6%	28.7%	4.1%
Dauphin County	42.7%	9.0%	11.8%	32.2%	21.6%	8.6%
Lancaster County	44.6%	11.6%	10.5%	36.3%	24.1%	10.0%
Lebanon County	43.8%	13.9%	14.6%	42.3%	25.5%	4.4%
Pennsylvania	39.1%	10.0%	10.6%	40.6%	27.3%	8.4%

*Reported by students indicating medically unapproved prescription drug use in the past 12 months

Prescription and Over-the-Counter Drugs and Medications - 30-Day Use (6, 8, 10, and 12th Grades)

	PEDs & Steroids			Narcotic Rx Drugs			Rx Tranquilizers			Rx Stimulants			Used OTC Drugs to Get High		
	2013	2015	2017	2013	2015	2017	2013	2015	2017	2013	2015	2017	2013	2015	2017
Berks County	0.4%	0.4%	0.2%	2.6%	1.9%	1.5%	0.8%	0.6%	0.8%	1.1%	1.0%	0.5%	n/a	1.3%	1.4%
Cumberland County	0.5%	0.3%	0.2%	2.6%	1.6%	1.4%	0.8%	0.4%	0.6%	1.6%	1.5%	0.9%	n/a	1.1%	1.2%
Dauphin County	0.3%	0.5%	0.3%	2.1%	2.3%	1.6%	0.5%	1.0%	0.6%	1.0%	1.5%	1.0%	n/a	1.3%	1.4%
Lancaster County	0.2%	0.2%	0.2%	2.1%	1.8%	1.2%	0.7%	0.6%	0.5%	1.2%	0.9%	0.7%	n/a	1.2%	1.0%
Lebanon County	0.2%	0.3%	0.5%	2.4%	2.1%	2.0%	0.3%	0.7%	0.9%	1.2%	0.7%	0.9%	n/a	0.9%	1.8%
Pennsylvania	0.4%	0.3%	0.3%	2.1%	1.9%	1.3%	0.7%	0.7%	0.7%	1.1%	1.3%	0.8%	n/a	1.4%	1.3%

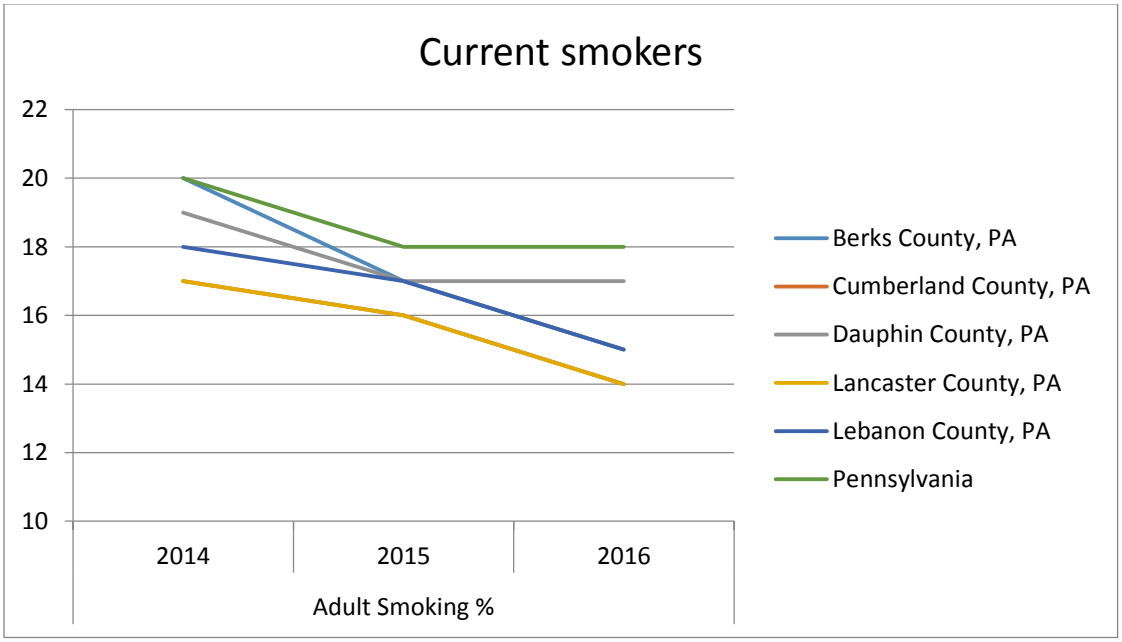
PEDs = Performance Enhancing Drugs
Rx = Prescription
OTC = Over-the-Counter

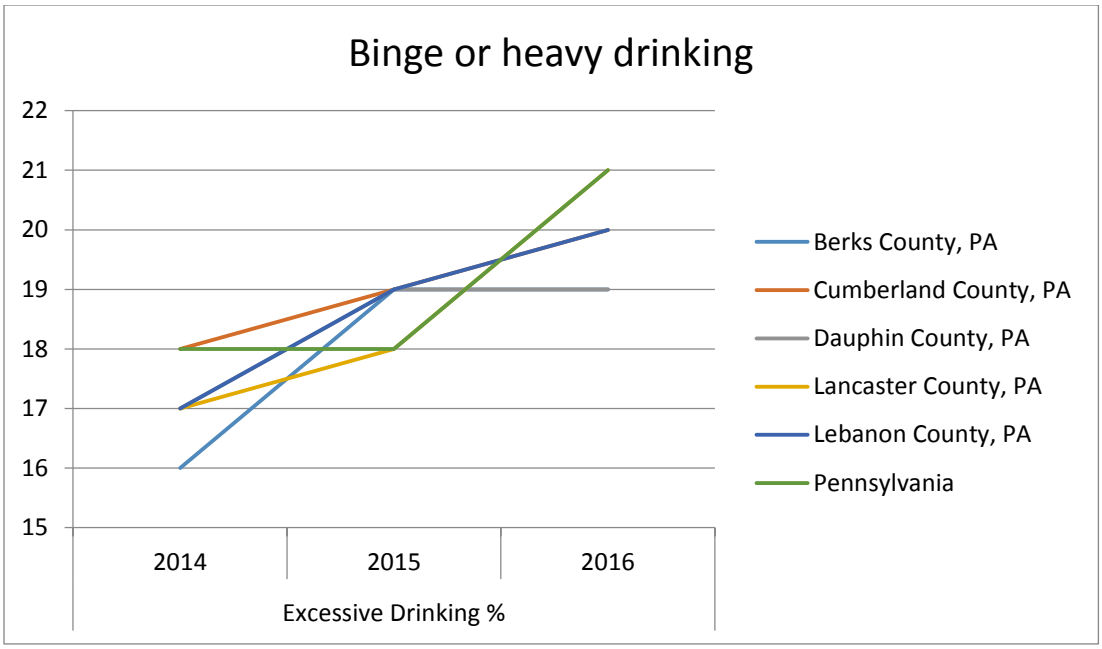
Current behaviors are determinants of future health, and smoking and drinking may be a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs.

The percentage of current smokers has decreased from 2014-2016 in all counties, and is lower than the Pennsylvania percent; however, the opposite can be seen with excessive drinking, as the numbers have increased from 2014-2016 in all counties. In the five-county region, Lancaster County had the greatest percentage (21%) of adults who reported excessive drinking in 2016.

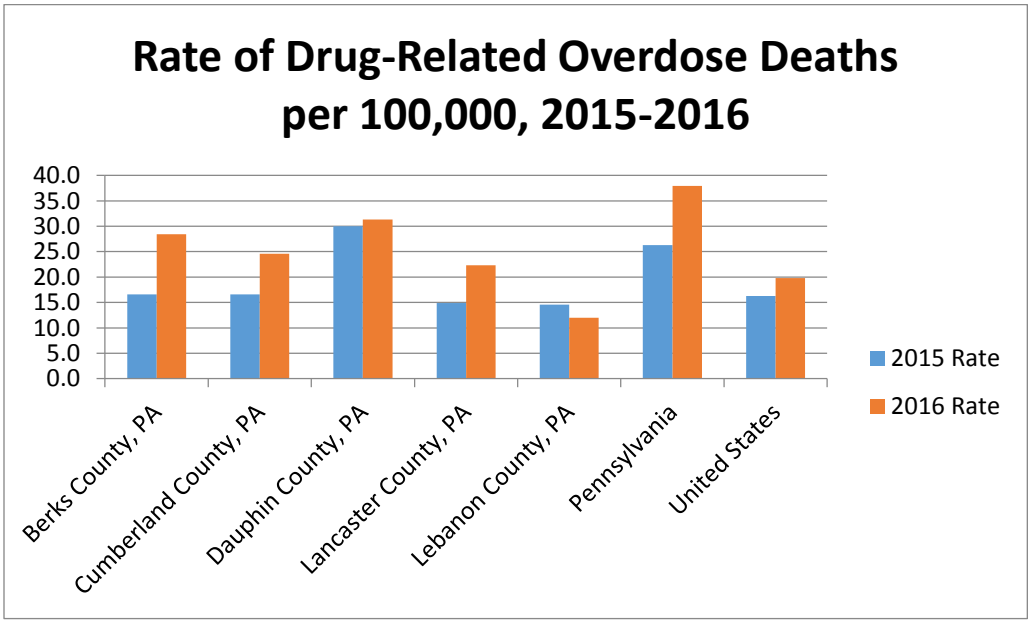
Adult Smoking and Drinking, 2014-2016

	Current Smoker %			Excessive Drinking %		
	2014	2015	2016	2014	2015	2016
Berks County	20	17	15	16	19	19
Cumberland County	17	16	14	18	19	20
Dauphin County	19	17	17	17	19	19
Lancaster County	17	16	14	17	18	21
Lebanon County	18	17	15	17	19	20
Pennsylvania	20	18	18	18	18	21





Suicide due to overdose is an indicator of poor mental health. The rate of drug-related overdose death increased from 2015-2016 in all counties except for Lebanon County, which saw a decrease. Dauphin County had the highest rate of overdose death, although it's important to note that Berks and Lancaster Counties had the highest raw counts of overdose death. The 2016 rates were higher than the national rate in all counties except for Lebanon.

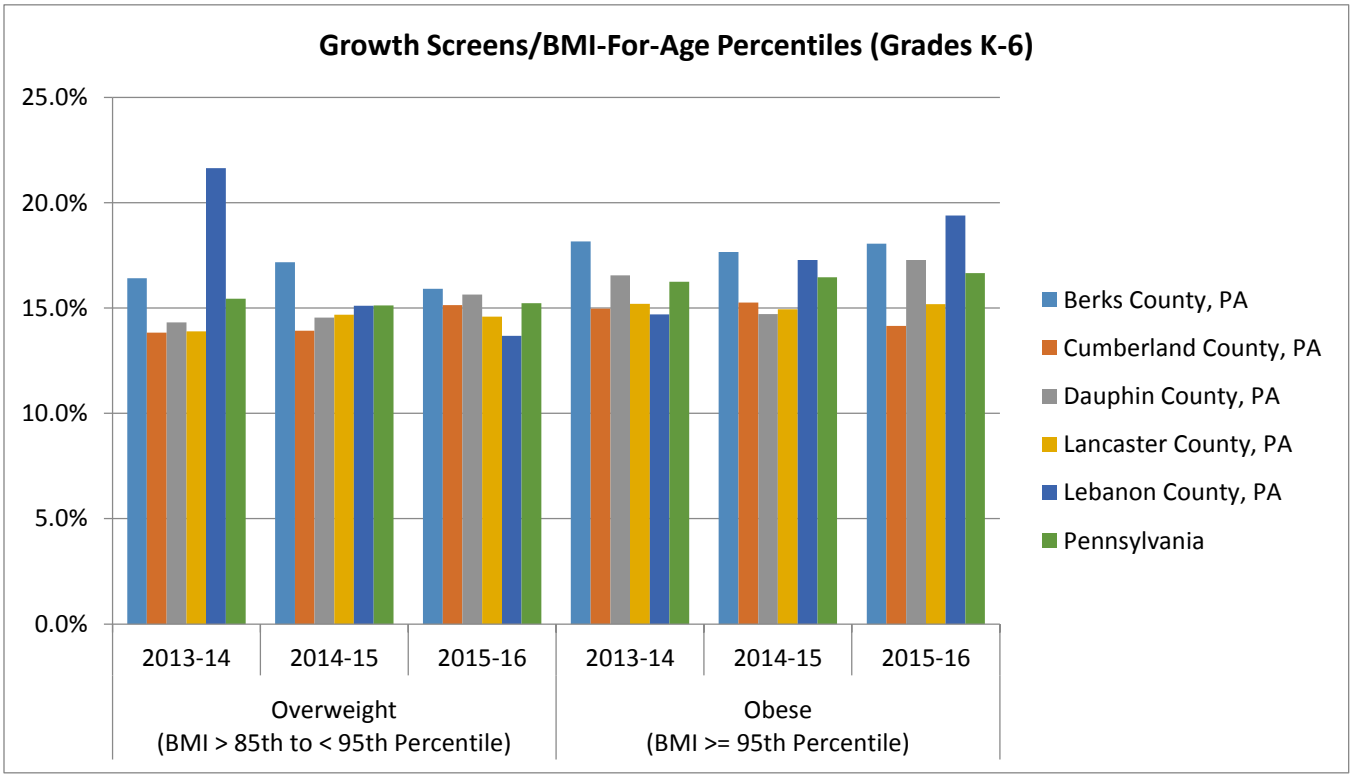


Rank and Rate of Drug-Related Overdose Deaths per 100,000

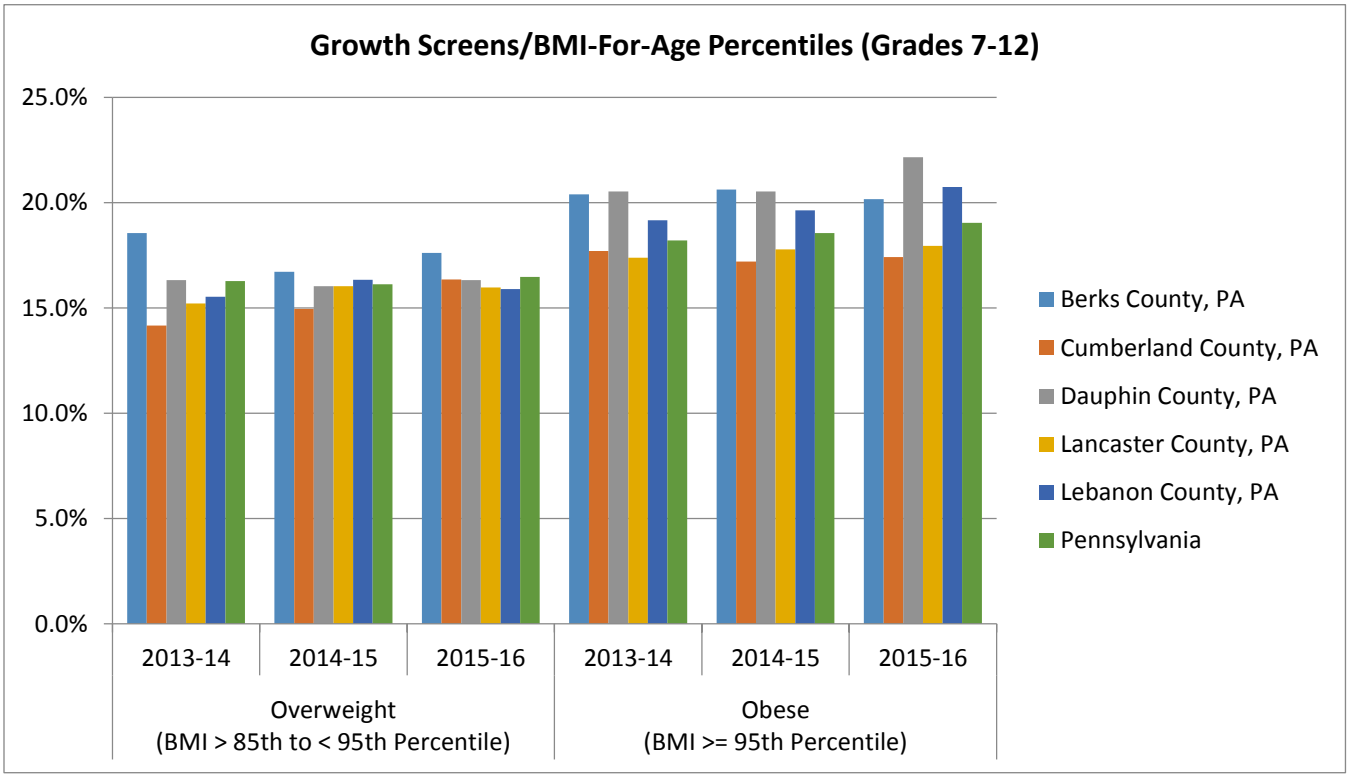
	2015 Count	2015 Rank	2015 Rate	2016 Count	2016 Rank	2016 Rate
Berks County	69	43	16.6	117	28	28.4
Cumberland County	41	39	16.6	58	40	24.6
Dauphin County	82	16	30.0	84	23	31.3
Lancaster County	80	47	14.9	116	43	22.3
Lebanon County	20	48	14.6	16	61	12.0
Pennsylvania	3,264	n/a	26.3	4,642	n/a	37.9
United States	52,898	n/a	16.3	63,600	n/a	19.8

*Source: Pennsylvania Coroner/Medical Examiner Data

Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues. According to the School Health Statistics collected by the PA Department of Health, Berks, Dauphin, and Lebanon Counties had the highest percentages of obese students, with Lebanon County having the highest percentage of K-6 students being obese and Dauphin County having the highest percentage of 7-12 grade students being obese. There was a greater percentage of obese students in grades 7-12 than grades K-6. Cumberland County was the only county that saw a decrease in the percentage of students in grades K-6 that were obese.

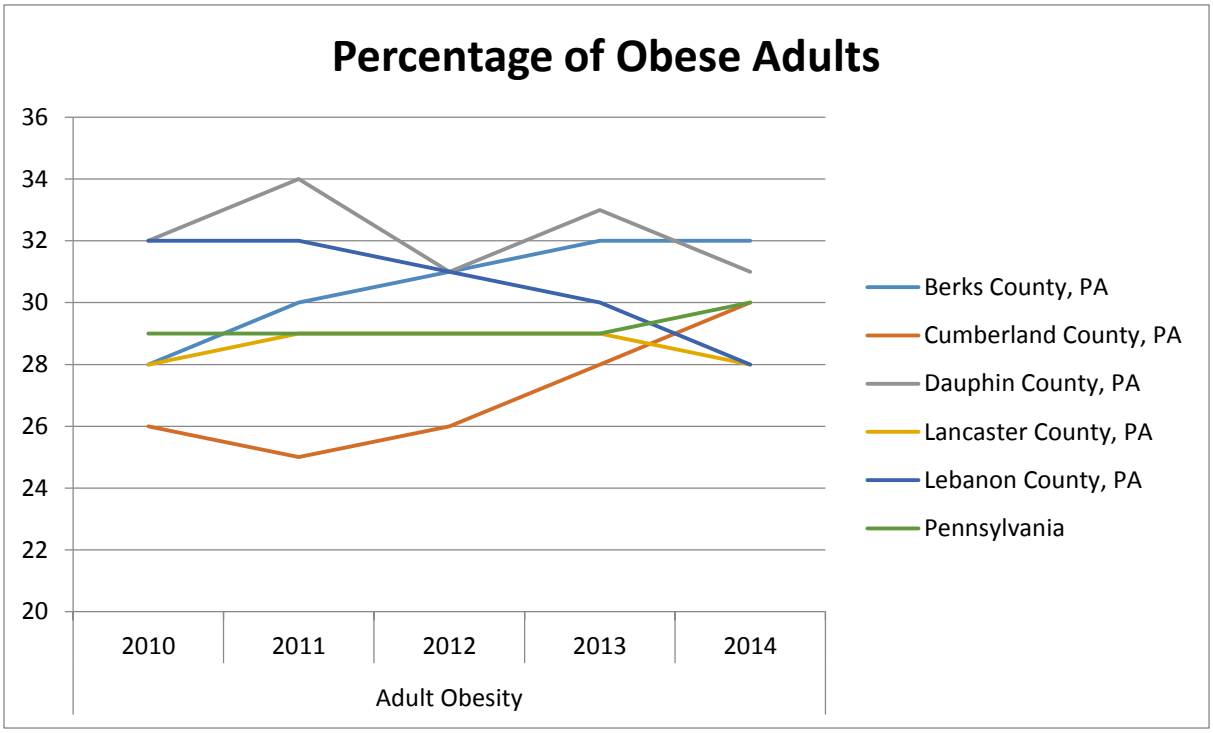


	Grades K-6					
	Overweight (BMI > 85th to < 95th Percentile)			Obese (BMI >= 95th Percentile)		
	2013-14	2014-15	2015-16	2013-14	2014-15	2015-16
Berks County	16.4%	17.2%	15.9%	18.2%	17.7%	18.1%
Cumberland County	13.8%	13.9%	15.1%	15.0%	15.3%	14.2%
Dauphin County	14.3%	14.6%	15.7%	16.6%	14.7%	17.3%
Lancaster County	13.9%	14.7%	14.6%	15.2%	14.9%	15.2%
Lebanon County	21.6%	15.1%	13.7%	14.7%	17.3%	19.4%
Pennsylvania	15.5%	15.1%	15.2%	16.3%	16.5%	16.7%



	Grades 7-12					
	Overweight (BMI > 85th to < 95th Percentile)			Obese (BMI >= 95th Percentile)		
	2013-14	2014-15	2015-16	2013-14	2014-15	2015-16
Berks County	18.6%	16.7%	17.6%	20.4%	20.6%	20.2%
Cumberland County	14.2%	15.0%	16.4%	17.7%	17.2%	17.4%
Dauphin County	16.3%	16.0%	16.3%	20.5%	20.5%	22.2%
Lancaster County	15.2%	16.0%	16.0%	17.4%	17.8%	18.0%
Lebanon County	15.5%	16.3%	15.9%	19.2%	19.6%	20.8%
Pennsylvania	16.3%	16.1%	16.5%	18.2%	18.6%	19.1%

In 2014, the percentage of obese adults was greater in Berks and Dauphin Counties than in Pennsylvania, with Berks having the greatest percentage of obese adults. The percentage of obese adults was decreasing in Lebanon County from 2010-2014, but increasing in Berks and Cumberland Counties.

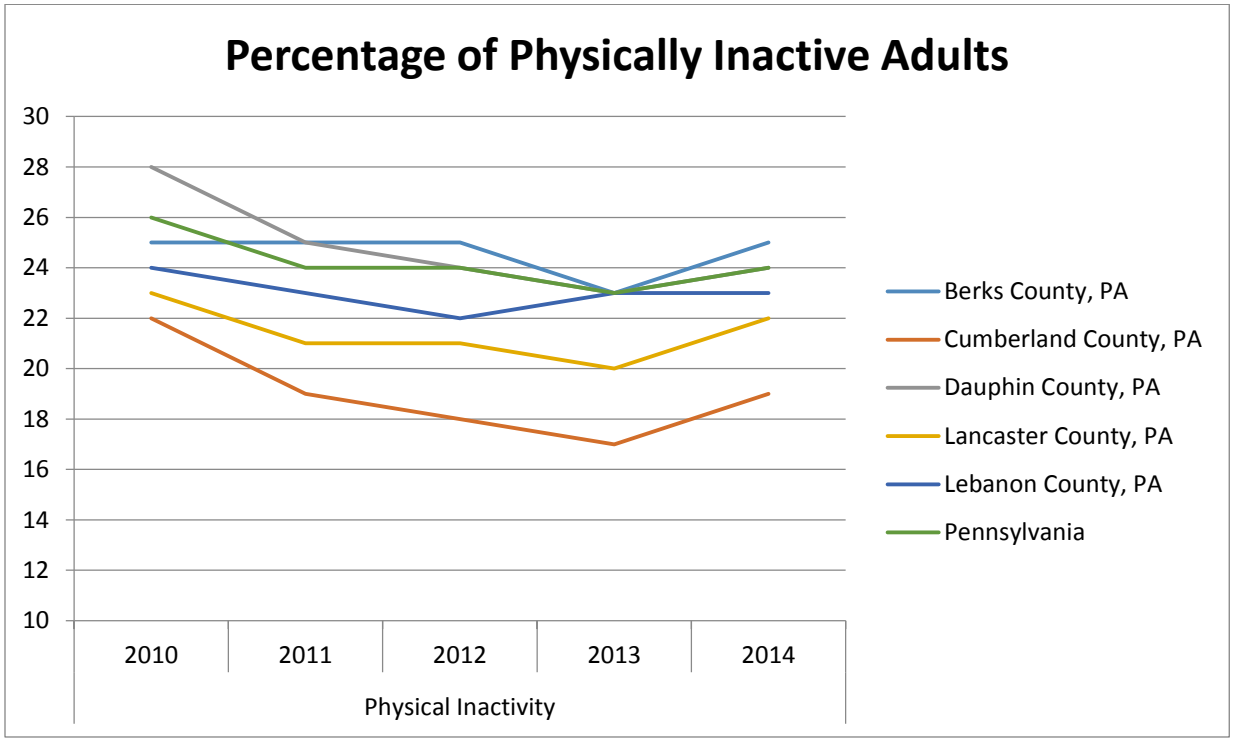


Percentage of Adults that Report a BMI of 30 or More

	Adult Obesity				
	2010	2011	2012	2013	2014
Berks County	28	30	31	32	32
Cumberland County	26	25	26	28	30
Dauphin County	32	34	31	33	31
Lancaster County	28	29	29	29	28
Lebanon County	32	32	31	30	28
Pennsylvania	29	29	29	29	30

Current behaviors are determinants of future health and no leisure-time physical activity may cause health issues such as obesity and poor cardiovascular health.

From 2010-2013 there was an overall downtrend in the percentage of adults reporting no leisure time physical activity (lower is better), but there was an uptick from 2013-2014. Berks County had the highest (worst) percentage of adults reporting no physical activity, and Cumberland County had the lowest (best) percentage reporting no physical activity.



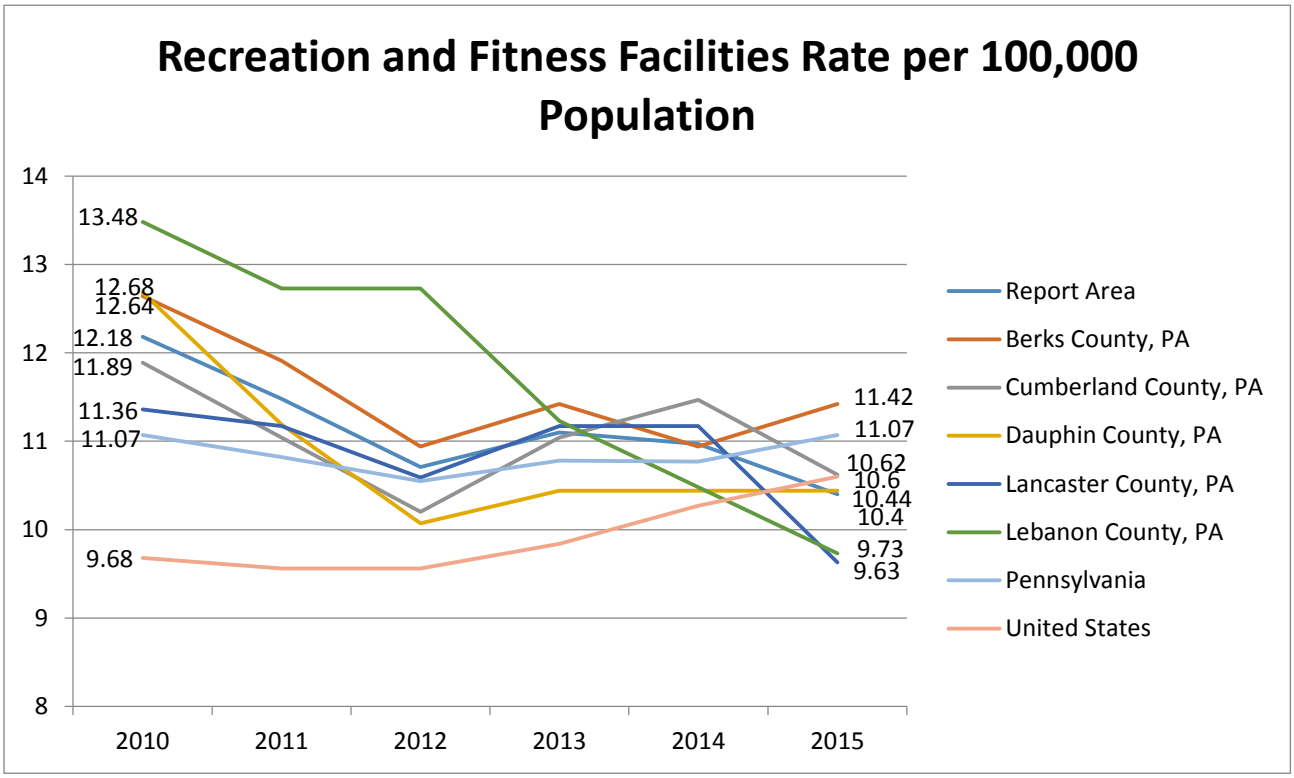
Percentage of Adults Age 20 and Over Reporting No Leisure-Time Physical Activity

	Physical Inactivity				
	2010	2011	2012	2013	2014
Berks County	25	25	25	23	25
Cumberland County	22	19	18	17	19
Dauphin County	28	25	24	23	24
Lancaster County	23	21	21	20	22
Lebanon County	24	23	22	23	23
Pennsylvania	26	24	24	23	24

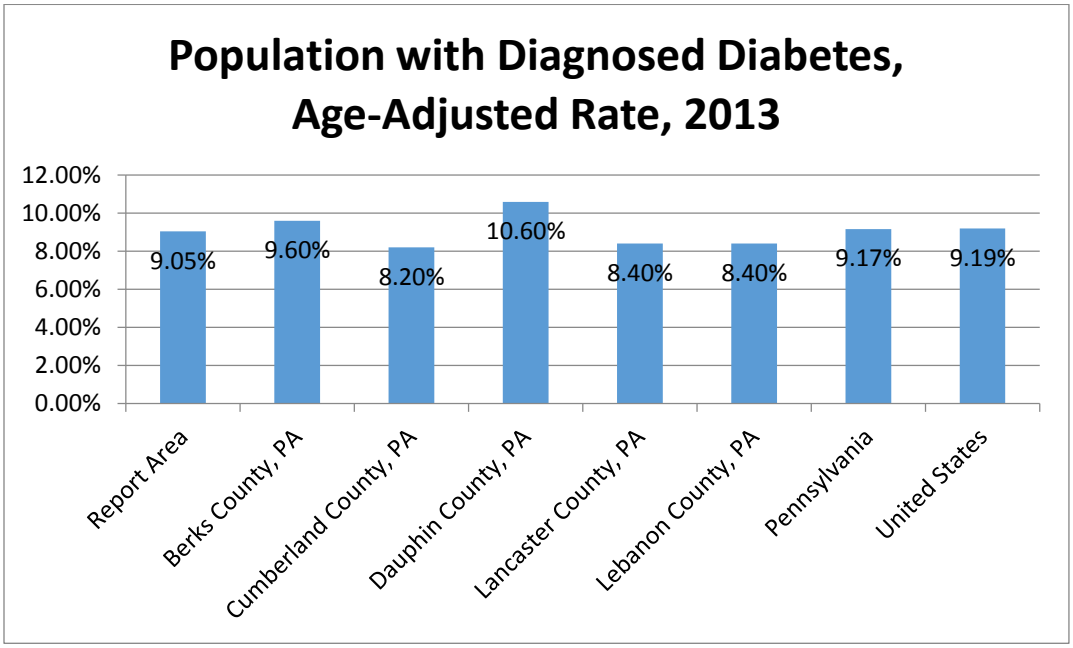
Access to recreation and fitness facilities encourages physical activity and other healthy behaviors. From 2010-2015, there was an overall down trend in the rate of recreation and fitness facilities in all counties, while the state rate stayed about the same, and the national rate increased. The lowest rate of facilities was in Lancaster and Lebanon Counties.

Recreation and Fitness Facilities Rate per 100,000 Population

	2010	2011	2012	2013	2014	2015
Service Area	12.18	11.48	10.71	11.1	10.97	10.4
Berks County	12.64	11.91	10.94	11.42	10.94	11.42
Cumberland County	11.89	11.04	10.2	11.04	11.47	10.62
Dauphin County	12.68	11.19	10.07	10.44	10.44	10.44
Lancaster County	11.36	11.17	10.59	11.17	11.17	9.63
Lebanon County	13.48	12.73	12.73	11.23	10.48	9.73
Pennsylvania	11.07	10.82	10.55	10.78	10.77	11.07
United States	9.68	9.56	9.56	9.84	10.27	10.6

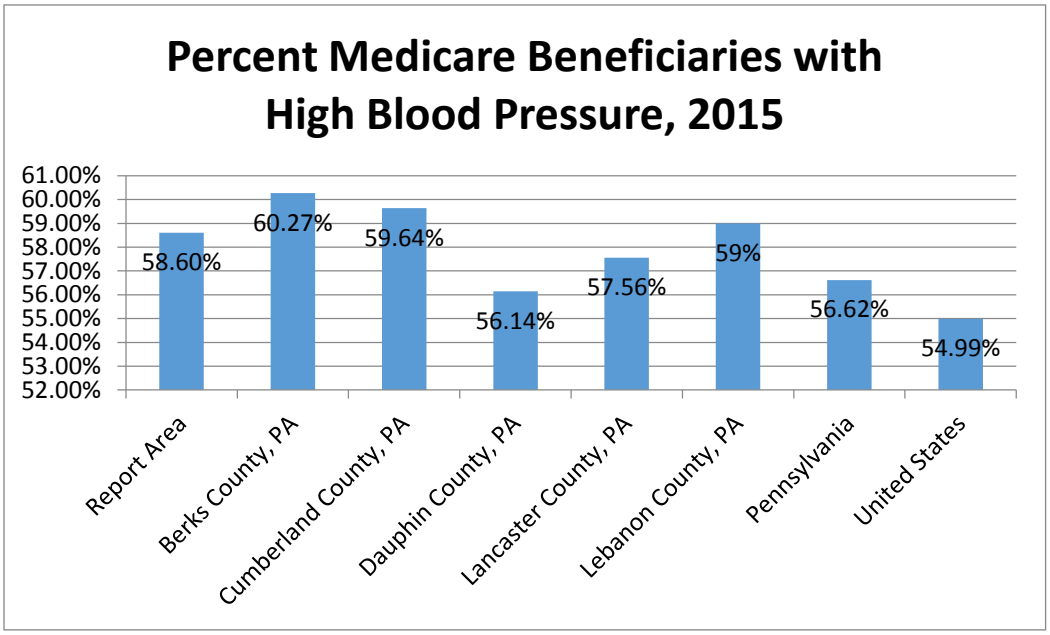


Dauphin County had the greatest percentage (10.6%) of adults diagnosed with diabetes, which was higher than both the state and nation. Cumberland County had the lowest rate (8.2%).

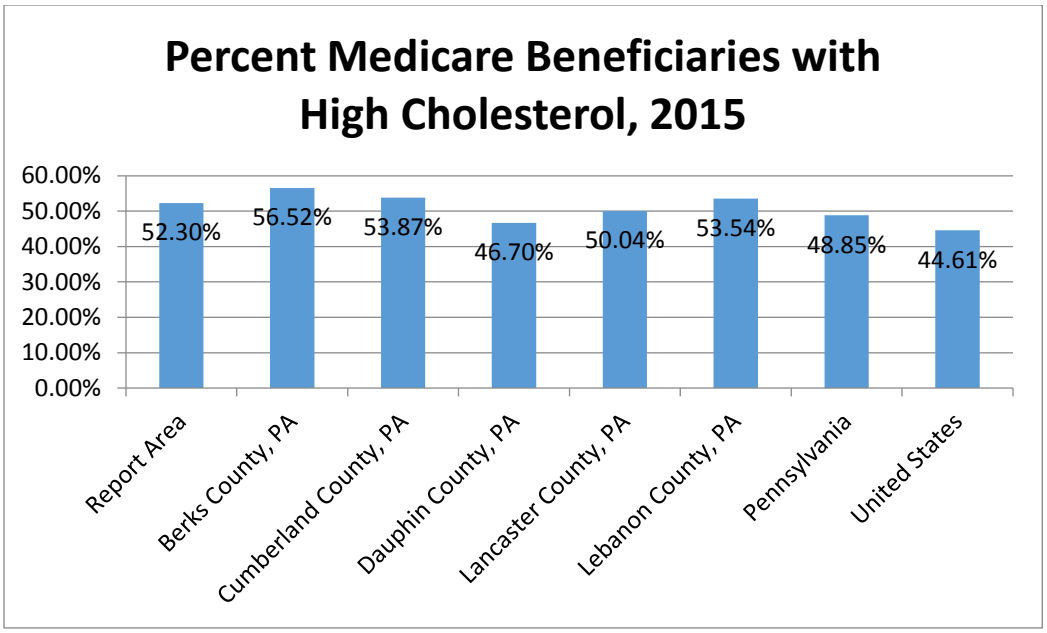


	Population with Diagnosed Diabetes	Population with Diagnosed Diabetes, Age-Adjusted Rate
Service Area	123,081	9.05%
Berks County	33,736	9.60%
Cumberland County	17,333	8.20%
Dauphin County	24,313	10.60%
Lancaster County	37,489	8.40%
Lebanon County	10,210	8.40%
Pennsylvania	1,028,685	9.17%
United States	23,685,417	9.19%

For both high blood pressure and high cholesterol, all counties except Dauphin had a higher percentage of Medicare fee-for-service population that had high blood pressure or cholesterol, compared to the state and nation. Berks County had the highest percent and Dauphin had the lowest.

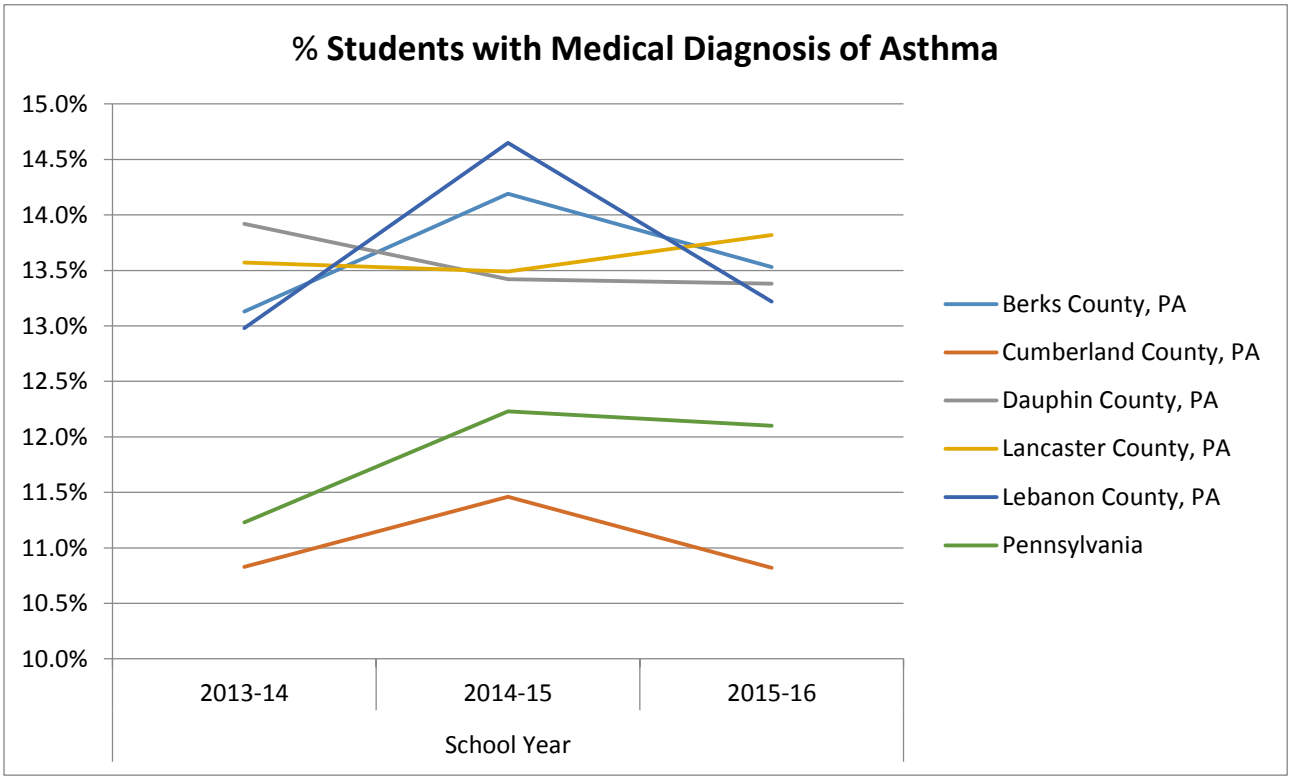


	Medicare Beneficiaries with High Blood Pressure	Percent with High Blood Pressure
Service Area	103,154	58.60%
Berks County	28,837	60.27%
Cumberland County	17,124	59.64%
Dauphin County	13,261	56.14%
Lancaster County	34,127	57.56%
Lebanon County	9,805	59%
Pennsylvania	782,052	56.62%
United States	18,761,681	54.99%



	Medicare Beneficiaries with High Cholesterol	Percent with High Cholesterol
Service Area	92,111	52.30%
Berks County	27,041	56.52%
Cumberland County	15,469	53.87%
Dauphin County	11,031	46.70%
Lancaster County	29,672	50.04%
Lebanon County	8,898	53.54%
Pennsylvania	674,775	48.85%
United States	15,219,766	44.61%

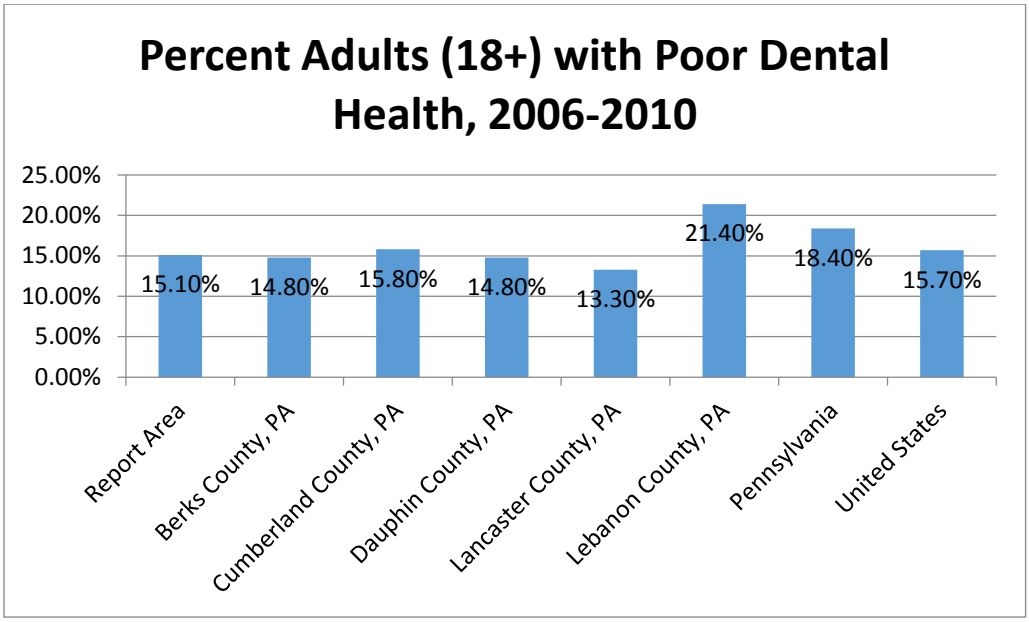
Asthma is a prevalent problem in the nation that is often exacerbated by poor environmental conditions. According to the School Health Statistics collected by the PA Department of Health, all counties, except Cumberland, had higher rates of students (all grades) with asthma compared to Pennsylvania. The rate has stayed the same or increased slightly in all counties except for Dauphin, which has seen a slight decrease from 2013-2016.



	Asthma		
	2013-14	2014-15	2015-16
Berks County	13.1%	14.2%	13.5%
Cumberland County	10.8%	11.5%	10.8%
Dauphin County	13.9%	13.4%	13.4%
Lancaster County	13.6%	13.5%	13.8%
Lebanon County	13.0%	14.7%	13.2%
Pennsylvania	11.2%	12.2%	12.1%

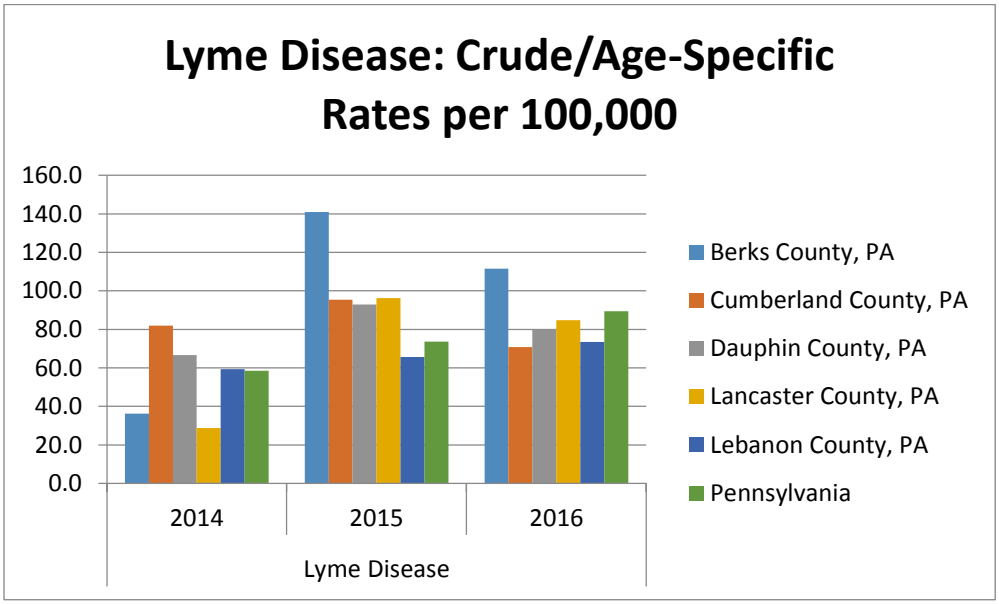
Poor dental health is reported as the percentage of adults age 18 and older who self-report that six or more of their permanent teeth have been removed due to tooth decay, gum disease, or infection. This indicates lack of access to dental care and/or social barriers to utilization of dental services.

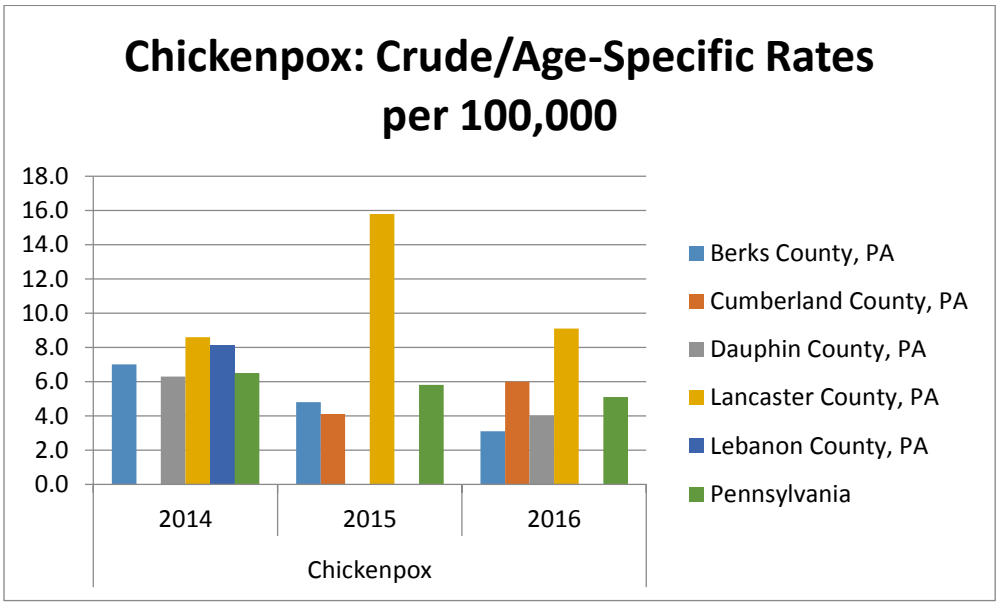
Lebanon County had the highest percentage (21.4%) of adults with poor dental health, which was higher than both the state and nation. The service area overall, though, had a lower percentage (15.1%) of adults with poor dental health compared to the state and nation.

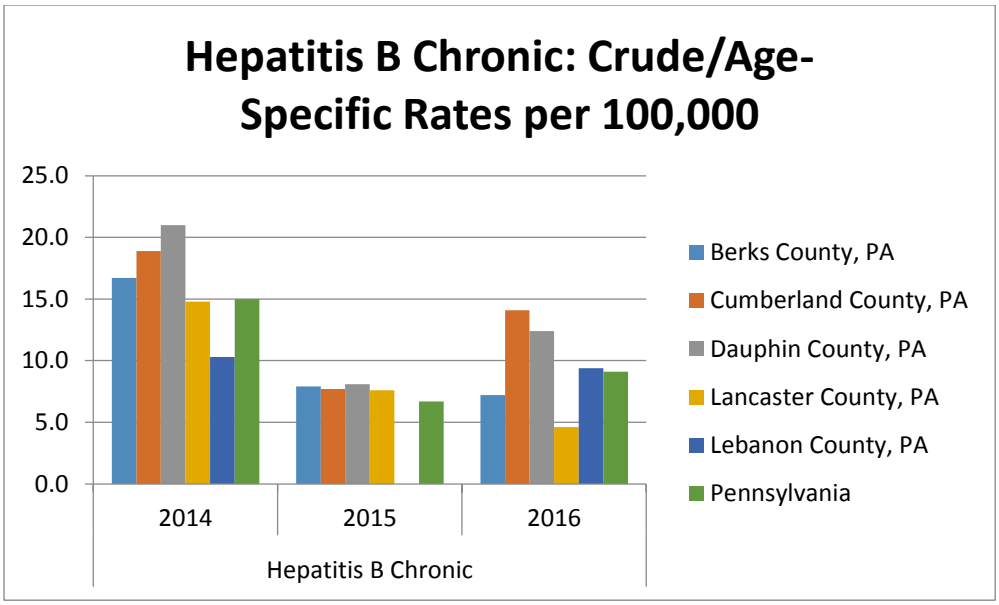


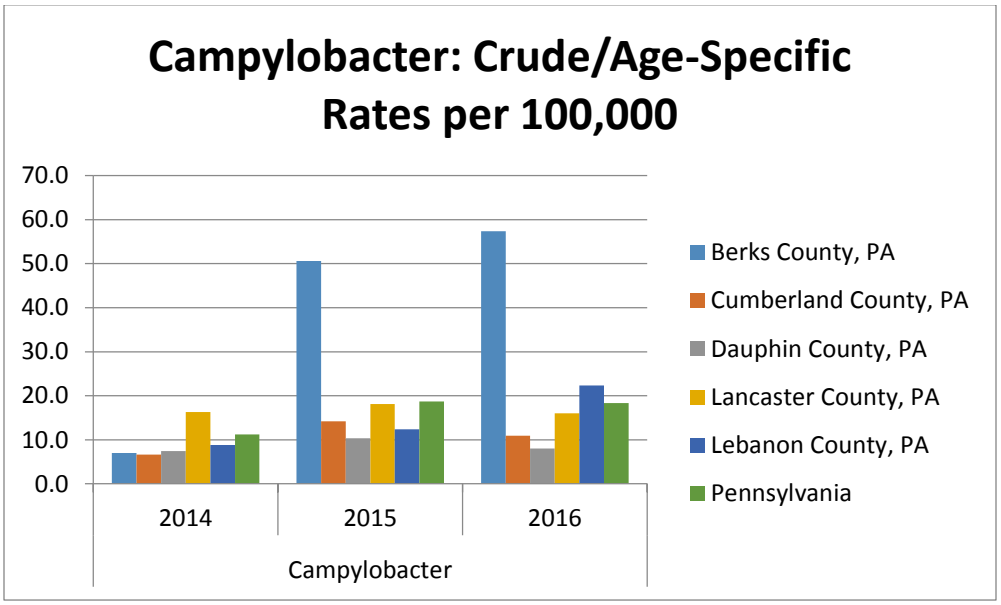
	Total Adults (18+) with Poor Dental Health	Percent Adults with Poor Dental Health
Service Area	177,284	15.10%
Berks County	45,769	14.80%
Cumberland County	28,873	15.80%
Dauphin County	30,117	14.80%
Lancaster County	50,906	13.30%
Lebanon County	21,619	21.40%
Pennsylvania	1,814,547	18.40%
United States	36,842,620	15.70%

In 2016, according to the PA Department of Health's Enterprise Data Dissemination Informatics Exchange, the rate of Lyme disease was significantly higher in Berks County than Pennsylvania, the rate of Chicken Pox was significantly higher in Lancaster County than Pennsylvania, the rate of Hepatitis B was significantly higher in Cumberland and Dauphin Counties than Pennsylvania, and the rate of Campylobacter was significantly higher in Berks and Lebanon Counties than Pennsylvania.





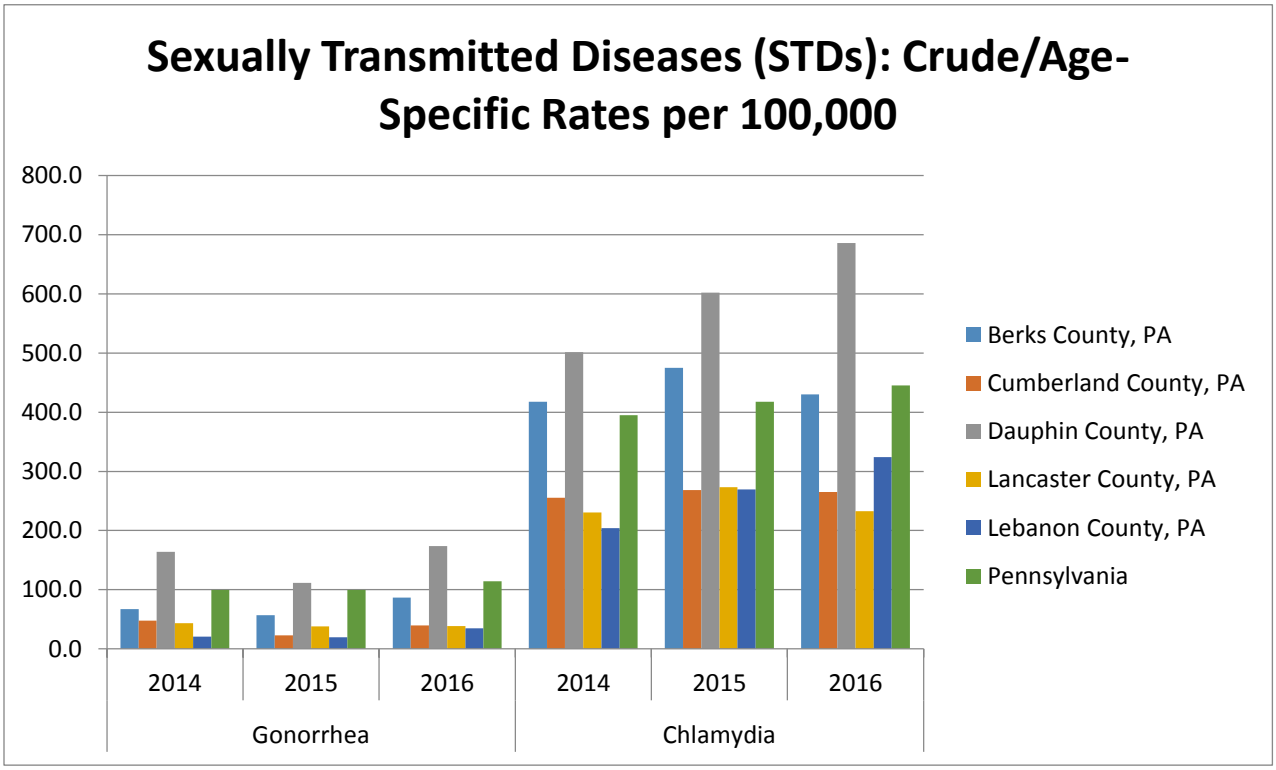




Communicable Disease (Other Than STD): Crude/Age-Specific Rates per 100,000

	Lyme Disease			Chickenpox			Hepatitis B Chronic			Campylobacter		
	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Berks County	36.3	140.9	111.6	7.0	4.8	3.1	16.7	7.9	7.2	7.0	50.6	57.4
Cumberland County	82.0	95.4	70.8	ND	4.1	6.0	18.9	7.7	14.1	6.6	14.2	10.9
Dauphin County	66.7	93.0	80.0	6.3	ND	4.0	21.0	8.1	12.4	7.4	10.3	8.0
Lancaster County	28.7	96.2	84.7	8.6	15.8	9.1	14.8	7.6	4.6	16.3	18.1	16.0
Lebanon County	59.4	65.7	73.5	8.1	ND	ND	10.3	ND	9.4	8.8	12.4	22.3
Pennsylvania	58.6	73.6	89.5	6.5	5.8	5.1	15.0	6.7	9.1	11.2	18.7	18.3

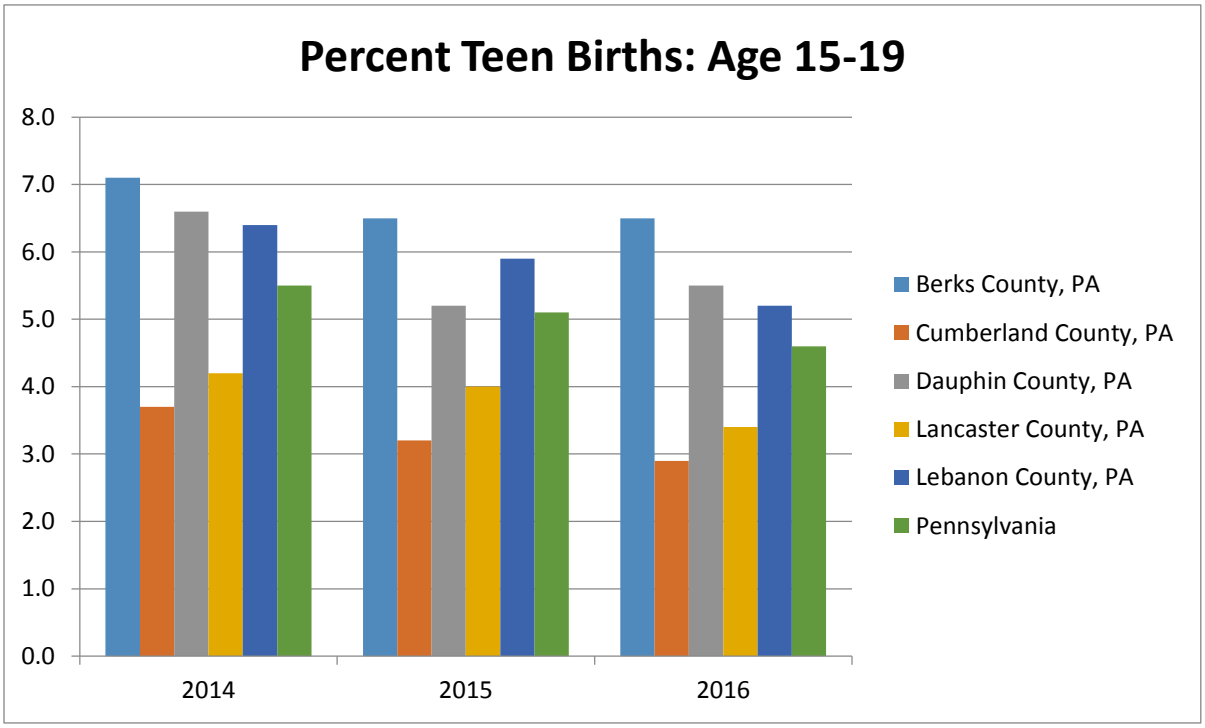
Sexually transmitted diseases (STDs) are a measure of poor health status and indicate the prevalence of unsafe sex practices. The rates of gonorrhea and chlamydia are the highest in Dauphin County and are higher than the state rates. Overall, the rates of chlamydia have increased in all counties between 2014 and 2016, and the rates of gonorrhea have increased in all counties except for Cumberland and Lancaster, which have seen a decrease.



Sexually Transmitted Diseases (STDs): Crude/Age-Specific Rates per 100,000

	Gonorrhea			Chlamydia		
	2014	2015	2016	2014	2015	2016
Berks County	67.0	57.1	86.8	417.5	475.1	430.1
Cumberland County	47.6	22.7	39.8	255.2	268.3	265.2
Dauphin County	163.9	111.4	173.9	501.4	602.2	685.8
Lancaster County	43.5	38.2	38.6	230.4	273.2	232.7
Lebanon County	20.5	19.7	34.6	203.9	269.2	324.1
Pennsylvania	99.4	99.9	114.3	395.2	417.6	445.4

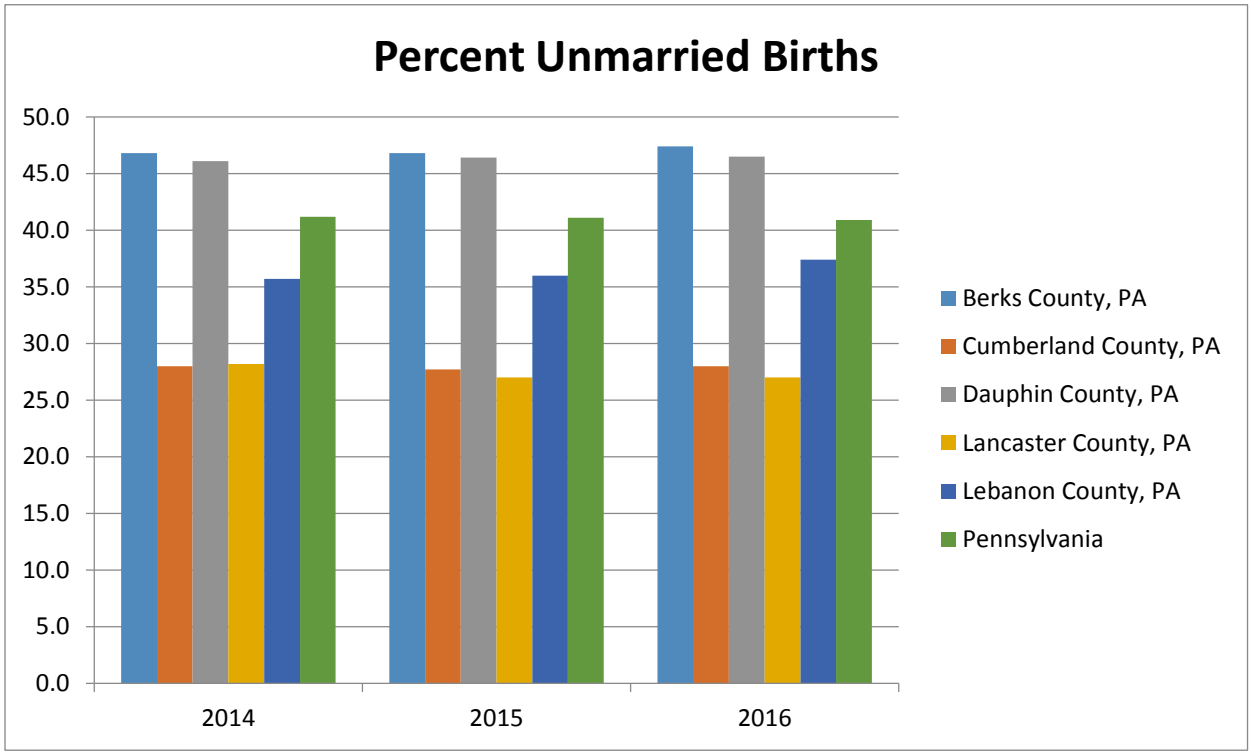
Teen pregnancy may indicate unsafe sex practices. The percentage of teen births was greatest in Berks County in 2016, and both Berks and Dauphin had significantly higher percentages than Pennsylvania. Overall, the percentage of teen births appears to be trending downward in all counties from 2014-2016.



Percent Teen Births: Age 15-19

	2014	2015	2016
Berks County	7.1	6.5	6.5
Cumberland County	3.7	3.2	2.9
Dauphin County	6.6	5.2	5.5
Lancaster County	4.2	4.0	3.4
Lebanon County	6.4	5.9	5.2
Pennsylvania	5.5	5.1	4.6

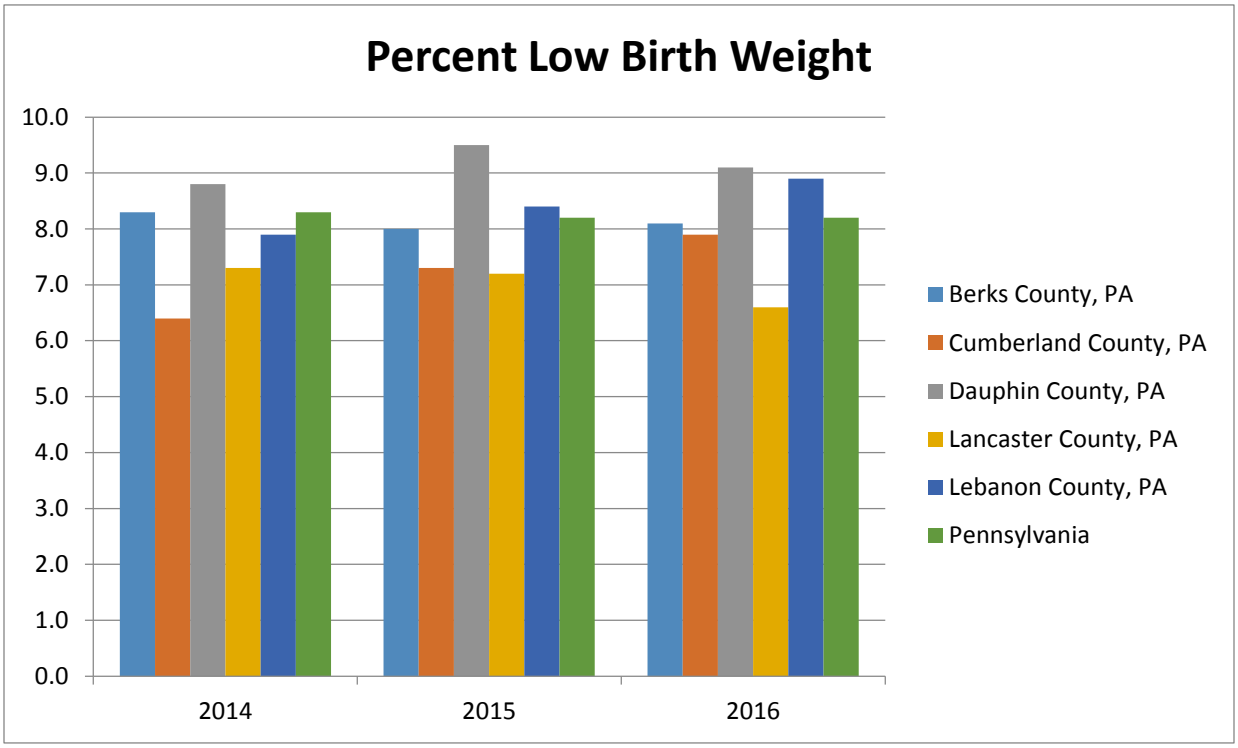
Unmarried births could represent unique economic and social circumstances for both the parent and child. The percentage of unmarried births was greatest in Berks County in 2016, and both Berks and Dauphin had significantly higher percentages than Pennsylvania. Overall, the percentage of unmarried births appears to have remained steady in all counties from 2014-2016.



Percent Unmarried Births

	2014	2015	2016
Berks County	46.8	46.8	47.4
Cumberland County	28.0	27.7	28.0
Dauphin County	46.1	46.4	46.5
Lancaster County	28.2	27.0	27.0
Lebanon County	35.7	36.0	37.4
Pennsylvania	41.2	41.1	40.9

Low birth weight infants can be at high risk for health problems. The percentage of low birth weight was greatest in Dauphin County in 2016, and was higher in both Lebanon and Dauphin counties than in Pennsylvania. The percentage of births that are low birth weight was trending upward in Cumberland, Dauphin, and Lebanon counties from 2014-2016.



Percent Low Birth Weight

	2014	2015	2016
Berks County	8.3	8.0	8.1
Cumberland County	6.4	7.3	7.9
Dauphin County	8.8	9.5	9.1
Lancaster County	7.3	7.2	6.6
Lebanon County	7.9	8.4	8.9
Pennsylvania	8.3	8.2	8.2

Engaging in cancer screening allows for early detection and treatment of any diagnoses. Lack of screening can also indicate lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Dauphin County had the lowest percentage (60.2%) of female Medicare enrollees with a mammogram, and Lancaster County had the highest (67.3%).

Percent of Female Medicare Beneficiaries Age 67-69 with Mammogram, 2014

	Female Medicare Enrollees Age 67-69	Female Medicare Enrollees with Mammogram in Past 2 Years	Percent Female Medicare Enrollees with Mammogram in Past 2 Years
Service Area	10,900	7,160	65.7%
Berks County	3,145	2,018	64.2%
Cumberland County	1,727	1,124	65.1%
Dauphin County	1,412	849	60.2%
Lancaster County	3,611	2,492	69.0%
Lebanon County	1,005	676	67.3%
Pennsylvania	91,755	59,441	64.8%
United States	2,395,946	1,510,847	63.1%

Lancaster County had the lowest percentage (59.4%) of adults who ever had a colon cancer screening, and Berks had the highest (68.1%).

Colon Cancer Screening (Ever), Percent of Adults Age 50+ by County, BRFSS 2006-12

	Total Population Age 50+	Estimated Population Ever Screened for Colon Cancer	Crude Percentage	Age-Adjusted Percentage
Service Area	420,650	279,454	66.40%	63.90%
Berks County	107,589	75,850	70.50%	68.10%
Cumberland County	66,081	45,464	68.80%	66%
Dauphin County	70,773	47,772	67.50%	65.60%
Lancaster County	136,945	84,769	61.90%	59.40%
Lebanon County	39,262	25,599	65.20%	61.30%
Pennsylvania	3,524,771	2,301,675	65.30%	62.10%
United States	75,116,406	48,549,269	64.60%	61.30%

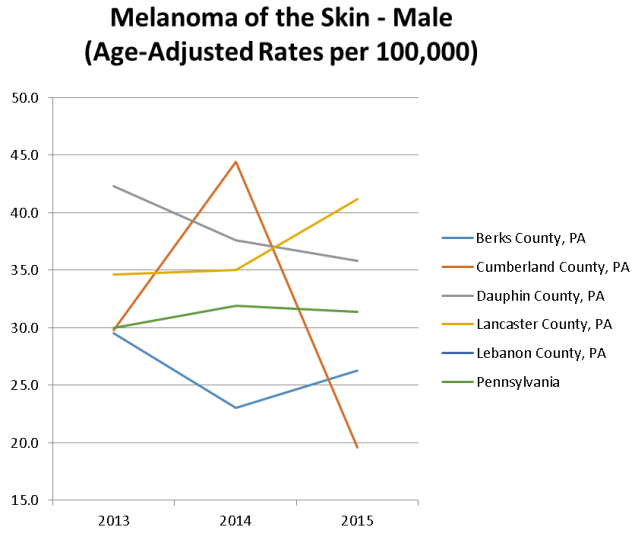
Cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

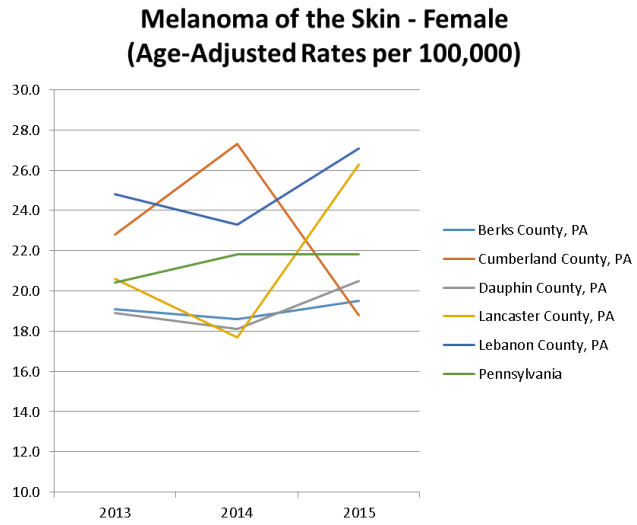
In 2015, rates of melanoma in females were higher in Lancaster and Lebanon Counties than in Pennsylvania, and were trending upward in all counties except for Cumberland. Rates of melanoma in males in 2015 were higher in Dauphin and Lancaster Counties than in Pennsylvania, and were trending upward in Lancaster County from 2013-2015.

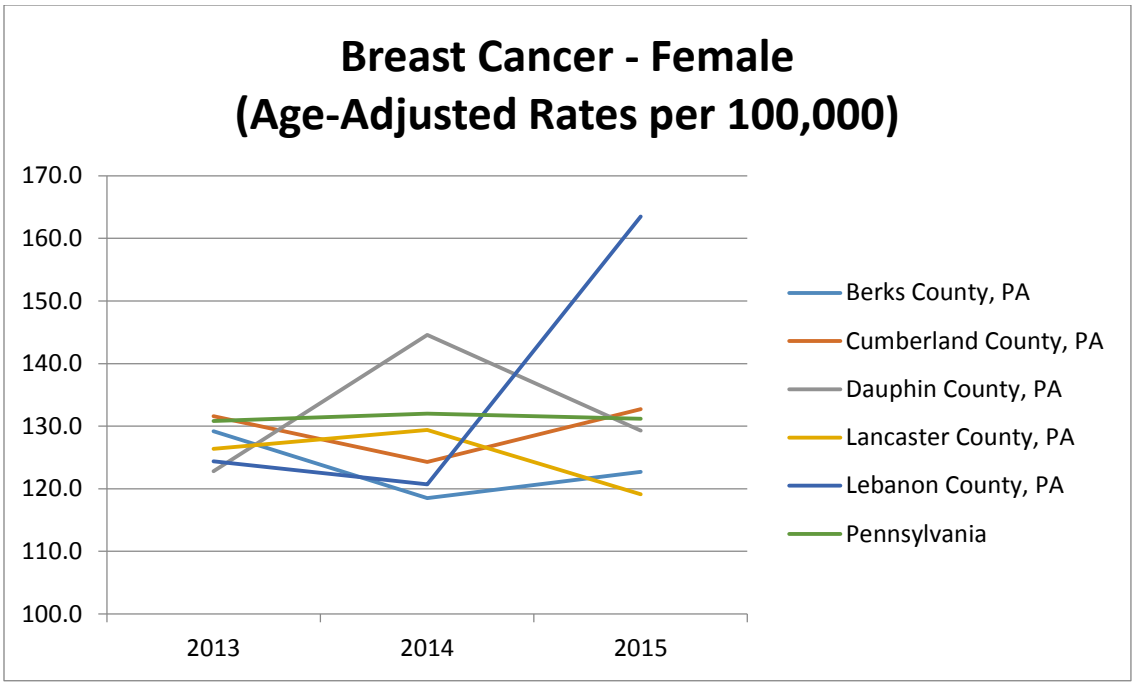
The breast cancer rate was highest in Lebanon County in 2015, and both Cumberland and Lebanon Counties had higher rates than Pennsylvania. The prostate cancer rate was highest in Berks County in 2015, and both Berks and Dauphin Counties had higher rates than Pennsylvania.

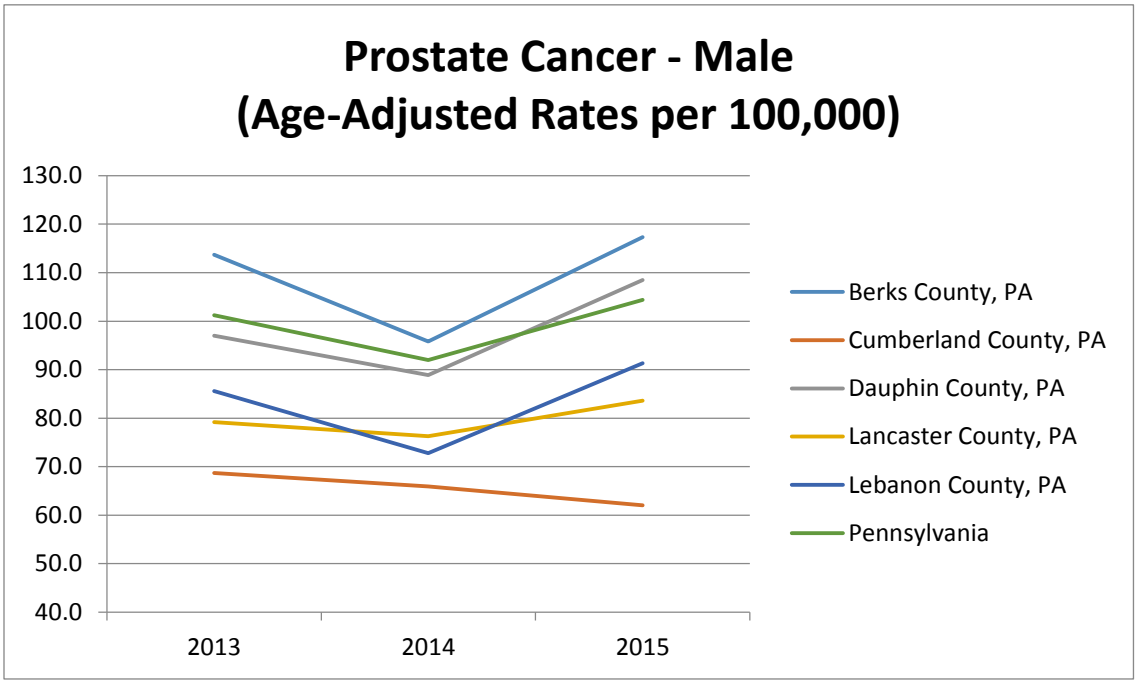
Cancer Incidence: Age-Adjusted Rates per 100,000 (2013-2015)

	Melanoma - Female			Melanoma - Male			Breast Cancer - Female			Prostate Cancer - Male		
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
Berks County	19.1	18.6	19.5	29.5	23.0	26.3	129.2	118.5	122.7	113.7	95.8	117.3
Cumberland County	22.8	27.3	18.8	29.8	44.4	19.6	131.6	124.3	132.7	68.7	65.9	62.0
Dauphin County	18.9	18.1	20.5	42.3	37.6	35.8	122.8	144.6	129.3	97.0	88.9	108.5
Lancaster County	20.6	17.7	26.3	34.6	35.0	41.2	126.4	129.4	119.1	79.2	76.3	83.6
Lebanon County	24.8	23.3	27.1	ND	ND	27.1	124.4	120.7	163.5	85.6	72.8	91.3
Pennsylvania	20.4	21.8	21.8	30.0	31.9	31.4	130.8	132.0	131.2	101.2	92.0	104.4



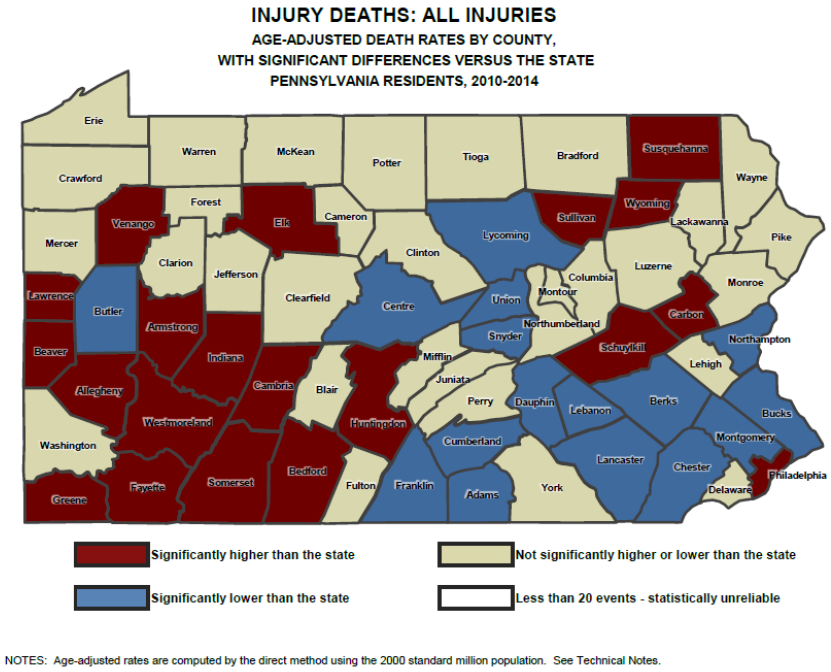



Breast Cancer - Female
(Age-Adjusted Rates per 100,000)
170.0
160.0
150.0
140.0
130.0
120.0
110.0
100.0
2013
2014
2015
Berks County, PA
Cumberland County, PA
Dauphin County, PA
Lancaster County, PA
Lebanon County, PA
Pennsylvania


Prostate Cancer - Male
(Age-Adjusted Rates per 100,000)
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
2013
2014
2015
Berks County, PA
Cumberland County, PA
Dauphin County, PA
Lancaster County, PA
Lebanon County, PA
Pennsylvania

Unintentional injuries, or accidents, occur by chance; but if proper precautions are taken can be reduced. The definition of injury in this report includes both unintentional injuries and self-inflicted or assault injuries (violence). Violence entails premeditated harm against oneself (suicide) or against another person (homicide).

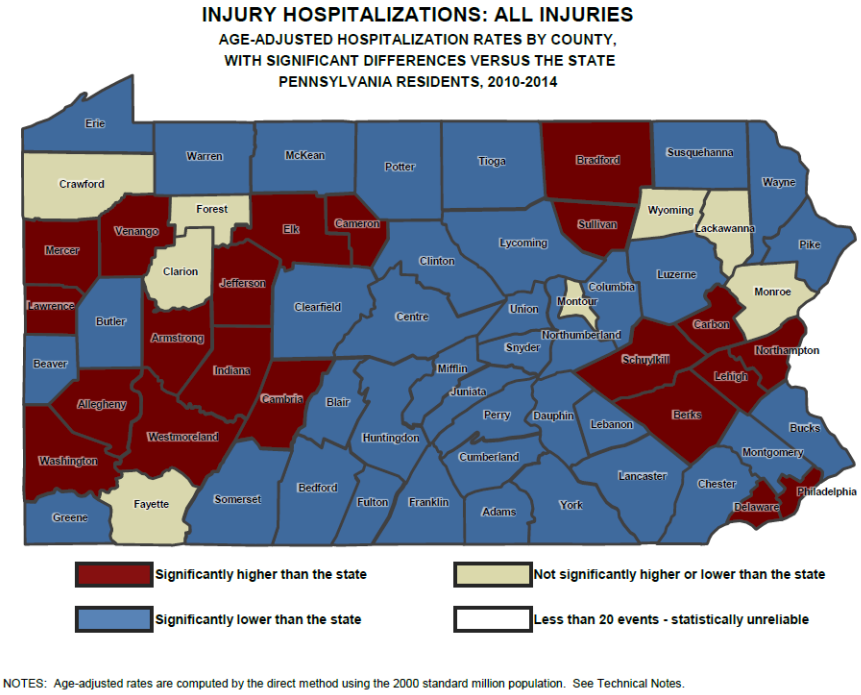
According to hospital discharge data compiled by the Pennsylvania Health Care Cost Containment Council, death rates for all injury types combined were significantly lower than the state for all five counties: Cumberland, Dauphin, Lebanon, Lancaster and Berks. However, Berks County death rates were significantly higher than the state for suicide and traumatic brain injury.



Injury Deaths - 2010-2014 Age -Adjusted Death Rates per County

	Suicide	Traumatic Brain Injury
Berks County	14.7	18.4
Cumberland County	13.0	13.2
Dauphin County	11.7	13.1
Lancaster County	10.1	11.4
Lebanon County	12.5	13.3
Pennsylvania	12.6	16.0

Injury Hospitalizations for all injuries were significantly lower than the state for four counties: Cumberland, Dauphin, Lebanon, and Lancaster; and significantly higher than the state in Berks County.



NOTES: Age-adjusted rates are computed by the direct method using the 2000 standard million population. See Technical Notes.

Berks County hospitalization rates were significantly higher than the state for motor vehicle traffic and all unintentional injuries. Lebanon County was significantly higher than the state for motor vehicle traffic injuries.

Injury Hospitalizations - 2010-2014 Age -Adjusted Rates Per County

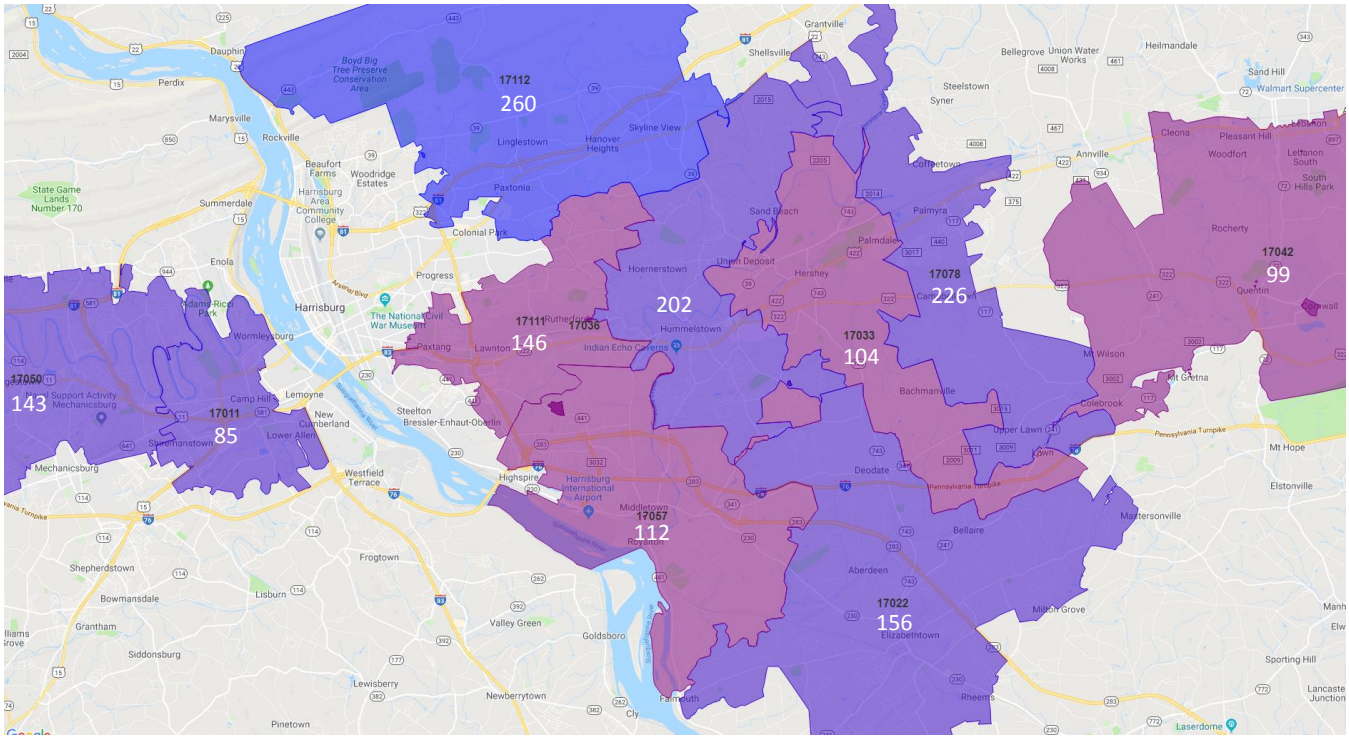
	Motor Vehicle Traffic	All Unintentional Injuries
Berks County	87.1	802.6
Cumberland County	60.9	603.4
Dauphin County	71.9	566.4
Lancaster County	72.1	610.1
Lebanon County	90.0	526.9
Pennsylvania	81.9	777.3

Penn State Health Utilization Data

In addition to demographic, socioeconomic, and public health data, patient utilization data were examined related to three conditions: pre-diabetes, early stage congestive heart failure, and early stage chronic obstructive pulmonary disease.

In 2017, the largest number (260) of unique patients that had pre-diabetes lived in the 17112, Harrisburg zip code.

Pre-Diabetes Patients, 2017

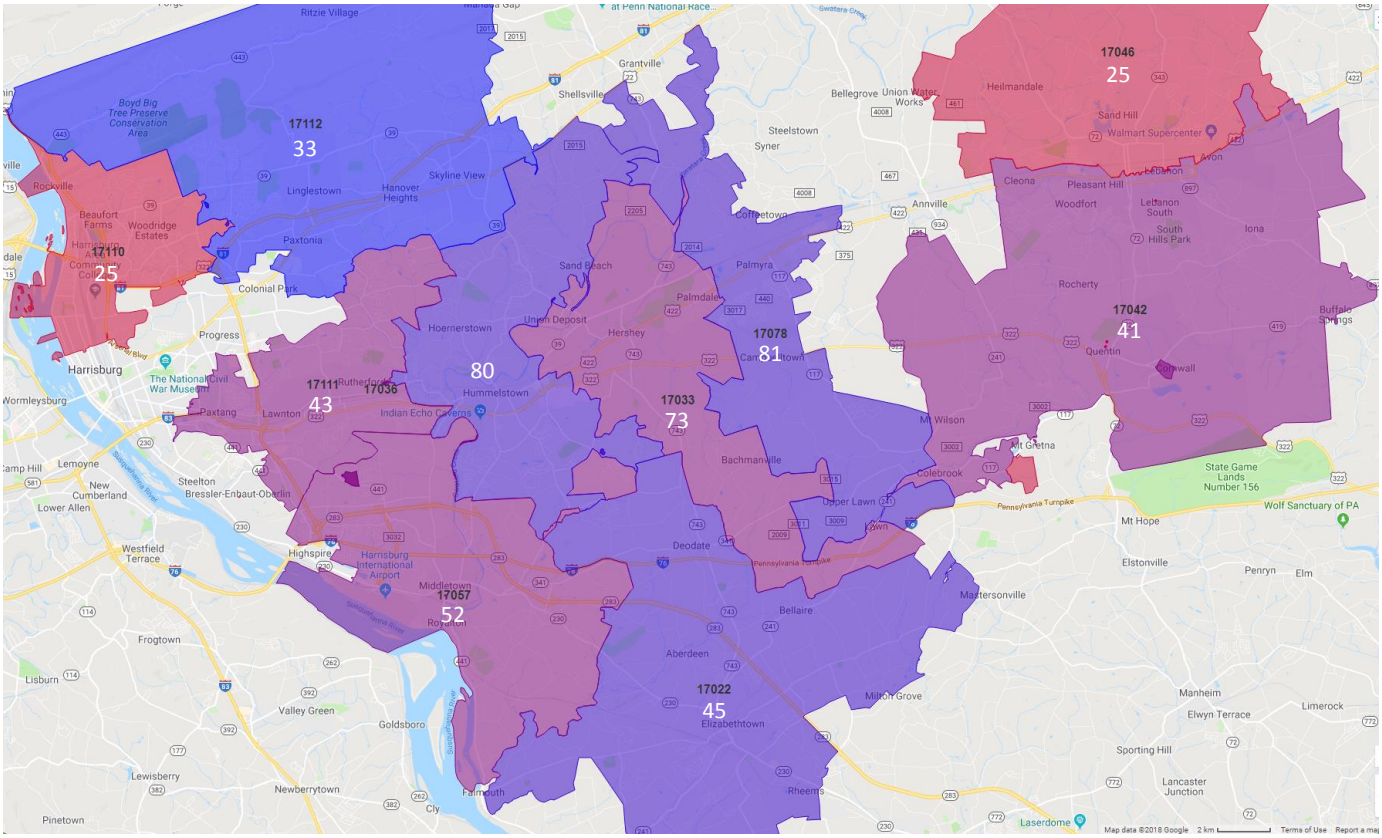


Pre-Diabetes Patients – Top 10 Zip Codes of Origin

Patient Zip Code	City	County	# of Patients
17112	Harrisburg	Dauphin	260
17078	Palmyra	Lebanon	226
17036	Hummelstown	Dauphin	202
17022	Elizabethtown	Lancaster	156
17111	Harrisburg	Dauphin	146
17050	Mechanicsburg	Cumberland	143
17057	Middletown	Dauphin	112
17033	Hershey	Dauphin	104
17042	Lebanon	Lebanon	99
17011	Camp Hill	Cumberland	85

In 2017, the largest number (81) of unique patients that had early state Chronic Heart Failure (CHF) lived in the 17078, Palmyra zip code.

Early Stage Congestive Heart Failure Patients, 2017

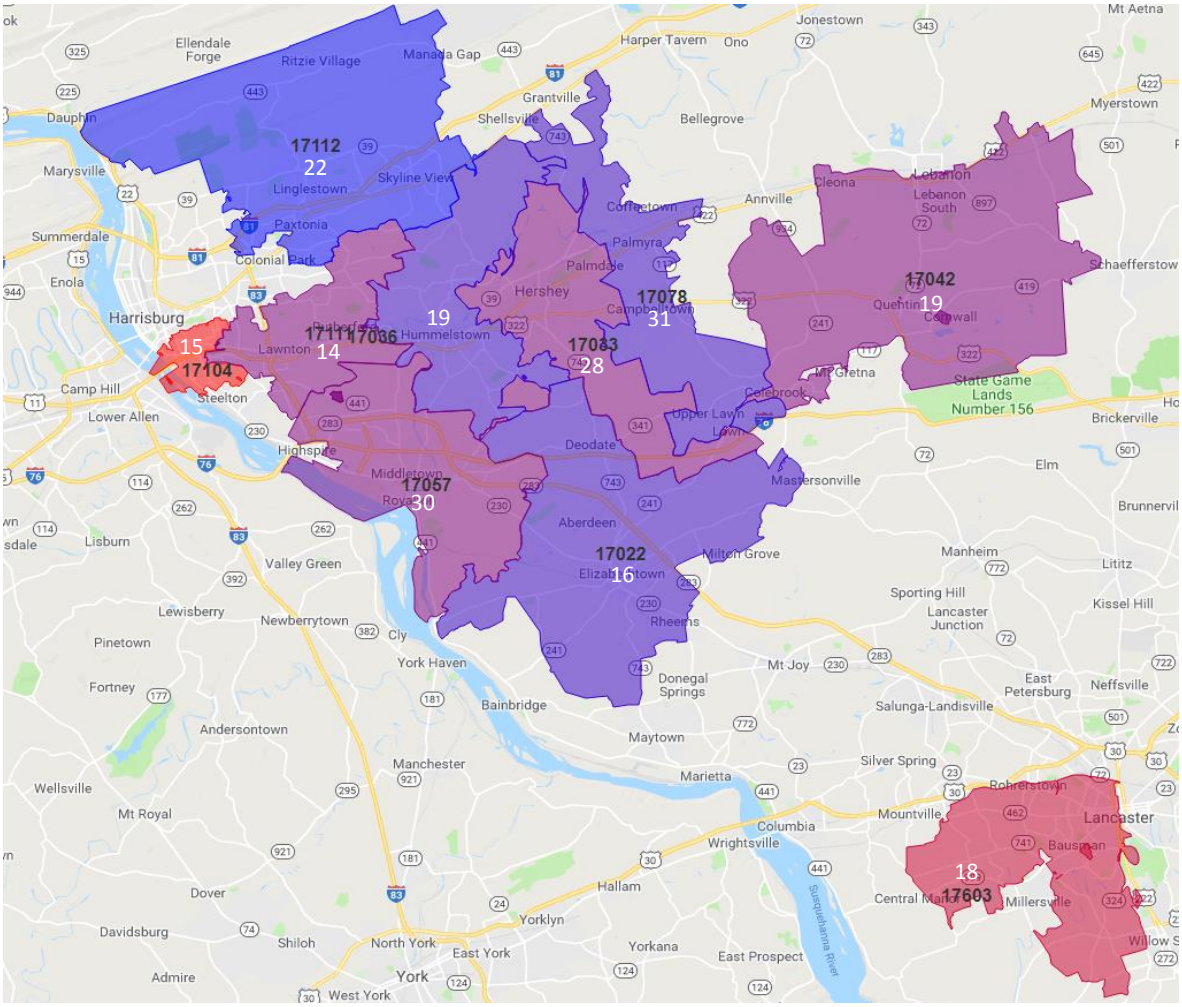


CHF Patients – Top 10 Zip Codes of Origin

Patient Zip Code	City	County	# of Patients
17078	Palmyra	Lebanon	81
17036	Hummelstown	Dauphin	80
17033	Hershey	Dauphin	73
17057	Middletown	Dauphin	52
17022	Elizabethtown	Lancaster	45
17111	Harrisburg	Dauphin	43
17042	Lebanon	Lebanon	41
17112	Harrisburg	Dauphin	33
17046	Lebanon	Lebanon	25
17110	Harrisburg	Dauphin	25

In 2017, the largest number (31) of unique patients that had early stage Chronic Obstructive Pulmonary Disorder (COPD) lived in the 17078, Palmyra zip code.

Early Stage Chronic Obstructive Pulmonary Disease Patients, 2017



COPD Patients – Top 10 Zip Codes of Origin

Patient Zip Code	City	County	# of Patients
17078	Palmyra	Lebanon	31
17057	Middletown	Dauphin	30
17033	Hershey	Dauphin	28
17112	Harrisburg	Dauphin	22
17036	Hummelstown	Dauphin	19
17042	Lebanon	Lebanon	19
17603	Lancaster	Lancaster	18
17022	Elizabethtown	Lancaster	16
17104	Harrisburg	Dauphin	15
17111	Harrisburg	Dauphin	14

Key Informant Survey Findings

Background

A Key Informant Survey was conducted to solicit information about community health needs. Approximately 250 individuals responded to the survey, including health and social service providers; community and public health experts; civic, religious, and social leaders; community planners, policy makers, and elected officials; and others representing diverse populations including minority, low-income, and other underserved or vulnerable populations.

These "key informants" were asked a series of questions about their perceptions of community health including health drivers, barriers to care, community infrastructure, and recommendations for community health improvement.

Survey Participants

Key informants served residents across the five-county service area with the largest percentage providing services within Dauphin County. Approximately 41% of informants also served residents outside of the five county service area, including the entirety of Pennsylvania or neighboring counties, (most commonly York and Perry Counties). A list of the represented community organizations and the key informants' respective role/title, is included in Appendix C. Key informant names are withheld for confidentiality.

Counties Served by Key Informants

	Percent of Informants*	Number of Informants
Dauphin County	60.2%	153
Cumberland County	39.4%	100
Berks County	39.0%	99
Lebanon County	34.3%	87
Lancaster County	33.1%	84
Other Counties (in addition to service area counties)	40.6%	103

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

About one-third of respondents provided services to all residents. Of those organizations that focused primarily on a special population, most served children/youth, low income/poor, or families. "Other" populations served, as indicated by respondents, included the faith-based community, pregnant women and families, and individuals affected by specific issues, including domestic violence, HIV/AIDS, mental health, or substance abuse. The table below shows the breakdown of key informants by the populations served.

Populations Served by Key Informants

	Percent of Informants*	Number of Informants
Children/Youth	44.9%	114
Low Income/Poor	44.5%	113
Families	37.8%	96
Hispanic/Latino	32.7%	83
Uninsured/Underinsured	31.5%	80
Not Applicable (Serve All Populations)	31.5%	80
Homeless	27.6%	70
Seniors/Elderly	26.4%	67
Women	26.0%	66
Disabled	24.4%	62
Black/African American	23.2%	59
Immigrant/Refugee	20.1%	51
Men	19.3%	49
LGBTQ+ Community	18.1%	46
Other**	12.6%	32
Asian/Pacific Islander	12.2%	31
Migrant Workers/Families	11.8%	30
American Indian/Alaska Native	10.6%	27

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

Health Perceptions

Choosing from a list of specified health issues, respondents were asked to rank order what they perceived as the top three health conditions impacting the populations they serve. An option for "other" was also provided. The respondents were then asked a second question to similarly rank order what they saw as the top three contributing factors to those health conditions. The top ten responses for each question are depicted in the tables below. The tables are rank ordered by the number of Key Informants that selected the issue as #1. The percent and count of Key Informants that selected each option within their top three choices is also shown.

Correlation between the percent of respondents selecting an issue as #1 and the percent of respondents selecting an issue within their top three choices demonstrates consistent perspectives regarding the top three health conditions: mental health conditions, overweight/obesity, and substance abuse.

While approximately one-third of respondents saw mental health conditions as the #1 health concern in the community, nearly 60% chose it among their top three community health concerns. Results were more divided for substance abuse, with only 13.2% selecting the issue as #1 yet nearly half of all respondents selecting it within their top three choices. Similarly, while 16% chose overweight/ obesity as the #1 issue, 43.4% selected it as a top three concern. It is worth noting that nearly 21% of respondents saw heart disease and stroke within the top three concerns, while less than 4% indicated it as the top concern.

Top 10 Health Conditions Affecting Residents

Ranking	Condition	Informants Selecting as the Top (#1) Health Concern	Informants Selecting as a Top 3 Health Concern	
			Percent	Count
1	Mental health conditions	29.8%	59.5%	144
2	Overweight/Obesity	16.1%	43.4%	105
3	Substance abuse	13.2%	48.8%	118
4	Diabetes	8.3%	24.4%	59
5	Cancers	4.5%	14.0%	34
6	Dental problems	4.1%	10.7%	26
7	Other*	3.7%	8.3%	20
8	Heart disease and stroke	3.7%	20.7%	50
9	Alzheimer's disease/Dementia	3.3%	8.3%	20
10	Disability	2.1%	7.4%	18

*Other responses: Access to care, bowel and bladder management, child abuse, end of life planning, genetic disorders, hypertension, oral healthcare, prenatal and pediatric care, preventative healthcare, sickle cell anemia, teen family planning, sexually transmitted disease treatment, and vision.

Key informants' responses were more divided on their perceptions of factors that most contributed to the health conditions they chose in the previous question. Nearly 18% of respondents considered "ability to afford healthcare" as the #1 top contributing factor to health conditions, followed by "health habits" (13.6%), and "drug/alcohol use" (10.7%). These three issues, along with "poverty" (23.1%) and "inadequate or no health insurance" (22.7%) were most chosen among participants' top three choices.

The percentage of respondents that chose the #1 contributing factor to health conditions was nearly 12 points lower than the percentage that chose the #1 health condition, and there were fewer percentage points between the most selected #1 choice (ability to afford healthcare) and the least selected #1 choices (food insecurity and stress). This variation in perception suggests less consensus among respondents in what factors most contribute to community health conditions.

Top 10 Contributing Factors to Health Conditions Affecting Residents

Ranking	Contributing Factor	Informants Selecting as the Top (#1) Contributor	Informants Selecting as a Top 3 Contributor	
			Percent	Count
1	Ability to afford healthcare	17.8%	29.8%	72
2	Health habits	13.6%	34.7%	84
3	Drug/Alcohol use	10.7%	23.1%	56
4	Number of healthcare providers available in the community	7.9%	17.4%	42
5	Poverty	7.4%	23.1%	56
6	Other*	4.5%	9.1%	22
7	Social support	4.1%	17.4%	42
8	Inadequate or no health insurance	4.1%	22.7%	55
9	Stress	3.7%	16.1%	39
10	Food insecurity	3.7%	9.1%	22

*Other responses: Lack of providers, language barriers, inadequate screening for mental health and co-occurring drug and alcohol use, and mental health stigma.

To expand upon their quantitative responses, respondents were asked to provide comments about their selections. Verbatim comments are included below.

Health Perceptions – Comments by Key Informants

Ability to Afford Healthcare/Poverty

- *"Although patients may have health insurance coverage, they often have high deductibles/copays or have difficulty finding a provider who takes their insurance. Dental care is still unaffordable to many, even with a federally qualified health center that provides dental care on an income-based sliding scale."*
- *"Legal barriers to eligibility for publicly funded health care and other health-promoting public benefits are a big challenge for the community we serve. For example, many non-citizens are ineligible for Medicaid."*
- *"People without health insurance do not access preventive or primary care services. Their only resource, then, is emergency care when preventable or easy-to-care-for problems escalate into life-threatening conditions. Also, Medical Assistance (MA) patients have long waits for new services, have too few providers willing to accept MA, and also have long waits if they have moved from Puerto Rico (other counties) here until their MA is accepted in PA."*
- *"The issues of poverty, including transience, lack of adequate and stable housing options, language barriers, access to affordable healthy food and transportation issues, compound to make all three of these issues important to and significant in our community. We need to do more to deal with preventable and manageable diseases, reduce hospitalization and re-admission for preventable illnesses."*

Health Habits & Overweight/Obesity

- *"I work with a primarily senior population. Many refuse to change their lifelong habits. A large number of those we deal with in Center City are living below poverty and are struggling to survive"*
- *"The client population we serve struggle with hunger and food insecurity. Their income generally falls at 150% or less of the poverty level; more than 60% are single female heads of households and 18% are individuals over the age of 60. They are disproportionately represented with heart disease, high blood pressure, diabetes and a host of other health issues that are not helped by poor nutritional habits."*
- *"The health of our most vulnerable community members continues to languish. Until we do a better job of ensuring that all individuals have access to affordable housing, family sustaining wages, affordable child care and benefits like paid family leave and sick days, it will be difficult to promote healthy lifestyle choices."*
- *"We see so much of the problems having roots in education on appropriate care. People don't think about preventative care (teeth cleaning, etc.) until there's a problem. Even then, our families, without proper knowledge on how to appropriately advocate for themselves, will generally fix the problem and not revisit providers until the next problem."*

Mental Health/Substance Abuse

- *"Culturally sensitive and appropriate mental health services are not easily accessible to the populations we serve. Waiting lists are long and appointment times do not meet the scheduling needs of low wage workers who cannot afford to take off work during regular business hours. In addition, many of the supportive services are not easily accessible to individuals with limited transportation or childcare."*
- *"I believe domestic violence, substance abuse and mental illness all stem from a social order that does not treat all people fairly and provide access to resources evenly and fairly."*
- *"Regarding the opioid epidemic, in addition to needing more providers locally, more work needs to be done around prevention. Once the addiction cycle begins, it can take a long time to get into recovery."*
- *"The stigma of mental illness or a behavioral health diagnosis contributes to reluctance to seek help and maintain treatment and recovery. Poverty and minority's health disparities contribute significantly to the county's health issues."*
- *"There is a limited amount of psychiatrists/psychologists in the area taking new clients; patients go to the ED for symptoms and are discharged with a request to follow up with their primary care provider (PCP). The PCP potentially prescribes medications that manage symptoms and says to get in to see a psychiatrist, but they cannot due to limited availability. The PCP is managing medications that a psychiatrist should do. It's a revolving circle of care…"*

Healthcare Access

Key informants were asked to rate their agreement to statements pertaining to health of the community and access to care using a scale of (1) “strongly disagree” to (5) “strongly agree.”

Approximately 47% of informants “disagreed” or “strongly disagreed” that their community is healthy, while one-quarter of informants “agreed” or “strongly disagreed” that their community is healthy. Access to adequate and timely health services is a key contributor to the health of a community.

Informants “agreed” or “strongly agreed” that residents can access a regular primary care provider when they need care. Nonetheless, primary care services were not considered to be widely available across the community. Approximately 23% to 34% of respondents “disagreed” or “strongly disagreed” that primary care services are available to residents.

Perceptions were divided on cultural sensitivities and competencies among providers. Cultural sensitivity received the highest mean score (3.17), while sufficient number of bilingual providers received the lowest mean score (2.27).

The number of providers accepting Medicaid/Medical Assistance is a top concern for the region. Key informants indicated that there is a lack of behavioral health providers to adequately prevent and treat conditions. More than half of respondents “disagreed” or “strongly disagreed” that “residents receive mental health or substance abuse care when they need it.”

Resident Healthcare Access

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	**Mean Score**
I would describe my community as healthy.	3.6%	43.1%	28.5%	22.5%	2.4%	**2.77**
Residents have a regular primary care provider/doctor/ practitioner that they go to for healthcare.	2.0%	32.3%	30.7%	31.1%	3.9%	**3.03**
Residents have available transportation (public, personal, or other service) for medical appointments and other services.	9.8%	38.6%	21.7%	28.3%	1.6%	**2.73**
Providers in the community are culturally sensitive to race, ethnicity, cultural preferences, etc. of patients.	2.8%	20.6%	37.9%	34.8%	4.0%	**3.17**
There are a sufficient number of providers that accept Medicaid/Medical Assistance in the community.	17.1%	28.6%	30.2%	20.2%	4.0%	**2.65**
There are a sufficient number of bilingual providers in the community.	20.9%	40.7%	29.6%	7.9%	0.8%	**2.27**

Key informants were asked to rate their agreement to statements pertaining to the availability and accessibility of primary and specialty care providers using scale of (1) “strongly disagree” to (5) “strongly agree.”

Mental health and substance abuse services were identified by informants as the least available and accessible resources to residents. Approximately 73% of informants “disagreed” or “strongly disagreed” that residents receive mental healthcare when they need it and that there are a sufficient number of providers in the community. More than 55% of informants “disagreed” or “strongly disagreed” that residents receive substance abuse care when they need it and that there are a sufficient number of providers in the community. Dental care and specialty care services also received lower overall mean scores.

Healthcare Provider Availability

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	**Mean Score**
Primary Care						
Residents can receive care when they need it.	4.5%	28.5%	27.7%	36.4%	2.9%	**3.05**
There are a sufficient number of providers in the community.	8.1%	28.2%	25.6%	31.6%	6.4%	**3.00**
Vision Care Services						
Residents can receive care when they need it.	7.1%	25.2%	36.6%	28.2%	2.9%	**2.95**
There are a sufficient number of providers in the community.	5.2%	18.5%	33.2%	38.8%	4.3%	**3.19**
Specialty Care Services						
Residents can receive care when they need it.	6.7%	32.5%	32.9%	26.3%	1.7%	**2.84**
There are a sufficient number of providers in the community.	10.3%	28.9%	29.7%	27.2%	3.9%	**2.85**
Dental Care Services						
Residents can receive care when they need it.	23.8%	28.7%	25.0%	19.6%	2.9%	**2.49**
There are a sufficient number of providers in the community.	19.4%	21.1%	25.4%	30.2%	3.9%	**2.78**
Substance Abuse Services						
Residents can receive care when they need it.	22.7%	35.5%	28.1%	12.0%	1.7%	**2.34**
There are a sufficient number of providers in the community.	23.5%	33.3%	28.2%	13.2%	1.7%	**2.36**
Mental Healthcare Services						
Residents can receive care when they need it.	35.7%	36.9%	16.4%	9.0%	2.0%	**2.05**
There are a sufficient number of providers in the community.	39.4%	33.1%	15.7%	11.0%	0.8%	**2.01**

Inability to afford care, challenges of navigating the healthcare system, feel healthy, lack of awareness/emphasis on preventive health, and lack of transportation were most chosen within respondents' top three selections as to why residents who have health insurance do not receive regular care.

Primary Reason Individuals with Health Insurance Do Not Receive Regular Care

Ranking	Reason	Informants Selecting as the Top (#1) Reason	Informants Selecting as a Top 3 Reason	
			Percent	Count
1	Unable to afford care (copays, deductibles, prescriptions, etc.)	19.0%	54.4%	129
2	Feel healthy ("Don't need to go to the doctor")	16.9%	33.3%	79
3	Challenges of navigating the healthcare system	14.8%	44.3%	105
4	Awareness/Emphasis of preventive health measures	13.9%	33.3%	79
5	Lack of transportation to access healthcare services	9.3%	29.5%	70
6	Fear of diagnosis, treatment	5.9%	20.3%	48
7	Limited office hours of providers (no weeknight/weekend office hours)	5.5%	19.4%	46
8	Lack of providers available in the community	4.6%	13.5%	32
9	Providers not accepting insurance/new patients	4.6%	22.4%	129
10	Other*	3.8%	8.0%	19
11	Personal beliefs or community biases related to religion, spirituality, culture, gender/sexual orientation, etc.	0.8%	7.2%	17
12	Providers do not speak their language	0.8%	9.3%	22

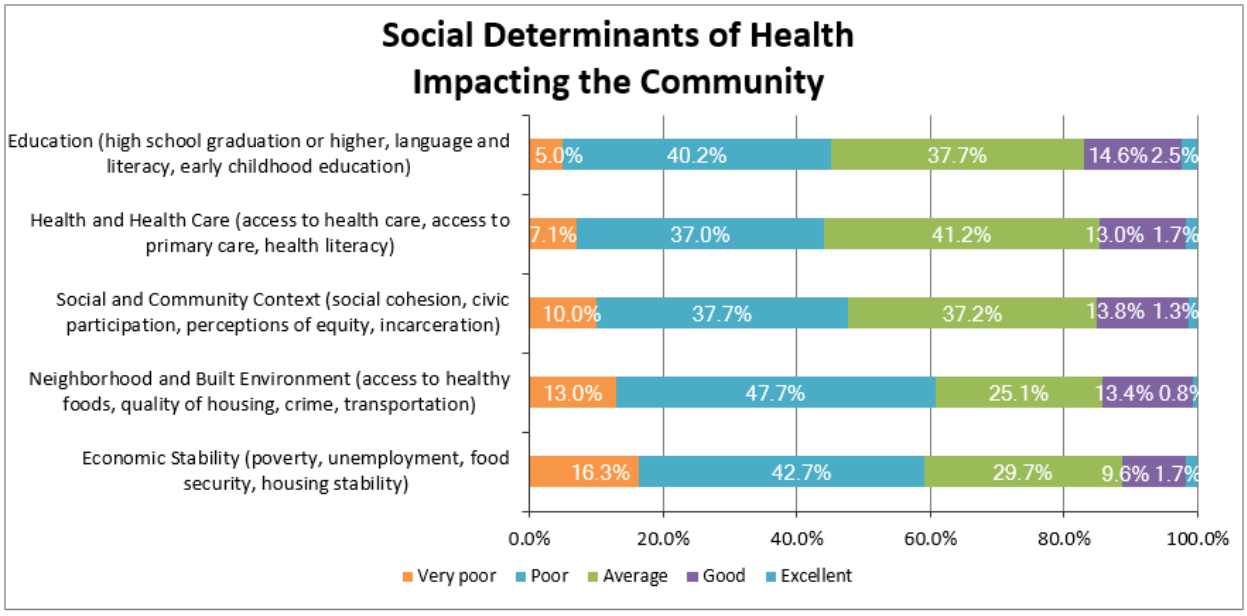
*Other responses include: Family obligations, fear of losing employment, generational patterns of receiving care, lack of personal motivation, and prioritization of basic needs over healthcare.

Social Determinants of Health

Healthy People 2020 defines social determinants of health as conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, function, and quality of life outcomes and risks. Based on comments made throughout the survey, key informants recognized the impact that social determinants had upon residents' health. A section within the survey asked respondents to rate social determinants of health, across five different dimensions: economic stability; education; health and healthcare; neighborhood and built environment; and social and community context using a scale of (1) "very poor" to (5) "excellent."

The mean scores for each dimension are listed in the table below in rank order, followed by a table showing the scoring frequency. Mean scores fell between 2.69 to 2.38, with most respondents rating the listed social determinants as "poor" or "average."

Ranking	Social Determinant of Health	Mean Score
1	Education	2.69
2	Health and Healthcare	2.65
3	Social and Community Context	2.59
4	Neighborhood and Built Environment	2.41
5	Economic Stability	2.38



Impact of Social Determinants on Health

Key informants acknowledged the impact of social determinants—particularly poverty—as key underlying factors of health issues within the community. Key Informants' specific comments related to poverty and health impact are included below.

- *"For many, their socioeconomic and community factors help to cause or exacerbate their mental health or substance use issues. If they have these issues early on, they will not be as able to access education, employment, and health opportunities. Add to that the poor school system, especially in Harrisburg, and a lack of mental health awareness in schools, churches, and employers. Stigma and misunderstandings need to be challenged and opportunities for support of mental health need to be enhanced."*
- *"Social and community context can be improved by more positive perception on discrimination and equity."*
- *"There are economic disparities. For the clients we serve, these scores are low in comparison to the populations of the county at large."*
- *"While I do believe our clients have access to health care, their health literacy is poor. In the neighborhood and built environment category, quality of affordable housing is a serious concern. Hershey and Hummelstown are very expensive communities in which to live and there are very few affordable housing opportunities available."*

Community 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 thought applied. More than three-quarters of informants chose mental health services as a missing resource within the community. Approximately 60% included transportation, and nearly half checked health and wellness programs, multi-cultural or bilingual healthcare providers, and substance abuse services.

Missing Resources within the Community to Optimize Health

Ranking	Resource	Percent of Informants	Number of Informants
1	Mental health services	76.3%	171
2	Transportation options	61.2%	137
3	Health and wellness education and programs	48.2%	108
4	Multi-cultural or bilingual healthcare providers	47.8%	107
5	Substance abuse services	47.3%	106
6	Healthy food options	44.2%	99
7	Dental care	40.6%	91
8	Housing	36.2%	81
9	Child care providers	35.7%	80
10	Community Clinics/Federally Qualified Health Centers	28.1%	63

Specific comments related to mental health services are include below.

- *"Access to behavioral health services - mental and substance abuse - remains a significant need. Leadership of our health systems with the opioid epidemic should be an ongoing priority."*
- *"Mental healthcare and follow-up is lacking to support individuals when they are discharged. There is very minimal transportation support available, therefore individuals do not follow up."*
- *"Mental Health First Aid should be taught in the schools and community more."*
- *"They incarcerate the mentally ill instead of providing the help they need. This increases the crime level and substance abuse."*
- *"Very few places to engage residents with mental health/behavioral issues. If someone doesn't fall into their restrictive requirements, they can't be seen."*
- *"While there are mental health providers in the area, most cannot afford the necessary amount of treatment needed. Even if the first two or three appointments or screening are paid by insurance providers, in order for treatment to be successful, the patient needs extended treatment."*

More than half of the informants identified the need for transportation options. Specific insights they provided are included below.

- *"Clients are likely to miss/neglect substance abuse needs and other health needs due to a horrible lack of public transportation and accessibility in Cumberland County."*
- *"Pennsylvania does not have an adequate transportation system in place. Many of our wellness programs are covered by grant funding, however those patients on Medical Assistance are unable to use CART (transportation for Medical Assistance patients to their appointments) because they are told since the cessation classes they are being transported to are not billed to MA and rather paid by a grant they cannot use MA funded transportation."*
- *"The transportation system is very lacking in our area. If people don't have cars in many regions they can't access services well. Our subsidized transportation, like CAT Share a ride, is very cumbersome and makes people wait much of the day for inconvenient rides... We need more accessible safe walking areas. More bike lanes should be added. They added the bikes but not too many safe places to ride."*
- *"We need to make a concerted effort to make access to healthcare and specialty care providers easier for seniors who face transportation issues. Berks Area Regional Transportation Authority (BARTA) cannot alone handle the demand for specialized services and many cannot afford the fares associated with Uber, taxi companies, etc."*

When asked how local and regional healthcare providers can better engage community members to achieve optimal health outcomes, respondents made recommendations for community collaboration; prevention; and improved healthcare access. They encouraged healthcare providers to partner with social service providers and integrate care services within the community. Specific recommendations from informants included:

- Actively participate in community collaborations to improve health
- Collaborate with community service providers to reach clients and inform them of services
- Develop collaborative care models with community health and social service providers
- Emphasize prevention through continued health promotion education and outreach in the community, targeting low-income and underserved residents
- Employ Community Health Workers to improve outcomes for underserved populations
- Engage providers, particularly primary care providers, in community outreach efforts
- Focus community outreach efforts on addressing the social determinants of health
- Improve access to affordable healthcare services and behavioral health providers
- Improve patient access to healthcare by expanding available office hours and the availability of bilingual and Medicaid accepting providers
- Improve patient navigation of the healthcare system, including billing and medical records
- Improve provider-patient relations and communication techniques
- Improve transportation options for medical appointments and social services
- Integrate healthcare services in community settings (e.g. schools, churches, community centers) and improve referrals to community partners
- Provide integrated behavioral and physical healthcare services and wellness programs

Penn State Health requested feedback on the 2015 CHNA and Implementation Plan reports outlining their initiatives to address community health needs. Feedback was considered in identifying and prioritizing significant health needs and in identifying resources potentially available to address those health needs. Select comments from informants included:

- *"As Lancaster County was not included in these reports and analysis it is difficult to draw conclusions. In many ways Lancaster County is unique and different; and also is undergoing rapid competitive change in healthcare providers and healthcare systems."*
- *"Following the last 2 assessments, I have not become aware of any increase in the quality of care for low-income, uninsured individuals, especially when trying to receive specialist care."*
- *"It would appear that we agree on the dominant issues in the Harrisburg area and that your goals are scheduled to try and address those areas of need. Hoping that the goals are met on schedule as there are many people in need of these services, not only in Harrisburg, but in Perry County as well! Thank you!"*
- *"The efforts are appreciated."*
- *"The previous CHNAs were very comprehensive and detailed. I do believe that there needs to be better promotion of these reports and plans so that more community members know how to access them."*

Community Member Survey

Background

A Community Member Survey was conducted with residents of the five-county service area to gather insights into health status, risk behaviors, barriers to accessing health services, and the health and social needs of vulnerable community members. The survey was conducted with adults aged 18 or over among low income, underserved, or minority populations. An electronic version of the survey was provided in English and paper copies were available in English and Spanish.

Penn State Health collaborated with more than 40 community health and social service providers to disseminate the survey. A list of participating organizations is included in Appendix D.

Penn State Health collaborated with more than 40 health and social service partners to disseminate the Community Member Survey

The survey was not intended to be a representative sample of the greater community, but rather provide general insights into respondents' perceptions and health status. The survey data were analyzed by county and race/ethnicity. (Note: racial/ethnic data based on a respondent count of less than 10 are excluded). Similar community surveys were conducted by PSH in 2015 and 2012; findings from the past studies are shown, as applicable, for observational comparison.

Summary of Findings

Common strengths shared or perceived among survey participants are outlined below:

- Despite the prevalence of poor health behaviors and chronic disease reported by respondents, the majority of individuals described themselves as "healthy" or "very healthy."
- While 22% of respondents smoked cigarettes, 6% or fewer of respondents used other forms of tobacco like cigars, chewing tobacco, and electronic cigarettes.
- About 90% of respondents reported having health insurance and 83% had a regular health care provider. More than 64% of respondents received a routine preventive checkup within the past year.
- Less than 7% of respondents used the ER as their medical home, while 70% of respondents used a doctor's office as their medical home.
- Less than 1% of respondents used the ER as their primary location for receiving dental care, while 67% of respondents received dental care from a dentist's office. More than 53% of respondents received dental care within the past year.
- Nearly all respondents consumed less than seven alcoholic drinks in an average week.

Areas of opportunities were also indicated and are outlined below for improvement:

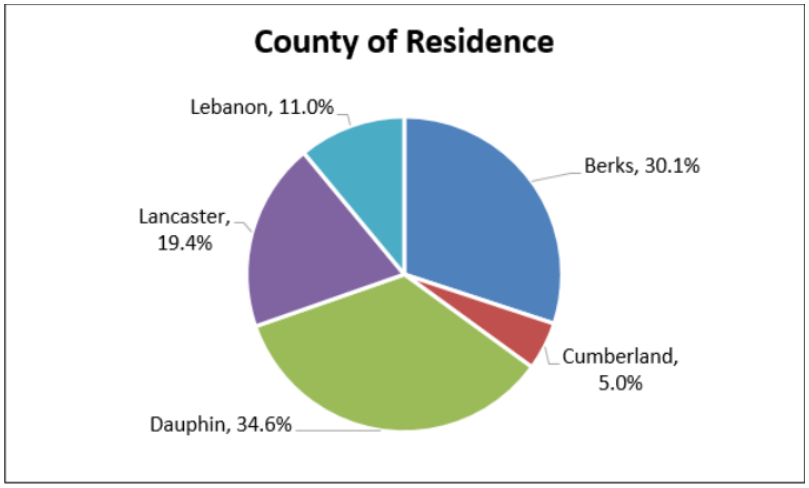
- Federal guidelines for fruit and vegetable consumption recommend that adults eat at least 1½ to 2 cups per day of fruit and 2 to 3 cups per day of vegetables. Less than 35% of respondents reported eating two or more cups of fruits or vegetables each day.
- The Office of Disease Prevention and Health Promotion recommends that adults participate in at least 150 minutes of moderate intensity aerobic physical activity each week. Less than 30% of respondents met the physical activity guideline; 21% of respondents did not participate in at least 30 minutes of physical activity on any day in the past month.
- Respondents indicated that out-of-pocket expenses are a key barrier to accessing care. Berks County respondents were most likely to delay care due to cost barriers, and among the least likely to have a regular healthcare provider.
- Twenty-one percent of respondents required assistance to read or complete health-related paperwork.
- Approximately 23% of respondents reported having been diagnosed with diabetes; the percentage was higher among Hispanic/Latino respondents (32%). More than 40% of respondents reported having been diagnosed with high blood pressure and/or overweight/obesity.
- Approximately one in ten respondents needed, but did not receive mental healthcare in the past 12 months. Dauphin County respondents reported a higher number of poor mental health days and were the least likely to receive mental healthcare.
- Approximately one in ten respondents have taken a prescription drug that was not prescribed to them, and one-fifth of respondents have taken an illegal drug. Marijuana was rated the most accessible drug to respondents, followed by club drugs.
- Approximately 44% of all respondents reported feeling “somewhat safe” or “not at all safe” in their neighborhood or community, compared to 56% of respondents who felt “extremely safe”. Respondents from Berks County and Black/African American respondents were the least likely to report feeling “extremely safe.”
- Across nearly all indicators, Blacks/African Americans and Hispanics/Latinos experienced greater barriers in accessing healthcare and poorer health outcomes than White respondents.

Demographics

A total of 1,354 community members completed the survey across the five-county service area. The largest percentages of respondents resided in Dauphin County (34.6%) and Berks County (30.1%), which are the home counties of Penn State Health Hershey Medical Center, Penn State Health St. Joseph Medical Center, and Pennsylvania Psychiatric Institute. The largest percentages of respondents were females and Whites. The most represented age groups were 54-65 (21.9%) and 45-54 (18.5%). One-quarter of respondents identified as Hispanic or Latino. Approximately 54% of respondents reported a household income of $24,999 or less. About 12% did not complete high school, while 34% graduated high school or earned a GED. Fifty-three percent of respondents have some college experience, including earning an associate's, bachelor's or master's degrees. About half of the respondents were employed, while the other half was not working due to being retired (18.4%), unable to work (11.5%), unemployed (16.4%) or other reasons. Demographic data for all survey respondents is shown in the following charts.

NOTE: Data from 2012 and 2015 survey questions are included in some charts below, but should not be used for comparison given the use of convenience sampling, rather than generalizable samples.

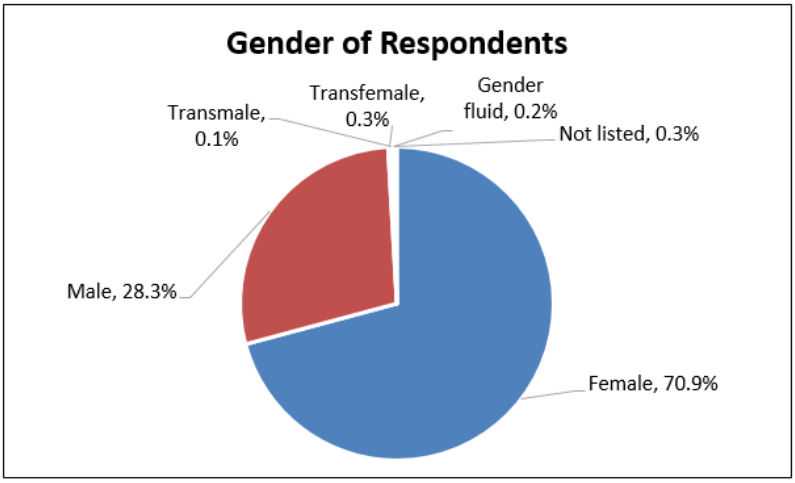
2018 Community Survey Respondents

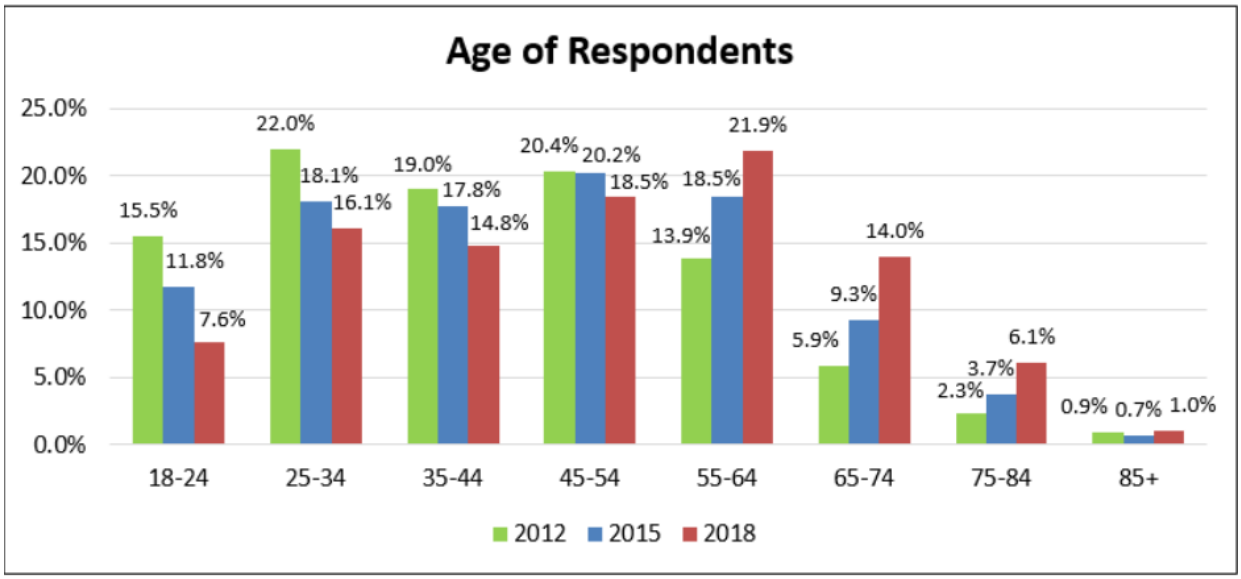


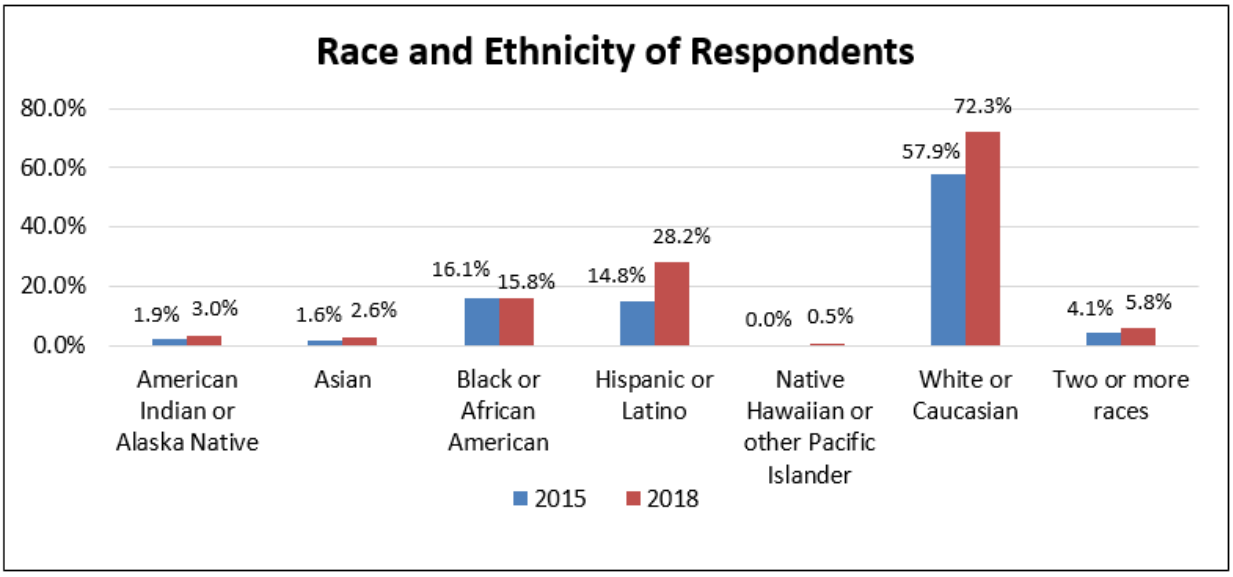
2018 Top Three Zip Codes of Residence by County

Berks County	Cumberland County	Dauphin County	Lancaster County	Lebanon County
19601, Reading (33.5%)	17013, Carlisle (31.3%)	17036, Hershey (21.3%)	17603, Lancaster (19.5%)	17042, Lebanon (27.7%); 17046, Lebanon (27.7%)
19601, Reading (19.1%)	17025, Harrisburg (16.4%)	17033, Hershey (13.4%)	17601, Lancaster (11.1%)	17078, Palmyra (18.9%)
19601, Reading (11.3%)	17011, Camp Hill (10.4%); 17055, Mechanicsburg (10.4%)	17104, Harrisburg (10.8%)	17554, Mountville (8.8%)	17003, Annville (5.4%); 17067, Myerstown (5.4%)

2018 Community Survey Respondents



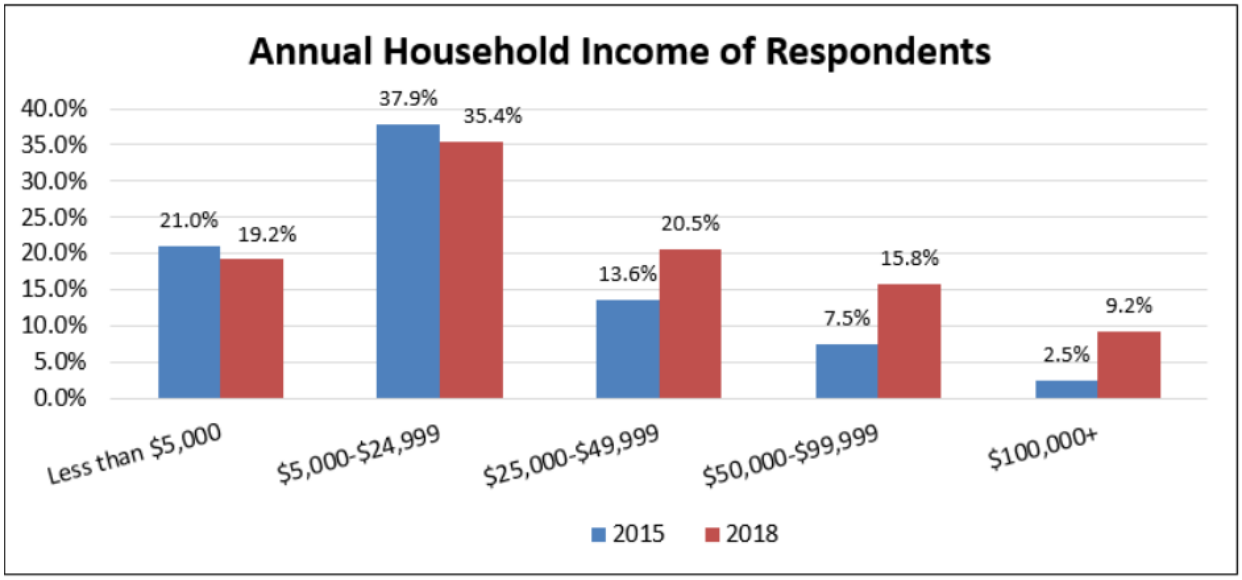


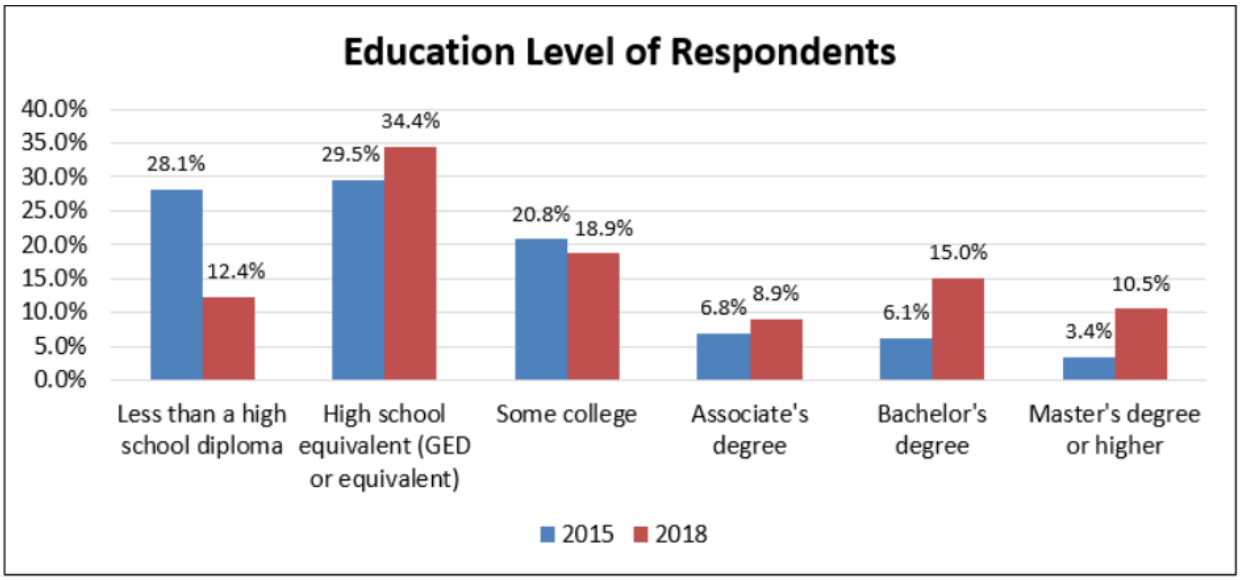


2018 Race and Ethnicity of Respondents by County

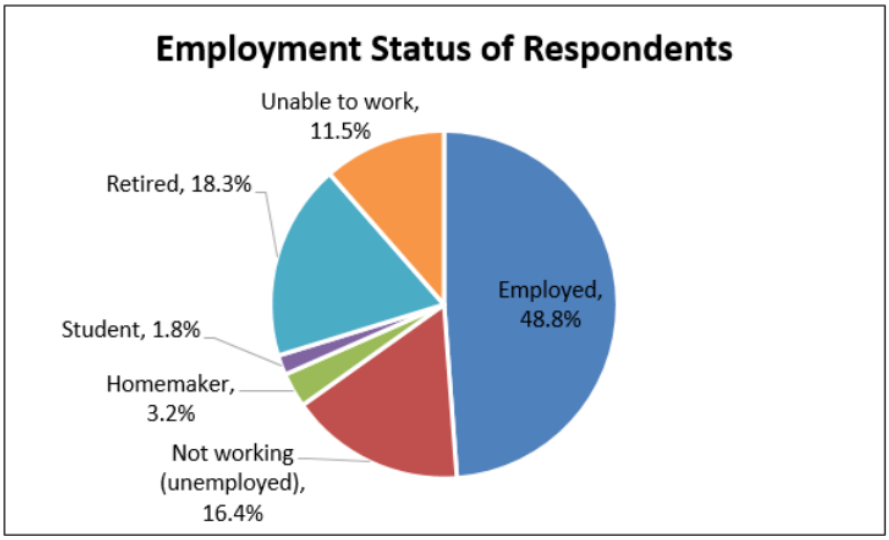
	American Indian or Alaska Native	Asian	Black or African American	Hispanic or Latino	Native Hawaiian or other Pacific Islander	White or Caucasian	Two or more races
Berks County	5.6%	3.8%	18.8%	57.7%	0.0%	65.0%	6.8%
Cumberland County	0.0%	3.6%	10.7%	9.3%	0.0%	82.1%	3.6%
Dauphin County	2.4%	1.6%	26.5%	13.8%	0.5%	63.8%	5.2%
Lancaster County	3.1%	2.6%	4.4%	13.0%	0.0%	84.7%	5.2%
Lebanon County	1.7%	2.6%	0.0%	23.5%	2.6%	85.5%	7.7%

*Hispanic/Latino ethnicity was collected separately of race. Percentages do not equal 100%.





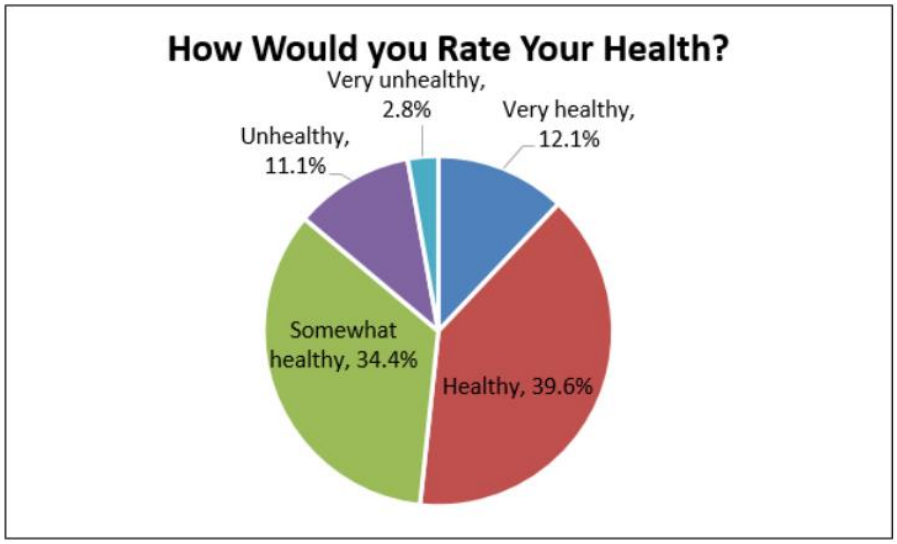
2018 Community Survey Respondents



Overall Health Status

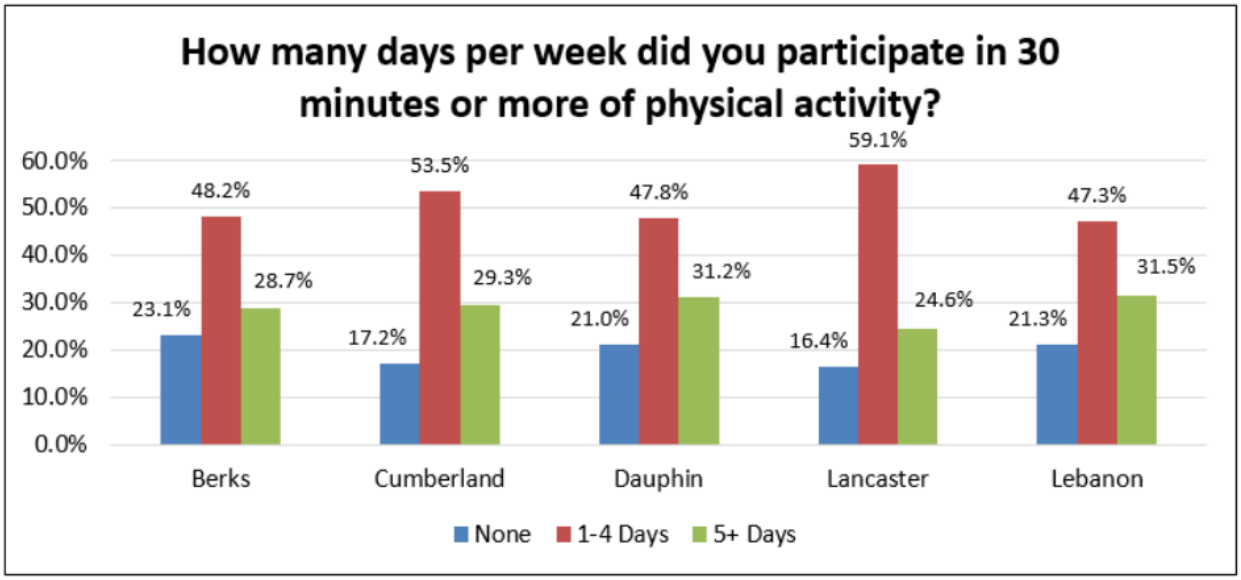
Approximately 74% of respondents report that they are “healthy” or “very healthy.” However, the majority of respondents do not meet recommended guidelines for physical activity or fruit and vegetable consumption. Fifty-eight percent of respondents have been advised by a healthcare provider to eat a healthier diet and 61% have been advised to exercise more.

2018 Community Survey Respondents



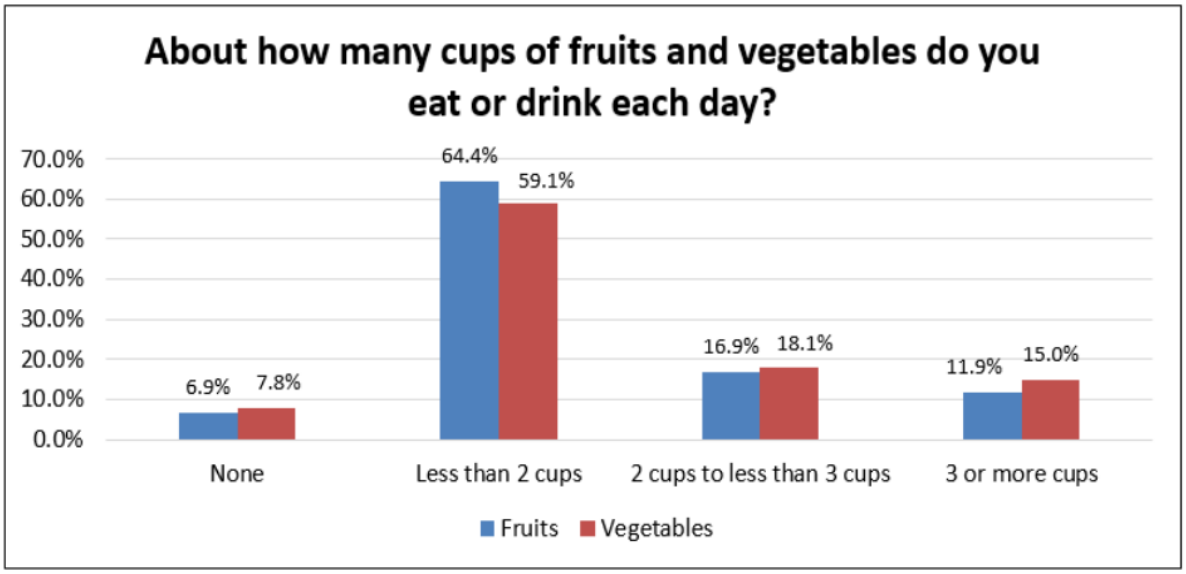
According to the Office of Disease Prevention and Health Promotion, adults should participate in at least 150 minutes of moderate-intensity aerobic physical activity each week, the equivalent of 30 minutes on at least five days. Less than 30% of respondents met the physical activity guideline; 21% of respondents did not participate in at least 30 minutes of physical activity on any day in the past month. Berks County respondents were the least likely to participate in any physical activity, followed by respondents from Dauphin and Lebanon Counties.

2018 Community Survey Respondents



Federal guidelines for fruit and vegetable consumption recommend that adults eat at least 1½ to 2 cups per day of fruit and 2 to 3 cups per day of vegetables. Less than 35% of all respondents reported eating two or more cups of fruits or vegetables each day. For some, low consumption of fruits and vegetables may be impacted by access to food or food insecurity. Eighteen percent of respondents reported being worried about running out of food within the past 12 months. Respondents in Dauphin and Berks Counties were the most likely to report being worried about running out of food.

2018 Community Survey Respondents



2018 Community Survey Food Insecurity by County

	Within the past 12 months, I worried whether our food would run out before we got money to buy more. ("Yes" response)	Are you able to have fresh, healthy foods (fruits/vegetables) when you want them? ("No" response)
Berks County	17.3%	7.2%
Cumberland County	13.8%	6.8%
Dauphin County	26.2%	11.2%
Lancaster County	8.1%	1.8%
Lebanon County	13.8%	7.8%

2018 Community Survey Food Insecurity by Race/Ethnicity

	Within the past 12 months, I worried whether our food would run out before we got money to buy more. ("Yes" response)	
	Percent	Count
American Indian/Alaska Native	33.3%	10
Black/African American	30.5%	40
Hispanic/Latino	17.7%	45
White/Caucasian	16.3%	104

*Data for Native Hawaiian/other Pacific Islander, Asian, and two or more racial groups are excluded due to low counts.

Tobacco use, particularly cigarette use, is declining across the state. According to 2016 BRFSS data, 18% of Pennsylvania adults smoke. Among the survey participants, 22% reported that they smoke. Black/African American respondents were the most likely to report smoking (34%). Less than 6% of respondents report using other forms of tobacco, including cigars, chewing tobacco, and electronic cigarettes.

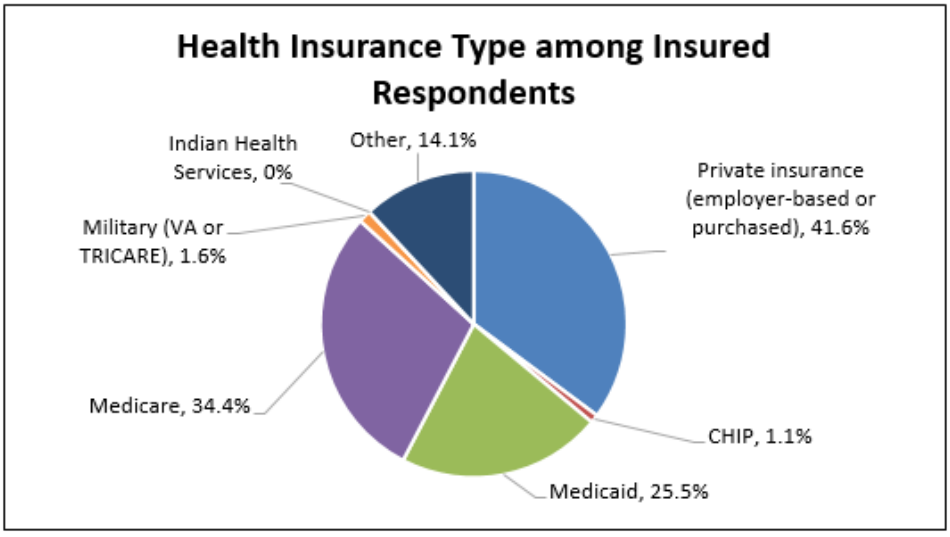
2018 Community Survey Tobacco Use in the Past 30 Days

	Not at all	Occasionally	Most days	Every day
Cigarette (manufactured/ roll-my-own)	77.6%	5.6%	3.8%	13.0%
Cigar/cigarillo/little cigar	93.6%	2.7%	0.7%	3.1%
Chewing tobacco/snuff	95.3%	3.0%	0.4%	1.4%
Electronic cigarette	98.3%	0.5%	0.6%	0.7%
Traditional pipe	97.1%	2.0%	0.3%	0.6%
Water-pipe/hookah	99.5%	0.4%	0.0%	0.2%

Access to Care

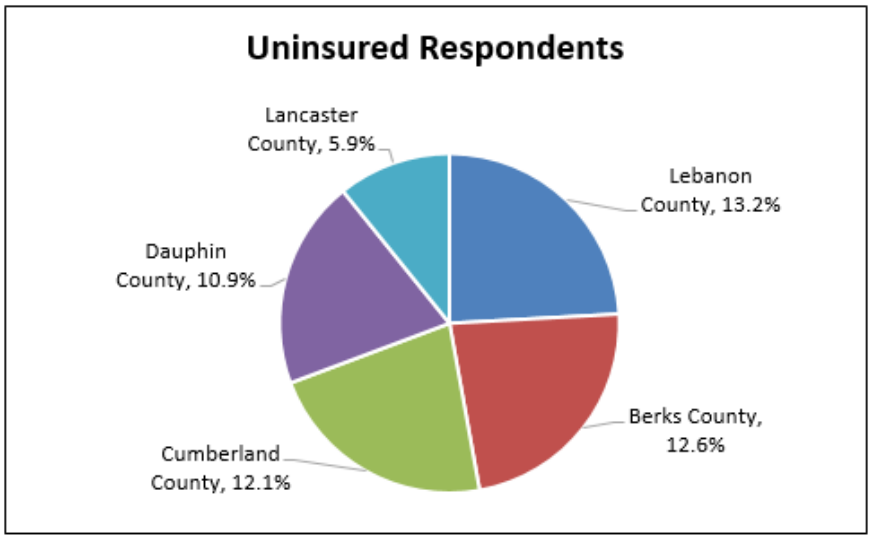
About 90% of survey respondents reported that they had health insurance. Respondents were asked to “check all that apply” in indicating their insurance provider. Approximately 42% of respondents indicated private health insurance coverage, including employer-based and self-purchased. About one-third of respondents indicated federal or state subsidized programs including Medicaid and/or Medicare. “Other” insurance types indicated by respondents included specific providers such as Aetna, AmeriHealth, Blue Cross Blue Shield, and Gateway, among others, which may have been private or public programs.

2018 Community Survey Respondents



Among the survey participants, Blacks/African Americans and Latinos were most likely to report being uninsured.

2018 Community Survey Respondents



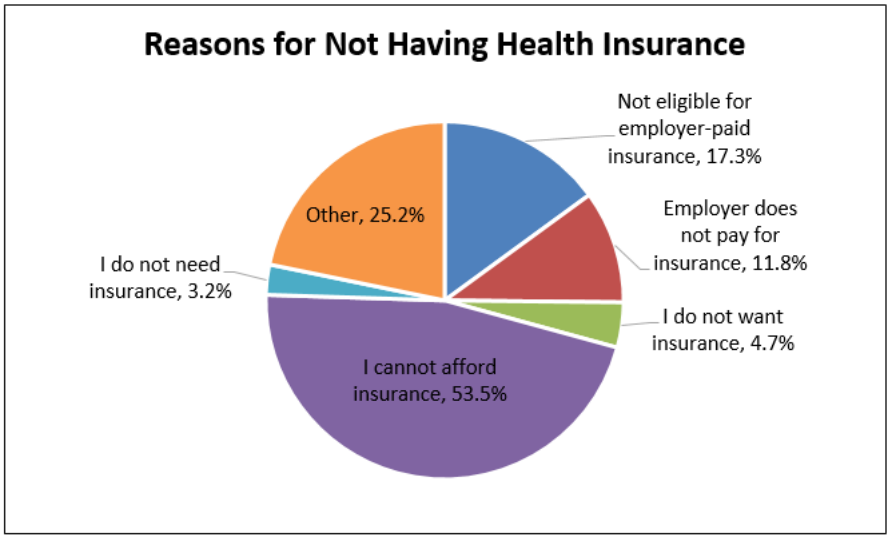
2018 Community Survey Uninsured Respondents by Race and Ethnicity

	Percent	Count
Black/African American	17.3%	26
Hispanic/Latino	11.8%	33
White/Caucasian	8.2%	59

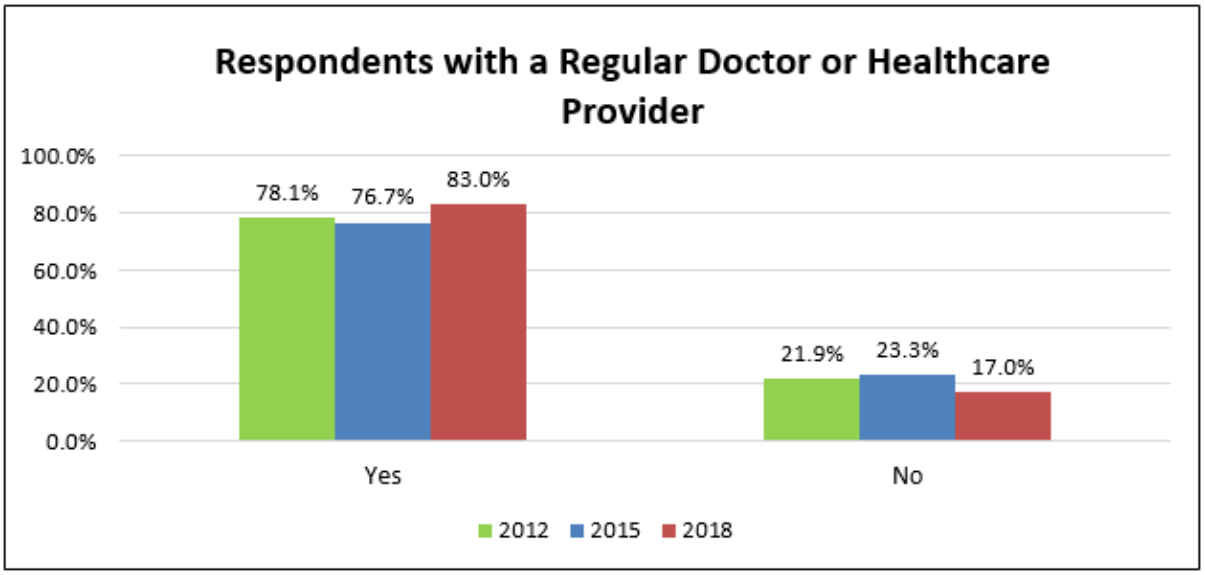
*Data for Native Hawaiian/other Pacific Islander, American Indian/Alaska Native, Asian, and two or more racial groups are excluded due to low counts.

Respondents could choose multiple reasons for not having health insurance. Slightly more than half (53.5%) noted that they cannot afford insurance. Among reasons chosen as “other” (25.2%), residents noted unemployment and ineligibility due to immigration status.

2018 Community Survey Respondents



Health insurance coverage can impact the number of individuals who have a regular primary care provider and receive routine care. Out-of-pocket healthcare costs may also prevent respondents from accessing healthcare when they need it. Approximately 23% of respondents could not see a doctor in the past 12 months due to cost. Berks County respondents were the most likely to not see a doctor due to cost barriers, followed by Dauphin County respondents. Contrary to this finding, Berks and Dauphin County respondents were among the most likely to receive a routine preventive checkup within the past year and to be advised to receive a flu shot or nasal spray.



2018 Community Survey Healthcare Provider Barriers by County

	Without a Regular Doctor or Healthcare Provider	Did not Receive Care in Past 12 Months due to Cost
Lebanon County	22.3%	15.3%
Berks County	21.7%	31.5%
Dauphin County	17.1%	24.2%
Cumberland County	15.9%	21.9%
Lancaster County	7.3%	13.1%

Minority racial and ethnic groups are more likely to experience barriers in accessing a healthcare provider. Approximately 25% of minority respondents did not have a regular provider and approximately 30% of respondents were not able to see a provider within the past 12 months due to cost. Consistent with having the highest uninsured rates, Black/African American and Hispanic/Latino respondents are among the least likely to be able to access a provider. However, contrary to these findings, Hispanics/Latinos were the most likely to receive a routine checkup within the past year.

Health literacy is another contributor to healthcare access. The Office of Disease Prevention and Health Promotion defines health literacy as “the degree to which individuals have the

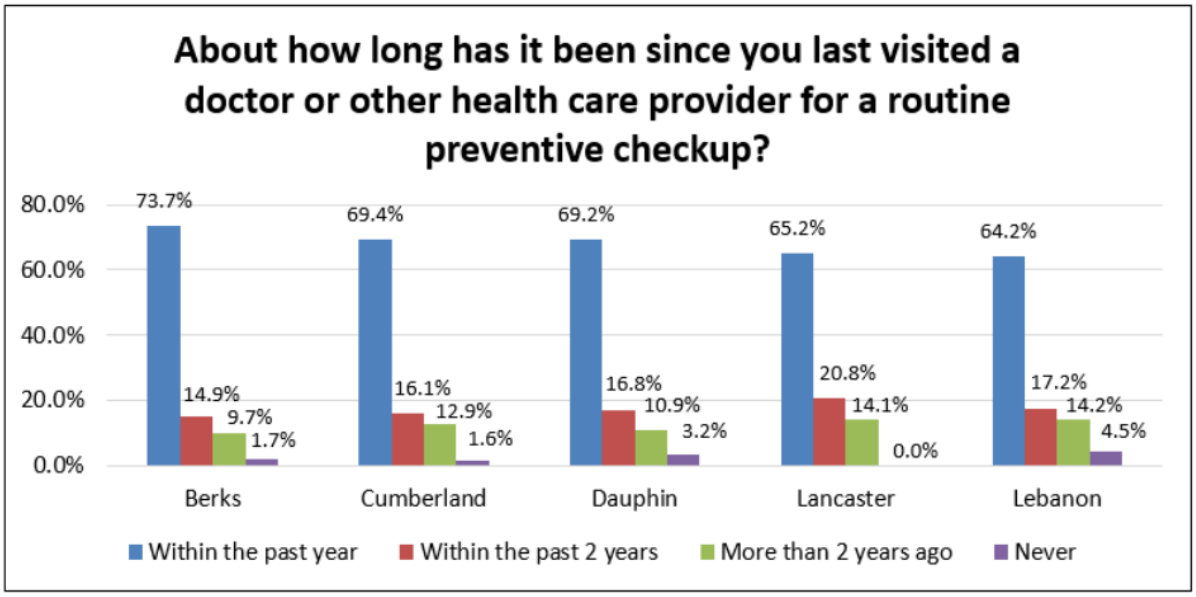
capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions." One indicator of limited health literacy is requiring assistance with health-related paperwork. One-fifth (21%) of respondents need help reading or filling out health-related paperwork; American Indian/Alaska Native and Hispanic/Latino respondents are the most likely to require assistance (41% and 39% respectively).

2018 Community Survey Healthcare Provider Barriers by Race and Ethnicity

	Without a Regular Doctor or Healthcare Provider		Did not Receive Care in Past 12 Months due to Cost	
	Percent	Count	Percent	Count
Black/African American	30.8%	45	30.8%	45
Two or more races	25.4%	15	30.4%	17
Hispanic/Latino	24.4%	64	32.4%	85
White/Caucasian	12.3%	86	18.9%	132
American Indian/Alaska Native	NA	NA	34.5%	10

*Data for Native Hawaiian/other Pacific Islander and Asian groups are excluded due to low counts.

2018 Community Survey Respondents



2018 Community Survey Routine Preventive Checkup within the Past Year by Race and Ethnicity

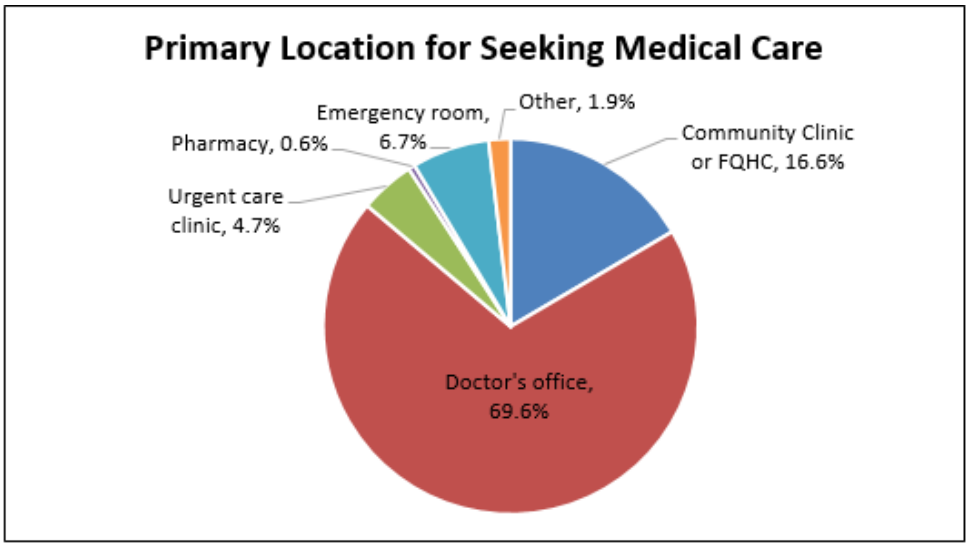
	Percent	Count
American Indian/Alaska Native	41.4%	12
Two or more races	51.7%	30
Black/African American	51.9%	81
White/Caucasian	62.5%	439
Asian	65.4%	17
Hispanic/Latino	71.7%	187

*Data for Native Hawaiians/other Pacific Islanders are excluded due to low counts.

Respondents indicated that they primarily seek medical care from a doctor's office. The doctor's office and other clinical settings are also the primary source for receiving health information among respondents (74%), followed by the internet (64%), and television (40%).

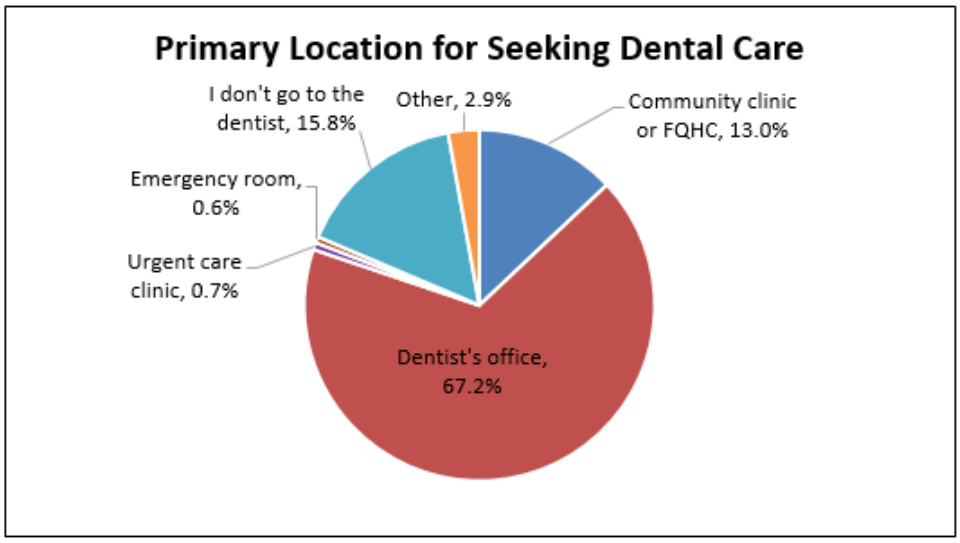
Five percent of respondents reported using urgent care clinics as their medical home, while 7% of respondents reported using the ER as their medical home. The percentage of respondents who reported using the ER as a medical home in the 2015 study was 10%.

2018 Community Survey Respondents

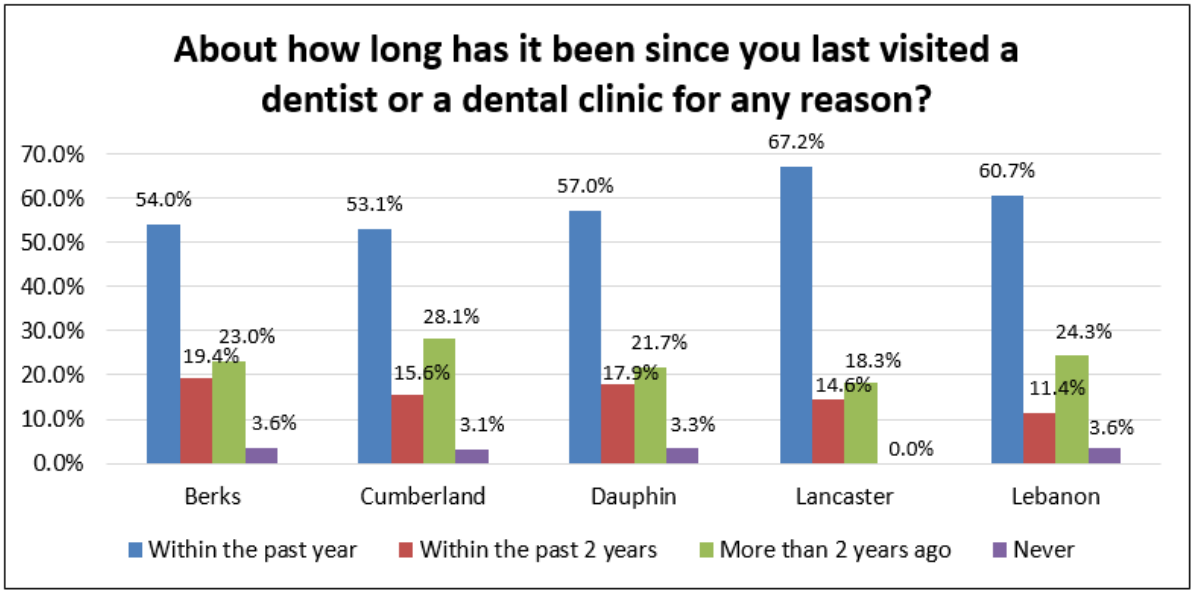


Across the service area, 58% of respondents visited a dentist or dental clinic within the past year. The majority of respondents primarily seek dental care from a dentist's office (67%); 16% responded that they do not seek dental care. Respondents from Lancaster and Lebanon Counties, as well as Asian and White/Caucasian respondents, were the most likely to receive dental care within the past year.

2018 Community Survey Respondents



2018 Community Survey Respondents



2018 Community Survey Dental Visits within the Past Year by Race and Ethnicity

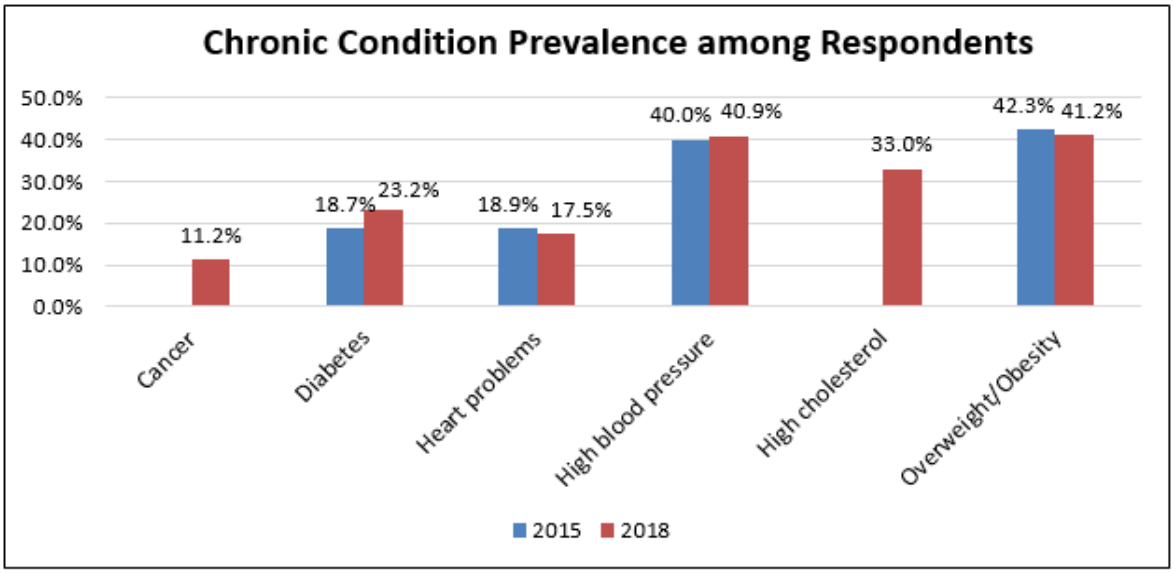
	Percent	Count
American Indian/Alaska Native	41.4%	12
Two or more races	51.7%	30
Black/African American	51.9%	81
Hispanic/Latino	56.6%	150
White/Caucasian	62.5%	439
Asian	65.4%	17

*Data for Native Hawaiians/other Pacific Islanders are excluded due to low counts.

Chronic Disease

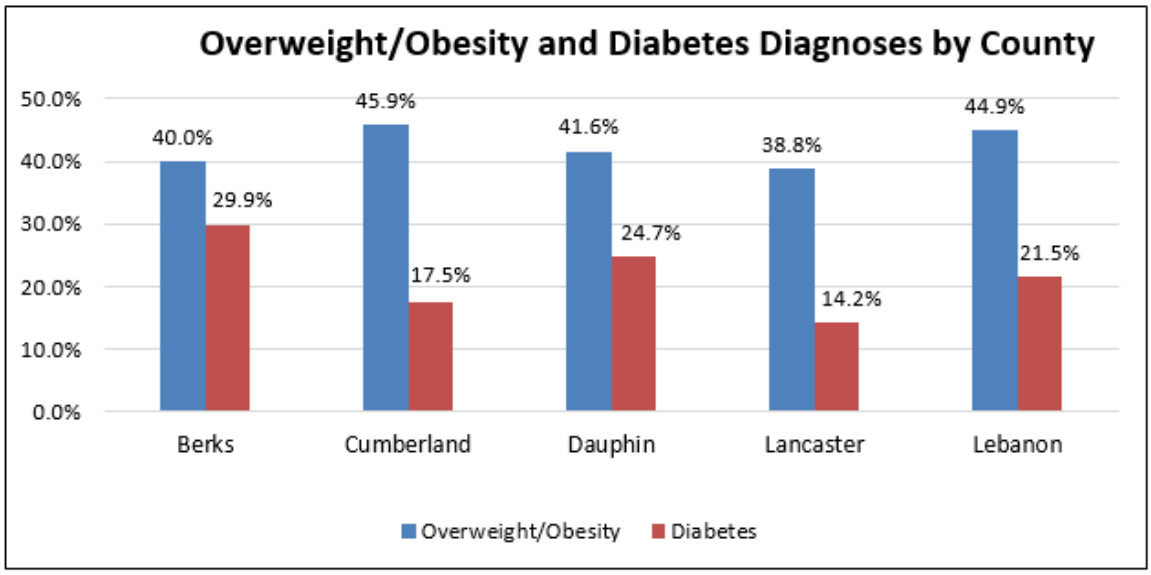
The most prevalence chronic conditions reported by respondents were high blood pressure (40.9%) and overweight/obesity (41.2%), followed by high cholesterol (33%). Approximately one-quarter of respondents also reported having been diagnosed with diabetes. Respondents from Berks and Dauphin County, as well as Hispanic/Latino respondents, were the most likely to have a diabetes diagnosis.

2018 Community Survey Respondents



Note: 2015 data comparisons are provided as available.

2018 Community Survey Respondents



2018 Community Survey Respondents Overweight/Obesity, Diabetes by Race, Ethnicity

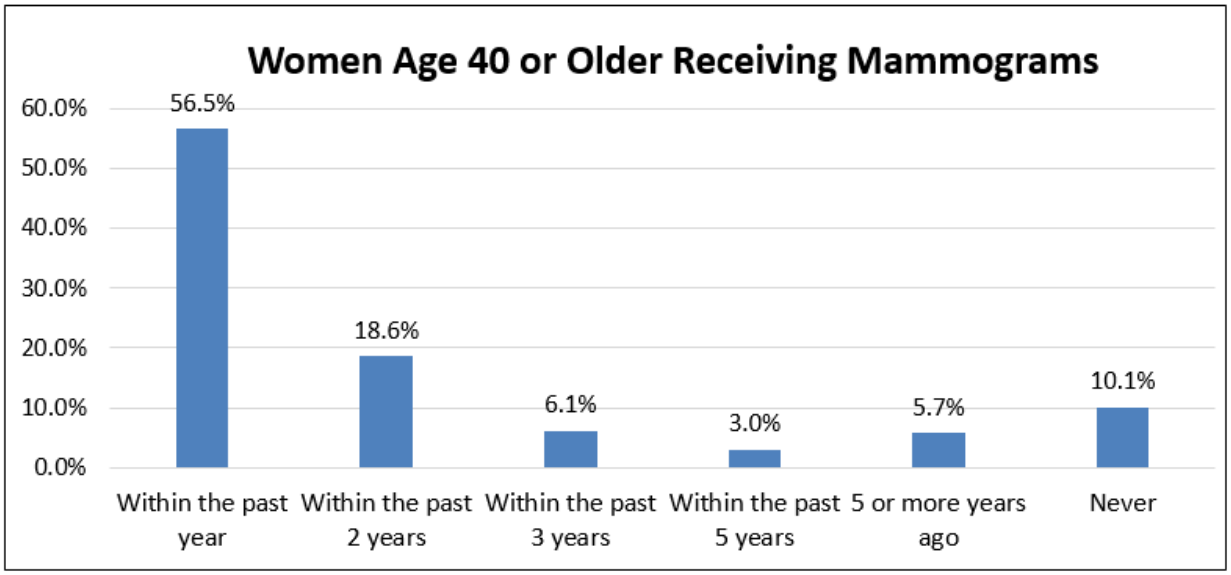
	Overweight/Obesity		Diabetes	
	Percent	Count	Percent	Count
White/Caucasian	43.2%	295	18.6%	123
Two or more races	37.0%	20	23.1%	12
Hispanic/Latino	35.5%	86	32.4%	79
Black/African American	35.2%	44	17.7%	22

*Data for American Indian/Alaska Native, Asian, and Native Hawaiian/other Pacific Islander groups are excluded due to low counts.

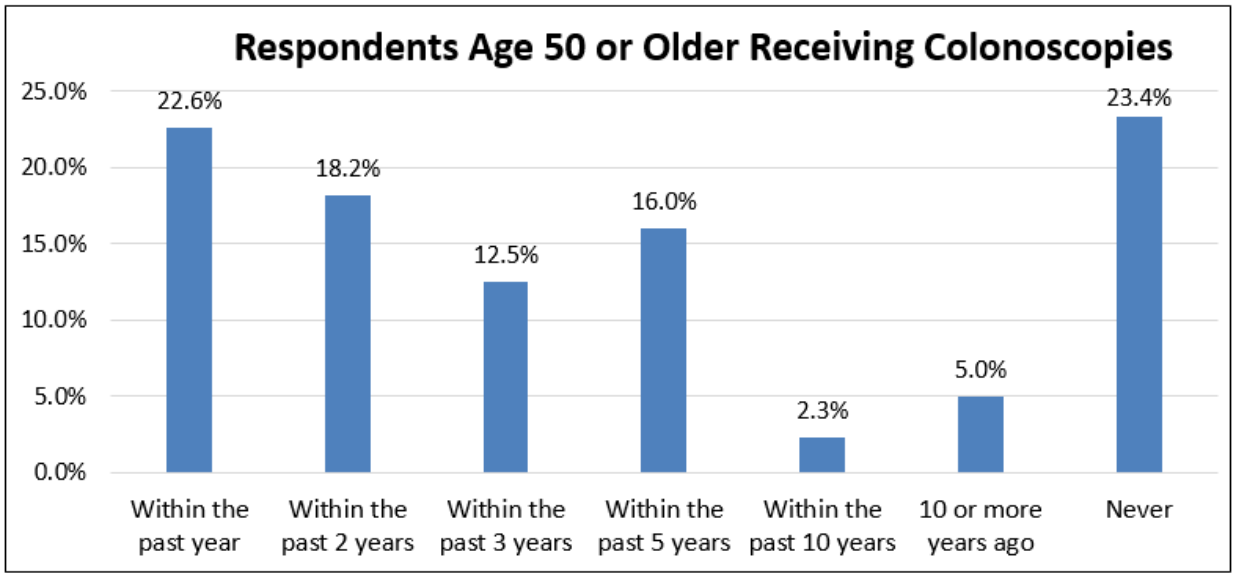
Approximately 11% of respondents reported having a cancer diagnosis. Cancer screenings are essential for the early detection and treatment of cancer. The following charts illustrate the prevalence of mammograms and colonoscopies among age-recommended respondents.

Mammograms are recommended for women age 40 or older every one to two years. Approximately 75% of female respondents received a mammogram within the past two years. Colonoscopies are recommended for adults age 50 or older every five to 10 years. Nearly one-quarter of respondents age 50 or older have never had a colonoscopy.

2018 Community Survey Respondents



2018 Community Survey Respondents

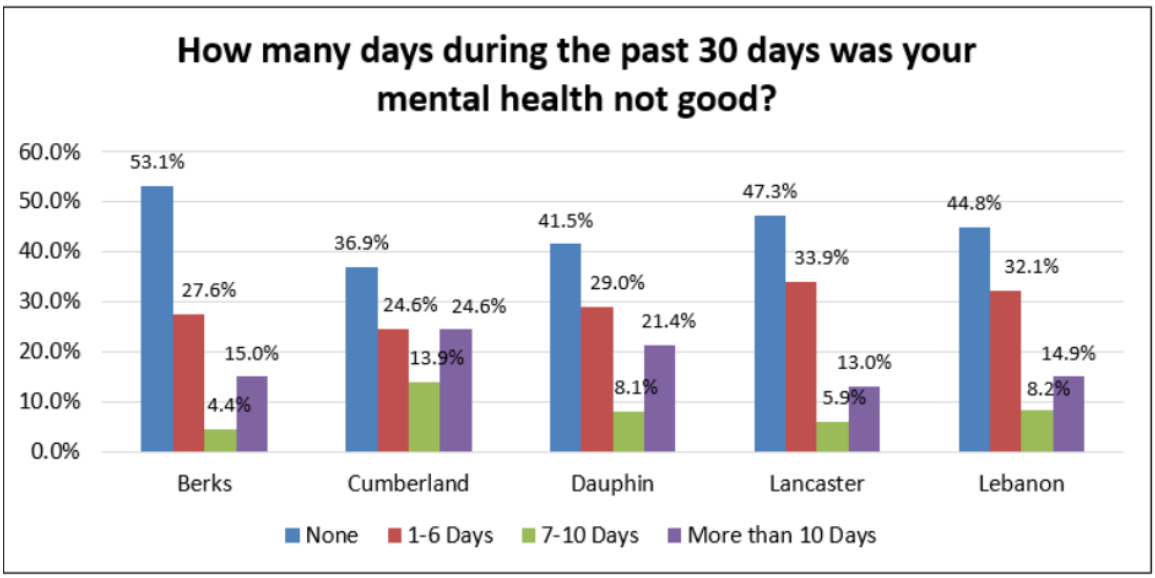


Mental Health and Substance Use Disorder

Across the region, 54% of respondents reported having poor mental health on at least one day in the past month and 24% reported having poor mental health on seven or more days in the past month among respondents from Cumberland and Dauphin Counties 30% or more reported poor mental health on more than seven days in the past month.

Approximately 28% of all respondents received services or treatment for a mental health issue in the past 12 months. An additional 14% of respondents needed but did not receive services. Respondents from Cumberland County were the most likely to have received mental health services, while respondents from Dauphin County were most likely to have needed services, but not received them.

2018 Community Survey Respondents

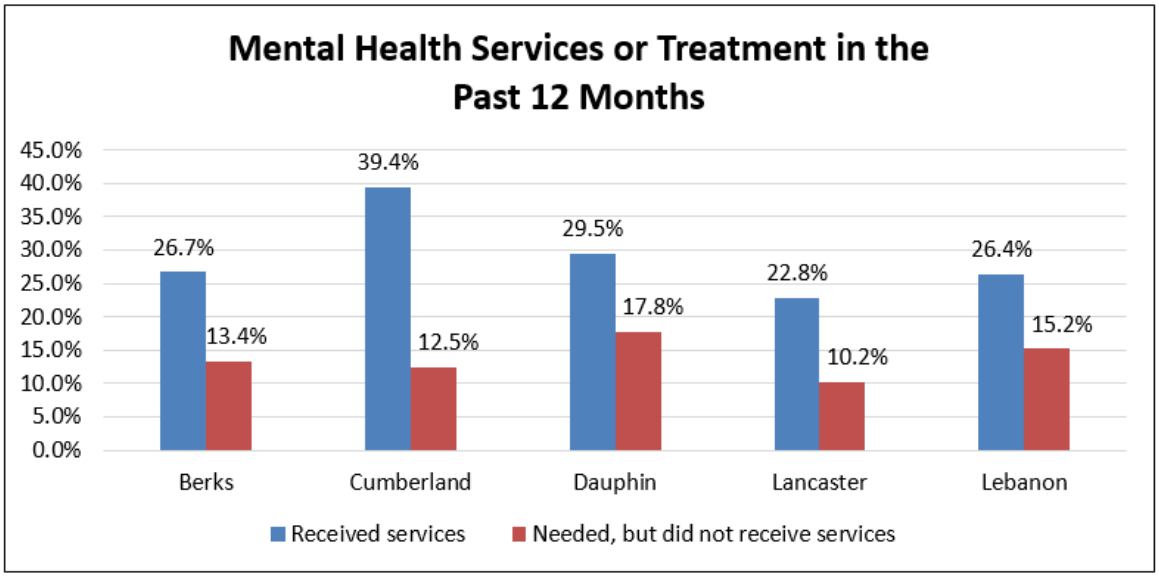


2018 Community Survey 7+ Poor Mental Health Days in Past 30 Days by Race and Ethnicity

	Percent	Count
Two or more races	27.9%	15
White/Caucasian	27.0%	182
Black/African American	21.1%	30
Hispanic/Latino	18.0%	47

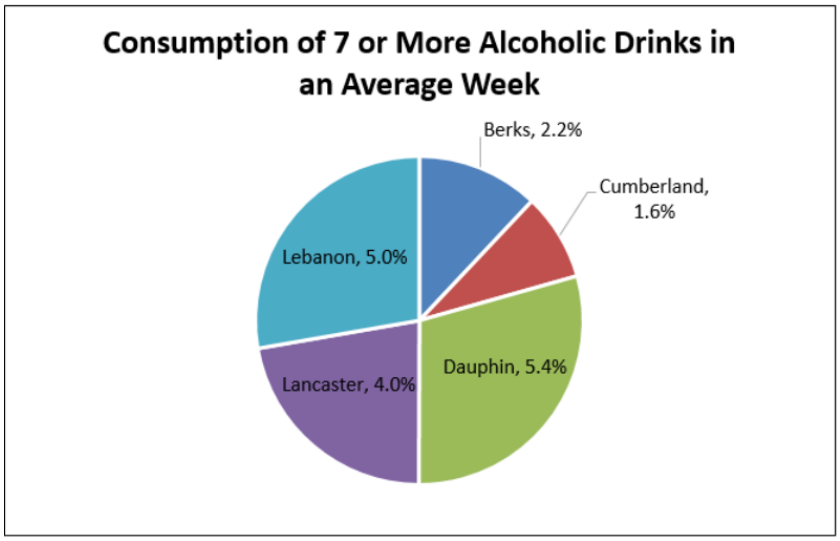
*Data for American Indian/Alaska Native, Asian, and Native Hawaiian/other Pacific Islander groups are excluded due to low counts.

2018 Community Survey Respondents

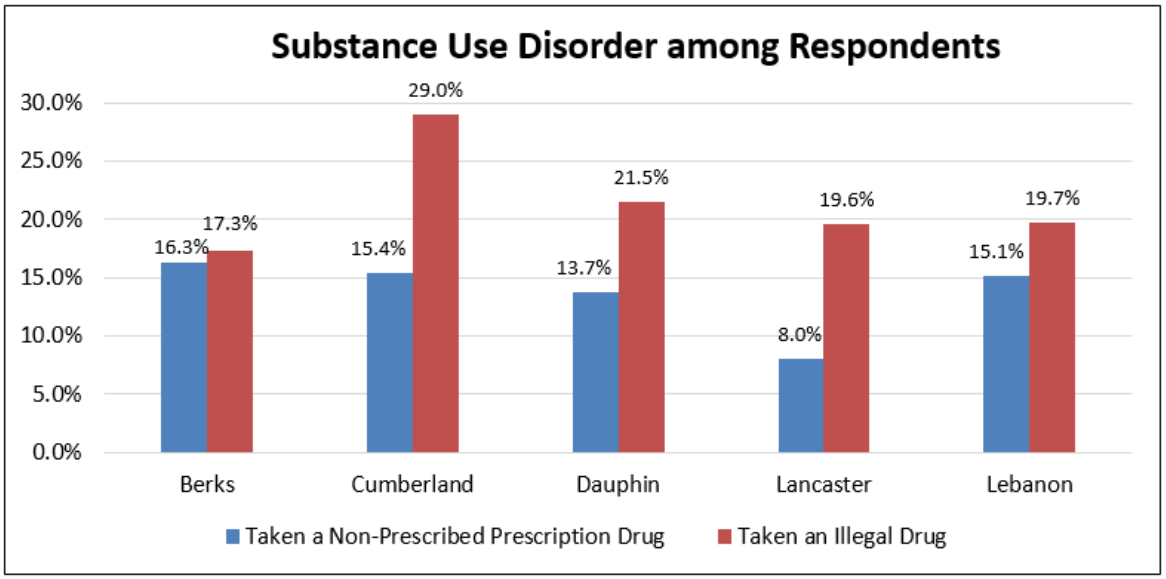


Across the region, 96% of respondents reported consuming less than seven alcoholic drinks in an average week. However, 14% of all respondents have taken a prescription drug that was not prescribed to them and 20% have taken an illegal drug (e.g. marijuana, cocaine, heroin, and LSD). Respondents from Berks County were the most likely to report taking a non-prescribed prescription drug, while respondents from Cumberland and Dauphin Counties were the most likely to report taking an illegal drug.

2018 Community Survey Respondents



2018 Community Survey Respondents



2018 Community Survey Substance Use Disorder by Race and Ethnicity

	Taken a Non-Prescribed Prescription Drug		Taken an Illegal Drug	
	Percent	Count	Percent	Count
Two or more races	17.2%	10	33.3%	17
Hispanic/Latino	17.0%	47	13.6%	34
White/Caucasian	13.3%	95	22.5%	150
Black/African American	12.3%	19	25.0%	33

*Data for American Indian/Alaska Native, Asian, and Native Hawaiian/other Pacific Islander groups are excluded due to low counts.

Respondents were asked to rate the availability of recreational drugs within their community. Marijuana was rated the most accessible with 46% of respondents stating it is “easy” or “very easy” to obtain it. Prescription opioids were rated the least accessible with 73% of respondents stating it is “difficult” or “very difficult” to obtain them.

2018 Community Survey Perceptions of Ease of Accessing Recreational Drugs

	Very difficult	Difficult	Easy	Very easy
Club drugs (cocaine, ecstasy, LSD)	56.2%	14.8%	14.4%	14.6%
Opioids (Heroin)	57.2%	15.3%	13.9%	13.6%
Marijuana or synthetic marijuana	43.9%	10.3%	21.3%	24.4%
Prescription opioids (OxyContin, Fentanyl, Vicodin)	56.7%	16.4%	15.1%	11.8%

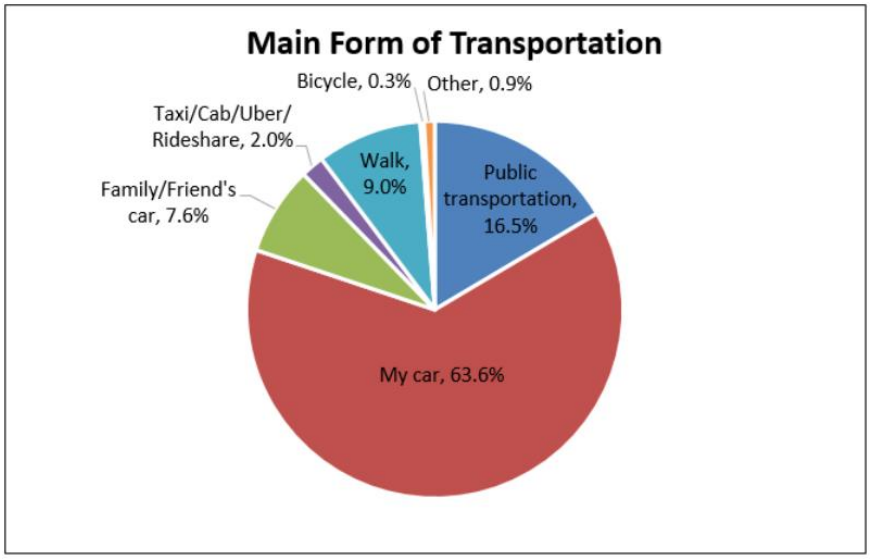
Community Health and Resources

The top three community health concerns identified by respondents were diabetes (13%), cancer (13%), and substance abuse (12%). The findings are similar to the 2015 top three identified health concerns of drug and alcohol use, cancer, and mental health. Diabetes was the fifth ranked health concern in 2015.

The majority of respondents reported being able to find available services within the community, but fewer individuals reported being able to use the services if needed. Respondents reported that services for individuals with HIV/AIDS are the least accessible in the community. Other services that were less accessible to respondents included sexually transmitted disease services, pregnancy care, and services for individuals who drink too much. The services that were most accessible to respondents were housing assistance, mental healthcare, employment assistance, eye care, and dental care.

The main form of transportation among respondents was their personal car, followed by public transportation. The majority of respondents who rode or drove in a car always wore a seatbelt (83%). Respondents from Lebanon County were the least likely to wear a seatbelt (75%). Among respondents with children under the age of eight, 91% always used a car seat or booster for their child(ren) when riding in a car.

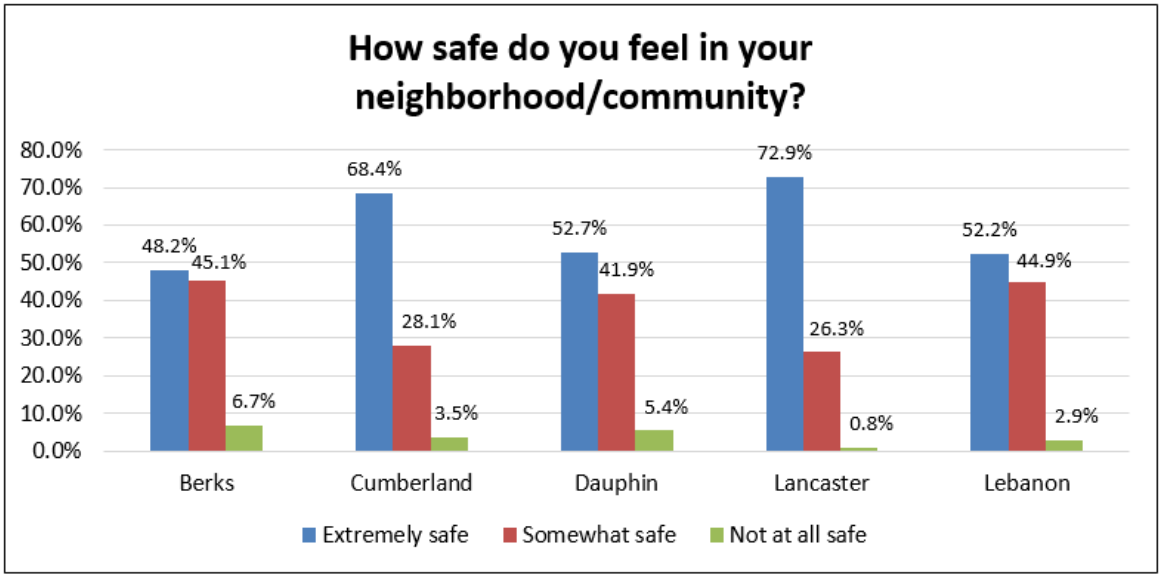
2018 Community Survey Respondents



Respondents were asked to rate how safe they feel in their neighborhood and close personal relationships. Approximately 56% of all respondents felt “extremely safe” in their neighborhood, while 4% felt “not at all safe.” Respondents from Berks County, as well as Black/African American respondents, were the least likely to feel “extremely safe” in their neighborhood.

Approximately 14% of all respondents felt unsafe in their close personal relationships within the past 12 months. Respondents from Dauphin, Berks, and Cumberland Counties were the most likely to report feeling unsafe in their relationships.

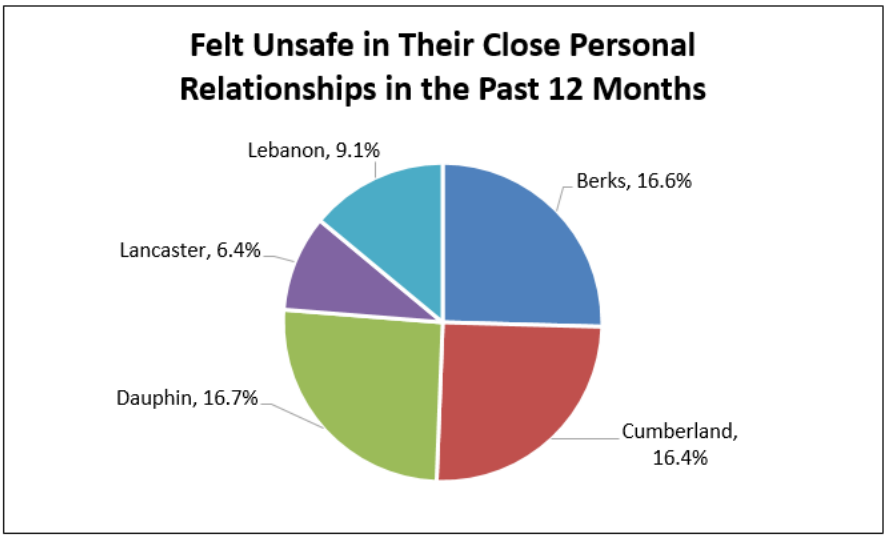
2018 Community Survey Respondents



Respondents Who Feel "Extremely Safe" in Their Neighborhood/Community by Race and Ethnicity

	Percent	Count
Black/African American	38.5%	57
Two or more races	44.6%	25
Hispanic/Latino	48.0%	123
American Indian/Alaska Native	48.2%	13
Asian	60.0%	15
White/Caucasian	62.0%	443

2018 Community Survey Respondents



Comments by Survey Respondents

Community members were asked to provide any comments they would like to share regarding health or their community. Many of their comments addressed the impact of social determinants of health (e.g. income, employment, housing) on health status as provided below.

- *"I had to take two loans out for dental care. Need more work done/can't afford it."*
- *"I have a hard time getting along, money wise, need a job. Can't get one."*
- *"I would like to work, but I don't have a permanent home."*
- *"We need more housing help in Lebanon County."*

Other comments addressed the need for more affordable or accessible healthcare services.

- *"I cannot find local eye care that accepts Medicaid; I had to drive to York. Dental is also difficult."*
- *"Complimentary healthcare is needed, not more pills."*
- *"Hamilton Health wait is too long. [Patients] are only allowed to [schedule] an appointment 90 days to 6 months away."*
- *"Healthcare is getting very, very expensive."*
- *"The problem isn't having insurance. It's that my insurance won't cover the medicines and services my doctors say I need."*

Respondents commented on programs that they viewed are needed in the community.

- *"Domestic violence and abuse victims must have better representation in the court systems and treated with compassion and care."*
- *"If you can bring doctors to talk about different diseases."*
- *"Initiate a comprehensive, long-term initiative to promote community wide physical activity."*
- *"It seems there is inadequate support, intervention, treatment for mental health and substance abuse."*
- *"More senior citizen programs that are easily available."*
- *"Need a place to get senior health info, socialize and exercise."*
- *"There should be more programs available to people "too old" to hire but "too young" to collect SS. Income guidelines should be re-evaluated as it does not match personal situations."*

Results from the 2018 Community Survey were compared with statistical secondary data, quantitative and qualitative responses from the Key Informant Survey, and then presented to community partners during the Partner Forums for their review and feedback in determining community health needs.

Partner Forums

Background

Two Partner Forums were conducted across the five-county service area, one in Hershey and one in Reading. The objective of the forums was to share CHNA findings to date and solicit feedback from community representatives. Participants were also asked to share insight on priority health needs, underserved populations, existing community resources to address health needs, and gaps in services. The forums were a platform to identify opportunities for collaboration to address health needs.

The Hershey Partner Forum was held on May 9, 2018, 11:00 am-1:30 pm at 100 Crystal A Drive in Dauphin County. Sixty-five (65) people attended. The Reading Partner Forum was held on May 15, 2018, 8:00 am-10:30 am at Penn State Berks Campus in Berks County. Fifty-two (52) people attended.

Attendees represented a wide variety of community organizations including health and social service agencies, senior services, schools, religious institutions, and other civic and social organizations. A list of attendees and their respective organizations is included in Appendix E.

Prioritization Process

The CHNA findings to date were provided to participants in advance of the forum and formally presented to attendees. Questions about the data were encouraged and clarified. At the conclusion of the data presentation, a list of five health topics derived from an analysis of the findings were presented to the group for discussion and recommendations in determining priority health needs. Participants were asked to offer suggestions for additional health needs not captured on the list. Participants in the Hershey session determined to add “housing” and “personal and community safety” to the list of needs to be voted upon. Discussion ensued about factors that impact health and subcategories within each of the health categories.

The tables below show the final health issues determined by the Partner Forum participants to be included in the prioritization exercise, as well as voting results. Voting results were based on scoring the following criteria on a scale of 1 (low) to 4 (very high) across each health issue.

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

Voting results are presented in order of cumulative scores across all criteria, with scoring of individual criterion displayed. In both sessions, participants’ generally rated “scope of the issue” and “severity of the issue” higher than “ability to impact,” pointing at increased resources, learning, policy, and/or community readiness needed to address the identified health issues.

Voting in both Partner Forums ranked Substance Use Disorder and Mental Health as top priorities among the health issues. This ranking was consistent with results from the Key Informant Survey. Scoring results varied slightly for the remaining issues, with Access to Care, Chronic Disease Management and Healthy Lifestyles included within the top ranked five issues in both sessions.

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

Overall Ranking	Identified Health Need	Scope of the Issue	Severity of the Issue	Ability to Impact the Issue	Overall Score
1	Mental Health	3.5	3.4	2.6	9.5
2	Substance Use Disorder	3.1	3.4	2.4	8.9
3	Access to Care	2.9	2.8	2.4	8.1
4	Chronic Disease Management	2.9	2.7	2.3	7.9
5	Healthy Lifestyles	2.8	2.6	2.3	7.6
6	Personal and Community Safety	2.4	2.4	2.1	6.9
7	Housing	2.1	2.2	1.6	5.9

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

Overall Ranking	Identified Health Need	Scope of the Issue	Severity of the Issue	Ability to Impact the Issue	Overall Score
1	Substance Use Disorder	3.2	3.1	2.5	8.7
2	Mental Health	3.3	3.1	2.1	8.5
3	Chronic Disease Management	3.0	2.8	2.6	8.5
4	Healthy Lifestyles	2.9	2.9	2.6	8.4
5	Access to Care	2.8	2.8	2.6	8.2

The voting and follow-up discussion illuminated the complexities of these issues and diverse factors that influence our efforts to improve outcome measures for health needs. The facilitators encouraged open dialogue among the group to discuss the ranking and participants' considerations in assigning scores. Participants discussed how each health issue had a broader impact on the community beyond the individuals directly affected, which impacted their scoring.

Small Group Discussion

Participants were divided into small groups based on their expertise, knowledge or interest to discuss individual priority areas. A large format interactive map was used to encourage creative thinking and discussion within the group. A prepared facilitator led table participants through a common discussion tool to capture participant insights. Participants were asked to respond to the following questions.

1. Define the Problem: How does this issue impact your community?
2. Develop Your Vision: What does the community look like if this issue is solved?
3. Map a Course: How will you achieve your vision?

Group participants provided responses through discussion and by writing their thoughts on notecards to attach to the interactive map. Facilitators also captured discussion notes. Many consistent trends emerged from the small group discussion as described below.

Key factors contributing to health disparities across all issues included poverty; language and literacy comprehension; lack of transportation; lack of insurance; and limited providers. These commonalities across health issues foster opportunities for cross-cutting initiatives to impact multiple community health needs concurrently.

In developing a vision for community health improvement, the small groups came up with common elements across the varying health issues that described what the community would look like if the issue was solved. Common vision descriptions included equitable access for all community members; heightened awareness and use of existing resources; increased community interaction and productivity; reduced disease and improved health habits among residents.

Asked to map a course to reach their community vision, small group participants defined these common initiatives to address health issues: increase health literacy among residents; improve social determinants of education, poverty, housing, and food access; drive advocacy and education of legislators to change policies; engage community members and CBO partners to solve issues; define more access points to receive healthcare and resources to help individuals navigate and coordinate care.

In addition to the common themes listed above, specific comments and unique responses are outlined below. A list of existing assets according to health issue, and as identified by the participants, is included in Appendix F.

Mental Health Small Group Discussion

Mental health was ranked as the top health need in the Hershey Partner Forum and as the second highest health need in the Reading Partner Forum. Mental health was also ranked as one of the top three health conditions by Key Informant Survey respondents.

Small group participants outlined the following issues related to mental health.

- Individuals needing mental health services face a myriad of social, societal, and healthcare system barriers in receiving care, including the following:
  - There is a lack of mental health providers, especially psychiatrists
  - Denial, stigma, finances, and lack of resources keep people from receiving care
  - There is a disconnect between physical health and mental health
  - Language and/or cultural barriers exacerbate challenges
  - Availability of transportation and long wait lists for services keep people from receiving timely care
  - Providers and consumers have difficulty in distinguishing between mental health conditions and dementia in seniors
  - Primary care providers often manage behavioral health needs due to a lack of specialty providers
  - Mental health support in schools is lacking

Participants in the mental health discussion group used the following phrases to describe attributes of their "vision" for a healthy community.

- Immediate access to services when needed with less patient hospitalization
- School-based health centers available in all districts
- Decreased depression and suicide rates
- Stable housing; increased employment; more productive community; less violence
- Adequate number of psychiatrists and mental health providers that are paid equitably
- Specialty housing and services
- Transportation to services available to all
- Community educated about mental health as a treatable illness
- Decreased stigma; increased awareness of signs and symptoms of mental illness
- Community resources, outreach, and support groups available to all
- Better payment models for mental health care delivery
- Alternative prison diversion programs for perpetrators with mental health illness
- Best practice sharing and celebrating success among providers

The following actions or resources were listed to achieve a vision for a healthy community related to mental health care needs.

- Develop a county-wide diversion system to address behavioral health among individuals who enter the criminal justice system
- Define proactive and preventive approaches to mental health, including education about mental health conditions
- Advance integrated care for medical and behavioral health; including single location access to medical, behavioral, dental, vision care
- Increase access to and availability of early childhood services
- Decrease barriers to accessing needed medications
- Provide afterhours services to meet the needs of working adults
- Encourage volunteerism within the community to promote better mental health

Substance Use Disorder Small Group Discussion

Substance use disorder was ranked as the top need in the Reading Partner Forum and the second highest need in the Hershey Partner Forum. Substance use disorder was also ranked as one of the top three health conditions by Key Informant Survey respondents.

Small group participants outlined the following issues related to mental health.

- All populations are affected by substance use disorder but it is often more visible in vulnerable and poorer populations
- Drugs are easily accessible and are often used by individuals to self-medicate
- Children often witness their parent's substance use disorder which models risk behaviors and contributes to adverse childhood experiences (ACE)
- There is a lack of community engagement to address substance use disorder issues
- There is a "drug culture" that considers drug use as normal
- There is lack of police resources to address substance use disorder in the community
- It is difficult to access or afford substance use disorder rehabilitation and other treatment services, particularly by the most vulnerable populations

Participants in the substance use disorder discussion group described attributes of their "vision" for a healthy community as listed below.

- Youth would have many activities available to them to encourage healthful behaviors i.e., after school programs, clubs, sports, parks and recreation resources, community centers
- The same effort would be put toward prevention and education as is for treatment
- New practices and alternatives to pain management would lower the cumulative supply of prescription opioids circulating in the community
- There would be no stigma towards substance use disorder issues
- All community members would be able to contribute to society and attain a better quality of life

Small group participants outlined action plans or needed resources to support substance use disorder and achieve their vision for a healthy community.

- Develop relationships with providers outside of the area to increase access to care
- Provide education and open dialogue to address stigma towards substance use disorder
- Support and advocate for those with substance use disorders
- Increase the number of programs and activities available for youth and all populations to encourage healthful behaviors
- Share information between emergency responders, emergency departments, and pharmacies to identify frequent Narcan users
- Add community service to substance use disorder treatment plans to promote community engagement
- Emphasize treatment as a protocol for first time substance use disorder offenders
- Engage the media to help increase knowledge and awareness of substance use disorder and highlight positive outcomes

Chronic Disease Management Small Group Discussion

Chronic Disease Management was ranked as the third highest need in the Reading Partner Forum and the fourth in the Hershey Partner Forum.

Small group participants outlined these concerns related to chronic disease management.

- A lack of transportation to get to medical appointments, community services, grocery stores, etc.
- Limited English proficiency is a barrier to receiving care and health education
- Lack of common agreement and understanding among providers of how to manage chronic conditions
- Stigma related to diagnosis
- Unintended challenges for those who need pain medications due to stricter oversight of prescription opioids
- Varying resources for disease support and outcomes among neighboring zip codes
- Lack of specialists and support services for less common diseases
- Not enough providers available at free clinics
- Care coordination and transition between providers needs improvement
- Patient compliance and self-management is impacted by cultural habits, family support, denial, trust, cost to change habits, etc.
- Difficulty in determining and leveraging motivation for patients for self-management
- Patient self-management information is not always culturally or literacy appropriate

Small group participants detailed the following attributes of their “vision” for a healthy community as listed below.

- Better lifestyle choices, improved mental health, less healthcare needed
- More social interaction; people out and about in the community
- Collective decrease in number of medications taken; cost of medical supplies will decrease with less demand
- Families able to invest financial resources into areas other than healthcare costs
- Lower per capita healthcare costs as chronic disease is managed
- Increased productivity and reduced absenteeism at work; lower insurance costs
- Transportation available and convenient to all
- Diverse and culturally sensitive community health workers are available in all communities
- Key health messages are consistent and echoed across providers and support systems
- Improved care transition from hospital to home

Small group participants outlined action plans or needed resources to achieve their vision in the following ways.

- Employ additional community health workers, nurse navigators, and primary care providers
- Have providers write “isolation prescriptions” for patients to go to community centers and social service programs

- Engage cultural centers and leaders as partners for support and healthy messaging
- Increase policy advocacy and investment in prevention over treatment
- Develop healthcare providers to support transition from hospital to home
- Increased home care or house calls by providers and physicians
- Reduce administrative burden and productivity expectations for primary care providers to refocus primary care on patient treatment and well care

Access to Care

Access to care was the third ranked need in the Hershey Partner Forum and the fifth ranked need in the Reading Partner Forum.

Small group participants defined their concerns related to access to care.

- Seniors, homeless women and children, immigrant, LGBTQ+ community, and minority populations are most impacted by inability to access care when they need it
- Lack of available and convenient transportation presents a barrier to receiving care, particularly in areas outside of city centers
- Primary care providers, clinics, and other healthcare office hours of operation are limited
- Language differences, cultural norms and values, and health illiteracy present significant challenges to receiving care, particularly among vulnerable populations
- Cost of insurance, copays, insurance eligibility, and availability of providers reduce the use of primary care providers and consistency of a medical home; the ED is seen as easier or more convenient to access for some
- Lack of specialists within the community
- Cost, health illiteracy, language differences, lack of transportation, and other barriers keep patients from filling prescriptions; providers do not follow up to see if prescription was filled
- Fear of repercussions deter undocumented residents from accessing care

Small group participants used the following attributes to define their “vision” for a healthy community.

- Systemic overhaul of the fractured healthcare system
- Increased work productivity, less staff turnover and absenteeism
- Increased citizenship
- Reduced rates of mental health, suicide, substance use disorder
- Residents’ healthy lifestyles lead to reduced need for care and medications, and improved health outcomes
- Use of a central navigator to help patients access needed resources
- All residents have health insurance and know how to use it to access the services they need
- Culturally competent care is available where and when it is needed
- There is enough funding for community health workers and social workers
- Chronic conditions are well managed

Small group participants outlined action plans or needed resources to achieve their vision in the following ways.

- Education, sharing information, and creating or maintaining relationships across partners
- Provide a mobile approach and take the care to the people who need it
- Implement the use of a medical provider, social worker, and legal partner during care coordination
- Create a community resource inventory specifically for the undocumented population
- Invest financial resources into prevention
- Increase the number of mental health providers

Healthy Lifestyles

Healthy lifestyles was ranked as the fourth health need in the Reading Partner Forum and the fifth health need in the Hershey Partner Forum.

Small group participants outlined these concerns related to chronic disease management.

- Lack of a feeling of "community" that encourages active lifestyles
- Lack of nutrition education and confusing messages over what foods are healthy
- Rate of activity linked to one's culture; exercise may not be a part of cultural norms
- Food insecurity can bring about limited and poor food options
- Insufficient safe parks and open spaces in the city
- Economic inability to "afford a healthy lifestyle;" i.e., high cost of fruits and vegetables, lack of time to exercise, lack of transportation to get to resources; cost of memberships
- Using high reading level writing and use of clinical jargon reduce patients' ability to read, understand, and follow health instructions and education materials
- Public policy and stigma reduces use and creates distrust of health and social programs among would-be participants, including immigrants
- Increased social acceptance of vaping as alternative to smoking
- Increased screen time for children and adults
- Stressors of everyday life and lack of "disposable" time to devote to health
- Priority of basic needs outweighs importance of health improvement

Small group participants used the following attributes to define their "vision" for a healthy community.

- Use of active transit; convenient and accessible transportation system (e.g. safe streets, bike lanes, walking paths, sidewalks in neighborhoods)
- More community interaction; less isolation, especially among seniors
- Improved health outcomes; decreased obesity; decreased chronic disease
- Decentralized healthcare options in the community
- Neighborhood walking groups and exercise programs; a walkable city
- Greater communication and collaboration between partners to reinforce healthy habits
- Improved communication between racial and ethnic groups
- More availability of affordable healthy food close to home; increased neighborhood farmers' markets; mobile markets

- Safe recreation areas, e.g., parks, trails, community centers
- Improved mental health; increased happiness
- Accurate, unbiased education regarding tobacco and vaping

Small group participants outlined action plans or needed resources to achieve their vision in the following ways.

- Community planning and development; community events
- Build trust among diverse cultures
- Leverage religious institutions to promote healthy lifestyles and community resources
- Create a Welcome Task Force for new families moving into the area and a Spanish speaking hotline for new families
- Provide data about health impacts of vaping

Food Insecurity

Food insecurity was added as a discussion group in recognition of the many initiatives underway in the region to increase consistent access to healthy foods.

Small group participants outlined the following issues related to food insecurity.

- Food deserts exist throughout the region with little access to fresh produce
- High cost of nutritious food reduces ability for many to afford to eat more of it; poverty is a key contributor to food insecurity
- Lack of education to prepare tasty, healthy food that reflects food culture
- Lack of education and navigation for a robust food social safety net
- Stigma surrounding food insecurity
- Specialized diets are expensive for some to afford
- Lack of available, convenient transportation to access better selection and lower cost food

Partner Forum participants used the following phrases to describe attributes of their “vision” for food security.

- Unlimited access to fresh, convenient, affordable healthy food
- Widespread health and nutrition education
- Reduced chronic conditions and improved disease management
- Institutionalized healthy lifestyles as a norm of daily living
- Integrated “one stop shops” for healthy food and other services, e.g., school and farm stands, farm market at health provider
- Improved mental and physical health
- Reduced stress among residents and a healthier community
- Healthy food habits esteemed by all
- Availability of food regardless of rural, suburban, or urban setting
- Reinvestment of “sick care” resources to address other needs

Small group participants outlined the following action plans or needed resources to achieve their vision.

- Advocacy at systemic and local levels; identify and mobilize state and federal partners
- Connect consumers to Supplemental Nutrition Assistance Program (SNAP)
- Improve navigation to find available resources
- Increase food access to provide better food options
- Tailor communication and message to meet audience
- Build neighborhood gardens that reflect local cultural heritage and food cultures

Personal and Community Safety

During the Hershey Partner Forum, Personal and Community Safety was determined as an additional community need to be explored. This topic was not discussed at the Reading Partner Forum.

Small group participants defined the following concerns related to personal and community safety.

- Lack of social supports; acceptance of unsafe conditions
- Underreported crime and violence
- Increased substance use disorder and overdose
- Burdens on emergency responders regarding funding and wages
- Impact of housing and homelessness on personal and community safety
- Poverty levels that contribute to decreased personal or community safety
- Lack of education attainment contributes to social factors that impact violence
- Lack of knowledge about how to increase personal and community safety
- Domestic violence and child abuse and neglect
- Targeted LGBTQ+ community violence and domestic partner violence
- Vulnerability of immigrants, refugees, non-English speakers in seeking help or prosecuting perpetrators
- Impact of trauma and adverse childhood experiences on health outcomes
- Childhood injuries due to vehicles, bicycles, traffic, etc.
- Falls at home among seniors

Small group participants detailed attributes that reflected their “vision” for a healthy community.

- Decreased use and costs for health, social services, policing, and first responders
- Increased resources for equity; respect and regard for diversity
- Reduced school absenteeism; higher education attainment; better life outcomes
- Improved community dynamics; reduced stress; refocused efforts on other areas of life
- Physically active seniors; longer life expectancy; improved health outcomes and outlook

Small group participants outlined the following actions needed to achieve their vision.

- Identify root causes; develop pilot programs and adopt policy changes to address them
- Identify and enlist people with expertise of impacted populations to help address issues
- Collect additional data to better understand factors, trends, disparities
- Provide more English as a Second Language (ESL) classes
- Develop a collective vision for a safer community

Housing

Housing was recommended as an additional health issue to be discussed at the Hershey Partner Forum. During the large group discussion, participants discussed ways in which housing was a key contributing factor for health. Availability, affordability, stability, safety, and environmental hazards were noted as challenges related to housing issues that impact individuals' health status or take priority over health needs. As small groups were determined for further discussion of priority areas, participants decided to address housing as a factor for other health concerns, rather than hold a small group that focused specifically on housing issues.

Feedback from the partner forums were compiled and reviewed with the CHNA Steering Committee to make the final determination on the priority areas the Penn State medical centers would address. Specific insights and recommendations from community partner attendees were integral in developing implementation plans.

Focus Groups Summary

Background

As part of the 2018 CHNA, three focus groups were conducted in May and June 2018 within the hospitals' primary service areas. The target audiences for the focus groups included underserved or vulnerable populations that the CHNA Planning Committee determined were not adequately represented in other study methodologies. Groups were conducted with 1) Hispanic/Latino residents; 2) food pantry recipients; and 3) local veterans.

The objectives of the sessions were to collect perspectives on individual and community-wide health issues, barriers to accessing healthcare, preferences and experiences in accessing health and social services, and existing or needed community resources. A total of 25 people participated in the focus groups. Specific session dates, locations, and number of attendees are listed below.

Focus Group Sessions

Hispanic/Latino Residents in Reading
Location: Centro Hispano, 501 Washington Street, Reading
June 1, 2018
Number of Attendees: 10

Food Pantry Recipients/Working Poor
Location: Cocoa Packs Food Bank
Hershey Middle School, 500 Homestead Rd, Hershey
June 21, 2018
Number of Attendees: 4

Local Veterans
Location: Temple University Harrisburg Classroom, 234 Strawberry Square, Harrisburg
June 23, 2018
Number of Attendees: 11

Centro Hispano Focus Group Key Findings

A focus group was conducted at Centro Hispano in downtown Reading with 10 Latino/a residents. All but two residents have lived in Reading for more than 10 years. The other two residents came to Reading within the past 6 months after being displaced from Puerto Rico following Hurricane Maria in September 2017.

Long-time Reading residents revered their community and readily listed numerous attributes of the city. Activities including the Reading Pubic Museum, music in the park, churches, movie theatres, shopping, and Centro Hispano were enjoyed by participants. They acknowledged and appreciated having a peer community within Centro Hispano and the larger community that spoke the same language and valued the Latino culture.

Centro Hispano was regarded literally as the “center” for the Latino/a community where one could connect to resources, receive a meal, and find community and camaraderie. One commented, “This is the place where [Latino/a] seniors are every morning. I just wish they were open in the afternoons.”

Those that were new to the area said they were referred to Centro Hispano for help in finding housing, employment, and other services. Service Access and Management (SAM), the Salvation Army, and the Department of Welfare office were also relied upon resources for accessing services. One new resident said that she had a caseworker from SAM that showed her around the area and helped her to become acclimated to her new community. Other group participants were knowledgeable about resources to help pay rent, utilities, or other expenses when needed. Centro Hispano and local churches provide food distribution to those in need.

As much as the participants esteemed their community as good place to live, they were concerned that the city was “changing.” They felt it was “not as safe anymore” and there were fewer activities for children. They were reluctant to let their children play freely at parks or within the neighborhood without supervision. The prevalence of violence and drugs were top concerns.

Healthcare in the community was regarded as high quality and readily available. Some expressed concerns with their insurance plan restrictions or need to travel outside of Reading to access doctors. One participant’s perception was, “The [insurance company] sends me to Lancaster or Hershey for appointments because they know I have a car.”

Most in the group walked or used public transportation to get to medical appointments and other services. They found the downtown hospital locations convenient and welcoming for care. St. Joseph and West Reading Hospital were most used by participants. The group is divided on provider preference, but agree both health systems provide quality care.

Most had medical homes where they have seen the same doctors for 10 or more years. One in the group had been with her same doctor for 27 years. Participants that were Spanish-only speakers would prefer to receive healthcare from a practitioner that spoke fluent Spanish. They had used interpreters, language lines, and family members to translate when needed. Some had negative experiences with interpreters while others were accustomed to using interpreters and didn’t mind. The greatest concern with third party interpretation was the potential for miscommunication. Most had experienced an instance where information was wrongly passed on from them or the doctor.

Most important to all participants was that their doctor “listens very well” and respects them. Participants expected to have a “relationship” with their doctor where they are “recognized and greeted” at each visit.

Participants had the following suggestions of ways healthcare providers could improve experiences for Latino/a patients.

- Hire more Latino/a staff that can increase cultural understanding within the healthcare organization and put Latino/a patients at ease with providers
- Provide reminder or follow-up calls in Spanish for Spanish-only speaking patients. Patients who do not speak English, particularly seniors, do not understand the caller or recordings when in English
- Print name of PCP on insurance card (for plans that require PCP) so patients can remember the name of their doctor

Within the broader community, participants would like to see more free activities for seniors and children. They noted that many Latino/a seniors come to Centro Hispano during weekday mornings, but have nowhere to commune in the afternoons. “They just go home and watch TV,” one said. Some suggested gym or pool exercises as an option. A recommendation to add a fitness center to Centro Hispano was met with enthusiasm from the group.

Structured activities for youth were also requested. Some suggested that a multi-age center with activities for youth and seniors could build relationships and experiences for both groups.

Team and association fees were seen as barriers for participation for many youths. School-sponsored activities are provided during the school year, but not available during summer and weekends. The Police Athletic League (PAL) and the Boys and Girls Club were also mentioned as good community resources for children.

Cocoa Packs Focus Group Key Findings

The focus group was conducted with four individuals that regularly used Cocoa Packs for food distribution. Cocoa Packs is a weekly food assistance program, providing nutritious options to Hershey area students in grades K-12 during the weekends, holidays, and summers.

All four of the focus group participants were new residents of Hershey; most had moved to the area within the past one to two years. They were drawn to the area for better medical care and a better quality of life for their family. “I didn’t want my kids living in a concrete jungle,” one said of her previous community. Participants praised Cocoa Packs and other social service organizations for assisting them during their transition to the Hershey community.

Participants were still adjusting to what they saw as the “high cost of living in the area.” Food security was among their biggest challenges. Healthy foods were seen to be “expensive,” and often beyond what they could afford on an already stretched food budget. Participants agreed, “The food banks are a huge help even if it’s just to fill in once a week.” One stated, “I’m on food stamps and they do not cover everything. By the time I buy food to meet my son’s special diet, they are gone.” Another added, “I thank God for Cocoa Packs because how else are my kids going to eat.”

In addition to food needs, participants sought help with other social services. They were frustrated that despite having limited incomes, they were not eligible for services they needed. “The services are here, but they need to adjust the regulations. We don’t qualify. If you’re married or your income is too much, they won’t even look at [your application] for services. Our income might look good on paper, but it doesn’t cover what we need.”

Transportation was also seen as a necessity by participants. One participant explained, “If you don’t have transportation, you stay stuck.” Some did not have a personal vehicle or had a car, but not the funds to maintain it. Public transportation is available, but also at a cost. One person commented, “You don’t have money to pay for the bus because you have to buy food or medicine.”

Participants were appreciative of extra help they often received from local organizations to get to services. “[Social worker] will come to my house and pick up my son to take him to a doctor’s appointment.”

Of the four participants, two had private insurance through a spouse’s employer and two were covered by subsidized programs including Medical Assistance and Medicare. Only one in the group regularly saw a primary care provider for preventive care and treatment. Those with public insurance could not find a local provider that was accepting new MA patients or could not afford out-of-pocket copays associated with their program. “I use the emergency room when I need care.” Parents were more likely to make sure their kids receive care when needed. “I don’t go myself. I take my kids.” The closest Federally Qualified Health Center is Hamilton Health Center, located in downtown Harrisburg. Participants were aware of the center, but felt it was too far to travel, particularly if they did not have personal transportation, or did not “feel safe traveling into the city.”

Two participants also accessed behavioral healthcare for themselves or their families. One participant who has Medical Assistance said, “My son is Autistic and he has been without mental health services for over a month because I was told there is a waiting list. The places [that don’t have] a waiting list won’t take my insurance.”

The same family encountered similar challenges when accessing inpatient behavioral healthcare for their autistic son. Most local hospitals do not provide inpatient behavioral healthcare for children or adolescents. Specialty inpatient providers exist, but limitations in age of child, condition, insurance coverage, among other factors limit access. The family had to find a fit outside of the community. “We drive two to four hours for inpatient care for my child.”

Parents in the group also had trouble finding affordable activities for their children. One said, “There are a ton of activities for kids, but you can’t afford them.” Others commented, “The only place for my kids to swim this summer is the creek.” “My kids window shop at the outlets for fun.” School-sponsored afterschool programs were recommended by the group.

Participants said they and their families felt isolated from the community. “If you don’t know anyone, it’s tough.” “When I first moved here, I didn’t know of any services. Thank gosh I met a friend who can help me. She has been a lifesaver!” One participant suggested a new neighbor welcoming committee to greet new residents. A similar initiative, the Welcome Wagon, was implemented in York. Other participants recommended community champions or advocates to welcome residents and identify individuals in need of services.

Participants also suggested more community outreach about available resources. Hershey Food Bank, Cocoa Packs, Love, Inc., and schools were specifically suggested as places to share information. A resource book that can be distributed at these locations was recommended. Word of mouth was also considered an effective communication channel. “If I know something, I want to share it to help others.”

Veterans’ Focus Group Key Findings

A focus group was conducted with 10 veterans that reside in Harrisburg or the surrounding area. Participants were recruited through outreach to local veterans’ services including Harrisburg Vet Center, Pennsylvania State Headquarters VFW, Department of Military and Veterans Affairs, JFT Recovery and Veterans Support Services, The Salvation Army Harrisburg, and YWCA Greater Harrisburg. Veterans were identified through CHNA research as a vulnerable population that disproportionately struggle with homelessness, drug and alcohol abuse, and access to care.

Participants in the focus group had been deployed overseas within different branches of the military and shared their experiences in readjusting to civilian life following their tour of duty. Upon relocating to the community, most were given a full day briefing with a “readjustment counselor” through the Harrisburg Veteran Center to receive information and assistance in securing housing, food, healthcare, and social services.

A meeting with a readjustment counselor is intended to be part of all End Time Service (ETS) processing for retiring military personnel. Not all in the group had the benefit of this meeting. There was a marked difference in ease and timeliness of locating needed services between those who had met with a readjustment counselor and those who had not.

One said, “Any time I had a problem, they were there for me.” Others acknowledged that the VA office paid their rent or found them a place to live. Participants also felt the community was respectful and welcoming. “It’s not nothing like it was after Vietnam. People respect us and thank us for our service.”

Outside of the Harrisburg Veteran Center, the Lebanon VA hospital was seen as a key entry point for services. “During appointments the doctors ask about food security and housing. If the patient says it’s a problem, they help directly.” Veterans also received outpatient care at the Cumberland County VA Community Clinic, which provides primary care and telehealth services including mental and behavioral health, laboratory and women's health services. Another participant lived and received care at the Carlisle Barracks.

Participants felt that the VA health services coordinated well with local hospitals for procedures not performed at the VA Hospital. “The VA will refer you to Hershey [Medical Center] if they can’t do [a procedure], but they are doing more and more. They even do hip replacements now.”

Participants in the group were divided about their health status. Some in the group felt they were in excellent health, while others described their health as poor. Multiple participants in the group had been injured during their tour of duty, some were still treating chronic conditions including back, hip, knee, nerve problems, urinary or kidney issues, memory loss, depression, and post-traumatic stress disorder (PTSD).

Participants agreed that mental health and substance use disorder were among the highest health issues for veterans. Some saw these conditions as a result of active duty, others thought behavioral health issues arose from the stress of readjustment to civilian life. “I missed the camaraderie after coming home; my friends and family didn’t understand. I was going to the VFW to drink myself to death and make [my feelings] go away.”

Participants discussed a “drinking culture” within different branches of the military. One said, “I learned to drink in the Army.” Another added, “Drinking is what you did in the Army. There was beer in the soda machines.” “Not in the Marines,” another said. Individual experiences varied between participants, but all acknowledged that many soldiers used alcohol or drugs to deal with stress. “Substance use is a way of trying to numb issues, but it is a short term solution to a long term problem.”

Some veterans learned about recovery resources to get sober after they got into trouble or went to jail. Once an issue is identified, services are readily available to veterans. “You might have to wait two weeks for an appointment, but if it’s a crisis, they’ll see you the same day.” “They take mental health seriously. When you call the VA, the first thing on the recording asks if you are having a mental health crisis and gives you an option to connect to the crisis line.” A 24-hour crisis line is promoted heavily within VA materials.

About one-quarter of the focus group members participated in a Veteran-sponsored substance use disorder program to get sober. The group provided support and understanding among individuals who had similar experiences during their military service.

Participants agreed that the majority of homelessness among veterans stemmed from mental health or substance use disorder issues. Participants explained that the VA employs outreach workers that visit vets on the streets and offer to help them with services. “The help is there for them, but some just aren’t ready to be helped.” Another said, “The VA will bend over backwards to find you adequate housing.” Another added, “You have to ask, though. They can’t read your mind.” In addition to mental illness, participants thought “pride” kept some vets from asking for help when they needed it.

Group participants made several recommendations to help veterans readjust to civilian life and access health and social service programs.

- Ensure that all veterans receive information during ETS on how to connect with local VA office for readjustment counseling and to sign up for benefits
- Provide a follow-up “class” to ensure vets are acclimating into community; including job placement
- Increase advertising of local benefits for vets: food distribution, support groups, fitness centers, other discounts
- Provide opportunities for networking and camaraderie outside of VFW; encourage healthy interactions with other vets

Results from the three focus groups were reviewed by the Penn State Health CHNA Committee in conjunction with secondary data statistics and qualitative data findings from stakeholders. Findings will be used to inform the medical centers’ Implementation Plans and future community benefit activities.

Prioritization of Community Health Needs

Representatives of Hershey Medical Center, St. Joseph Medical Center, and PPI met with key community stakeholders to review CHNA findings and gather input to determine priority health needs to be addressed by each medical center.

In advance of the meetings, attendees were provided and asked to review CHNA summary reports that highlighted health disparities and key findings across the service area as determined through quantitative data collection and qualitative input.

Through facilitated and open dialogue, participants considered contributing social issues, existing community resources, gaps in services, and expertise and resources within each medical center in determining recommendations for priority health issues.

Participants agreed that behavioral health and healthy lifestyles continue to be the highest community needs across the service area. Attendees affirmed that emphasis be placed on issues that attributed to health disparities within each priority area. Recommendations were also made for the medical centers develop a separate priority to distinguish disease management from disease prevention (healthy lifestyles).

Penn State Health used this information to determine system-wide priorities on which to focus community health and benefit activities over the next three-year cycle. The three hospitals developed an Implementation Plan in support of these priorities. By adopting system-wide priorities, Penn State Health seeks to promote a regional approach to addressing community health needs and foster partner collaboration.

2018 CHNA Community Health Priorities

Evaluation of Impact from Prior CHNA Implementation Plans

Penn State Health Milton S. Hershey Medical Center 2016-19 Implementation Plan

Overview
The findings of the 2015 CHNA identified three overarching priorities and each of these had subcategories of goals and measureable objectives established:

1. Access to Health Services
    a. Primary Care
    b. Specialty Care
    c. Dental Care

2. Behavioral Health Services
    a. Mental Health
    b. Substance Use Disorder

3. Healthy Lifestyles
    a. Lack of Physical Activity
    b. Obesity and Inadequate Nutrition
    c. Smoking Cessation and Prevention

Forty-eight programs were identified to address these goals and measureable objectives in the follow-up Implementation Plan. For the first of three years of this Implementation Plan (FY 2017), there were 137 indicators set to be accomplished for these 48 Programs and 123 or 90% of them were met. See Report Card in Appendix G. All Programs met at least 1 of their planned indicators and are on target for next fiscal year. Only two Programs had to re-evaluate plans set and change focus; they will still continue next fiscal year. Example reasons that 14 indicators were not met include programs changing focus based on community need; several were met but others were on target to be met next fiscal year; positions hired but still getting oriented and target numbers of persons served not quite met.

By addressing these indicators, Penn State Health Milton S. Hershey Medical Center (PSHMC) served 138,426 persons in our community, and contributed $779,340.00 to this service.

Sample Highlights of Accomplished Indicators
Farmers' Market and Food as Medicine Program health screenings and education programs served 7,718 people. These programs include "Prevention Produce" where doctors write fruit and vegetable prescriptions for at-risk patients that can be reimbursed at participating farmers' markets.

The Food Pantry Health Education programs and screenings reached 2,285 persons who may not have regular access to preventive healthcare services.

The Community Garden reached 500 people through the actual garden, educational programming and produce donated to food pantries and underserved areas.

Through Community and Drive-Thru Flu Shot sessions, 2,253 people were vaccinated in high need communities that typically would not receive a flu shot.

Drugs 101 Prevention Sessions reached 519 teens and parents. The Drug Take Back Program reached 340 families and Opioid Prevention activities served 281 people directly and a much larger community population through our work on two task forces: IMPACT – Attorney General's Task force on Drugs and the Southcentral PA Opioid Awareness Coalition.

LionCare Free Clinic, Harrisburg helped 1,635 underserved patients with primary care services; Hope Within Ministries, 1,000 participants and the Community Check-up Center 1,400 pediatric patients.

Heart and Vascular Institute (HVI) reached 1,317 people for HVI education and Atherosclerotic Cardio Vascular Disease (ASCVD) screenings and 1,000 for the Children's Heart Health Program. Stroke Community Outreach served 3,686 community members, Lion Net Telestroke hospitals and EMS professionals.

The ASCVD screening project was initiated in March, 2017 with 190 unique clients seen by February, 2018 in five food pantry locations. Key results are listed below. Many clients have multiple risk factors and 36 referrals were made to help them access prevention resources and clinical care. Plans are to continue screenings every six months, track outcomes and expand to additional locations.

Risk factors among ASCVD Screening participants

- 44% BP > 140 mmHg or > 90 mmHg
- 28% smokers
- 48% BMI > 30
- 20% without PCP
- 22% no insurance
- 36 referrals:
  - 11 follow-up clinical care
  - 14 smoking cessation support
  - 9 medical student "prevention produce" program
  - 2 financial counseling

Nurse leaders completed health assessments in local schools serving 7,835 underserved students, thus providing their school nurses more time through-out the school year to better address their health needs.

Cancer Prevention Programs and Care for Underserved Populations reached 1,665 persons through the Rural and Urban Cancer Networks and 10,171 for all cancer-related community outreach across campus.

Smoking Prevention and Cessation Programs reached 1,492 people; of those participating in Carbon Monoxide screenings, 29% agreed to follow-up services to help them quit.

A Bike Share Program was implemented on the Penn State Hershey campus with immediate plans to extend bike racks into the Derry Township community.

A plan was developed to initiate a community dental clinic to increase access to appropriate dental care to those who are uninsured and underinsured.

Students offer many programs to serve the needs of our community such as the Lioncare clinics; educate our children and families on the importance of proper nutrition and physical activity such Food as Medicine, HealthSLAM and Health Haven and provide opportunity for interdisciplinary service learning at the Bethesda Mission and Hershey Plaza.

PSHMC and Dickinson Law School initiated a Medical-Legal Partnership that provided free legal advice and representation to 104 underserved patients in the areas of advanced directives, housing, domestic violence, medical bills, immigration, education, energy and utility issues and public benefits. This program provides a resource for physicians to refer patients who have legal needs which may be negatively impacting their health.

Measureable Objectives

The following measurable objectives were set for Dauphin County and progress made after FY 17 and when available after FY 18, is documented below.

	Baseline (7/1/16)	FY 17	FY 18	Target (6/30/2019)
Access to Health Services				
Percent of Adults Who Report Poor or Fair Health	16%	14%	15%	12%
Percent of Adults 18-64 Without Medical Insurance	14%	11.2%		13%
Percent of Children Under Age 19 Without Medical Insurance	6%	4.5%		5%
Percent of Adults Without a Dental Exam in the Past Year	26.4%	26.4%		25%
Behavioral Health Services				
Average number of Poor Mental Health Days Reported in the Past 30 Days	4	3.7	4.1	2.8
Number of Persons Admitted for Alcohol Abuse	224	195		192
Number of Persons Admitted for Drug Abuse	473	520		405
Healthy Lifestyles				
Percent of adults who report no leisure-time physical activity	24%	23%	24%	20%
Percent of adults who are obese (BMI of >=30)	31%	33%	31%	29%
Percent of residents who report inadequate fruit and vegetable consumption	71.8%	71.8%		70%
Percent of Adults Who are Current Smokers	19%	17%	17%	15%

Additional key accomplishment for FY 17

PSHMC collaborated with the United Way of the Capital Region and other local community-based organizations to develop a Community Dashboard (www.lifeinthecapitalregion.com). This site includes the most up-to-date data on nearly 100 key determinates for health, education, income, basic needs and demographics. It helps local organizations better track data related to measureable objectives and raise awareness of the issues impacting health in the region.

A Food Box Initiative, in partnership with the Central Pennsylvania Food Bank, was pilot tested in two Penn State Health locations: General Pediatrics and the Community Paramedics Program with plans to expand to additional clinic locations. Due to staff recognizing the needs of clinic patients, a social determinants of health assessment was introduced. Based on responses to the food insecurity questions, staff members provide healthy food boxes and recipes; connect families to their local food pantry; and assist with completion of Supplemental Nutrition Assistance Program (SNAP) and Women, Infant and Children (WIC) applications for those who qualify. At the time of this report, 81 boxes were provided to 34 families. In addition to food boxes, a clothing voucher program is also being implemented in partnership with the Salvation Army Harrisburg Capital City Region and the Central Pennsylvania Food Bank.

Community Start-Up Grants have been awarded for three years. This successful endeavor engages campus teams to partner with community organizations to initiate a program addressing at least one of the health need priorities identified by the CHNA. See tables of awarded grants and results in Appendix H.

Conclusion

Based on the results of the current Implementation Plan, PSHMC will continue into the final years of the strategy intending to accomplish the established indicators as well as any not yet met or re-established. Data sources will be monitored with the overarching goal of demonstrating improved community health. These accomplishments and new partnerships provided input into the 2019 CHNA process and priorities determination, and will inform the next Implementation Plan.

Penn State Health St. Joseph 2016-19 Implementation Plan Evaluation of Impact

Overview
The findings of the 2016 CHNA identified four main areas of need:

(1) increased access to care,
(2) education and management of obesity,
(3) improved care and management of chronic conditions, and
(4) greater availability of behavioral & mental healthcare.

Considering these four main areas of need, Penn State Health St. Joseph (PSHSJ) developed the following objectives:

- *Objective 1: PSHSJ will aim to remove crucial barriers to care, including out of pocket expenses, language and cultural divides, transportation barriers and the complexity of navigating the healthcare system;*
- *Objective 2: PSHSJ will implement programs to target the widespread problem of obesity in the community. Through partnerships with other organizations we will foster opportunities for education, lifestyle change, and improved health outcomes.*
- *Objective 3: PSHSJ will offer comprehensive disease management services to aid community members in caring for chronic conditions such as diabetes and infectious diseases.*
- *Objective 4: PSHSJ will increase the availability of behavioral and mental health services. Partnering with the Berks Counseling Center will allow for behavioral health services to be available at the Downtown Campus, a convenient location for many community members.*

Programs associated with these objectives include:

Access to Care	Obesity	Chronic Conditions	Behavioral & Mental Health
			
• HealthOne Mobile Health Initiative • Community Health Worker Training Institute • Community Education Programming • Breast Cancer Screening for the Underserved • Dental Care for the Underserved	• KidsFit (Children's Metabolic Clinic) • Be Bold, Take Charge • Partnerships with Reading Recreation Commission	• Diabetes Wellness • Infectious Disease Services • Patient Navigation	• Reading Youth Violence Prevention • Primary Care & Behavioral Health Integration • Mental Health First Aid Training

Sample Highlights of Accomplished Indicators
To showcase key successes from PSHSJ's implementation plan, the following programs' outputs and outcomes are highlighted:

1) Increased access to care:

The Community Health Worker Training Institute
Community Health Workers (CHWs) are trusted members of the community with a gift for helping people prevent or manage disease and other physical or mental health conditions. Studies have shown that CHWs have a positive impact on patients keeping appointments, taking their medications, and reducing risk by improving access to care and assisting individuals with acute or chronic conditions. While some CHWs may have little formal training in medicine or healthcare, they tend to have an intimate knowledge of their communities and local resources. They use that wisdom and passion to help their fellow citizens overcome barriers associated with language, culture, transportation, scheduling and finances.

The Community Health Worker Training Institute at the PSHSJ Downtown Campus Langan Allied Health Academy offers a free 100-hour training program in partnership with the Eastcentral and Northeast PA Area Health Education Center and the Literacy Council of Reading/Berks. This training is designed to provide the core competencies needed for work in community-based and inpatient/outpatient settings. The training also provides comprehensive education about accessing healthcare and other human service resources specific to the particular area where the training takes place. Through this initiative, PSHSJ was instrumental in planning the first ever state-wide Community Health Worker Symposium - which took place May 5-6, 2015 in State College, PA - and continues to advocate for CHWs as an emerging profession in Pennsylvania. The PSHSJ program has been in continuous operation for over four years with growing demand as the value of the CHW approach gains greater recognition. PSHSJ has also utilized CHWs effectively in several key clinical areas, including: diabetes/chronic disease management; breast cancer/oncology; maternal child health; and primary medical and dental care for the urban underserved.

> Objective: *PSHSJ will build Community Health Worker (CHW) capacity in the community, improving health care access, utilization, and coordination.*

> Measures of Success:
- *Number and percentage of students completing the program and receiving certification: Nearly 150 students, approximately 75 percent of those matriculating, have completed the program to date. A state certification process should also be in place by late 2018.*
- *Number and nature of job or volunteer placements: While many CHW students are already employed in health & human services or a related field, a majority seek a chance to expand, enhance or change their career path and report that the training has been instrumental in their success. At least 25 program graduates have been hired or retained in PSHSJ staff or volunteer positions since the program began. Over a dozen other local organizations have recruited from or sent personnel to the program.*
- *Sustainability of program and positions: The CHW program & all positions begun under grant funding have been sustained to date.*

2) Education and management of obesity:

Be Bold Take Charge Initiative
PSHSJ is a partner with Penn State Berks in a multidisciplinary, multi-sector initiative designed to improve health outcomes in the City of Reading, called Be Bold Take Charge (BBTC). Its focus is to increase access to nutritious food, educate about how to live healthfully, and promote physical activity. This partnership led to the creation of a full-time position focused on implementing food access and nutrition-based healthcare programs within PSHSJ's Downtown Reading Campus. The first such pilot program, Veggie Rx, was developed from October 2017 through May 2018 and successfully launched in June 2018. Using an innovative, upstream approach, this fruit and vegetable prescription program allows physicians to prescribe vouchers for discounted fruits and vegetables to patients at-risk for--or currently facing—diet-related chronic illnesses, including diabetes and obesity. PSHSJ's Veggie Rx program involves the following community partners: Penn State Berks, Penn State College of Medicine, The Philadelphia Food Trust, Berks Agricultural Resource Network, Greater Reading Chamber Alliance, Blue Mountain Academy, United Way of Berks County and Wholesome Wave.

> Objective: *Improve overall health outcomes in the City of Reading through improving access to nutritious foods and promoting increased physical activity.*

> Measures of Success:
- *Number of patients enrolled: Target number is 100 patients, and 47 have enrolled to date (through July 2018);*
- *Number of vouchers redeemed: 774 vouchers have been redeemed for fruits and vegetables at participating farmer's markets, which equates to $1,548;*
- *Several biometric data sets (including BMI, A1c, and blood pressure) which will be tracked throughout the duration of the six-month pilot program; an initial baseline data set will be compared to results at the end of six months;*
- *Several program outcomes, including patient knowledge of nutrition; fruit and vegetable consumption over time; self-reported health status; and food security. These will be recorded from pre and post-survey assessments;*
- *Sustainability of program and positions: We are pursuing multiple channels of sustaining this program, including through Penn State University Strategic Planning funds, other grants, endowments, and through our affiliated health insurance providers.*

3) Improved care and management of chronic conditions:

Diabetes Wellness
PSHSJ's innovative Diabetes Wellness program promotes self-management of the disease to achieve treatment goals that bring about positive health outcomes. A Diabetes nurse navigator and community health worker provide culturally sensitive care coordination, referral to appropriate specialists, and aid in removal of barriers to care for all diabetic patients who are seen on the 2nd floor Family Practice at the PSHSJ's Downtown Reading Campus. Group sessions are held continuously in both English and Spanish for patients who wish to receive additional education about how to manage their diabetes. In addition, patients attending group sessions are able to see a provider one-on-one to address any

needs at that time. The program leads have also developed new ways to increase the scope of the program. Namely, the nurse navigator and community health worker have expanded their work to include patients seen at the 1st Floor Family Practice Residency clinic, and have recruited some of these patients for group sessions. Availability of group sessions for community members outside of the PSHSJ network is currently being explored, which could further increase access to appropriate diabetes care in the City of Reading.

> Objective: *Provide culturally-sensitive care to patients with type II diabetes, and to promote self-management of diabetes through education about proper nutrition, exercise and health maintenance.*

> Measures of Success:
- *10% reduction in Hemoglobin A1c ≥ 8 for registered patients with type II diabetes at the Downtown Campus.* ***NOTE:*** *While still an overarching goal of the program, this is a difficult change to achieve in any given patient or cohort over the course of a typical six-week Diabetes Wellness session. Greater emphasis is now placed on behavioral change in two key areas: Nutrition (compliance with individualized meal plan goals) and Monitoring (regularly checking blood sugar at home).*
- *Pre- and post- statistics from the past 18 months showed an 18.4 percent improvement in the nutrition compliance and a 20.7 percent improvement in monitoring.*
- *The Diabetes Wellness program recently became the pilot patient population for PSHSJ's Veggie Rx program (as described above.) This pilot should provide additional opportunities for patient and data tracking over time.*

4) Behavioral and Mental Health:

Youth Mental Health First Aid Training

The Mental Health First Aid model is a best practice approach aimed at empowering laypersons and non-clinical professionals to handle known or suspected crisis situations. It has several program variations for particular audiences and applications, all of which we hope to eventually make more readily available in Reading & Berks County.

Youth Mental Health First Aid (YMHFA) is an 8-hour certification course that introduces participants to the unique risk factors and warning signs of mental health problems in adolescents and helps builds an understanding of the importance of early intervention. The program teaches how to help an adolescent who is in crisis or experiencing a potential mental health or substance use disorder challenge. Participants learn about a variety of mental health challenges common among adolescents, including anxiety, depression, psychosis, eating disorders, ADHD, disruptive behavior disorders, and substance use disorder.

Participants do not learn to diagnose, nor how to provide any therapy or counseling, rather they learn a core five-step action plan to support an adolescent who is developing signs and symptoms of mental illness or an emotional crisis. YMHFA uses role-playing and simulations to demonstrate how to assess a mental health crisis, select interventions, provide initial help, and connect young people to professional, peer, and self-help care. YMHFA is listed in

SAMHSA's National Registry of Evidenced Based Programs and Practices and is approved as one of the curriculums that meet the professional development requirements of Act 71. Various professionals and educators may thus be eligible for CEUs.

> Objective: *PSHSJ will help build community capacity to proactively recognize and appropriately intervene in various crisis scenarios.*

> Measures of Success:
- *Number of trainers, professionals, and laypeople trained. A grant obtained from the Berks County Community Foundation in 2016 made it possible to certify a local YMHFA trainer and conduct three public YMHFA trainings through which more than 100 local individuals received certification.*
- *Interest in and demand for YMHFA and other model variations. This program was initially piloted as part of PSHSJ's Community Health Worker (CHW) Training Institute in 2014 and remains sustained as part of that program with at least three trainings completed per year. Additional funding is being sought to continue offering YMHFA and other model variations as a free or low cost stand-alone program at the PSHSJ Downtown Campus, Langan Allied Health Academy, and/or other locations based on community needs.*
- *Level of acceptance and integration of the mental health first aid model into local policies, practices, systems, and organizations. The County of Berks requires YMHFA training for most staff in youth serving programs and departments.*

Conclusion:

Based on early results of the 2016-19 Implementation Strategy, PSHSJ will continue to accomplish measures of success. These accomplishments and new partnerships provided input into the 2019 CHNA process and priorities determination, and will inform the next Implementation Plan.

Board Approvals and Next Steps

The 2018 CHNA final report and corresponding implementation plans were reviewed and approved by the Penn State Health Board of Directors in April 2019. Following the Boards' approval, all were made available to the public via each hospital's website:

Penn State Health Milton S. Hershey Medical Center:
http://hmc.pennstatehealth.org/community/community-outreach

Penn State Health St. Joseph Medical Center:
https://www.thefutureofhealthcare.org/

Pennsylvania Psychiatric Institute:
https://www.ppimhs.org/about-us/community-programs

We thank our community partners for their valuable contributions to the CHNA and welcome your collaboration to improve the health of all residents in the region. For additional information about the CHNA and opportunities for collaboration, please contact us.

Judy Dillon
Penn State Milton S. Hershey Medical Center
Director, Community Health
717-531-4413
jdillon@pennstatehealth.psu.edu

Mary Hahn
Penn State Health St. Joseph
Vice President, Ambulatory Services & Business Development
610-378-2404
mhahn2@pennstatehealth.psu.edu

Ruth Moore
Pennsylvania Psychiatric Institute
Director, Business Development & Admissions
717-782-2188
rmoore@ppimhs.org

Appendix A: Community Health Team Advisory Board

The 2018 CHNA was overseen by a Planning Committee of representatives from Penn State Health Milton S. Hershey Medical Center, Penn State Health St. Joseph, and Pennsylvania Psychiatric Institute, as well as a Community Health Team Advisory Board, including:

CHNA Planning Committee
Austin Cohrs, Research Project Manager, Penn State College of Medicine
Judy Dillon, Community Health Director, Penn State Health
Jim George, Director of Community Relations, Penn State Health
Mary Hahn, Vice President, Ambulatory Services & Business Development, Penn State Health St. Joseph
Ruth Moore, Director, Business Development & Admissions, Pennsylvania Psychiatric Institute
Gail Snyder, Senior Instructor, Penn State College of Medicine
Susan Sullivan, Vice President, Mission and Ministry, Penn State Health St. Joseph

Community Experts
Jorja Barton, Central Pennsylvania Food Bank
Jason Reifsnyder, Derry Township School District
Mark Seaton, US Public Health Service
Melissa Weigle, Mohler Senior Center

Penn State Health
Sheila Borne, Governmental Health Relations
Nancy Campbell, Emergency Department
Erin Cathcart, Family & Community Medicine Resident
Darlene Miller Cooley, Chaplain Services
Katherine Curci, Family and Community Medicine
Alison Enimpah, Nursing
Kim Fields, Nursing
Benjamin Fredrick, Family & Community Medicine
Rachel Gorichky, Penn State Hershey Medical Group Care Management
Deanna Graaf, Penn State College of Medicine Medical Education
Jennifer Groff, Operations Excellence
Lori Harkaway, Penn State Children's Hospital/Special Projects
Ellie Hogentogler, Penn State PRO Wellness
Jim Kincaid, Finance
Carol LaRegina, Public Health Sciences
Jozef Malysz, Anatomic Pathology
Megan Mendez Miller, Family and Community Medicine
William Milchak, Psychiatry
Sam Moore, University Development
Heather Reeder, Internal Medicine Associates
Diego Sandino, Strategic Planning & Marketing
Erika Saunders, Psychiatry
Ashley Visco, Case Management
Brandon Wattai, Life Lion Emergency Medical Services

Community Health Team Fellow
Ashley Kuzmik, Public Health Sciences Graduate Student

Appendix B: Secondary Data References

- Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2006-10.
- Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Accessed via the Health Indicators Warehouse. US Department of Health & Human Services. 2006-12.
- Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2013.
- Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network. 2012.
- Dartmouth College Institute for Health Policy & Clinical Practice, Dartmouth Atlas of Health Care. 2014.
- DEA Philadelphia Division and the University of Pittsburgh, Analysis of Overdose Deaths in Pennsylvania, 2016. 2017.
- Dignity Health, Community Need Index. Retrieved from http://cni.chw-interactive.org/. 2017.
- ESRI, ArcGIS. U.S. Census Bureau. 2017/2022. National Center for Education Statistics, NCES - Common Core of Data. 2015-16.
- PA Commission on Crime and Delinquency, Pennsylvania Youth Survey – Substance Abuse & Anti-Social Behaviors. 2015.
- PA Department of Health, Division of Health Risk Reduction. Injuries Deaths and Hospitalizations in Pennsylvania. 2010-2014.
- PA Department of Health, Enterprise Data Dissemination Informatics Exchange. Pennsylvania Birth Certificate Dataset.
- PA Department of Health, Enterprise Data Dissemination Informatics Exchange. Pennsylvania Cancer Registry Dataset. 2015.
- PA Department of Health, School Health Statistics. 2013-16.
- Pennsylvania Department of Health, Bureau of Communicable Diseases. 2016.
- Pennsylvania Uniform Crime Reporting System, CRIME IN PENNSYLVANIA ANNUAL UNIFORM CRIME REPORT. 2015.
- University of Wisconsin Population Health Institute, County Health Rankings. 2018.
- US Census Bureau, American Community Survey. 2012-16.
- US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2015.
- US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2015.

- US Department of Agriculture, Food and Nutrition Service, USDA - SNAP Retailer Locator. Additional data analysis by CARES. 2017.
- US Department of Health & Human Services, Center for Medicare & Medicaid Services, Provider of Services File. March 2018.
- US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2014 and 2015.

Appendix C: Key Informant Survey Participants

A Key Informant Survey was conducted with 254 community representatives. The organizations represented by key informants, and their respective role/title, included:

Key Informant Organization	Key Informant Title/Role
Adventist WholeHealth Network	Associate Director of Faith Community Nurses
Adventist WholeHealth Network	Executive Director
Alder Health Services	Director of Clinic Operations
All About Hershey	President/Founder
Alvernia University	Director
Alvernia University	Nursing Department Chair
Alzheimer's Association	Vice President
American Heart Association	Community Health Director
American Lung Association	Tobacco Control Team Director
Beacon Clinic for Health and Hope	Director of Development
Beacon Clinic for Health and Hope	Certified Registered Nurse Practitioner
Berks Cardiologists	Medical Doctor
Berks Coalition to End Homelessness	Co-Executive Director
Berks Community Health Center	Chief Executive Officer
Berks Counseling Center	Grant & Public Relations Coordinator
Berks County Community Foundation	Health and Human Services Program Officer
Berks County Head Start/Early Head Start Child Care Partnership	Health Nutrition Specialist
Berks County Intermediate Unit	Executive Director
Berks County Mental Health/Developmental Disabilities Program	Deputy Administrator
Berks County Workforce Development Board	Director
Berks Encore	President & Chief Executive Officer
Berks Encore	President & Chief Executive Officer
Berks HealthChoices Program	HealthChoices Program Director
Berks Teens Matter	Liaison for Community Engagement
Berks Visiting Nurses Association	Hospice Social Worker
Berks Visiting Nurses Association	Social Worker
Bethesda Mission	Registered Nurse - Nurse Manager
Bethesda Mission	Executive Director
Bethesda Mission	Director of Development
Better Together	Chair
Big Brothers Big Sisters	Director
Brentwood Industries	Corporate Human Resources Director
Calvary United Church of Christ	Pastor
Capital Area Head Start	Health Coordinator
Capital Area Head start	Director of Operations
Case Management Unit	Early Intervention Supervisor
Central Dauphin School District	Director of Pupil Services
Central Pennsylvania Food Bank	Health Innovations Coordinator
Central Voice newspaper and web site	Founding Publisher and Editor
Church World Service	Intensive Case Manager

Key Informant Organization	Key Informant Title/Role
City of Reading	City Clerk
City of Reading	Councilwoman, District 1
Cocalico School District	Certified School Nurse - Coordinator of District Health Services
Cocoa Packs, Inc.	President/Founder
Community Check-Up Center	Practice Manager
Community Prevention Partnership	Chief Executive Officer
CONTACT Helpline	Executive Director
Cornwall-Lebanon School District	School Nurse
Cumberland County Aging and Community Services	Director
Cumberland County Housing and Redevelopment Authorities	Executive Director
Cumberland-Perry Drug & Alcohol Commission	Executive Director
Dauphin County Crisis Intervention	Director
Dauphin County Library System	Executive Director
Dauphin County Mental Health/Intellectual Disabilities	Administrator
Dauphin County Mental Health/Intellectual Disabilities	Program Specialist 2, Early Intervention Coordinator
Derry Township	Supervisor
Derry Township Police Department	Chief of Police
Derry Township School District	Assistant to the Superintendent
Derry Township School District	Social Worker
Derry Township School District	Certified School Nurse
Derry Township School District	Certified School Nurse
Disability Rights Pennsylvania	Investigation/Monitoring Lead
Domestic Violence Intervention of Lebanon County, Inc.	Public Education Coordinator
Downtown Daily Bread	Director
Domestic Violence Services of Cumberland and Perry Counties	Advocate
Domestic Violence Services of Cumberland and Perry Counties	Volunteer Coordinator
Domestic Violence Services of Cumberland and Perry Counties	Shelter Supervisor
East Shore YMCA	Executive Director
Elizabethtown Area School District	Certified School Nurse
Family Behavioral Resources	Management
Family Promise of Berks County	Executive Director
Four Diamonds	Communications Manager
Franklin Family Services	BHRS Case Manager
Franklin Family Services	Clinical Director/Transcranial Magnetic Stimulation Coordinator
Franklin Family Services	Director of Behavioral Health Rehabilitation Services
Gather the Spirit for Justice	Program Director

Key Informant Organization	Key Informant Title/Role
Gemma's Angels	President
Genesis HealthCare	Regional Vice President of Operations
Genesis HealthCare	Hospital Liaison
Genesis HealthCare/Berkshire Center	Administrator
Greater Harrisburg Healthy Start	Director
Greater Harrisburg Healthy Start	Health Educator
Harrisburg Area Community College	President
Hamilton Health Center	Chief Executive Officer
Hamilton Health Center	Chief Social Services Officer
Hamilton Health Center	Director of Quality
Health Calls Home Health Agency	Chief Operating Officer
Healthy Living Kitchen	Owner
Healthy Steps Diaper Bank	Board President/Founder
Hempfield Area Recreation Commission	Director, Fitness & Wellness
Hershey Free Church	Pastor for Local Outreach
Highmark Blue Shield	Vice President, Community Affairs
Home Health Care Management	Director of Quality Improvement
Home Health Care Management	Director of Fund and Business Development
Home Health Care Management	Business Development Manager
I-LEAD Charter School	Chief Executive Officer
Juniper Village at Lebanon	Connections Director
Lancaster Community Member	Community Member
Lancaster Family YMCA	Associate Executive Director
Leadership Berks-Alvernia University	Director of Leadership Berks and Community Leadership Programming
Lebanon County Area Agency on Aging	Director of Home and Community Based Services
Lebanon Family Health Services	Director of Education and Outreach
Lebanon Family Health Services	Chief Executive Officer
Lebanon Valley Volunteers in Medicine	Medical Doctor/Medical Director
Literacy Council	Associate Director
Literacy Council of Reading-Berks	Executive Director
Love INC of Greater Hershey	Executive Director
Love INC of Greater Hershey	Parsonage Director
Love INC of Greater Hershey	Director of Operations
Lower Dauphin Communities That Care	Program Director
Lower Dauphin School District – High School	School Nurse
Manna Food Pantry	Administrator
Manor Care	Regional Director, Operations
Maternal and Family Health Services	Senior Operations Manager
Mechanicsburg Area School District	Social Worker
Mechanicsburg Chamber of Commerce	Executive Director
Medical Outreach Service	Director
Milton Hershey School	Executive Director, Student Support Services
MidPenn Legal Services (Berks Office)	Managing Attorney
Milton Hershey School	Lead Physician
Mohler Senior Center	Executive Director
New Beginnings Church of Middletown	Pastor

Key Informant Organization	Key Informant Title/Role
Northern Dauphin Human Services Center	Operation Manager/Community Liaison
Olivet Boys & Girls Club	Chief Executive Officer
Partnership for Better Health	Director of Health Promotion
Partnership for Better Health	Executive Director
Peace Lutheran Church	Pastor
Penn Medicine	Director of Community Health
Penn State College of Medicine, Department of Public Health Sciences	Instructor
Penn State College of Medicine-Psychiatry	Senior Instructor
Penn State Extension	Educator/State Program Team Leader for Health and Wellness
Penn State Extension	Program Manager
Penn State Extension	Assistant Director of Programs, Food, Families, and Health
Penn State Extension-Montgomery County	Nutrition Links Regional Coordinator
Penn State Health	Manager of Diabetes Education
Penn State Health	Chairman of Board
Penn State Health	Director, Global Health
Penn State Health	Registered Nurse
Penn State Health	Board Member
Penn State Health	Black Belt
Penn State Health Children's Hospital	Social Worker
Penn State Health Children's Hospital	Social Worker
Penn State Health Community Medical Group	Physician
Penn State Health Education Graduate Program	Professor-in-Charge/Assistant Teaching Professor
Penn State Health St. Joseph	Director of Quality Initiatives, St. Joseph Medical Group
Penn State Health St. Joseph St. Joseph Medical Center Foundation	Grants & Special Projects Officer
Penn State Hershey Medical Group	Social Worker
Penn State PRO Wellness	Coordinator
Pennsylvania Department of Health	Director, Office of Health Equity
Pennsylvania Department of Health	Community Health Nurse
Pennsylvania Department of Health	Community Health Nurse
Pennsylvania Department of Health	Director, Bureau of Health Planning
Pennsylvania Department of Health	Community Health Nurse
Pennsylvania Department of Health	Division Director, Community Epidemiology
Pennsylvania Nutrition Education Network	Community Nutrition Program Manager
Pennsylvania Psychiatric Institute	Director of Business Development & Admissions
Pennsylvania Psychiatric Institute	Peer Specialist
Pennsylvania Psychiatric Institute	Registered Nurse
Pennsylvania Psychiatric Institute	Admissions Intake
Pennsylvania Psychiatric Institute	Mental Health Clinician
Pennsylvania Psychiatric Institute	Clinical Manager
Pennsylvania Psychiatric Institute	Behavioral Health Specialist
Pennsylvania Psychiatric Institute	Staff Registered Nurse

Key Informant Organization	Key Informant Title/Role
Pennsylvania Psychiatric Institute	Director, Child & Adolescent Service Line
Pennsylvania Psychiatric Institute	Registered Nurse
Pennsylvania Psychiatric Institute	Human Resources Assistant
Pennsylvania Psychiatric Institute	Patient Advocate
Pennsylvania Psychiatric Institute	Nurse Educator
Pennsylvania Psychiatric Institute	Registered Nurse
Pennsylvania Psychiatric Institute	Manager of Social Service
Pennsylvania Psychiatric Institute	Admission Intake Coordinator
Pennsylvania Psychiatric Institute	Management
Pennsylvania Psychiatric Institute	Assistant Manager, Admissions
Pennsylvania Psychiatric Institute	Infection Control Coordinator/Employee Health
Pennsylvania Psychiatric Institute	Case Manager
Pennsylvania Psychiatric Institute	Manager/Nurse
Pennsylvania Psychiatric Institute	Registered Nurse Manager
Pennsylvania Psychiatric Institute	Admissions Manager
Pennsylvania Psychiatric Institute	Intake Coordinator
Pennsylvania Psychiatric Institute	Behavioral Health Services
Pennsylvania Psychiatric Institute	Licensed Practical Nurse, NCP
Pennsylvania Psychiatric Institute	Receptionist/Clerical
Pennsylvania Psychiatric Institute	Occupational Therapist
Pennsylvania Psychiatric Institute	Behavioral Health Services
Pennsylvania Psychiatric Institute	Behavioral Health Services
Pennsylvania Psychiatric Institute	Intake Coordinator
Pennsylvania Psychiatric Institute	Registered Nurse
Pennsylvania Psychiatric Institute	Executive Assistant
Pennsylvania Psychiatric Institute	Child/Adolescent Partial Program Manager
Pennsylvania Psychiatric Institute Older Adult Outpatient Services	Geriatric Psychiatrist
Pennsylvania Refugee Health Program	Refugee Health Promotion Coordinator
Pennsylvania State Senate	Senator
Penn State University	Principal Investigator
Penn State University, College of Nursing	Nursing Instructor
Pennsylvania State University, Dickinson Law	Director, Medical-Legal Partnership Clinic & Assistant Professor of Law
Penn State University/Pennsylvania Psychiatric Institute	Medical Director; President of Medical Staff
Phoebe Berks	Executive Director
Physical Therapy	Liaison
Palmyra Area Middle School	Health Teacher
Planned Parenthood Keystone	Training Manager
Project SHARE of Carlisle	Chief Executive Officer
RB Legal Counsel LLC	Managing Partner
Reading Area Community College	President
Reading Berks Conference of Churches	Executive Director
Reading Berks Conference of Churches	Executive Director
Ronald McDonald House Charities of Central Pennsylvania	Executive Director
Sadler Health Center	Chief Executive Officer

Key Informant Organization	Key Informant Title/Role
Social Services	Administrator
South Central Transit Authority	Director of Administration & Human Resources
Southeastern Home Health Services	Vice President
Sovia Therapy, LLC	Owner
Spinal Cord Injury Support Group	Peer Mentor
SpiriTrust Lutheran Home Care & Hospice	Director, Community Relations
St. Peter the Apostle RC Church	Pastor
St. Ignatius Loyola Catholic Church	Pastor
St. Joseph Regional Health Network	Chief Executive Officer
Steelton-Highspire High School	Principal
Steelton-Highspire School District	Certified School Nurse
Steelton-Highspire School District	Assistant to the Superintendent
Steelton-Highspire School District	Coordinator of Grants and STEM Education
Steelton-Highspire School District	Principal
The Caring Cupboard	Executive Director
The M.S. Hershey Foundation	Senior Director, Communications
The M.S. Hershey Foundation	President and Executive Director
The Salvation Army	Educational Enrichment Coordinator
The Salvation Army Harrisburg Capital City Region	Corps Officer/Pastor
The Salvation Army Harrisburg Capital City Region	Family Services Coordinator
The Salvation Army Harrisburg Capital City Region	Family Services Administrator
The Salvation Army Harrisburg Capital City Region	Director of Programs and Operations
The Wyomissing Foundation	President
The Wyomissing Foundation	Foundation Associate
Township of Derry, Dauphin County	Director of Community Development
TransCentralPA	President
Tri County Community Action	Deputy Director
Tri County Community Action	Executive Director
TW Ponessa	Behavioral Health Rehabilitation Services Coordinator
United Cerebral Palsy of Central PA, Early Intervention	Physical Therapist
United Way of Berks County	Senior Vice President, Community Impact
United Way of the Capital Region	Vice President, Community Impact
UPMC Pinnacle Children's Resource Center	Manager
UPMC Pinnacle Lead Poisoning Prevention & Education	Registered Nurse, Program Manager
UPMC Pinnacle Lebanon Valley Advanced Care Center	Director of Operations
UPMC Pinnacle Nurse-Family Partnership	Nurse-Home Visitor
UPMC Pinnacle REACCH Program	REACCH Program Manager
UPMC Pinnacle/Pennsylvania Psychiatric Institute	Chaplain
Weidenhammer	Chief Executive Officer

Key Informant Organization	Key Informant Title/Role
Women, Infants, and Children (WIC)	Outreach Coordinator/Nutritionist/Certified Lactation Consultant
Wyomissing Foundation	Associate
YWCA Greater Harrisburg	Project Manager/Case Manager
YWCA Lancaster	Chief Executive Officer
WellSpan	Community Health and Wellness Coordinator
West Shore Chamber of Commerce	President & Chief Executive Officer
West Shore YMCA	Executive Director
Western Berks Free Medical Clinic	President & Chief Executive Officer

Appendix D: Community Member Survey Partner Organizations

A Community Member Survey was conducted with 1,354 residents representing vulnerable populations across the PSH service area. Penn State Health collaborated with more than 40 community health and social service organizations and four sponsored events to disseminate the survey across the region. Partner organizations and events included:

Community Organizations

- Beacon Clinic
- Camp Hill WIC
- Carlisle Area Family Life Center
- Carlisle C.A.R.E.S.
- Central Pennsylvania Food Bank
- Centro Hispano
- Cocoa Packs
- Common Ground Café and Community Center
- Downtown Daily Bread
- Family Promise of Berks County
- Grantville Area Food Pantry
- Halcyon Activity Center
- Hamilton Health Center
- Hershey Food Bank and Community Outreach
- Hershey Plaza Apartments
- Hope Within Ministries
- Hummelstown Food Pantry
- Langan Allied Health Academy
- Latino Hispanic American Community Center
- Lebanon County Community Action Partnership
- Lebanon Family Health Services
- Lebanon Valley YMCA
- Literacy Council of Reading-Berks
- Love Inc. of Greater Hershey
- Manna Food Pantry
- Mary's Shelter
- Middletown Food Pantry
- Mohler Senior Center
- Penn National Race Track
- Penn State Health - Harrisburg
- Penn State Health - Lancaster
- Penn State Health St. Joseph
- Pennsylvania Psychiatric Institute
- PROBE
- Reading Housing Authority
- St. Francis of Assisi Church
- Steelton Food Pantry
- The Caring Cupboard
- The Gate House
- The Salvation Army
- Western Berks Free Medical Clinic
- YMCA of Reading and Berks County

Community Events

- El Poder del Rosado
- Latino Health Summit
- Penn State Health Milton S. Hershey Medical Center Health Fair
- School Nurse Conference

Appendix E: Partner Forum Participants

Two Partner Forums were conducted with 117 individuals representing the PSH service area, one in Hershey and one in Reading. Attendees represented a wide variety of community organizations including health and social service agencies, senior services, schools, religious institutions and other civic and social organizations. The organizations represented by participants included:

Hershey Partner Forum Participants (May 9, 2018)

Community Representative	Organization
Lanae Ampersand	Penn State Health
Brandon Aukamp	Elizabethtown Area School District
Rose Baron	Penn State Health Milton S. Hershey Medical Center
Jorja Barton	Central Pennsylvania Food Bank
Debra Boyd	Penn State Extension Nutrition Links
Joanne Carroll	TransCentralPA
Caitlin Cluck	American Lung Association
Austin Cohrs	Penn State Health Milton S. Hershey Medical Center
Oneida DeLuca	UPMC Pinnacle
Judy Dillon	Penn State Health Milton S. Hershey Medical Center
Jennifer Doyle	The Foundation for Enhancing Communities
Christine Drexler	Cocoa Packs
Deborah Dum	Bethesda Mission
Shelly Eby	Walk, Central PA, Walk
Sarah Edge	Pennsylvania Department of Health
Julie Eisenhauer	Penn State Health
Chuck Emerick	Derry Township
James George	Penn State Health Milton S. Hershey Medical Center
Deb Gogno	Diakon
Kelly Gollick	CONTACT Helpline
Deanna Graaf	Penn State Health Milton S. Hershey Medical Center
Jennifer Groff	Penn State Health Milton S. Hershey Medical Center
Sandra Guibas	Capital Area Head Start
Sandra Gurreri	Cumberland County Aging and Community Services
Mary Hahn	Penn State Health St. Joseph
Brenda Harding-Albert	PA Link
Kay Huber	Beacon Clinic
Annie Huff	Cumberland County Aging and Community Services
James Kincaid	Penn State Health Milton S. Hershey Medical Center
Sadie Kinnarney	Steelton-Highspire School District
Bill Krenz	Penn State Health Milton S. Hershey Medical Center
Ashleigh Kulick	Power Train Gym
Kathleen Lacomba	Tri County Community Action
Carol LaRegina	Penn State College of Medicine
Lisa Lemon	Capital Area Head Start
Brian Lentes	Pennsylvania Department of Health
Michael Macchioni	Gemma's Angels
Nicole Maurer	Community Health Council of Lebanon County

Hershey Partner Forum Participants (May 9, 2018) cont'd

Community Representative	Organization
Katherine Middleton	Bayada Home Health Care
William Milchak	Penn State Psychiatry
Karla Mitchell	Ronald McDonald House Charities of Central Pennsylvania
Ruth Moore	Pennsylvania Psychiatric Institute
Jason Reifsnyder	Derry Township School District
Angela Roebuck	Capital Area Head Start
Karen Sandnes	Pennsylvania Psychiatric Institute
Shakila Shah	PA Refugee Health
Jennifer Sharp	Diakon
Gail Snyder	Penn State Health Milton S. Hershey Medical Center
Melissa Snyder	The Salvation Army Harrisburg
Shelly Sweigart	Diakon
Ted Spotts	Diakon
Carol Steele	Bethesda Mission
Alane Stief	Compeer of Lebanon County
Ruth Stoll	Beacon Clinic
Melissa Stradnick	Hershey Entertainment and Resorts
Kelsey Taylor	Penn State Health Milton S. Hershey Medical Center
Carol Thornton	Partnership for Better Health
Deb Tregea	Penn State College of Medicine
Ashley Visco	Penn State Health Milton S. Hershey Medical Center
Melanie Waters	Hamilton Health Center
Melissa Weigle	Mohler Center
Heather Wilson	Diakon
Jennifer Wintermyer	Tri County Community Action
Angela Wise	YWCA Greater Harrisburg
Gail Witwer	Partnership for Better Health

Reading Partner Forum Participants (May 15, 2018)

Community Representative	Organization
Iliana Almodovar	Penn State Extension
Carolyn Bazik	Co-County Wellness Services
Cindy Bonney	Diakon
Gretchen Burford	Penn State Health Community Medical Group
Austin Cohrs	Penn State Health Milton S. Hershey Medical Center
Lynann DeCusatis	Home Health Care Management
Desha Dickson	Tower Health
Kathy DiGuiseppe	Penn State Extension
Judy Dillon	Penn State Health Milton S. Hershey Medical Center
Katie Fetzer	The Food Trust
Erica Francis	Penn State PRO Wellness
Kristin Gehris	United Way
James George	Penn State Health Milton S. Hershey Medical Center
Mandy Gerhard	Berks County Intermediate Unit

Reading Partner Forum Participants (May 15, 2018) cont'd

Community Representative	Organization
Pat Giles	Wyomissing Foundation
Amy Good	MidPenn Legal Services
Deborah Greenawald	Alvernia University
Debra Griffie	Penn State Extension
Peter Guerrieri	Pivot Physical Therapy
Mary Hahn	Penn State Health St. Joseph
Rebecca Hartman	Berks Counseling Center
Mary Hennigh	Berks County Mental Health/Developmental Disabilities
Rose Mary Herrero	Integrated Living
Mary Kargbo	Berks Community Health Center
Kathy Kolb	Breast Cancer Support Services
Donna Landis	Western Berks Free Medical Clinic
Ada Leung	Penn State Berks
Frances Malley	Berks Counseling Center
Lynn Manganaro	Breast Cancer Support Services
Kimberly Musko	The Heritage of Green Hills
LuAnn Oatman	Berks Encore
Thomas Orsulak	St. Peter the Apostle Roman Catholic Church
Amanda Phile	Penn State Extension
Monica Reyes	Berks County Community Foundation
Virginia Rush	Wyomissing Foundation
Bob Scheffler	Haven Behavioral Hospital
Jim Shankweiler	Penn State Berks
Cynthia Shirey	Berks Counseling Center
Gail Snyder	Penn State Health Milton S. Hershey Medical Center
Susan Sullivan	Penn State Health St. Joseph
Lisa Sweitzer	Berks Visiting Nurses Association
Donnie Swope	Berks Department of Emergency Services
Ramona Turner Turpin	Literacy Council of Reading-Berks
Whitney Venus	Home Health Care Management
Rochelle Wanner	Berks County Area Agency on Aging
Wendie Waschitsch	Western Berks Free Medical Clinic
Lisa Weaver	Penn State Health St. Joseph/Penn State Berks
Laura Welliver	Penn State Health St. Joseph
Dennis Williams	NAACP
Mary Wolfe	Hope Lutheran Church
Allison Wollyung	Berks County Head Start
Deanna Ziemba	Diakon Senior Living

Appendix F: Existing Community Assets to Address Community Health Needs

Community Benefit Inventory

Penn State Health Milton S. Hershey Medical Center maintains an inventory of community partners in a community benefit database, the Community Benefit Inventory for Social Accountability (CBISA) Plus™ for Healthcare by Lyon Software (http://lyonsoftware.com/). This partner inventory includes 300+ community organizations and multiple contacts for each one and highlights programs and services within the five-county assessment area. It is continually updated by the CBISA project managers to remain current and includes contact names, organization name, emails, telephone numbers, addresses, program descriptions and relationship to Penn State Health. A current copy of this inventory can be generated in real-time upon request.

Because this inventory represents organizations our entire campus works with, it identifies a wide-range of community organizations and public health agencies that are serving the various target populations within our service area. Therefore, it was used to generate an initial list to invite organizations to provide their input on community health needs via Key Informant Surveys and Interviews, assist with conducting Community Member Surveys, attend Community Forums and host Focus Groups.

In addition to this list, other departments across campus who are very active in the community maintain lists of their key community contacts. Owners of these lists were invited to complete the Key Informant Survey and were and asked to share it with their contacts to also complete. For example, the Mohler Senior Center Executive Director received the survey invitation via her participation on the Partners for Healthy Communities of Central PA Coalition and she then forwarded to other individuals in her same role in our five-county area. The invitation was also sent to the Penn State College of Medicine Department of Public Health Sciences workforce development list that includes excellent connections to several Pennsylvania Department of Health Divisions. Lists engaged in the surveying process include:

- Band Together and the WISE Study
- Better Together Lebanon
- Love Inc. Coalition of Caring
- Partners for Healthy Communities of Central PA Coalition
- Pennsylvania Psychiatric Institute
- Penn State Cancer Institute
- Penn State Clinical and Translational Science Institute
- Penn State College of Medicine, Department of Public Health Sciences
- Penn State College of Nursing
- Penn State Health Community Medical Group
- Penn State Health Department of Governmental Health Relations
- Penn State Health Milton S. Hershey Medical Center Board of Directors
- Penn State Health Milton S. Hershey Medical Center Community Health Team
- Penn State Health Milton S. Hershey Medical Center Nursing Community Advisory Board

- Penn State Health Population Health
- Penn State Health Rehabilitation Hospital
- Penn State Health Resuscitation Science Training Center CPR in the Schools Program
- Penn State Health Safe Kids Program
- Penn State PRO Wellness
- Pennsylvania Department of Health Public Health 3.0
- Senior Center Executive Directors
- South Central PA Opioid Awareness Coalition

Partner Forums

Partner Forum participants were divided into small groups to discuss each of the identified areas of need based on their expertise, knowledge or interest. As part of the facilitated exercise, participants were asked to identify community assets to address each health issue. The following lists profile existing assets according to health issue.

The lists include organizations as identified by Partner Forum participants, and are not inclusive of all community partners. Specific organizations will be added to the Penn State Health CBISA Partner Directory if they are not already included and may be asked to collaborate on Implementation Plan development.

Access to Care

- 211
- Area Agency on Aging
- Berks Community Health Center
- Children and Youth Services
- Churches
- County health councils
- Emergency and supplemental food programs
- Federally qualified health centers
- Free community clinics
- Government
- Libraries
- Local nonprofits
- Mid Penn Legal
- Parish nurses
- School health assessments
- Street Medicine Institute
- Welfare offices

Chronic Disease Management

- Aclamo Family Services
- Bayada
- Berks Encore
- Meals on Wheels
- Penn State Extension
- Visiting Nurse Association

Food Insecurity

- Community gardens
- Emergency and supplemental food programs
- FIT Program
- Home economics and life skills classes
- Hope Lutheran Church Food Pantry
- Penn State Extension
- The Food Trust
- School districts

Healthy Lifestyles

- Churches
- Community coalitions
- Community events
- Law enforcement
- Metropolitan Planning Organizations (MPO) and township planners
- National Association for the Advancement of Colored People (NAACP)
- Uber Berks
- Walk, Central PA, Walk
- Women, Infants, and Children (WIC)

Mental Health

- Compeer of Lebanon County
- Mental Health First Aid
- No Way Out Ministries
- YWCA

Personal and Community Safety

- Beacon Clinic
- Child advocacy centers
- Community health workers
- County Child Death Review Team
- Emergency and supplemental food programs
- Government
- Head Start program
- HELP Office
- Hospitals/Primary care providers
- Law enforcement
- Love in the Name of Christ
- Mentoring programs
- Parents/Care providers
- Boy/Girl Scouts
- Second City Church
- Teachers
- Victim service agencies

Substance Use Disorder

- 211
- Berks Conference of Churches
- Berks Counseling Center
- Berks Treatment Access & Services Center (TASC)
- Caron Treatment Centers
- Council on Chemical Abuse (COCA)
- Drug courts
- Elected officials
- Faith communities
- Family Guidance Center Health insurers
- Hospital Association of PA
- Law enforcement
- Mental Health/Developmental Disabilities Departments
- Reading Risk Reduction
- School districts

Appendix G: Penn State Health Milton S. Hershey Medical Center Evaluation of Impact Report Card

The following objectives improved in Dauphin County	Baseline 2016	Actual 2017	Target 2019
Percent of Adults Who Report Poor or Fair Health[1]	16%	14%	12%
Average Number of Poor Mental Health Days Reported in Past 30 Days[1]	4	3.7	3
Number of Persons Admitted for Alcohol Abuse[2]	224	195	192
Percent of Adults Who Report No Leisure-time Physical Activity[1]	24%	23%	20%
Percent of Adults Who Are Current Smokers[1]	19%	17%	15%

Several Penn State Health Milton S. Hershey Medical Center (PSHMC) initiatives may have contributed to these positive trends:

- Food pantry health education programs such as healthy eating and tomato planting, blood pressure and cholesterol screenings, and free flu shots were offered in nine local pantries, reaching people who may not have regular access to preventive health care services.
- PSHMC and Dickinson Law School initiated a Medical-Legal Partnership that provides free advice for legal needs which may negatively impact health, such as advanced directives, housing, domestic violence, medical bills, immigration, education, energy and utility issues and public benefits.
- Al-Anon is a fellowship program offered weekly to provide support and inspire hope for families of alcoholics to change attitudes and aid recovery.
- A Bike Share Program was implemented on the Penn State Hershey campus with immediate plans to extend into the Derry Township community.
- Smoking Prevention and Cessation Programs including carbon monoxide screenings were offered, with a special focus placed on the LGBTQ community; and 29% of participants screened agreed to follow-up services to help them quit.

The following objectives did not improve in Dauphin County	Baseline 2016	Actual 2017	Target 2019
Number of Persons Admitted for Drug Abuse[2]	473	520	405
Percent of Adults Who Are Obese (BMI of >=30)[1]	31%	33%	29%

Multiple PSHMC initiatives are taking place to focus on:

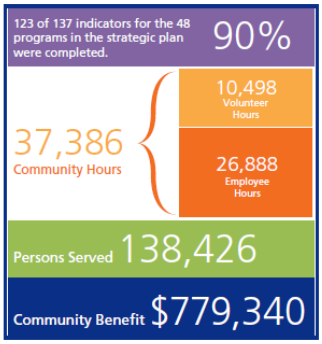
Drug Addiction Issues & Awareness

- Drugs 101
- Drug Take Back
- Opioid Task Force and Stewardship Program
- Pennsylvania Coordinated Medication-Assisted Treatment Grant for a Hub-and-Spoke Model to Treat Opioid Use Disorder

Healthy Eating & Active Lifestyles

- Community Garden
- Farmers' Market in Hershey
- Food as Medicine
- HealthSLAM

[1]County Health Rankings; [2]County Health Profiles



Program Title	Employee Hours	Volunteer Hours	Net Community Benefit	Persons Served
ADHD Program	180	0	29,135	300
Al-Anon	65	0	3,037	350
Alder Health Services	37	0	3,618	3,804
ALS Telemedicine	624	0	0	106
Anxiety Program	180	0	29,135	232
ASD (Autism Spectrum Disorder)	91	0	0	907
Attorney General's Task-Force Substance Abuse	12	0	562	186
Band Together	14,317	4,193	0	87,090
Bike Share Program	177	0	33,687	158
Center for the Protection of Children	84	0	10,717	698
CHIP Awareness and Enrollment	1	0	0	0
Carbon Monoxide and Pulmonary Function Testing in the Community	17	0	795	746
Cocoa Pack Program	57	0	2,521	390
Community Check-Up Center	890	0	106,133	1,400
Community Garden	500	600	22,912	500
Dental Services	127	0	22,923	0
Dermatology TeleHealth	72	0	8,308	225
Diabetic Adult Care	0	0	0	100
Diversity Education and Cultural Competency	33	27	0	623
Drug and Alcohol Related Community Awareness in Schools	0	2	0	3
Drug Take Back Day	88	99	4,348	340
Drugs 101	72	120	3,364	519
Farmers Market / Food as Medicine	193	237	2,565	7,418
Financial Counseling and Insurance Enrollment	93	0	4,321	443
Food Pantry Health Education / Children's Summer Program	218	476	13,169	2,285
Get Fit Together	3	23	139	15
HealthSLAM	0	136	0	689
Healthy Woman Free Mammogram Program	15	0	1,565	45
Heart and Vascular Health for Adults	101	0	6,791	94
Heart Health for Children	170	250	69,635	1,000
Hope Within Ministries	150	0	31,631	1,000
Influenza Vaccine Administration	347	218	44,195	776
LionCare at Bethesda Mission	760	2,305	84,460	1,635
LionNet Telestroke	197	0	9,638	1,135
Medical-Legal Partnership	52	0	5,295	104
Nepalese and Bhutanese Populations	40	0	1,419	25
Opioid Task Force and Stewardship Program	229	0	17,604	281
Pediatric Trauma Center and Injury Prevention	840	236	6,049	7,245
Prescription Assistance Program	4,160	0	137,125	1,065
Primary Care Physicians and Advanced Practice Clinicians	1	0	0	45
Rural and Urban Cancer Networks	680	135	0	1,665
School Health Assessments	737	1,011	38,222	7,835
Skin Cancer Due to Sun Exposure	33	0	6,609	282
SMILES Dental Program Referrals	6	0	609	2
Stroke Outreach	132	23	5,960	2,283
Tobacco Intervention Program Support Group	102	57	11,144	677
Walk Friendly Community Assessment	6	37	0	1
Walking Opportunities	0	314	0	1,704
Totals: CHNA	**26,888**	**10,498**	**779,340**	**138,426**

Appendix H: Penn State Health Milton S. Hershey Medical Center Community Start-Up Grants

Penn State Health Milton S. Hershey Medical Center funded start-up grants for community-based projects addressing the identified health priorities from the 2015 CHNA. The following section includes a summary of funded projects for 2016 to 2018.

2016 Start-Up Grants

Project Title & Contact(s)	CHNA Priority	Description & Results
HealthSLAM Alexandra Petrie Renyta Scales	Healthy Lifestyles - Nutrition	HealthSLAM educated third, fourth and fifth grade students in Dauphin and Lebanon County elementary schools about healthy food choices. The program started with a video that students watched with their teacher or on their home computer. After watching the video, volunteers from Penn State College of Medicine visited classrooms and facilitated 60 minutes of exercises and activities designed to solidify the concepts in the video. Medical students provided 184 hours to offer this program to 577 students. They also trained additional first-year medical students to sustain the program and enhanced their curriculum by purchasing cereal boxes so the kids could compare food labels using real-life choices.
Assessing the Health and Wellness Priorities of Local Childcare Facilities Erica Francis	Healthy Lifestyles - Nutrition	The initial survey of 30 local childcare centers regarding their wellness policies and awareness found that the most common barriers to obesity prevention, healthy eating, physical activity, and limited screen time were lack of parental support, lack of money, lack of staff support, and lack of staff knowledge. The majority of childcare centers indicated they would like opportunities for professional education and assistance with development and implementation of wellness policies.
Prevention Produce for Underserved Populations Daniel George	Healthy Lifestyles - Nutrition	Prevention Produce extended its fruit and vegetable prescription voucher outreach program to two additional markets, Broad Street and Farmstead; and two underserved populations at-risk for nutrition related illnesses: 1) women living in transitional housing in Harrisburg, and 2) 10 recently resettled refugee families from Syria. Medical students contributed 150 volunteer hours providing vouchers for 80 individuals, serving as mentors, assisting with shopping, and offering nutritional education. Post program data showed that families consumed more servings of fruit and vegetables, and increased their knowledge about dietary prevention of chronic disease. In addition to benefits for participants, medical students also developed skills in teaching preventive health and working with underserved populations in community settings. Initial findings and program descriptions were published, including a paper in *The Lancet* and an essay in press with the *American Journal of Public Health*; and students are developing research projects.

2016 Start-Up Grants continued

Project Title & Contact(s)	CHNA Priority	Description & Results
School to Table™ Elizabeth Hivner	Healthy Lifestyles - Nutrition	School to Table ™ provided Steelton-Highspire Elementary School students in grades K-6 with one rolling aquaponics cart. Students were introduced to aquaponics using 21st Century science, technology, engineering, and math (STEM) skills to learn the system design and operations. The cart provided opportunities to learn new concepts that were interactive and engaging creating excitement and passion for many students. Overall, the project reached 1,912 individuals and achieved the flowing outcomes: promoted better nutrition and food knowledge to students and families; provided the community with affordable, healthy food choices; provided students with immersion in new technologies; delivered new educational opportunities for students to be mentored by experts; and provided opportunity for input from the school and businesses.
Get Fit Together Brian Lentes Corby Myers	Healthy Lifestyles - Lack of Physical Activity	Get Fit Together helped low-income families in South Central PA become healthier together with the assistance of a free personal trainer and registered dietitian at the Harrisburg YMCA. Two multi-week sessions were offered with different physical activities and nutritional education at each session. During the first Get Fit Together session four families participated and lost a total of 38 inches, 27.5 pounds, and 39% body composition. All four families filled out paperwork for financial aid to become members of the YMCA to continue their journey to Get Fit Together. During the second session, five families participated and lost a total of 45 inches, 32 pounds, and 47% body composition. Participants reported becoming closer as a family and having a new outlook on healthy living habits.
Walk by Faith - Church Volunteer Implementation Marcyann Bencivenga	Healthy Lifestyles - Nutrition & Lack of Physical Activity Access – Specialty Care	Walk by Faith toolkits were developed for rural churches to self-implement to address cancer risk reduction and cancer screening awareness. Toolkits included pedometers; calorie, fat, and carbohydrate counters; educational programs on healthy eating; and group physical activities. Three churches engaged in this opportunity. Interviews indicated changes in knowledge, attitude, behavior, physical activity, fruit and vegetable consumption, and participant's weight. Participants reported walking a total of 41,079,189 steps as of the end of December, 2016. Overall, the Walk by Faith program reached 198 individuals.
Improving Health Care Quality Through Language Bridging Patricia Silveyra	Access – Primary Care	Through this interpretation skills program, 51 bilingual medical students took full advantage of their service time to train to become certified medical interpreters in their native language. After receiving training, students felt more confident about interpreting for 90 uninsured and under-insured Spanish-speaking Latino patients at the Lebanon Valley Volunteers in Medicine clinic. The clinic reported the interpreters improved healthcare outcomes.

2016 Start-Up Grants continued

Project Title & Contact(s)	CHNA Priority	Description & Results
LionCare Tyrone Clayton Cooper	Access – Primary Care	LionCare Tyrone, a free clinic established and run by College of Medicine students, improved access and provided acute care to the underserved population in Tyrone, PA. Medical students partnered with the College of Nursing at Penn State Altoona, and Tyrone Regional Health Network to contribute 415 hours serving 69 patients during 10 monthly clinics. Staff and students also offered 100 blood pressure screenings at a free community event.
Transformational Ministry Program Liz Massar	Access – Primary Care	Transformational Ministry, a service offered by Love In the Name of Christ (Love INC), funded the training of a certified facilitator for Faith and Finances by the Chalmers Center. Through the Faith and Finances educational classes, five low income individuals in need in the community were empowered to be stewards of their own gifts and resources to overcome poverty. Two computers, purchased to sustain the program, were used by participants for budgeting assistance and job searches to support themselves and provide for their families. Love INC provided 115 volunteer hours to the Transformational programs; including time contributed by four volunteers that served as a planning and oversight team.
Interdisciplinary Service Learning: Hershey Plaza Apartments Kelly Karpa Charlie Lin	Access - Primary Care	Medical and Nursing students formed the Interprofessional Service Organization (IPSO), which has two divisions: a monthly Health Fair at the Hershey Plaza and a Health Mentors program. Over the course of the year, the events cumulatively recorded attendance of 110 people, with 6 to 17 participants each month. The Health Fairs focused on activities such as medication safety, hand hygiene, bone health and healthy eating. The Health Mentors program enabled interprofessional teams of students to work with six Hershey Plaza residents on specific health goals over a longitudinal period of time. Students also partnered with Lebanon Valley College physical therapy students who led exercise sessions and conducted balance assessments as well as pharmacy students and dietitian interns. Students had the opportunity to learn from each other's disciplines as well as from the community member's experience with the healthcare system and about their barriers to achieving health and well-being. One resident with a BMI indicating "obesity" lost more than 20 pounds and was able to stop all diabetes medications.
Colorectal Cancer Community Education Program Patricia A. Robinson	Access – Specialty Care	The Colorectal Cancer Community Education program trained 13 Penn State Community Health Workers (CHW) to facilitate Colorectal Cancer educational events to raise awareness of colorectal cancer and increase screenings among African American residents in Dauphin County. In total, CHWs educated 145 Harrisburg residents in their efforts to reduce morbidity and mortality through early detection and treatment. This program will continue to navigate 25 individuals to complete the colon cancer screening of their choice.

2016 Start-Up Grants continued

Project Title & Contact(s)	CHNA Priority	Description & Results
EMS Feedback Tool Standardized Stroke Educational Video Kelly Rotondo	Access – Specialty Care	The Emergency Medical Service (EMS) Feedback Tool standardized procedures for early interventional stroke care among EMS providers within the LionNet Telestroke Network. Following review of early and quick assessment skills of EMS personnel, a closed-captioned educational video was designed and distributed to more than 200 EMS companies and reached 309 individuals. EMS providers were then evaluated by the EMS Feedback Tool on their delivery of care to stroke patients. The LionNet Telestroke team provided 10 feedback reports to the Life Lion EMS and Mt. Nittany Medical Center has given nine feedback reports to EMS companies in the State College area. Plans are to use the video education and feedback tool to expand to other EMS providers in the state.
"My Gift of Grace" Lauren J. Van Scoy	Access – Specialty Care	"My Gift of Grace" encouraged families and friends to have a meaningful conversation about sensitive end-of-life issues and medical decisions. Focus group participants reported the program was helpful and made them think about their own wishes and beliefs in addition to their loved one's values in a positive and light hearted manner. Upon follow-up, approximately 75% of participants went on to complete additional advance care planning such as speaking with loved ones about end-of-life decisions and completing a living will. Physicians, nurses and trained facilitators contributed 183 hours in support of 22 events at local churches, senior centers, retirement homes and libraries that reached 93 persons. One abstract was submitted to the American Thoracic Society (ATS) Journals in 2016; preliminary data supported a NIH Research Project Grant Program (R-01) application; and a manuscript has been submitted.

2017 Start-Up Grants

Project Title & Contact(s)	CHNA Priority	Description & Results
Breaking Language Barriers Patricia Silveyra	Healthy Lifestyle - Improve physical and mental health	A total of 100 students in nine different languages have been trained as medical interpreters for walk-in clinics serving 101 patients with limited English proficiency. 98% of those trained indicated they were more comfortable with interpreting following the training and 100% indicated interest in serving as interpreters. A system to sign-up to interpret has been established for when clinics need help the most and the program is now serving additional locations, all reporting excellent results.
Dangers of Impaired Driving Kimberly Fleissner	Healthy Lifestyle - Improve physical and mental health	Provides interactive educational tools and visuals for students to increase knowledge about the dangers of impaired driving and to encourage positive behavior change. All supplies have been purchased to maintain the program, 510 teens trained and additional community partnerships established.
Spinal Cord Injury Peer Mentoring Program Nancy Lokey	Healthy Lifestyle - Improve physical and mental health	The Spinal Cord Injury Peer Mentoring Program, including seven peer mentors, is fully established and began in January, 2018 with a handbook, orientation, monthly meetings, follow up forms, quality of life survey, and brochure. Plans are now to use this model to create additional peer mentoring programs for brain injury, amputee, and stroke populations.
LGBTQ+: Time to Quit - The Last Drag! Bill Krenz	Healthy Lifestyle - Reduce smoking	Smoking cessation and prevention information reached 185 members of the LGBTQ+ community; 72 completed CO screening and 38 had elevated results; 19 of those (50%) agreed to follow-up to help them quit smoking; an excellent response! The LGBTQ+ & Allies Affinity Group will continue this project due to the experience, equipment and supplies gained from this grant as well as LGBTQ+ community partners being more aware of these screenings.
Bringing locally grown fruits and vegetables to Food Pantries Sarayna Schock	Healthy Lifestyle - Nutrition	In partnership with the Penn State Extension and Central Pennsylvania Food Bank, access to fresh fruit and produce and nutritional education was increased in five local food pantries: Grantville, Morrison Towers, Steven's Emanuel, Gratz Military Share and Rutherford Military Share. An estimated total of almost 72,000 pounds of produce was distributed.
Training Extension Educators to Adapt/Implement Faith-based Toolkits Marcyann Bencivenga	Healthy Lifestyle - Reduce obesity	This project prepared four Penn State Extension Educators to assist rural churches and community members to adapt the Walk-by-Faith toolkit. The combined program total of 101 participants in six churches increased physical activity, improved fruit and vegetable consumption and many participants reported weight loss. Health Educators also observed a positive impact on church social activities becoming healthier.

2017 Start-Up Grants continued

Project Title & Contact(s)	CHNA Priority	Description & Results
Health Haven Laura Penny	Healthy Lifestyle - Reduce obesity	Two multi-week sessions were offered by five students to teach 46 Salvation Army clients the basics of cooking so they could use the items they received at the food pantry to create healthy menu items for their families on a small budget. Clients tried fresh produce they had never tasted before and learned to prepare them in ways they enjoyed. They reported remaking the meals at home, weight loss, feeling generally healthier and more equipped to take care of themselves.
Enhance®Fitness Corby Myers	Healthy Lifestyle - Increase physical activity	The Enhance®Fitness Program was successfully initiated by certified instructors at three Harrisburg Area YMCA locations to provide access to fitness training and education on cardiovascular endurance, strength, flexibility, and balance to 30 older adults living with arthritis.
STRESS: Student and Teacher Response to Environmental School Stress Elizabeth Hivner	Behavioral Health - Improve mental health	Teachers (n=87) from the South Central Pennsylvania region completed the 15-minute, validated STRESS survey. Overall, teachers reported high levels of stress and similar coping mechanisms with little stress-reduction programming and resource availability in their districts. Next steps are to share mindfulness and stress reduction resources with participating teachers and explore opportunities to implement educational sessions.
Improving Stroke Care Through Affordable Education for EMS Kathy Morrison	Access - Specialty Care	Four stroke team members were trained as ASLS Instructors and Life Lion Critical Care has been established as the Training Center for ASLS. The first educational seminar was held with 18 prehospital stroke providers trained. This training will be continued for additional community pre-hospital providers with the goal of improved efficiency and communication resulting in more patients arriving early enough to qualify for IV tPA and thrombectomy.
Glasses for Children in Need Beth Bates	Access - Specialty Care	Penn State Hershey Departments of Nursing and Ophthalmology in partnership with the Lebanon Free Clinic conducted 48 vision exams and provided glasses for 47 Lebanon School District students who failed their school vision screenings and did not have resources for additional vision care. Only one child seen did not require glasses indicating effectiveness of the school screening program also offered by the Penn State Hershey Nursing Department.
CPR in Schools Tammi Bortner	Access - Specialty Care	CPR in the Schools is a self-contained 10 manikin kit with DVD's that is used to train groups in Hands-Only CPR in just 30 minutes. AED Trainers and spare pads were also added to kits. Grant placed CPR in the Schools Kits in five local schools in February, 2017 to increase the readiness and responsiveness of students and staff to impact the survival rate from sudden cardiac death.

2018 Start-Up Grants

Project Title & Contact(s)	CHNA Priority	Description & Results
Navigation Outreach in Lebanon County	Access to Primary Care	Develop health education and outreach programs to promote the healthcare services of a local free clinic to increase assess to primary care in that underserved community.
#All Kids Covered: Improving Access to Healthcare for Lebanon County Children	Access to Primary Care	The purpose of this study is to understand barriers to improve access to healthcare for uninsured children in Lebanon county by conducting community focus groups and surveys.
Latinos Medical Student Association Medical ESL Program	Access to Primary Care	Address the current healthcare shortage of bilingual providers by training immigrant physicians to improve their English language fluency, obtain healthcare entry-level positions and prepare for board exams.
Glasses for Young Students	Access to Specialty Care	Identify young students (K-3rd grade) who do not meet the minimum standards for vision screening requirements in two underserved school districts, expand resources to provide follow-up eye care and obtain 40 pairs of classes.
SEFTA: Stroke Education For The Amish	Access to Specialty Care	Partner with key members of the Amish community to Identify ways to reach this high-risk population to education them on stroke risks, prevention, and treatment options.
CARFit	Access to Specialty Care	This program is designed to help older drivers find out how well they currently fit their personal vehicle, highlight actions they can take to improve their fit, and to promote conversations about driver safety and community mobility.
LGBTQ+ "Be the Change-Save A Life"	Mental Health	Implement a train-the trainer program with an ally component in local school district Gay Straight Alliance (GSA) programs that focusses on both bullying and suicide prevention.
Raising Mental Health Awareness for Youth and Young Adults	Mental Health	Increase awareness of psychiatric illnesses and of local supports for mental health treatment in youth and young adults through community events, including educational media and discussion sessions with experts and community representatives.
After The Storm: Trauma Informed Care, Hispanic Support and Care Coordination	Mental Health	Build a community program through a trauma-informed care approach for migrant victims who are uninsured to help them connect through support groups, screen for mental health disorders and access healthcare and community services.
REMARK - Rehabilitation, Education, and Mentorship for At-Risk Kids	Mental Health	Partner with Alternative Rehabilitation Communities to provide mentorship, health literacy and health education; as well as exemplifying healthy lifestyle modifications to address mental illness in incarcerated youth.

2018 Start-Up Grants continued

Project Title & Contact(s)	CHNA Priority	Description & Results
Love INC Homes of Hope Transitional Housing Program	Mental Health	Use the Love INC's Homes of Hope Transitional Home to empower homeless families to transition to sustainable housing and ultimately improve their physical, social, emotional and mental health.
Cancer Survivorship Community Initiative	Mental Health	Coordinate and fund transportation to underserved cancer survivors in Central PA so they can attend the Penn State Cancer Survivorship Initiative providing education, support and celebration to participants.
Aquaponics Nutrition Education and CSA Programs	Inadequate Nutrition & Obesity	Develop nutrition education and community supported agriculture (CSA) programs for the Steelton-Highspire Community using fresh produce grown in the Steel-High Aquaponic Greenhouse.
Penn State Health Emergency Food Box Initiative	Inadequate Nutrition & Obesity	Identify food insecurities in outpatient clinics and supply a one-time emergency food box to those identified in need, bridge the gap between office visit and community resources available and ultimately improve health outcomes.
Prevention Produce for Central PA	Inadequate Nutrition & Obesity	Improve access to fresh produce and increase nutrition knowledge through an educational program that includes four one-on-one interaction sessions between medical students and Food Pantry ASCVD Program participants.