Geisinger

Community Health Needs Assessment

July 1, 2018 – June 30, 2021

Northeast Region

Geisinger Wyoming Valley Medical Center

Geisinger South Wilkes-Barre

June 2018

BAKER TILLY

Candor. Insight. Results.

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Our Commitment to Community Health

Geisinger has long been known for providing superior professional and compassionate healthcare to the communities we serve throughout northeast Pennsylvania. Our commitment continues to grow as we work to reopen emergency services at our Geisinger South Wilkes-Barre campus, return obstetrics care to Geisinger Community Medical Center, and enhance services at Geisinger Wyoming Valley Medical Center and the Geisinger Marworth Alcohol and Chemical Dependency Treatment Center.

We are proud of our non-profit mission and work every day to ensure we meet the healthcare needs of the region for years to come. We've taken major steps recently in achieving that goal.

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

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

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

Sincerely,

Anthony Aquilina, DO
Regional President, Northeast

Ron Beer
Chief Administrative Officer, Northeast

Overview of the FY2019 CHNA

A Collaborative Approach to Community Health Improvement

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

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

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

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

CHNA Leadership

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

CHNA Planning Committee

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

CHNA Regional Advisory Committee

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

Community Engagement

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

CHNA Methodology

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

Specific research methods included:

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

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

Prioritized Community Health Needs

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

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

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

Board Approval

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

Research Partner

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

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

Geisinger FY2019 CHNA Research and Planning Team
Julius Green, CPA, JD, Tax Exempt Practice Leader
Colleen Milligan, MBA, CHNA Project Manager
Catherine Birdsey, MPH, Research Manager
Brittany Blau, MPH, Research Consultant
Jessica Losito, BS, Research Consultant
Keith Needham, BS, Research Consultant

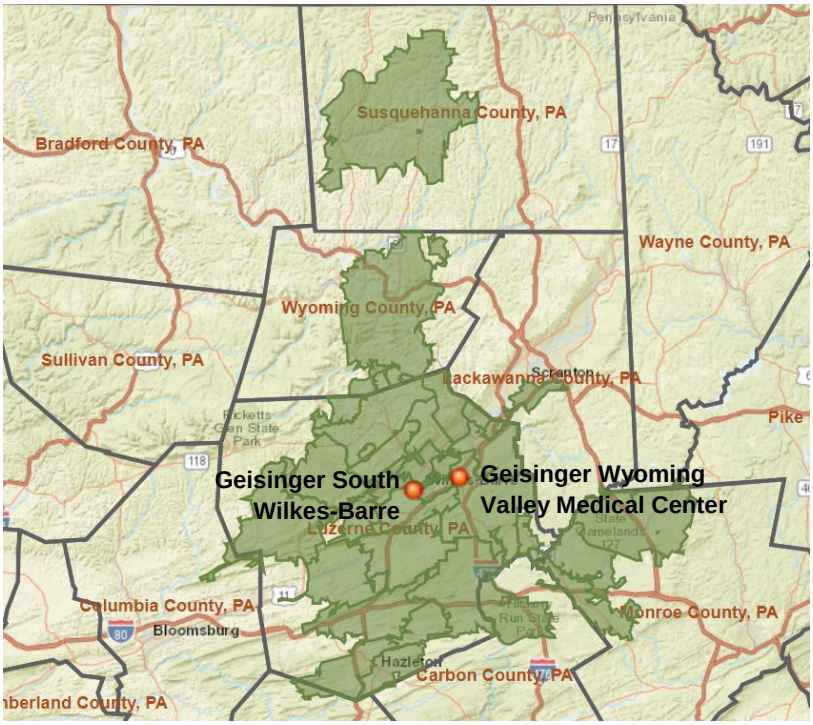
Service Area Description for Geisinger South Wilkes-Barre and Geisinger Wyoming Valley Medical Center

Population Overview

Geisinger Wyoming Valley Medical Center and Geisinger South Wilkes-Barre primarily serve residents in 31 zip codes spanning Lackawanna, Luzerne, Monroe, Susquehanna, and Wyoming Counties in Pennsylvania. The 2017 population of the service area is 371,119 and is projected to decrease 0.6% by 2022.

Geisinger South Wilkes-Barre/Geisinger Wyoming Valley Medical Center Service Area

Zip Codes
18201, Luzerne
18202, Luzerne
18222, Luzerne
18224, Luzerne
18347, Monroe
18466, Monroe
18505, Lackawanna
18610, Monroe
18612, Luzerne
18618, Luzerne
18621, Luzerne
18634, Luzerne
18640, Luzerne
18641, Luzerne
18642, Luzerne
18643, Luzerne
18644, Luzerne
18651, Luzerne
18655, Luzerne
18657, Wyoming
18660, Luzerne
18661, Luzerne
18701, Luzerne
18702, Luzerne
18704, Luzerne
18705, Luzerne
18706, Luzerne
18707, Luzerne
18708, Luzerne
18709, Luzerne
18801, Susquehanna



Service Area Population Growth

2017 Population	% Growth from 2010	% Growth by 2022
371,119	0.0%	-0.6%

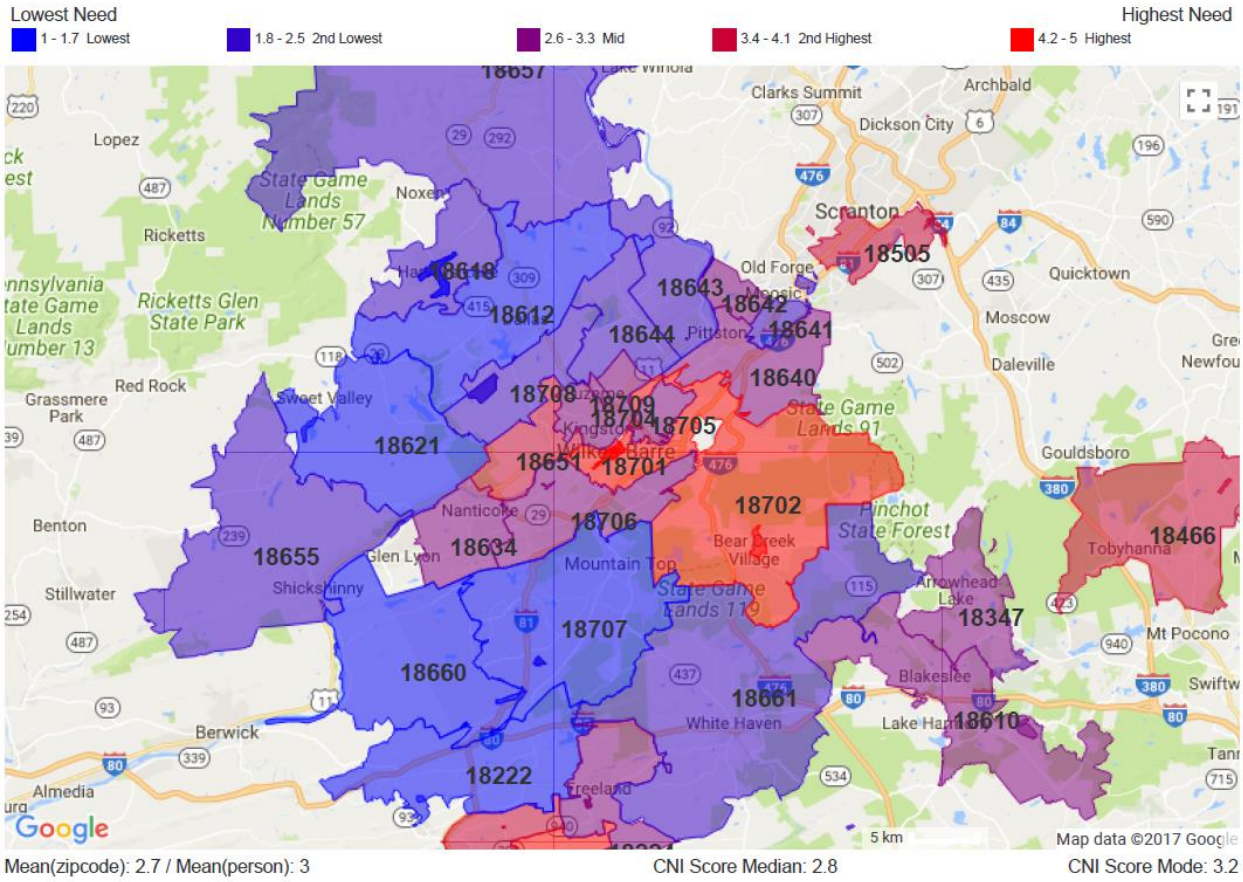
Zip code of residence is one of the most important predictors of health disparity; where residents live matters in determining their health. The Community Need Index (CNI) was developed by Dignity Health and Truven Health Analytics to illustrate the potential for health disparity at the zip code level.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

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

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

The weighted average CNI score for the 31 zip code service area is 3.0, indicating moderate overall community need. Zip code 18201, Hazelton has the highest score, followed by Wilkes-Barre zip codes 18701 and 18702. Both areas are designated as Medically Underserved Areas.

Community Needs Index for Geisinger Wyoming Valley Medical Center/ Geisinger South Wilkes-Barre Service Area



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

Populations in 10 of the 31 service area zip codes have higher poverty rates in comparison to their respective county. Populations in Scranton, Wilkes-Barre, and Hazleton zip codes have the highest poverty rates and the lowest educational attainment. Populations in the zip codes are diverse. Hazleton zip code, 18201, in particular is comprised of 52% Hispanic/Latino residents.

Residents in the zip code are the least likely to be only English speaking and have the highest uninsured rate in the service area.

Residents in zip code 18466, Tobyhanna, also experience poorer social determinants of health. The zip code has the highest unemployment rate in the service area, lower educational attainment, and a higher uninsured rate. The population in the zip code is diverse with approximately 30% of residents identifying as Black/African American and/or Hispanic/Latino.

Social Determinants of Health Indicators by Zip Code

	Black/ African American	Hispanic / Latino	English Speaking (only)	HHs in Poverty	Unemp-loyment	Less than HS Diploma	Without Health Insurance	CNI Score
Lackawanna County	**3.2%**	**7.4%**	**91.1%**	**14.2%**	**5.4%**	**9.4%**	**7.9%**	
18505 (Scranton)	7.5%	20.8%	81.2%	20.0%	6.4%	13.4%	12.6%	3.8
Luzerne County	**4.6%**	**11.2%**	**90.3%**	**15.0%**	**5.6%**	**10.4%**	**8.5%**	
18201 (Hazleton)	5.1%	51.9%	54.9%	23.5%	10.1%	22.3%	16.1%	4.4
18701 (Wilkes-Barre)	10.4%	11.3%	85.7%	29.5%	7.1%	11.1%	7.3%	4.2
18702 (Wilkes-Barre)	13.3%	17.3%	88.1%	23.9%	6.1%	14.0%	11.1%	4.2
18202 (Hazleton)	3.0%	27.6%	76.1%	16.0%	7.3%	16.2%	11.5%	3.8
18651 (Plymouth)	4.8%	5.4%	97.0%	17.9%	5.8%	11.0%	8.4%	3.4
18709 (Luzerne)	0.9%	4.3%	94.7%	21.6%	5.4%	14.3%	9.8%	3.2
18634 (Nanticoke)	2.2%	4.7%	96.7%	19.3%	6.1%	11.1%	8.8%	3.2
18706 (Wilkes-Barre)	4.0%	5.3%	96.3%	17.1%	5.4%	8.2%	7.3%	3.2
18704 (Kingston)	3.8%	5.5%	94.7%	15.1%	4.6%	7.0%	9.0%	3.2
18705 (Wilkes-Barre)	4.2%	8.8%	91.8%	14.4%	6.8%	10.4%	7.9%	3.2
18224 (Freeland)	1.4%	9.0%	95.9%	16.5%	6.1%	7.9%	6.9%	2.8
18640 (Pittston)	2.1%	3.7%	96.8%	14.3%	6.5%	10.3%	7.3%	2.8
18642 (Duryea)	0.8%	3.9%	95.3%	13.0%	7.0%	7.0%	5.3%	2.6
18643 (Pittston)	1.3%	2.3%	97.5%	11.9%	4.4%	8.2%	5.6%	2.4
18644 (Wyoming)	0.9%	1.4%	96.4%	10.4%	4.0%	5.9%	6.9%	2.4
18708 (Shavertown)	13.1%	4.3%	92.7%	8.1%	2.4%	8.4%	5.2%	2.2
18655 (Shickshinny)	0.5%	2.3%	97.2%	12.2%	5.2%	11.4%	8.4%	2.2
18641 (Pittston)	0.9%	2.9%	96.8%	11.3%	4.9%	7.9%	5.4%	2.2
18618 (Harveys Lake)	0.3%	1.3%	96.0%	12.3%	5.8%	9.0%	8.3%	2.0
18661 (White Haven)	1.8%	4.8%	95.6%	10.0%	4.6%	7.3%	11.4%	1.8
18612 (Dallas)	0.8%	1.7%	96.9%	8.8%	4.3%	4.9%	4.9%	1.6
18222 (Drums)	5.9%	5.6%	92.1%	7.0%	2.4%	5.4%	6.8%	1.6
18621 (Hunlock Creek)	0.5%	1.7%	98.8%	7.6%	5.5%	9.3%	7.6%	1.4

	Black/ African American	Hispanic / Latino	English Speaking (only)	HHs in Poverty	Unemp-loyment	Less than HS Diploma	Without Health Insurance	CNI Score
Luzerne County (continued)	**4.6%**	**11.2%**	**90.3%**	**15.0%**	**5.6%**	**10.4%**	**8.5%**	
18660 (Wapwallopen)	0.6%	1.7%	98.6%	6.0%	3.2%	8.3%	5.3%	1.2
18707 (Mountain Top)	1.5%	3.5%	93.7%	4.7%	4.0%	3.9%	4.2%	1.2
Monroe County	**14.5%**	**15.8%**	**84.7%**	**11.6%**	**9.3%**	**9.7%**	**11.4%**	
18466 (Tobyhanna)	31.7%	28.4%	79.1%	12.3%	13.3%	12.1%	13.7%	3.4
18347 (Pocono Lake)	4.7%	9.2%	90.0%	16.2%	8.2%	11.7%	4.8%	2.8
18610 (Blakeslee)	16.1%	16.3%	84.3%	15.8%	6.8%	9.6%	12.6%	2.6
Susquehanna County	**0.5%**	**1.9%**	**97.5%**	**12.6%**	**4.7%**	**10.3%**	**11.3%**	
18801 (Montrose)	0.4%	1.9%	98.2%	11.0%	3.4%	8.4%	10.7%	1.6
Wyoming County	**1.1%**	**2.0%**	**97.6%**	**11.4%**	**4.8%**	**8.3%**	**8.7%**	
18657 (Tunkhannock)	0.7%	1.2%	97.5%	11.5%	4.2%	7.1%	8.4%	1.8
Pennsylvania	**11.2%**	**7.4%**	**89.4%**	**12.9%**	**6.2%**	**10.1%**	**8.8%**	

Secondary Data Profile: Northeast Region

The Northeast region is comprised of three counties and is served by five of the CHNA collaborating hospitals, including Geisinger Wyoming Valley and its Geisinger South Wilkes-Barre Medical Center campus.

Northeast Region Service Area Counties

- Lackawanna County
- Luzerne County
- Wayne County

CHNA Collaborating Hospitals Serving the Northeast Region

- Geisinger South Wilkes-Barre
- Geisinger Wyoming Valley Medical Center
- Geisinger Community Medical Center
- Allied Services Rehabilitation Hospital
- John Heinz Rehabilitation Hospital

Secondary Data Profile Summary

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

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

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

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

The Northeast region population is primarily White, but diversity is increasing. The White population as a percentage of the total population is declining in all counties, while Black/African

American and Hispanic/Latino populations are growing. The demographic shift is a statewide trend. Minority populations are the only growing demographic in Pennsylvania. The Hispanic/Latino population is one of the fastest growing demographic groups; Luzerne County is projected to experience the greatest increase in the population by 2022.

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

Within the Northeast region, residents in all counties have a lower median household income than the state and the nation, and residents in Lackawanna and Luzerne Counties have higher poverty rates, particularly among children. All three counties have a similar unemployment rate to the state and the nation, and a similar percentage of residents who have attained less than a high school diploma.

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

Areas of Strength for the Northeast Region:

- Health Insurance Coverage: The percentage of uninsured residents declined for all counties. All counties have a lower uninsured rate when compared to the state and the nation for their respective data years.
- Dental/Mental Health Provider Rate: Provider rates per 100,000 population increased for all counties from the FY2016 CHNA.
- Health Outcomes: Wayne County has a higher (better) health outcomes ranking from the FY2016 CHNA. A leading indicator of health outcomes is premature death; the county has a lower premature death rate than the state and the nation.
- Smoking/Chronic Lower Respiratory Disease: Adult smoking rates declined for every county from the FY2016 CHNA. All counties have a lower chronic lower respiratory disease death rate compared to the state and the nation.
- Senior Health: Senior Medicare Beneficiaries have similar or lower rates of Alzheimer's disease, asthma, cancer, depression, diabetes, heart failure, and stroke compared to the state and the nation. Beneficiaries in all counties are just as likely or more likely to receive diabetes and mammogram screenings compared to the state and the nation.
    - Note: Wayne County has the lowest Alzheimer's disease prevalence rate, but a higher rate of death due to the disease.

- Maternal and Child Health:
  - Teen Births: The teen birth percentage declined for all counties, but percentages for Lackawanna and Luzerne Counties exceed the state and the nation.
  - Low Birth Weight: The counties nearly meet the Healthy People 2020 goal for low birth weight among infants.
  - Infant Death: The Luzerne County infant death rate meets the Healthy People 2020 goal.

Areas of Opportunity for the Northeast Region:

- Health Insurance Coverage: Uninsured rates are higher among Blacks/African Americans and Hispanics/Latinos than Whites. Luzerne County has the largest minority population in the region and the greatest disparity in uninsured rates.
- Provider Rates:
  - Primary Care: All counties have a lower provider rate than the state and the nation. Geographic areas within Luzerne and Wayne Counties are designated as Health Professional Shortage Areas (HPSAs) for primary care.
  - Dental Care: Luzerne and Wayne Counties have a lower provider rate than the state and the nation. All three counties are HPSAs for dental care for low income populations.
  - Mental Healthcare: All counties have a lower provider rate than the state and the nation. Wayne County is a HPSA for mental healthcare.
- Health Outcomes: Lackawanna and Luzerne Counties have lower (worse) health outcomes rankings from the FY2016 CHNA. A leading indicator of health outcomes is premature death; both counties have a higher premature death rate than the state and the nation.
- Obesity:
  - More than one quarter of adults in the region are obese; adults in Lackawanna and Wayne Counties are more likely to be obese than adults across the state and the nation. Adults in all counties are more likely to be physically inactive.
  - Obesity rates among students exceed state benchmarks. A contributing factor to youth obesity is food insecurity; children in the region are more likely to be food insecure when compared to the state and the nation.
- Top Causes of Death: Heart disease, cancer, and accidents are the top causes of death within the Northeast region. Death rates due to heart disease and cancer are declining, but all counties have a higher rate of death compared to state and national benchmarks. Accidental death rates among Northeast region counties exceed national benchmarks; death rates for Lackawanna and Wayne Counties also exceed the state.

- Diabetes: Adult diabetes prevalence increased for all counties from 2009 to 2013. All counties have a higher diabetes prevalence rate than the state, and a higher diabetes death rate than the state and the nation.
- Notifiable Diseases**:**
  - Chlamydia: All counties have a lower incidence rate compared to the state and the nation, but rates increased by more than 50 points from 2010 to 2016.
  - Lyme Disease**:** Lyme disease incidence increased across the region. Wayne County has the highest incidence rate and exceeds the state rate.
  - Child Lead Poisoning: Northeast region children ages 0 to 2 are more likely than children across the state to test positive for lead poisoning, as measured by a blood lead level of 10 µg/dL or higher.
- Mental Health and Substance Abuse:
  - Suicide Death: The suicide death rate for all counties exceeds state and national benchmarks. Lackawanna and Luzerne Counties experienced a sharp increase in the number of suicides from 2014 to 2015.
  - Mental and Behavioral Disorders Death: Lackawanna and Luzerne Counties have a higher mental and behavioral disorders death rate than the nation; the death rate is increasing.
  - Excessive Drinking: Adults in the Northeast region are just as likely to drink excessively compared to the state and the nation, but a higher percentage of driving deaths are due to DUI, particularly in Lackawanna and Luzerne Counties.
  - Drug-Induced Deaths:
    - Drug-induced deaths include drug overdoses and deaths from medical conditions resulting from chronic drug use. Lackawanna and Luzerne Counties have a higher death rate than the state and the nation; the rates increased over the past decade. Wayne County has a higher death rate than the nation; annual trends are not reported.
    - Deaths due to drug-related overdoses increased for Lackawanna and Luzerne Counties; the counties are among the top 25% of Pennsylvania counties with regard to overdose death rates.
  - Youth Indicators: Students in all reported grades in Luzerne County are more likely to be sad or depressed when compared to the state. Students in 10th and 12th grades in Lackawanna County are more likely to be sad or depressed. Tenth and 12th grade students in both counties exceed state benchmarks for alcohol and/or marijuana use.

- Senior Health:
  - Fifty percent or more of senior Medicare Beneficiaries have high cholesterol and/or hypertension. Beneficiaries in Luzerne County have some of the highest rates of chronic disease overall and are more likely to manage four or more chronic conditions concurrently.
  - All counties have a higher percentage of seniors who live alone compared to the state and the nation. The percentage of seniors who live alone increased in Luzerne and Wayne Counties.
- Maternal and Child Health:
  - Prenatal Care: Lackawanna and Luzerne Counties do not meet the Healthy People 2020 goal for the percentage of mothers receiving first trimester prenatal care. Black/African American and Hispanic/Latina mothers are the least likely to receive care.
  - Smoking during Pregnancy: The percentage of mothers who smoke during pregnancy decreased, but no counties meet the Healthy People 2020 goal for the measure. White mothers are the most likely to smoke during pregnancy.
  - Breastfeeding: The percentage of mothers who breastfeed increased, but the counties do not meet the Healthy People 2020 goal for the measure. White and Black/African American mothers are the least likely to breastfeed.
  - Infant Death: The Lackawanna County infant death rate exceeds the state and the Healthy People 2020 goal. The rate has been variable over the past decade.

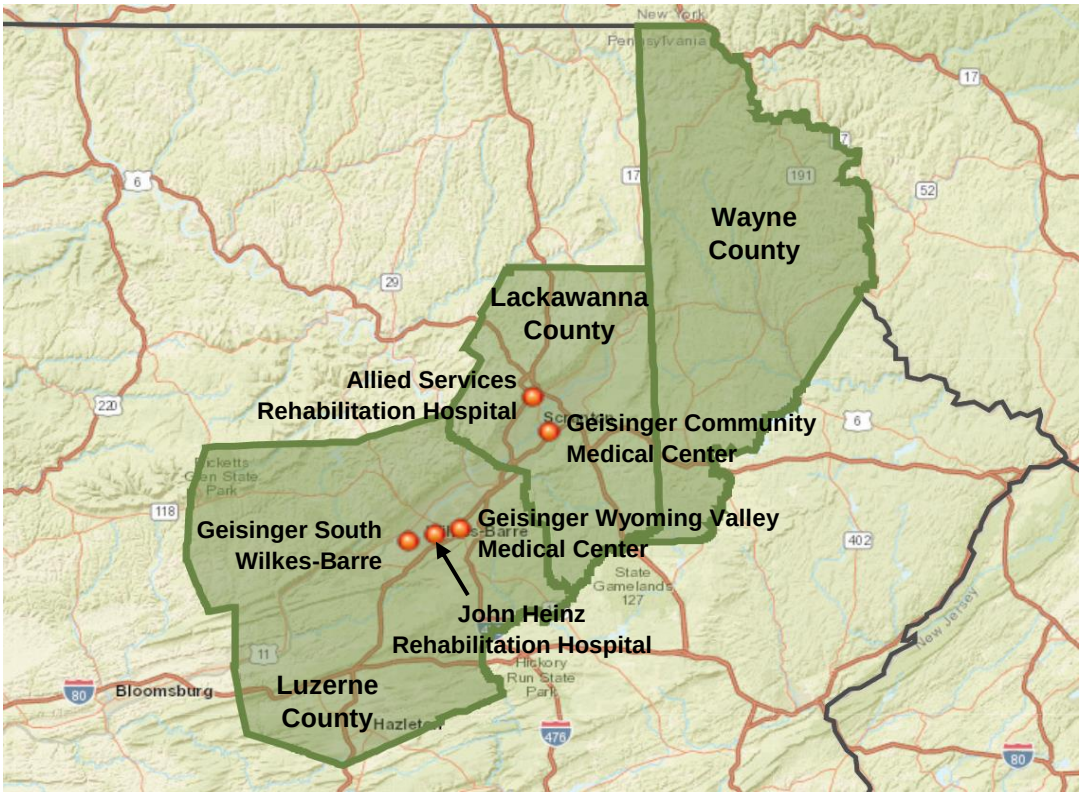
Full Report of Demographic Analysis

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

Northeast Region Demographic Overview

The 2017 population of the Northeast region is 589,689. Luzerne County comprises the largest portion of the population (54%), followed by Lackawanna County (37%). County populations are expected to remain stable with increases or decreases of approximately 1% by 2022.

Northeast Region Service Counties



Population Growth

	2017 Population	% Growth from 2010	% Growth by 2022
Lackawanna County	215,921	0.7%	0.6%
Luzerne County	320,999	0.0%	-0.5%
Wayne County	52,769	-0.1%	-0.8%

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

Pennsylvania has a higher median age than the nation. The median age of the Northeast region counties exceeds the state. Wayne County has the highest median age, exceeding the state median by 7 points.

2017 Population Overview

	Lackawanna County	Luzerne County	Wayne County	PA	US
White	89.0%	86.3%	92.9%	79.6%	70.2%
Black or African American	3.2%	4.6%	3.6%	11.2%	12.8%
Asian	2.5%	1.3%	0.6%	3.5%	5.6%
Hispanic or Latino (any race)	7.4%	11.2%	4.8%	7.4%	18.2%
Speak English Only*	91.1%	90.3%	94.3%	89.4%	79.0%

*Data are reported for 2011-2015.

2010-2022 Population Change by Race/Ethnicity

	White		Black/African American		Hispanic or Latino	
	2010	2022	2010	2022	2010	2022
Lackawanna County	92.0%	86.1%	2.5%	3.9%	5.0%	9.4%
Luzerne County	90.7%	82.9%	3.4%	5.7%	6.7%	14.2%
Wayne County	94.2%	91.7%	3.1%	4.2%	3.4%	6.1%

2017 Population by Age

	Lackawanna County	Luzerne County	Wayne County	PA	US
Under 14 years	15.5%	15.0%	13.3%	16.8%	18.6%
15-24 years	12.8%	12.2%	9.9%	13.2%	13.3%
25-34 years	12.1%	12.0%	11.1%	12.5%	13.8%
35-54 years	24.5%	25.5%	26.2%	13.7%	6.6%
55-64 years	14.3%	14.4%	16.8%	14.1%	12.9%
65+ years	20.6%	20.6%	22.5%	18.1%	15.6%
Median Age	43.3	44.1	47.9	41.3	38.2

Economic indicators vary across the region. Lackawanna County mirrors the nation for residents living in poverty, despite having a lower median household income. Luzerne County has the lowest median household income in the region; residents are more likely to live in poverty and receive food stamp benefits. Wayne County has the highest median household income in the region; residents are the least likely to live in poverty or receive food stamp benefits.

Northeast region counties have a more prominent blue collar workforce and a lower or comparable unemployment rate compared to the state and the nation. Wayne County has the lowest unemployment rate and the highest percentage of blue collar workers.

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

	Lackawanna County	Luzerne County	Wayne County	PA	US
Median Household Income	$50,000	$47,843	$52,942	$56,184	$56,124
People in Poverty	14.8%	15.8%	12.9%	13.5%	15.5%
Children in Poverty	21.8%	27.2%	19.0%	19.2%	21.7%
Households with Food Stamp/SNAP Benefits	14.2%	16.4%	11.6%	12.9%	13.2%

2017 Population by Occupation and Unemployment

	Lackawanna County	Luzerne County	Wayne County	PA	US
White Collar Workforce	59.0%	57.0%	53.0%	60.0%	61.0%
Blue Collar Workforce	41.0%	43.0%	47.0%	40.0%	39.0%
Unemployment Rate	5.4%	5.6%	4.3%	6.2%	5.5%

Homeownership is a measure of housing affordability and economic stability. Householders in all service counties are more likely to own their home when compared to the nation; households in Wayne County are also more likely to own their home when compared to the state. Wayne County has a higher median household income and higher median home value when compared to the state and the nation.

2017 Population by Household Type

	Lackawanna County	Luzerne County	Wayne County	PA	US
Renter-Occupied	36.0%	34.0%	21.0%	32.3%	37.3%
Owner-Occupied	64.0%	66.0%	79.0%	67.7%	62.7%
Median Home Value	$158,701	$135,423	$198,014	$182,727	$207,344

Education is the largest predictor of poverty and one of the most effective means of reducing inequalities. Across all counties, the percentage of residents attaining less than a high school diploma is on par with the state and lower than the nation. Residents are more likely to have a high school diploma than a bachelor's degree or higher when compared to both the state and the nation.

2017 Population (25 Years or Over) by Educational Attainment

	Lackawanna County	Luzerne County	Wayne County	PA	US
Less than a High School Diploma	9.4%	10.4%	10.1%	10.1%	12.6%
High School Graduate/GED	33.2%	34.0%	36.4%	31.2%	23.4%
Bachelor's Degree or Higher	27.6%	22.8%	21.1%	30.3%	31.0%

Across the Northeast region, Black/African American and Hispanic/Latino residents are impacted by poorer social determinants of health when compared to Whites. The following table profiles poverty, unemployment, and educational attainment by race and ethnicity.

2011-2015 Social and Economic Differences by Race and Ethnicity

People in Poverty						
	Lackawanna County		Luzerne County		Wayne County	
	Count	Percentage	Count	Percentage	Count	Percentage
White	25,549	13.4%	38,362	13.8%	5,870	12.6%
Black/African American	2,448	42.1%	4,919	48.3%	111	20.3%
Hispanic/Latino	4,660	38.2%	9,540	35.9%	278	19.0%
Unemployment Rate						
	Lackawanna County		Luzerne County		Wayne County	
	Count	Percentage	Count	Percentage	Count	Percentage
White	10,880	6.6%	17,194	7.1%	3,232	7.9%
Black/African American	957	21.4%	1,621	17.7%	98	5.7%
Hispanic/Latino	859	10.8%	2,963	16.3%	187	11.3%
Bachelor's Degree or Higher						
	Lackawanna County		Luzerne County		Wayne County	
	Count	Percentage	Count	Percentage	Count	Percentage
White	36,983	26.1%	46,143	21.9%	7,394	20.4%
Black/African American	253	7.8%	697	10.1%	97	6.6%
Hispanic/Latino	712	12.1%	1,095	8.4%	131	9.9%

Northeast Region Special Population Groups

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

Amish settlements are profiled by church district, which is typically comprised of a few dozen families. There are no reported church districts within the Northeast region. Across Pennsylvania, there are 497 church districts and an estimated Amish population of 74,251.

A study published in 2016 by The Sentencing Project, a nonprofit advocacy organization, found that in state prisons, African Americans are incarcerated five times more than Whites, and Hispanics are incarcerated nearly two times more than Whites. The following table identifies state and federal prison facilities within the Northeast region and corresponding demographic data for the facility's zip code of origin to analyze potential drivers of racial and ethnic diversity.

Zip code 18472, Waymart, home to a State Correctional Institution and US Penitentiary, has a higher population of Black/African American and Hispanic/Latino residents, which may impact overall diversity percentages for Wayne County.

State and Federal Prison Facilities and Racial/Ethnic Demographics

Prison Facility	Location	Inmate Population	Zip Code Demographics		County Demographics	
			Black/African American	Hispanic/ Latino	Black/African American	Hispanic/ Latino
State Correctional Institution, Dallas	18612, Dallas (Luzerne County)	2,155	0.8%	1.7%	4.6%	11.2%
State Correctional Institution, Hunlock Creek	18621, Hunlock Creek (Luzerne County)	1,123	0.5%	1.7%	4.6%	11.2%
State Correctional Institution, Waymart	18472, Waymart (Wayne County)	1,554	17.5%	10.4%	3.6%	4.8%
US Penitentiary Canaan	18472, Waymart (Wayne County)	1,479	17.5%	10.4%	3.6%	4.8%

Source: Federal Bureau of Prisons and Pennsylvania Department of Corrections

Full Report of Public Health Statistical Analysis

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

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

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

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

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

- Region 1: Lackawanna, Luzerne, and Wyoming Counties
- Region 2: Pike, Monroe, Susquehanna, and Wayne Counties

Access to Healthcare

Northeast region service counties received the following County Health Rankings for Clinical Care Access out of 67 counties in Pennsylvania. The rankings are based on a number of indicators, including health insurance coverage and provider access. All of the counties have a higher (worse) ranking compared to the 2014 rankings reported as part of the FY2016 CHNA.

2017 Clinical Care County Health Rankings

#26 Wayne County (#25 in 2014)

#30 Lackawanna County (#27 in 2014)

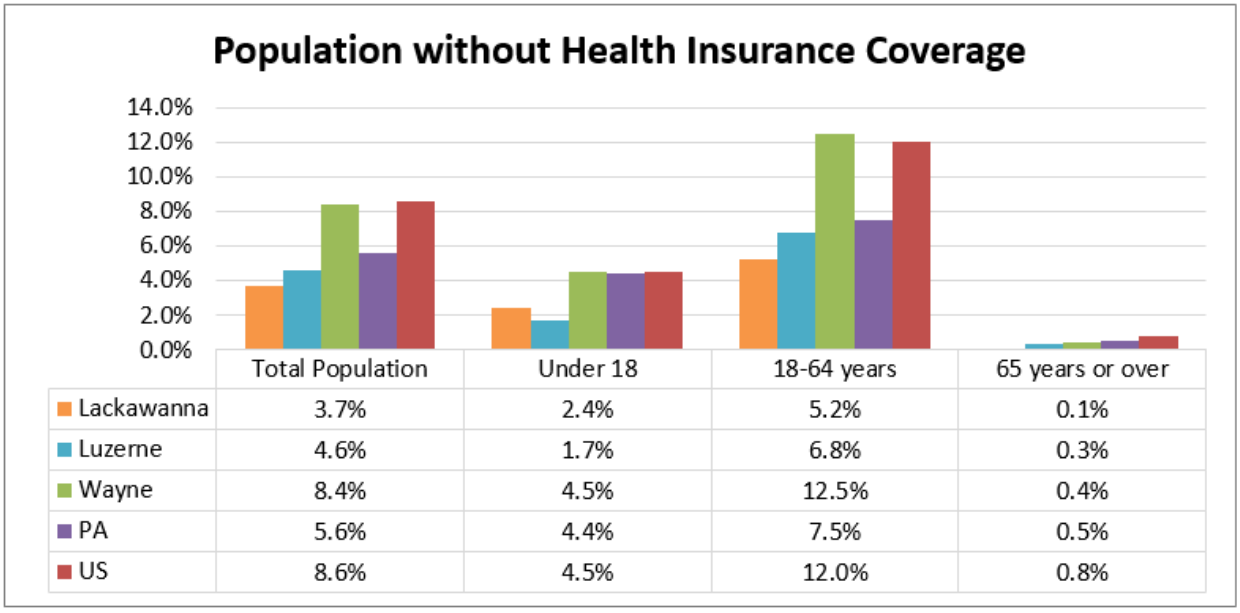
#37 Luzerne County (#28 in 2014)

Health Insurance Coverage

Fewer residents within the Northeast region are uninsured when compared to the nation. The Wayne County uninsured rate exceeds the state rate, however, the county rate represents a five-year aggregate that includes data years prior to the implementation of the Affordable Care Act individual mandate, which may account for the higher rate.

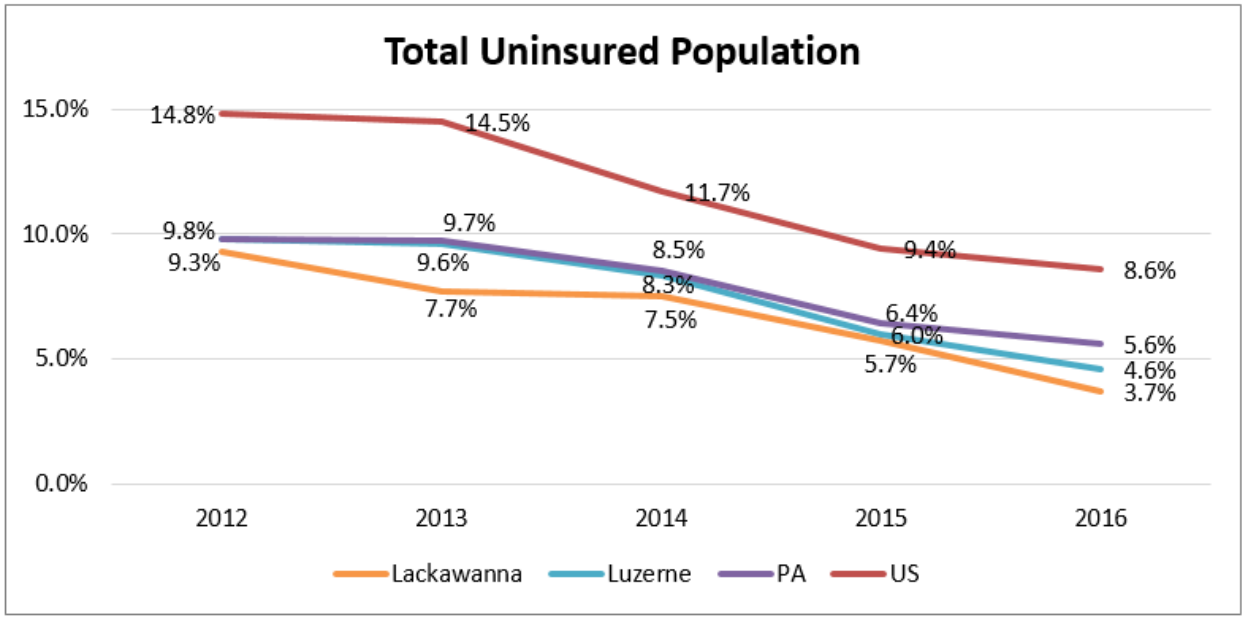
The uninsured rate declined in all service counties; less than 5% of people in Lackawanna and Luzerne Counties are uninsured

The percentage of uninsured residents declined in all counties; Lackawanna County experienced the greatest rate decline of 6 points from 2012 to 2016. However, counties do not meet the Healthy People 2020 goal of having 100% of all residents insured. Uninsured rates are highest among adults ages 18 to 64.

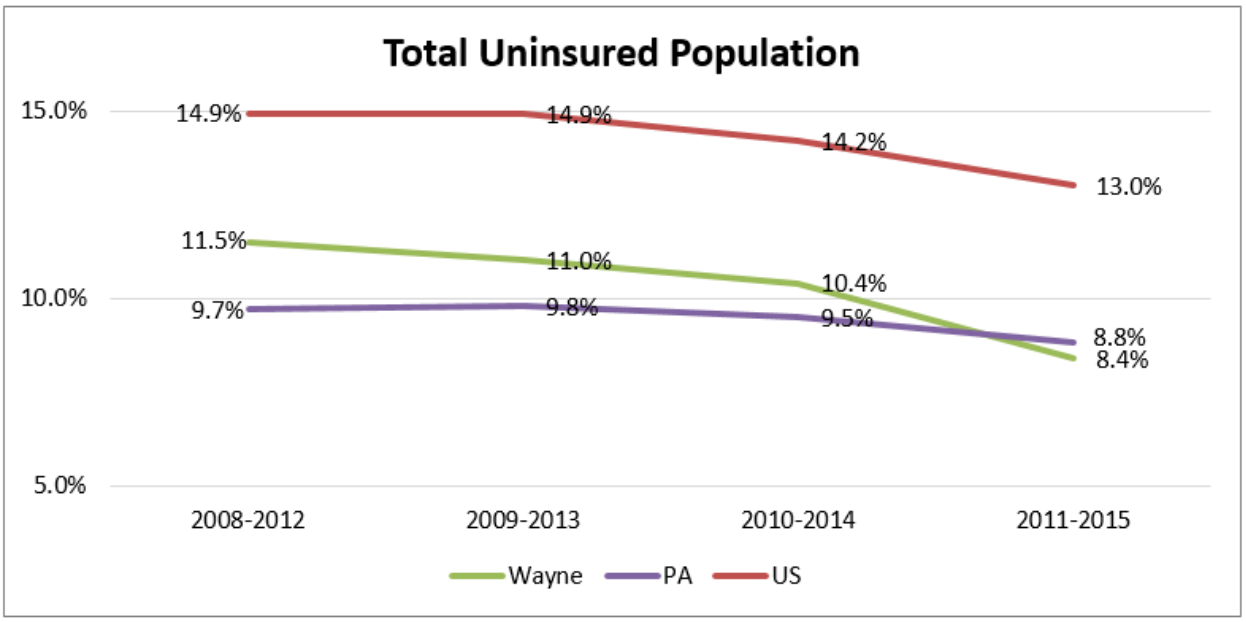


	Total Population	Under 18	18-64 years	65 years or over
Lackawanna	3.7%	2.4%	5.2%	0.1%
Luzerne	4.6%	1.7%	6.8%	0.3%
Wayne	8.4%	4.5%	12.5%	0.4%
PA	5.6%	4.4%	7.5%	0.5%
US	8.6%	4.5%	12.0%	0.8%

Source: American Community Survey, 2016 & 2011-2015
*Wayne County data are reported for 2011-2015. All other data are reported for 2016.



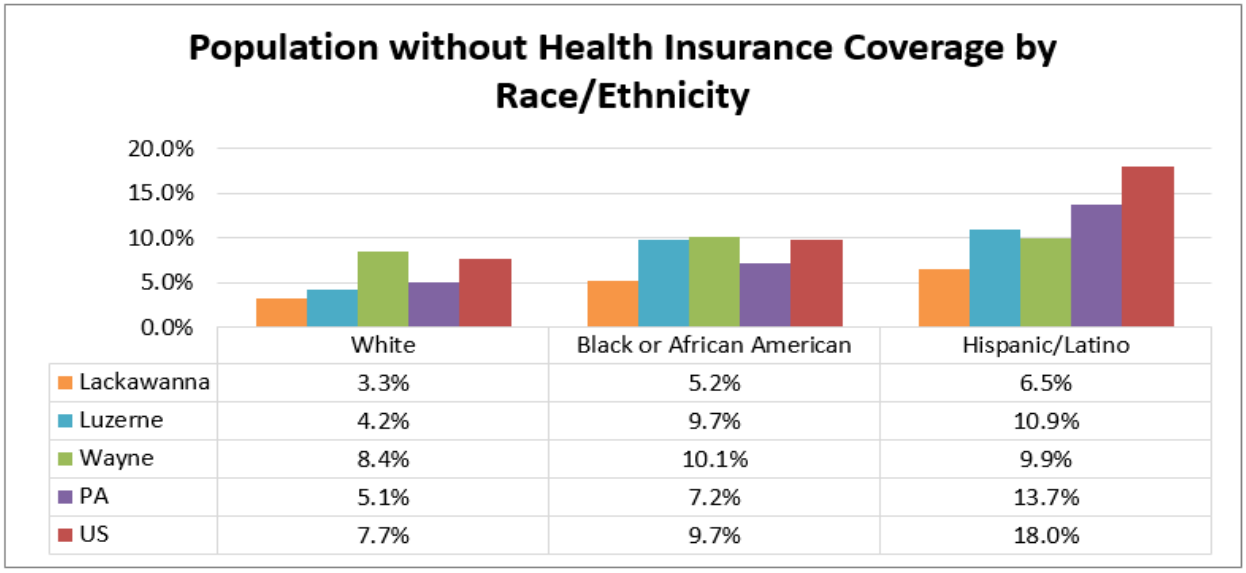
Source: American Community Survey, 2012-2016



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

Uninsured rates are highest among Hispanic/Latino residents. Luzerne County has the largest Hispanic/Latino population in the region and the highest uninsured rate among the population. However, Hispanic/Latino uninsured rates among all counties are lower than state and national benchmarks.

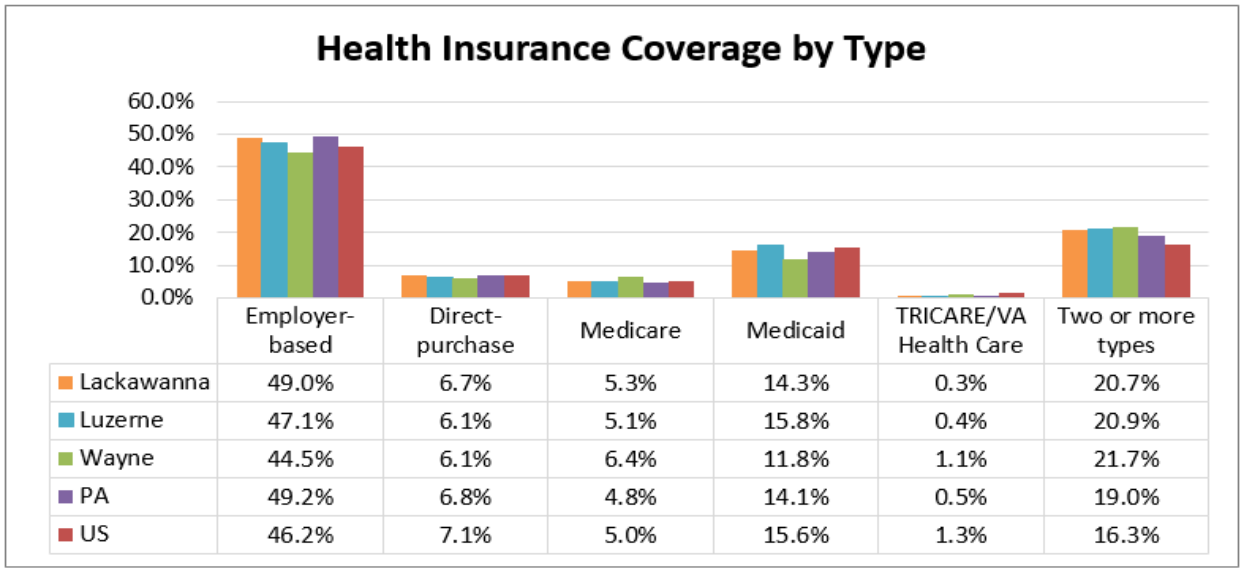
Luzerne County has the largest Hispanic/Latino population and the highest uninsured rates among this population



	White	Black or African American	Hispanic/Latino
Lackawanna	3.3%	5.2%	6.5%
Luzerne	4.2%	9.7%	10.9%
Wayne	8.4%	10.1%	9.9%
PA	5.1%	7.2%	13.7%
US	7.7%	9.7%	18.0%

Source: American Community Survey, 2016 & 2011-2015
*Wayne County data are reported for 2011-2015. All other data are reported for 2016.

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



	Employer-based	Direct-purchase	Medicare	Medicaid	TRICARE/VA Health Care	Two or more types
Lackawanna	49.0%	6.7%	5.3%	14.3%	0.3%	20.7%
Luzerne	47.1%	6.1%	5.1%	15.8%	0.4%	20.9%
Wayne	44.5%	6.1%	6.4%	11.8%	1.1%	21.7%
PA	49.2%	6.8%	4.8%	14.1%	0.5%	19.0%
US	46.2%	7.1%	5.0%	15.6%	1.3%	16.3%

Source: American Community Survey, 2016 & 2011-2015
*Wayne County data are reported for 2011-2015. All other data are reported for 2016.

Provider Access

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

Across the region, dental and mental healthcare provider rates increased from the previous reporting year. Lackawanna County had the greatest provider rate increases. However, all three counties are designated by the Health Resources & Services Administration (HRSA) as Health Professional Shortage Areas (HPSAs) for dental care for low income individuals. Wayne County is also designated as a HPSA for mental healthcare.

All three counties are designated as HPSAs for dental care; Wayne County is also a HPSA for mental healthcare

Primary care provider rates decreased or remained stable from 2011 to 2014. All three counties have a lower primary care provider rate than the state; the rate for Wayne County is 31 points lower than the state rate. The region is served by three Federally Qualified Health Centers (FQHCs) at 15 community locations. Six of the FQHC locations are within Wayne County.

The primary care provider rate is lower in all three service counties compared to the state, however, the region is served by 3 FQHCs at 15 community locations

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

	Primary Care		Dental Care		Mental Healthcare	
	2011	2014	2012	2015	2014**	2016
Lackawanna County	75.6	73.8	66.7	72.7	112.2	131.7
Luzerne County	79.5	79.7	59.2	63.7	80.3	86.4
Wayne County	49.1	50.6	50.0	54.7	36.9	50.8
Pennsylvania	80.4	81.4	60.6	65.4	146.6	167.3
United States	73.8	75.8	60.1	65.8	189.0	200.0

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

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

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

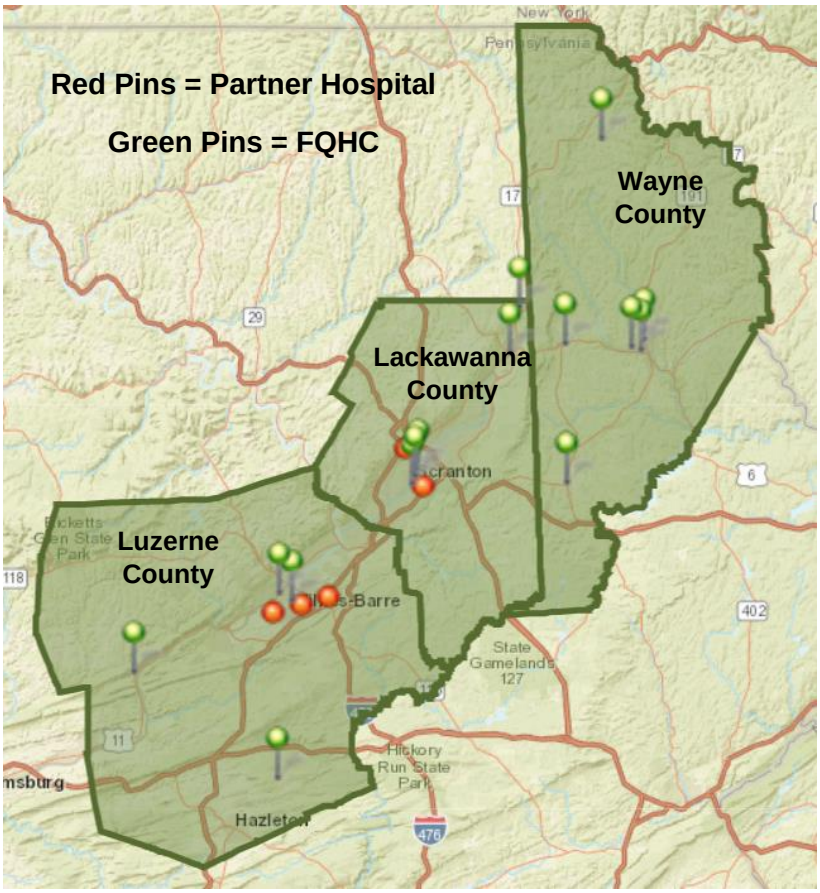
Health Professional Shortage Areas

Geographic Area/Population	Primary Care	Dental Care	Mental Healthcare
Lackawanna County (All)			
Low income population		X	
Luzerne County (All)			
Eastern Lycoming service area: Fairmount Twp.	X		
Low income population		X	
Wayne County (All)			X
Central Pike service area: Dreher and Lehigh Twp.	X		
Low income population		X	

Source: Health Resources & Services Administration, 2017

Federally Qualified Health Centers, as defined by HRSA, “are community-based healthcare providers that receive funds from the HRSA Health Center Program to provide primary care services in underserved areas.” They provide care services on a sliding fee scale based on patient ability to pay. The following map identifies the location of FQHCs within the region.

Federally Qualified Health Center Locations



FQHC	Address
Lackawanna County	
Scranton Primary Health Care Center	959 Wyoming Ave., Scranton, 18501
Scranton Primary Health Care Center: Alder Street Family Medicine Clinic	425 Alder Street, Scranton, PA 18505
Scranton Primary Health Care Center: Lackawanna Collage Student Health Services	406 N. Washington Ave., Scranton, PA 18503
Wayne Memorial Community Health Centers: Carbondale Family Health Center	141 Salem Ave., Carbondale, 18407
Wayne Memorial Community Health Centers: McAndrew Family Health Center	111 Main St., Vandling, PA 18421
Luzerne County	
Rural Health Corporation of Northeastern Pennsylvania: Freeland Health Center	404 Ridge St., Freeland, 18224
Rural Health Corporation of Northeastern Pennsylvania: McKinney Homeless Clinic	39 East Jackson St., Wilkes-Barre, 18701

FQHC	Address
Luzerne County	
Rural Health Corporation of Northeastern Pennsylvania: Shickshinny Medical Center	26 North Main St., Shickshinny, 18655
Rural Health Corporation of Northeastern Pennsylvania: Valley Pediatrics	468 Northampton St., Edwardsville, 18704
Wayne County	
Wayne Memorial Community Health Centers: Hamlin Family Health Center	543 Easton Tpke., Lake Ariel, 18436
Wayne Memorial Community Health Centers: Gutherz Family Health Center	600 Maple Ave., Honesdale, 18431
Wayne Memorial Community Health Centers: Northern Wayne Family Health Center	412 Como Rd., Lake Como, 18437
Wayne Memorial Community Health Centers: Honesdale Family Health Center	Rte 6 & Maple Ave., Honesdale, 18431
Wayne Memorial Community Health Centers: Waymart Family Health Center	29 Woodland Ave., Waymart, 18472
Wayne Memorial Community Health Centers: Highland Physicians Family Health Center	1839 Fair Ave., Honesdale, 18431

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

Routine Care

Health insurance coverage and provider rates impact the number of adults who have a primary care provider and receive routine care. The percentage of adults who receive routine checkups is increasing across the state and in both reporting regions. Adults in both regions are just as likely to consider cost as a barrier to receiving care.

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

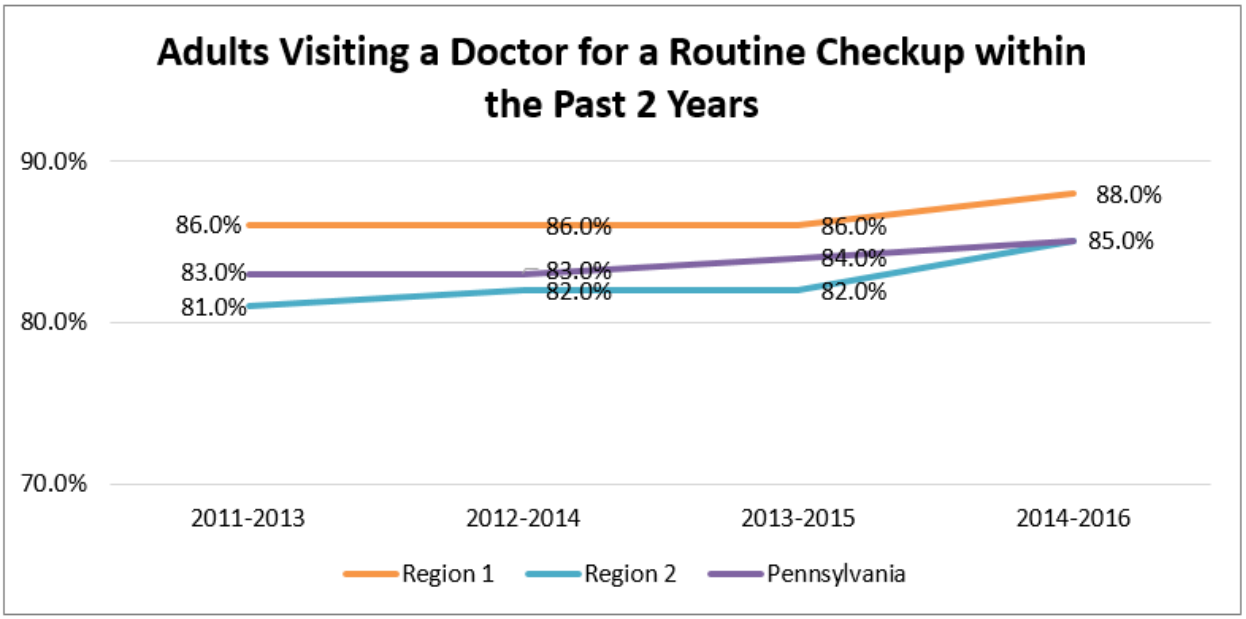
Adults in Region 2, including Wayne County, are less likely to have a personal doctor or to have received a routine checkup within the past two years. Wayne County has a lower uninsured rate compared to the state and the nation, but the lowest primary care provider rate in the region.

Wayne County has the lowest primary care provider rate in the region; Wayne County adults are among the least likely to have a regular doctor

Adult Healthcare Access

	Does Not Have a Personal Doctor	Received a Routine Checkup within the Past 2 Years	Unable to See a Doctor within the Past Year due to Cost
Region 1: Lackawanna/ Luzerne/Wyoming	11%	88%	13%
Region 2: Pike/Monroe/ Susquehanna/Wayne	13%	85%	13%
Pennsylvania	14%	85%	12%

Source: PA Department of Health BRFSS, 2014-2016



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

Overall Health Status

Northeast region service counties received the following County Health Rankings for Health Outcomes out of 67 counties in Pennsylvania. Health outcomes are measured in relation to premature death (before age 75) and quality of life. Lackawanna and Luzerne Counties have higher (worse) rankings compared to the 2014 rankings reported as part of the FY2016 CHNA. Wayne County has a lower (better) ranking.

2017 Health Outcomes County Health Rankings

#17 Wayne County (#29 in 2014)

#57 Lackawanna County (#56 in 2014)

#62 Luzerne County (#57 in 2014)

Wayne County has the best health outcomes ranking in the region despite more prevalent healthcare access barriers. The county's premature death rate and the percentage of adults who self-report having "poor" or "fair" health status are lower than the state and the nation.

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

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

	Premature Death Rate per 100,000	Adults with "Poor" or "Fair" Health Status	30-Day Average - Poor Physical Health Days	30-Day Average - Poor Mental Health Days
Lackawanna County	7,860	14.0%	3.5	3.8
Luzerne County	8,026	15.5%	3.8	3.9
Wayne County	6,589	13.9%	3.5	3.7
Pennsylvania	6,843	15.3%	3.5	3.9
United States	6,600	15.0%	3.6	3.7

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

Health Behaviors

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

Risk Behaviors

Adults in the Northeast region counties have similar smoking rates when compared to the state and the nation, but do not meet the Healthy People 2020 goal. Lackawanna County has the highest rate of adult smokers, exceeding the Healthy People 2020 goal by more than 7 points. Smoking rates decreased across the region from 2006-2012 (2014 County Health Rankings report) to 2015. Luzerne County had the greatest decline in adult smokers from 25% to 18%.

Adult smoking rates decreased in all counties from 2006-2012 to 2015, but still exceed the HP 2020 goal

Excessive drinking includes heavy drinking (two or more drinks per day for men and one or more drinks per day for women) and binge drinking (five or more drinks on one occasion for men and four or more drinks on one occasion for women). Adults in all counties are just as likely to drink excessively compared to adults across the state and the nation. Excessive drinking rates declined in Lackawanna and Luzerne Counties, but increased slightly in Wayne County.

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

	Smoking		Excessive Drinking	
	2006-2012	2015	2006-2012	2015
Lackawanna County	23.1%	19.4%	23.5%	17.6%
Luzerne County	24.6%	17.7%	19.9%	18.0%
Wayne County	18.9%	17.0%	17.7%	18.1%
Pennsylvania	19.9%	18.1%	17.3%	18.1%
United States	18.1%	18.0%	15.0%	18.0%
Healthy People 2020	12.0%	12.0%	NA	NA

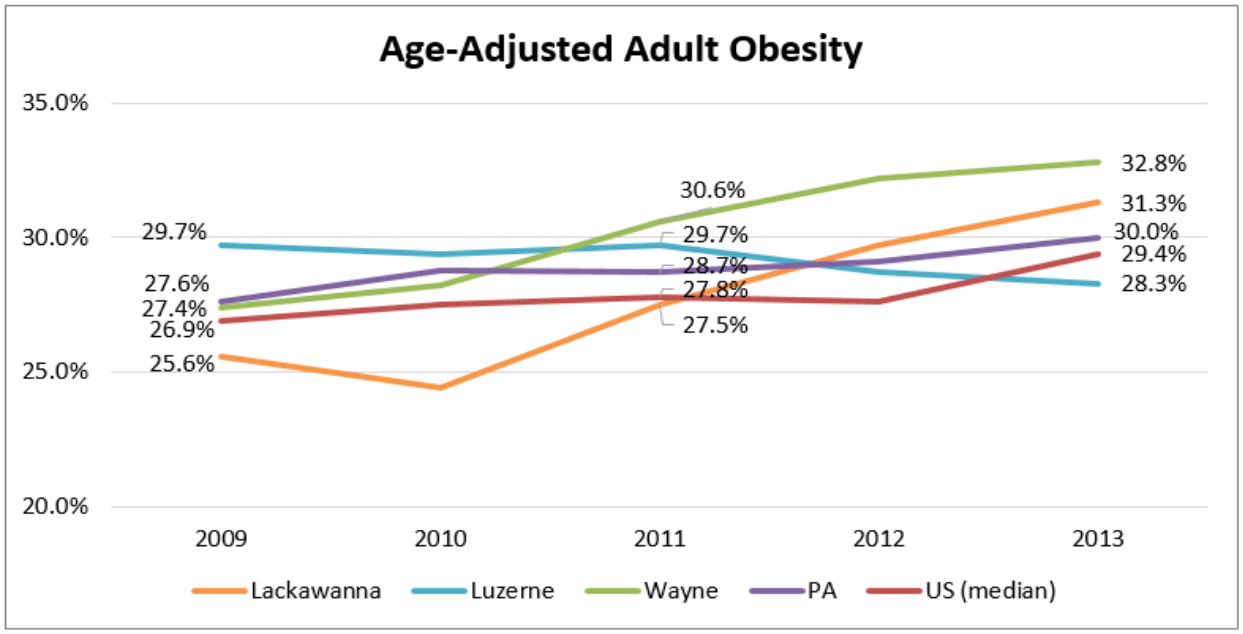
Source: CDC BRFSS*, 2006-2012 & 2015 & Healthy People 2020

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

Obesity

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

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



Source: CDC BRFSS, 2009-2013

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

Pennsylvania youth are screened for BMI as part of school health assessments. Data are reported for students in grades K-6 and 7-12. As of the 2012-2013 school year, approximately 20% of youth in the service counties are obese. Percentages in all counties exceed state benchmarks.

Approximately 20% of service county youth are obese, a higher percentage than the state

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

	Overweight		Obese	
	K-6 Grade	7-12 Grade	K-6 Grade	7-12 Grade
Lackawanna County	19.9%	16.3%	20.8%	20.0%
Luzerne County	17.6%	20.1%	19.2%	18.4%
Wayne County	14.7%	15.6%	20.2%	21.4%
Pennsylvania	22.0%	22.1%	16.4%	18.0%

Source: PA Department of Health, 2012-2013

Food insecurity, defined as being without a consistent source of sufficient and affordable nutritious food, contributes to obesity rates. The overall population in the Northeast region is less likely to be food insecure when compared to the state and the nation. However, children are more likely to be food insecure. Children in Luzerne County are the most likely to be food insecure, exceeding state and national benchmarks by nearly 3 points. They are also the most likely to be eligible for free or reduced lunches in school.

Luzerne County children are more likely to be food insecure and eligible for free or reduced price lunches

Food Insecure Residents

	All Residents	Children
Lackawanna County	12.7%	18.9%
Luzerne County	12.8%	20.5%
Wayne County	11.2%	18.8%
Pennsylvania	13.1%	17.9%
United States	13.4%	17.9%

Source: Feeding America, 2015

Children Eligible for Free or Reduced Price Lunch

	Percent
Lackawanna County	46.2%
Luzerne County	57.9%
Wayne County	46.5%
Pennsylvania	45.6%
United States	52.0%

Source: National Center for Education Statistics, 2014-2015

Access to physical activity includes access to parks, gyms, pools, etc. Across the region, residents in Lackawanna County are the most likely to have access to physical activity opportunities and the least likely to be physically inactive. However, adults in all of the counties are more likely to be physically inactive when compared to the state and the nation.

Approximately one-quarter of Northeast region adults are physically inactive, higher than state national benchmarks

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

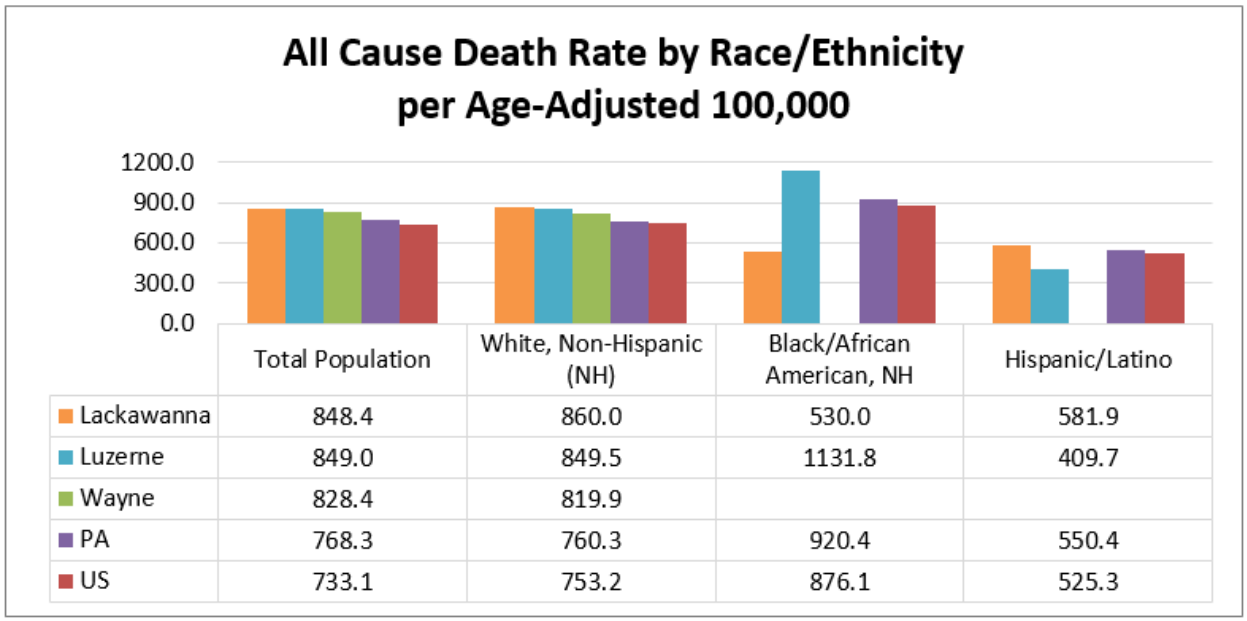
	Access to Physical Activity	Physically Inactive Adults
Lackawanna County	91.9%	23.8%
Luzerne County	81.8%	28.2%
Wayne County	69.3%	24.8%
Pennsylvania	85.2%	23.1%
United States	84.0%	22.0%

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

Mortality

The 2015 all cause age-adjusted death rate among Northeast region counties is higher than state and national rates. Across the state and the nation, the death rate is highest among Blacks/African Americans. Blacks/African Americans in Luzerne County also have a higher death rate; Black/African American deaths in Lackawanna and Wayne number less than 25 per county.

Northeast region counties have a higher rate of death compared to the state and the nation



	Total Population	White, Non-Hispanic (NH)	Black/African American, NH	Hispanic/Latino
Lackawanna	848.4	860.0	530.0	581.9
Luzerne	849.0	849.5	1131.8	409.7
Wayne	828.4	819.9		
PA	768.3	760.3	920.4	550.4
US	733.1	753.2	876.1	525.3

Source: CDC WONDER, 2015

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

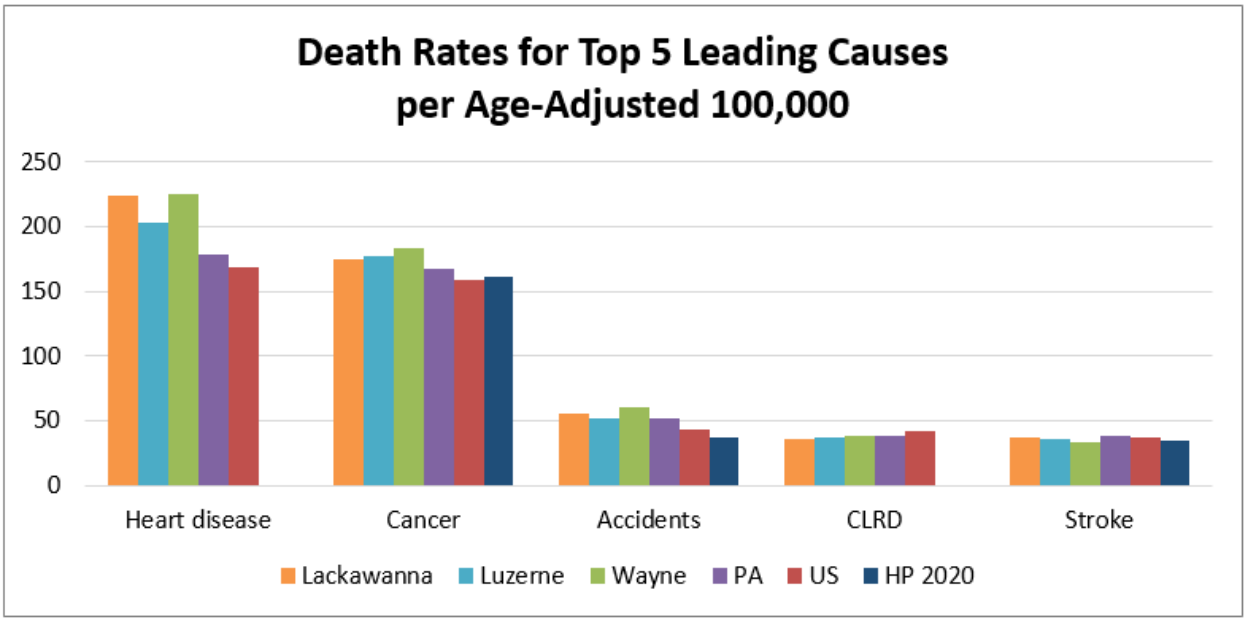
Northeast region residents have higher rates of death due to heart disease and cancer when compared to state and national benchmarks. Lackawanna and Wayne County death rates due to heart disease exceed the national rate by more than 50 points.

Northeast region residents have a higher rate of death due to heart disease and cancer compared to state and national benchmarks

Pennsylvania overall has a higher death rate due to accidents than the nation. Accidental deaths include transport accidents, falls, accidental discharge of firearms, drowning, exposure to fire or smoke, and poisoning. Death rates among Northeast region counties exceed the nation and the Healthy People 2020 goal; death rates for Lackawanna and Wayne Counties also exceed the state. Wayne County has the highest death rate, exceeding the Healthy People 2020 goal by 24 points.

Wayne County meets the HP 2020 goal for death due to stroke; Lackawanna and Luzerne County nearly meet the goal

Northeast region counties have a lower rate of CLRD and stroke death compared to the state and the nation. Wayne County meets the Healthy People 2020 goal for stroke death.



Source: CDC WONDER, 2015; Healthy People 2020

Chronic Diseases

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

Heart Disease and Stroke

The heart disease death rate for all counties is decreasing, but exceeds the state and the nation

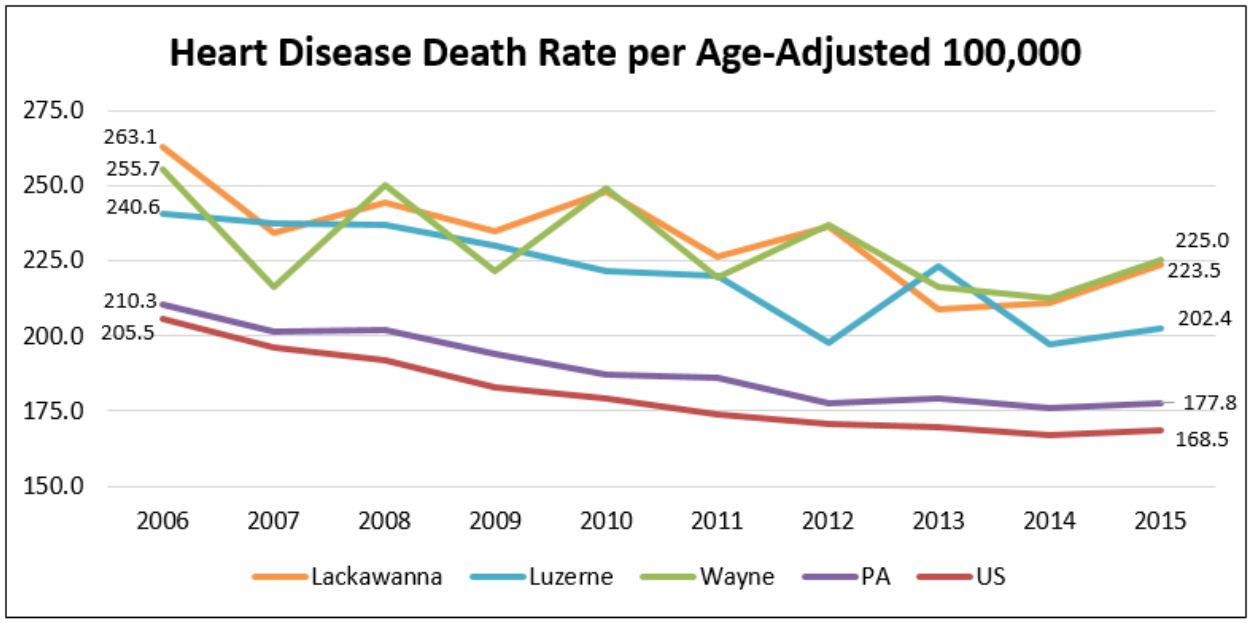
Heart disease is the leading cause of death in the nation. Approximately 7% of adults in the Northeast region have been diagnosed with a form of heart disease, similar to the state rate. Adults in the Northeast region also have similar rates of heart attack and stroke when compared to the state.

Heart disease death rates decreased across the Northeast region, but continue to exceed state and national rates. Lackawanna County experienced the greatest decline in death rates between 2006 and 2015 (40 points), followed by Luzerne County (38 points).

Heart Disease Prevalence among Adults

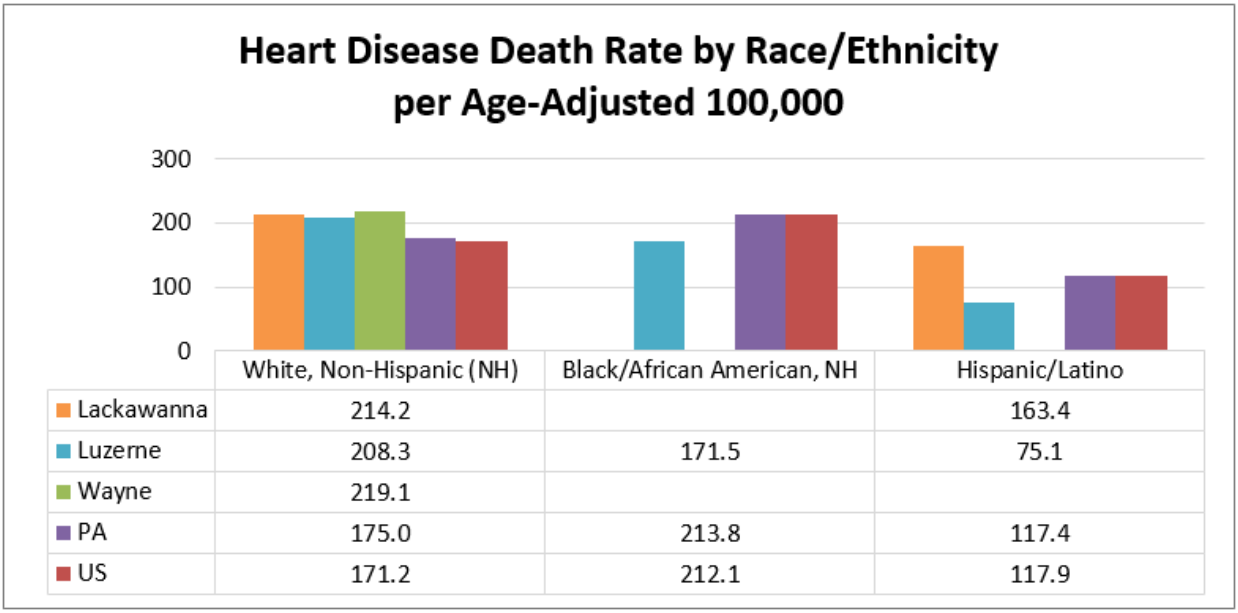
	Heart Disease	Heart Attack	Stroke
Region 1: Lackawanna/ Luzerne/Wyoming	7%	8%	4%
Region 2: Pike/Monroe/ Susquehanna/Wayne	7%	8%	5%
Pennsylvania	7%	7%	5%

Source: PA Department of Health, 2014-2016



Source: CDC WONDER, 2006-2015

Across the state and the nation, Blacks/African Americans have a higher heart disease death rate than Whites. Death rates among Blacks/African Americans in Lackawanna and Wayne Counties are not reported; the death rate for Luzerne County is based on a count of 27 deaths.



	White, Non-Hispanic (NH)	Black/African American, NH	Hispanic/Latino
Lackawanna	214.2		163.4
Luzerne	208.3	171.5	75.1
Wayne	219.1		
PA	175.0	213.8	117.4
US	171.2	212.1	117.9

Source: CDC WONDER, 2013-2015
*Death rates are reported as a 2013-2015 aggregate. Lackawanna and Wayne County data are limited due to low death counts.

Coronary heart disease (CHD) is characterized by the buildup of plaque inside the coronary arteries. Pennsylvania and the nation meet the Healthy People 2020 goal for CHD death. Northeast region counties have a higher rate of CHD death and do not meet the goal. Wayne County exceeds the goal by 37 points.

Northeast region counties exceed the HP 2020 goal for CHD death, but meet or are within reach of the goal for stroke death

Several types of heart disease, including coronary heart disease, are risk factors for stroke. Wayne County meets the Healthy People 2020 goal for stroke death; Lackawanna and Luzerne Counties are within reach of the goal.

Coronary Heart Disease and Stroke Death Rates
(Green = Meets Healthy People 2020 Goal; Red = Higher than the State and the Nation)

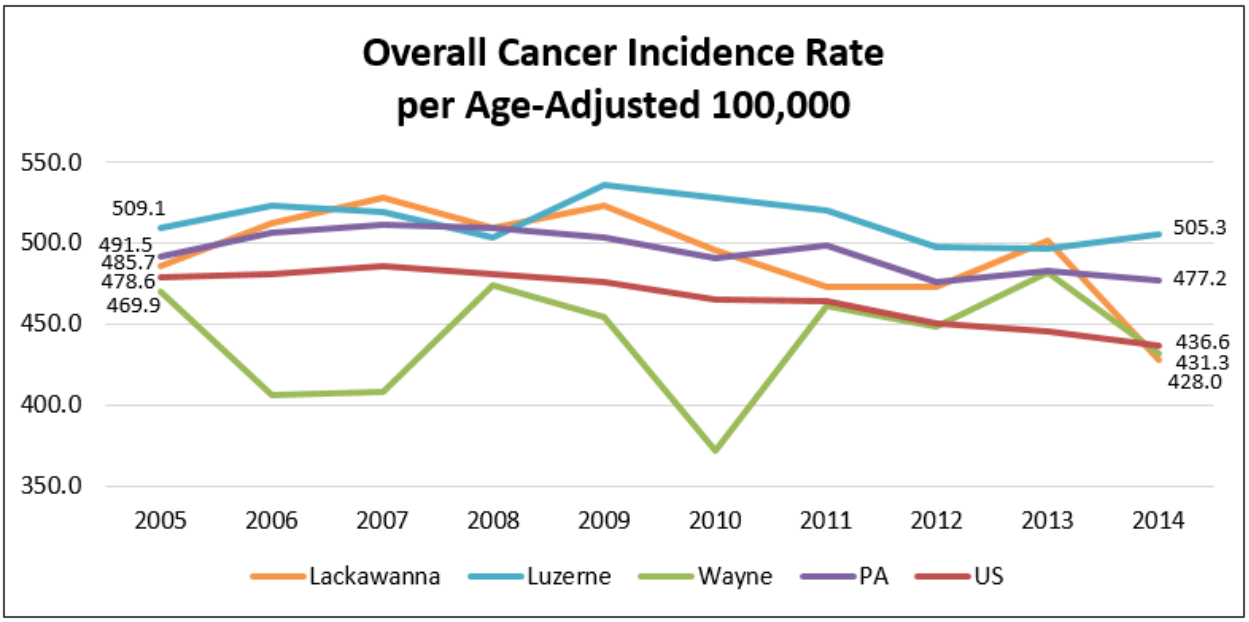
	Coronary Heart Disease Death per Age-Adjusted 100,000	Stroke Death per Age-Adjusted 100,000
Lackawanna County	105.1	37.5
Luzerne County	123.9	35.2
Wayne County	140.4	33.0
Pennsylvania	99.7	38.8
United States	97.2	37.6
HP 2020	103.4	34.8

Source: CDC WONDER, 2015

Cancer

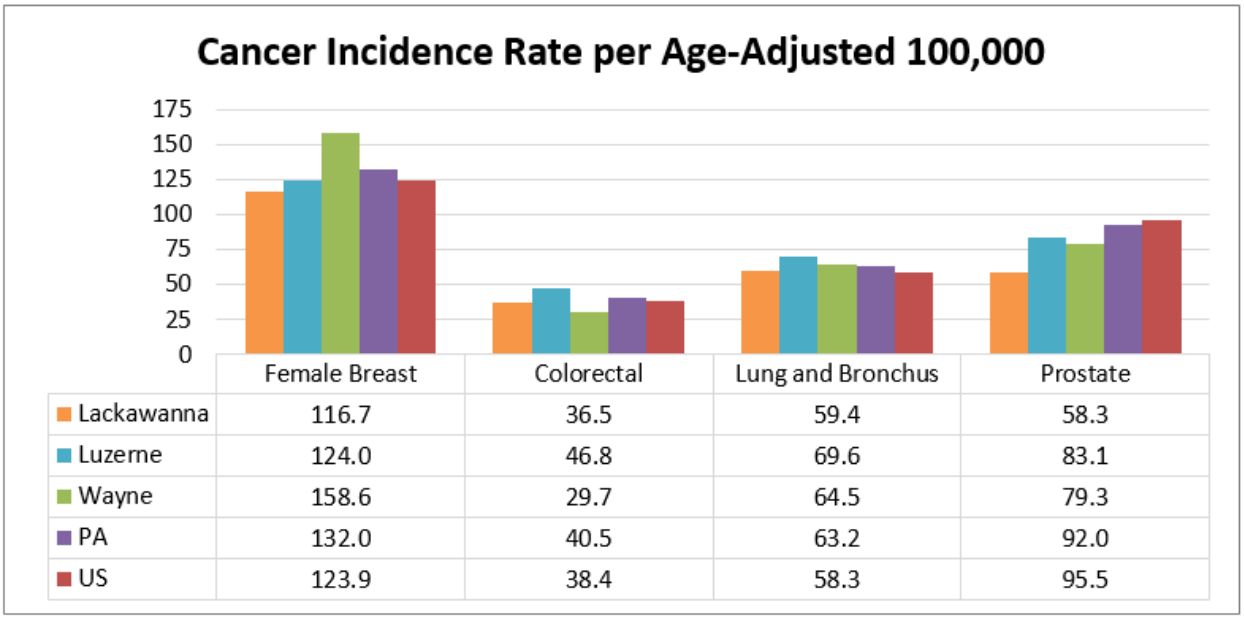
The cancer incidence rate for Pennsylvania is declining, but the current rate exceeds the national rate by 41 points. The Luzerne County incidence rate has been consistently high over the past decade and is currently higher than the state rate. The Lackawanna County incidence rate is lower than the state rate due to a 74 point decline between 2013 and 2014. The county rate has historically been similar to the state rate. The Wayne County incidence rate is similar to the national rate, but the rate has been variable over the past decade.

Cancer incidence in Luzerne County is higher than the state rate, while incidence in Lackawanna and Wayne Counties is on par with the nation



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

Presented below are the incidence rates for the most commonly diagnosed cancers: breast (female), colorectal, lung, and prostate (male). Luzerne County has the highest overall cancer incidence rate; county incidence rates for colorectal and lung cancer exceed state and national rates. Wayne County also has a high incidence of female breast cancer, exceeding the state rate by 27 points.

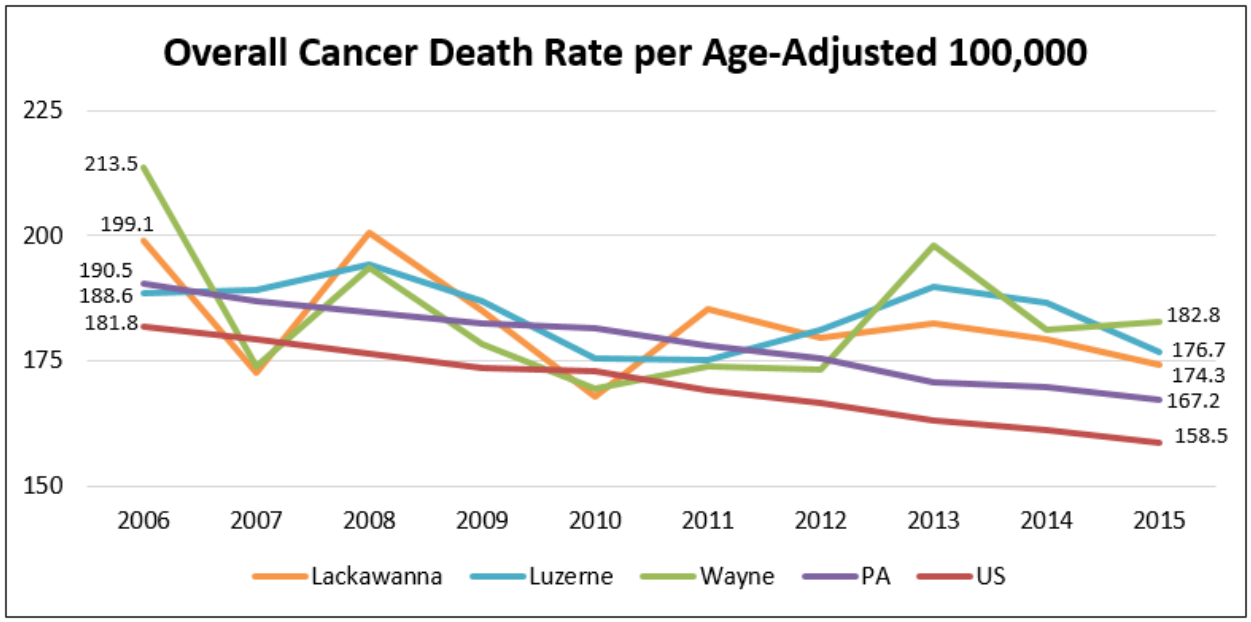


	Female Breast	Colorectal	Lung and Bronchus	Prostate
Lackawanna	116.7	36.5	59.4	58.3
Luzerne	124.0	46.8	69.6	83.1
Wayne	158.6	29.7	64.5	79.3
PA	132.0	40.5	63.2	92.0
US	123.9	38.4	58.3	95.5

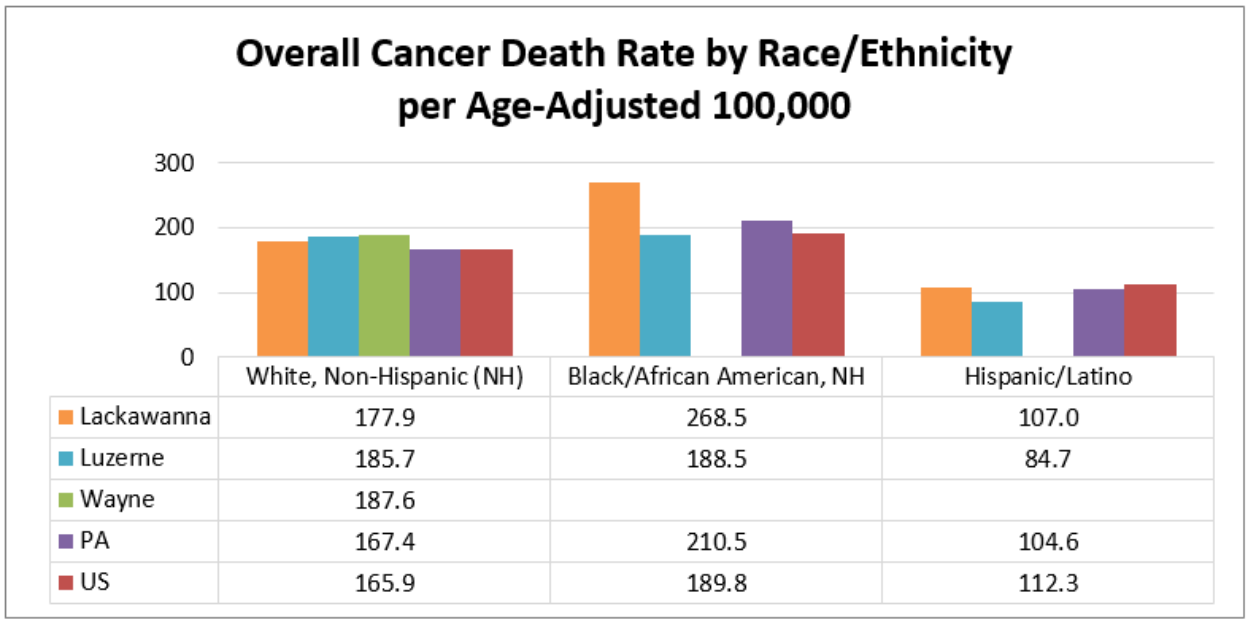
Source: CDC National Program of Cancer Registries, 2014; PA Department of Health, 2014
*The prostate cancer rate for Wayne County is reported for 2012-2014 due to a low count.

Northeast region counties have a higher rate of cancer death; rates are highest among Blacks/African Americans

Cancer death rates among Northeast region counties have been variable over the past decade, but generally declining. Current death rates exceed the state, the nation, and the Healthy People 2020 goal (161.4). Across the region, death rates are highest among Blacks/African Americans. Lackawanna County experiences the greatest disparity; the death rate among Blacks/African Americans is 91 points higher than the rate among Whites.



Source: CDC Wonder, 2006-2015

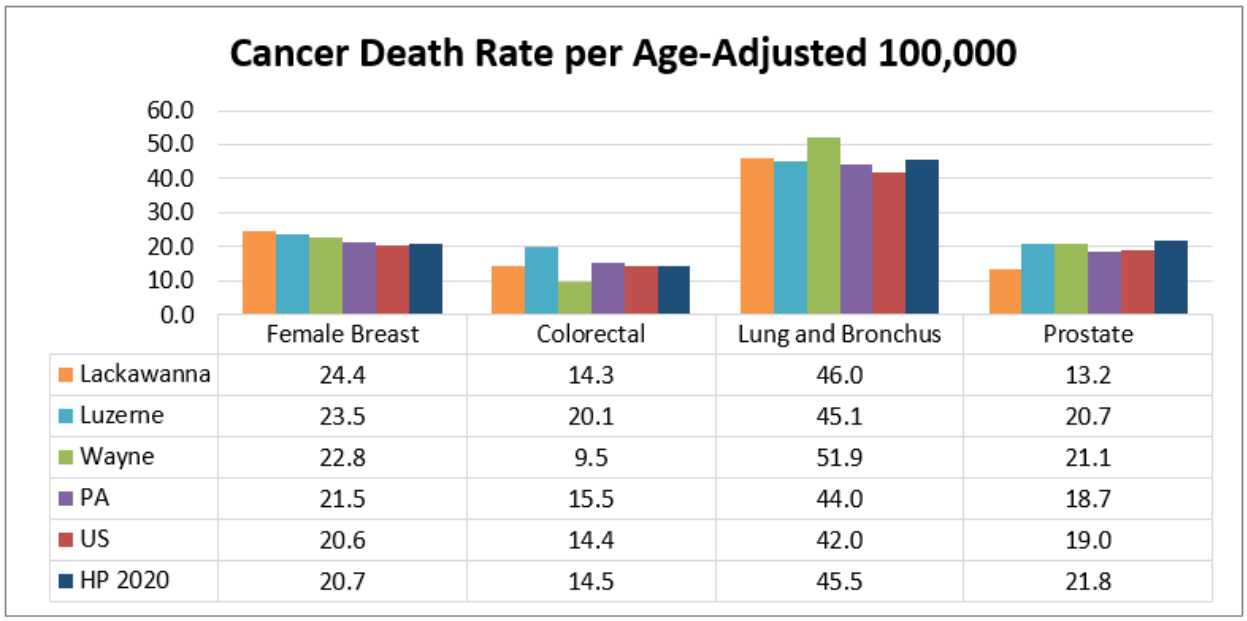


	White, Non-Hispanic (NH)	Black/African American, NH	Hispanic/Latino
Lackawanna	177.9	268.5	107.0
Luzerne	185.7	188.5	84.7
Wayne	187.6		
PA	167.4	210.5	104.6
US	165.9	189.8	112.3

Source: CDC Wonder, 2013-2015
*Death rates are reported as a 2013-2015 aggregate. Lackawanna and Wayne County data are limited due to low death counts.

All Northeast region counties meet the HP 2020 goal for prostate cancer, but exceed the goal for female breast cancer

Presented below are the death rates for the most commonly diagnosed cancers. All three counties meet the Healthy People 2020 goal for death due to prostate cancer, but exceed the goal for death due to female breast cancer. Death rates are also higher for colorectal cancer in Luzerne County and lung cancer in Wayne County.



	Female Breast	Colorectal	Lung and Bronchus	Prostate
Lackawanna	24.4	14.3	46.0	13.2
Luzerne	23.5	20.1	45.1	20.7
Wayne	22.8	9.5	51.9	21.1
PA	21.5	15.5	44.0	18.7
US	20.6	14.4	42.0	19.0
HP 2020	20.7	14.5	45.5	21.8

Source: CDC Wonder, 2013-2015
*Death rates are reported as a 2013-2015 aggregate.

Chronic Lower Respiratory Disease

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

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

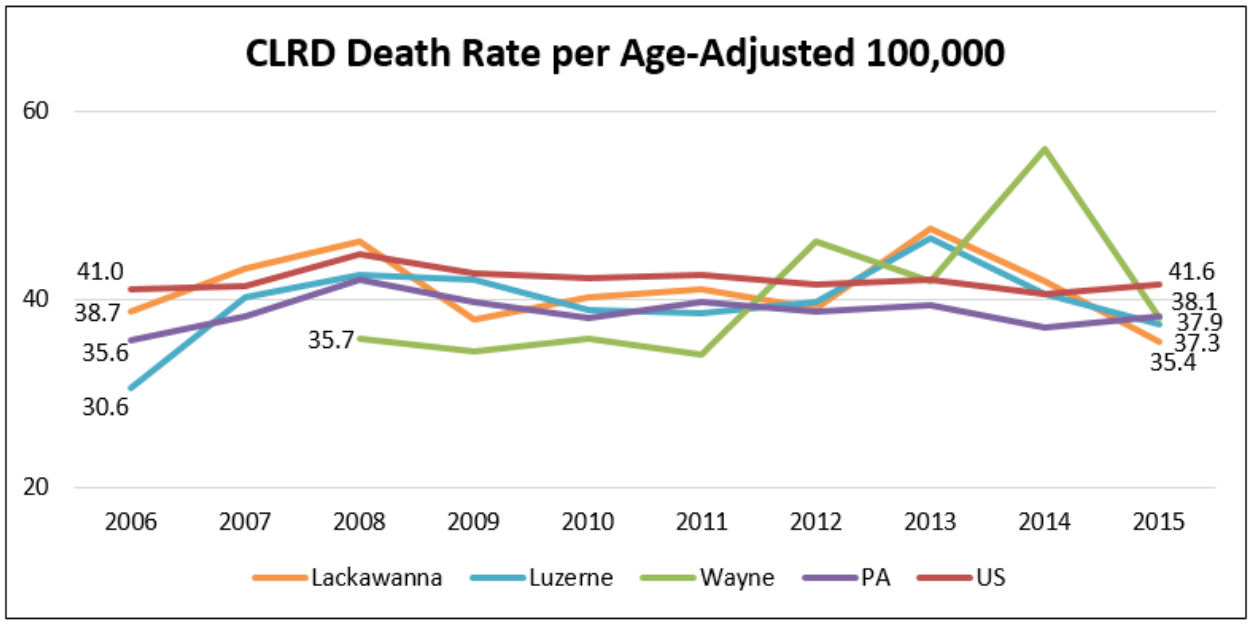
Reporting Region 2, which includes Wayne County, has a higher incidence of adults with asthma and COPD. However, all Northeast region counties have a lower death rate due to CLRD when compared to the state and the nation. Death rates across the state and the nation have been stable; service county death rates varied over the past four years. Data by race and ethnicity are not reported due to low death counts.

Smoking cigarettes contributes to the onset of CLRD. All counties have similar adult smoking rates when compared to the state and the nation, but do not meet the Healthy People 2020 goal.

CLRD Prevalence among Adults

	Asthma Diagnosis (Current)	COPD Diagnosis (Ever)
Region 1: Lackawanna/ Luzerne/Wyoming	10%	8%
Region 2: Pike/Monroe/ Susquehanna/Wayne	15%	10%
Pennsylvania	10%	7%

Source: PA Department of Health, 2014-2016



Source: CDC Wonder, 2006-2015

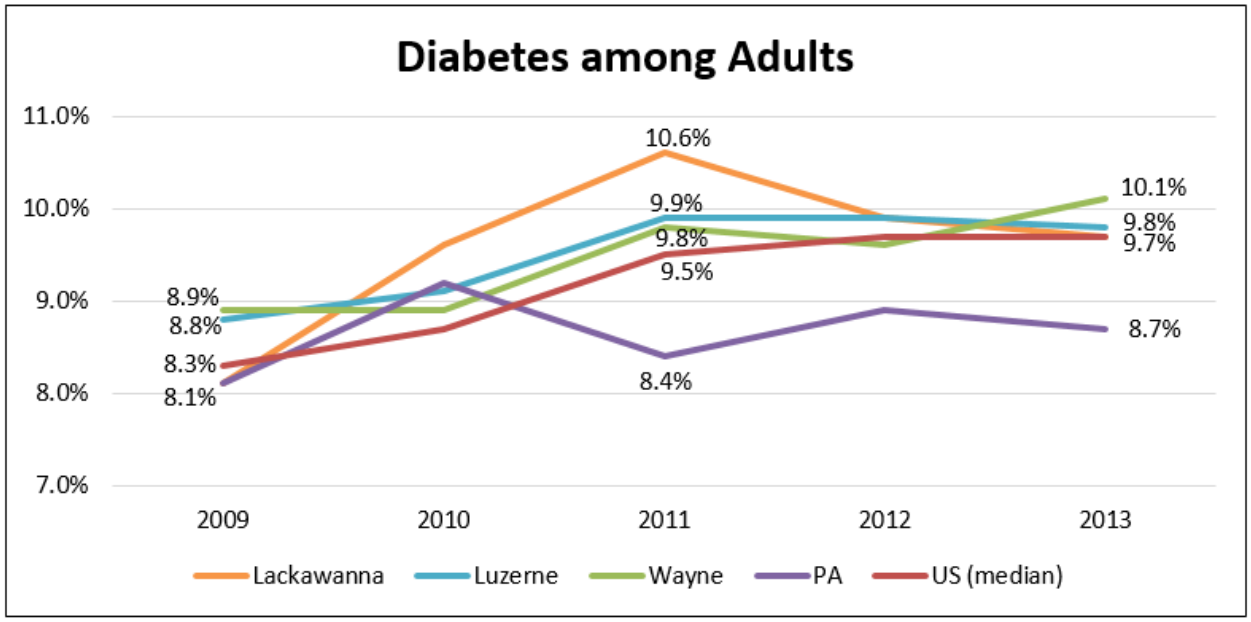
*Wayne County death rates are not reported for 2006 and 2007 due to low annual death counts.

Diabetes

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

All of the counties experienced a sharp increase in adult diabetes prevalence from 2009 to 2011. Between 2011 and 2013, prevalence rates remained stable. Adults are more likely to have a diabetes diagnosis when compared to the state, but they have similar rates to the nation.

Approximately 10% of Northeast region adults have diabetes, similar to the nation and higher than the state



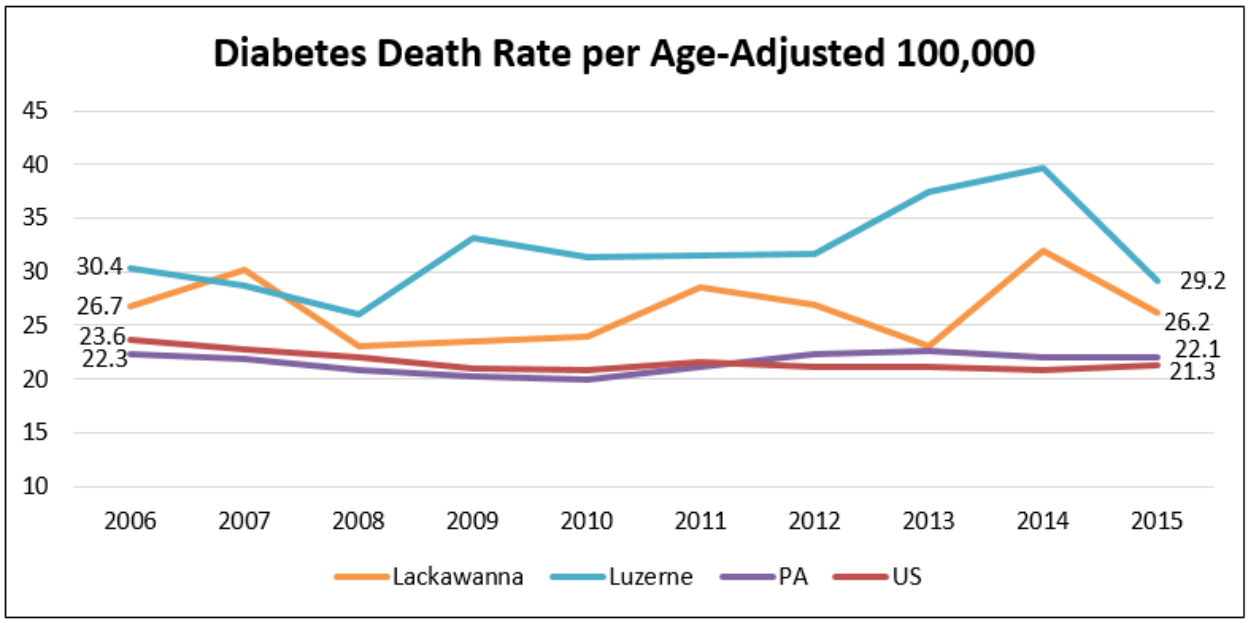
Source: CDC Diabetes Atlas & BRFSS, 2009-2013

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

The diabetes death rate among Northeast region counties is higher than state and national rates. In Lackawanna and Luzerne Counties, the diabetes death rate has been variable, and 2015 death rates are similar to 2006 death rates. Wayne County year-over-year trends are not reported due to low death counts. The three year (2013-2015) aggregate death rate for the county is 25.1 per 100,000.

The diabetes death rate is higher in all service counties compared to the state and the nation

Across Pennsylvania and the nation, the diabetes death rate is highest among Blacks/African Americans and Hispanics/Latinos. Racial and ethnic data are not reported by Northeast region county due to low death counts.



Source: CDC Wonder, 2006-2015

State and National Diabetes Death Rates by Race and Ethnicity

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

Source: CDC WONDER, 2013-2015

Notifiable Diseases

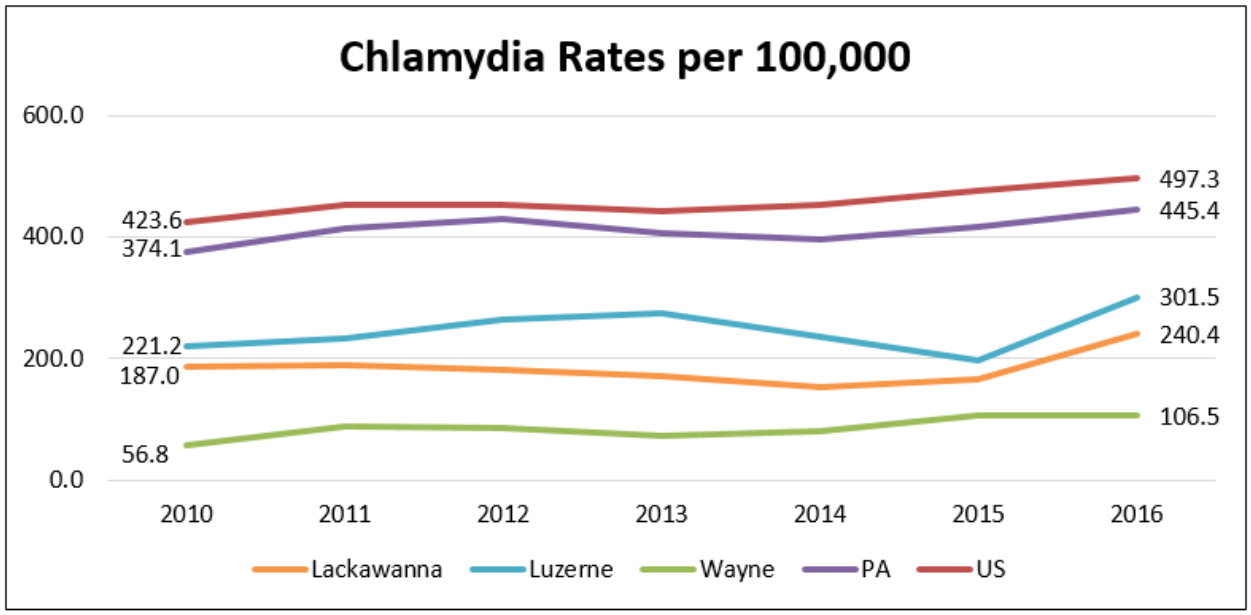
Sexually Transmitted Infections

Sexually transmitted infections (STIs) include chlamydia, gonorrhea, and HIV. The incidence of chlamydia in the Northeast region is lower when compared to the state and the nation, but increasing. The incidence rate increased by 50 points or more in each county.

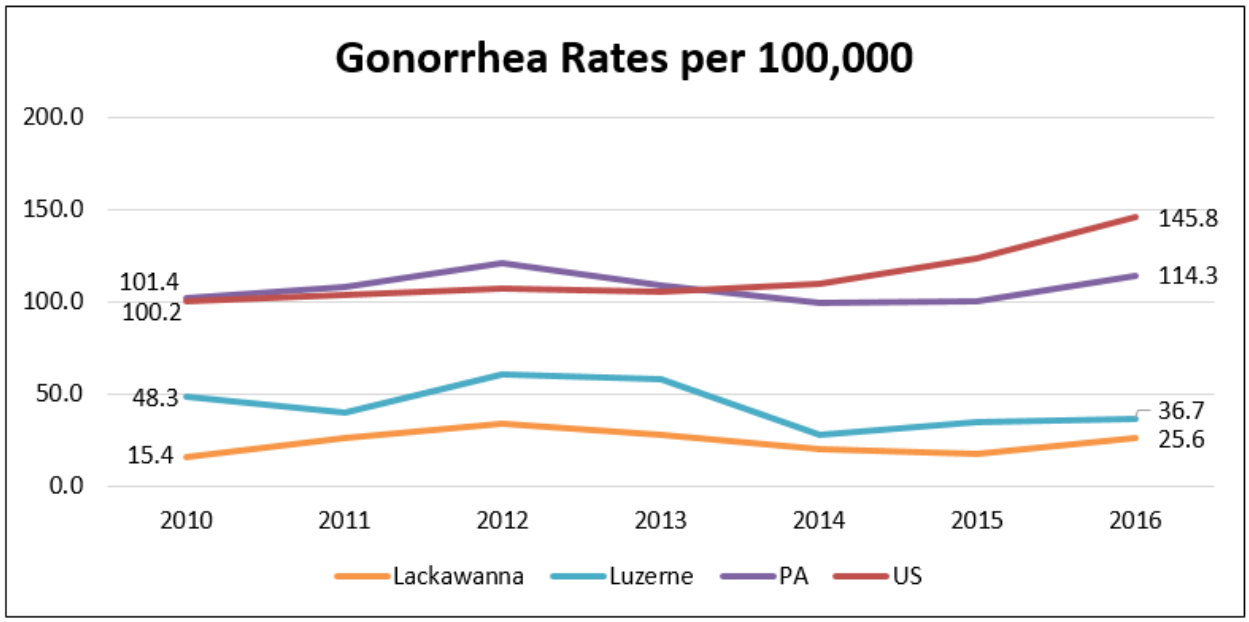
The incidence of chlamydia and gonorrhea in Northeast region counties is lower when compared to the state and the nation. Chlamydia incidence is increasing.

The incidence of gonorrhea in the Northeast region is also lower when compared to the state and the nation. However, the rate is increasing in Lackawanna County, and has been variable in Luzerne County. Wayne County year-over-year trends are not reported due to low counts. The three year (2014-2016) aggregate incidence rate for the county is 7.8 per 100,000, lower than the state and the nation.

All service counties have a lower incidence of HIV compared to the state and the nation. A total of 133 cases of HIV occurred in all three counties between 2013 and 2016.



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



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

HIV Incidence Rate

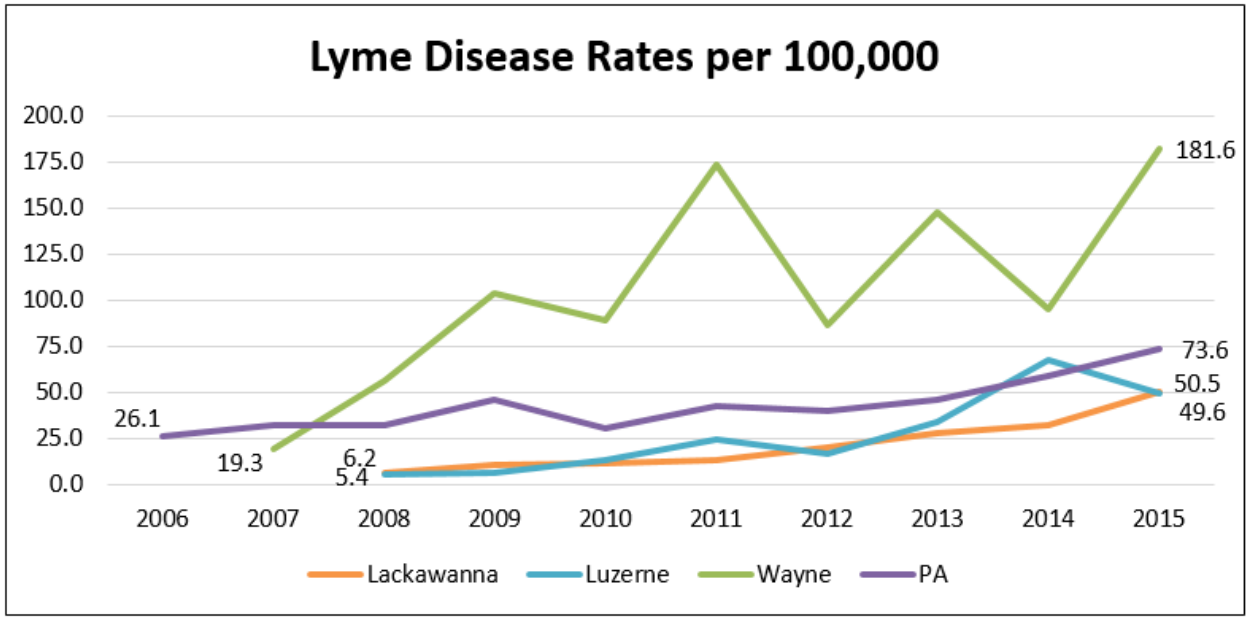
	2015 Crude Incidence Rate per 100,000	Cumulative 2013-2016 Incidence Count
Lackawanna County	5.2	45
Luzerne County	8.2	77
Wayne County	5.9	11
Pennsylvania	9.1	4,705
United States	12.3	NA

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

Lyme Disease

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

The incidence of Lyme disease has increased steadily across the state and the region, particularly in the last three years. Wayne County has the highest Lyme disease incidence rate. Approximately 218 people in the county were infected between 2013 and 2015, accounting for 23% of all cases in the region.



Source: PA Department of Health, 2006-2015

*Lyme disease rates for 2006 and 2007 may not be reported due to low annual counts.

Child Lead Screening and Poisoning

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

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

Approximately one-fifth to one-quarter of children ages 0 to 2 in the Northeast region are tested for lead poisoning. Children in Lackawanna County are less likely to be tested. Children ages 0 to 2 in all counties are more likely to have lead poisoning when compared to the state.

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

	Age Group	Percent Tested for Lead Poisoning	Percent with Blood Lead Levels ≥10 µg/dL
Lackawanna County	0-2 years	20.3%	3.8%
	3-6 years	5.3%	1.8%
Luzerne County	0-2 years	24.1%	2.5%
	3-6 years	3.8%	2.0%
Wayne County	0-2 years	26.0%	3.2%
	3-6 years	4.2%	2.7%
Pennsylvania	0-2 years	26.0%	1.8%
	3-6 years	4.5%	2.4%

Source: PA Department of Health, 2014

Behavioral Health

The suicide rate is higher in all Northeast region counties compared to the state and the nation; Luzerne County has the highest rate with 70 suicides in 2015 alone

Mental Health

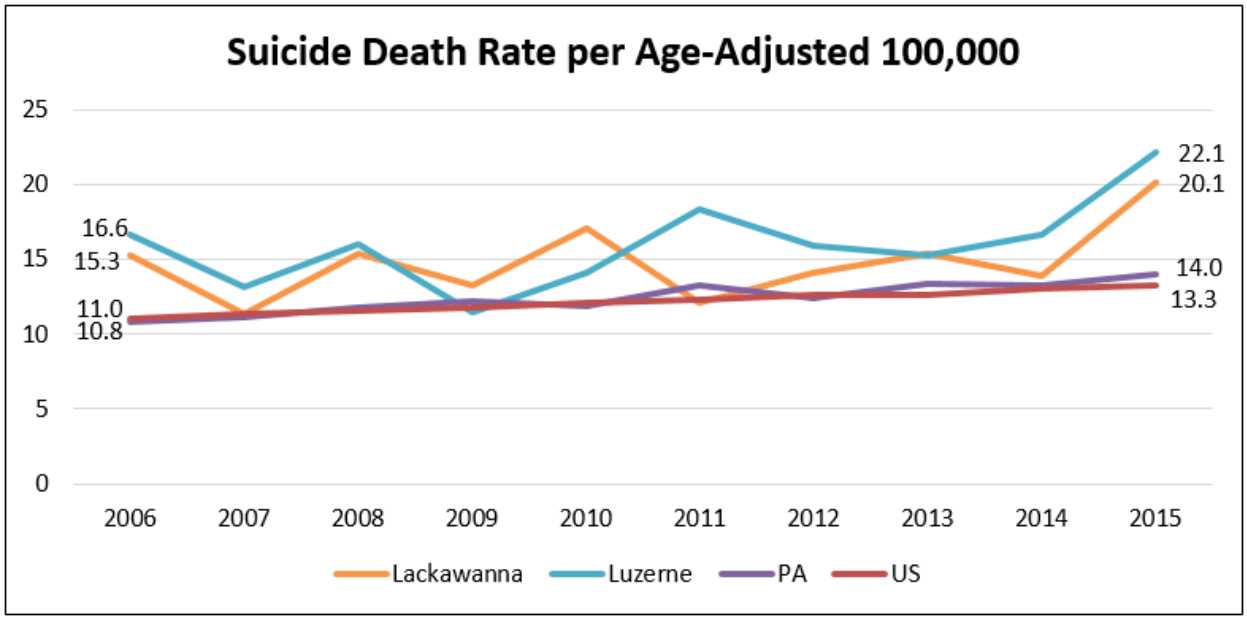
The suicide rate is one measure of mental health status. The rate among Northeast region counties exceeds state and national benchmarks. Luzerne County has the highest suicide rate, exceeding the Healthy People 2020 goal by 12 points. The suicide rate for the county has been variable over the past decade, but consistently above the Healthy People 2020 goal. The rate increased sharply between 2014 and 2015 due to a decade high number of suicide deaths (n=70). Luzerne County has the highest self-reported average of poor mental health days among adults.

Mental and behavioral disorders span a wide range of disorders, including dementia, amnesia, Schizophrenia, phobias, and mood or personality disorders. The disorders are not induced by alcohol and other psychoactive substances, but they may result from substance abuse. The mental and behavioral disorders death rate is higher in Lackawanna and Luzerne Counties compared to the nation, and increasing. The death rate increased across Pennsylvania and the nation over the past decade.

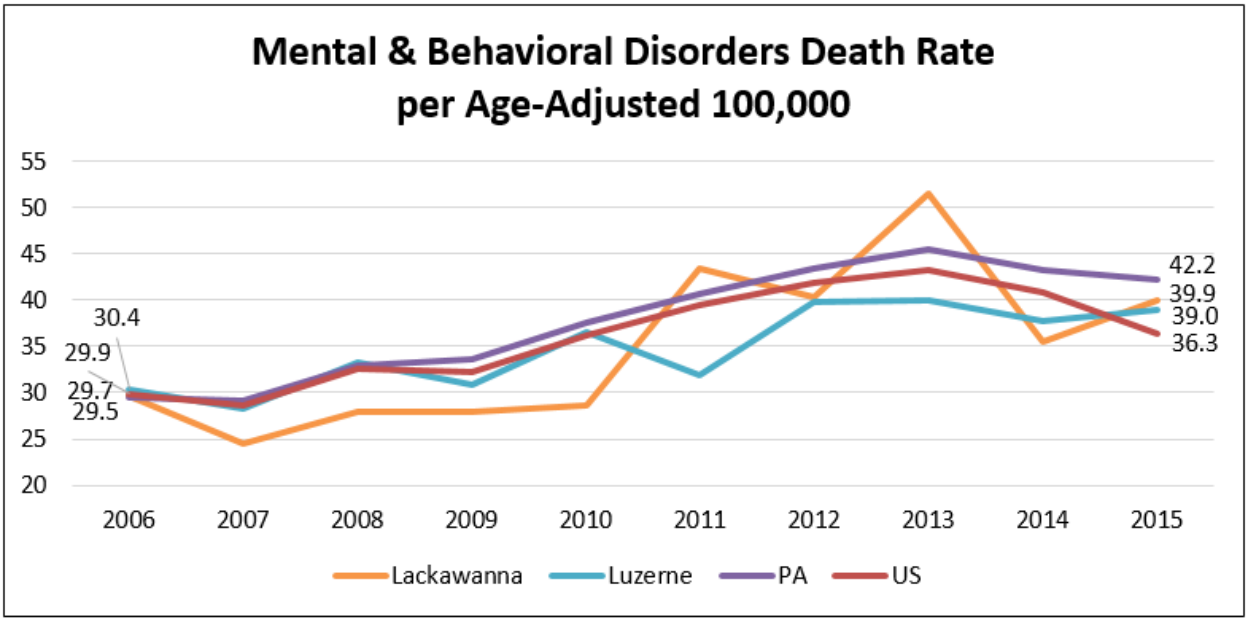
Mental Health Measures

	30-Day Average - Poor Mental Health Days (Adults)	Suicide Rate per Age-Adjusted 100,000	Mental & Behaviors Disorders Death Rate per Age-Adjusted 100,000
Lackawanna County	3.8	20.1	39.9
Luzerne County	3.9	22.1	39.0
Wayne County	3.7	20.6	23.1
Pennsylvania	3.9	14.0	42.2
United States	3.7	13.3	36.3
HP 2020	NA	10.2	NA

Source: CDC BRFSS & WONDER, 2013-2015 & 2015 & Healthy People 2020
*Suicide and mental and behavioral disorders death data for Wayne County are reported for 2013-2015 due to a low death count.



Source: CDC Wonder, 2006-2015



Source: CDC Wonder, 2006-2015

Substance Abuse

Substance abuse includes both alcohol and drug abuse. Adults in Northeast region counties are just as likely to drink excessively compared to the state and the nation. However, a higher percentage of driving deaths in the region are due to driving under the influence (DUI).

Adults in the Northeast region are just as likely to drink excessively compared to the state and the nation, but a higher percentage of driving deaths are due to DUI

Drug-induced deaths include all deaths for which drugs are the underlying cause, including drug overdoses and deaths from medical conditions resulting from chronic drug use. Pennsylvania

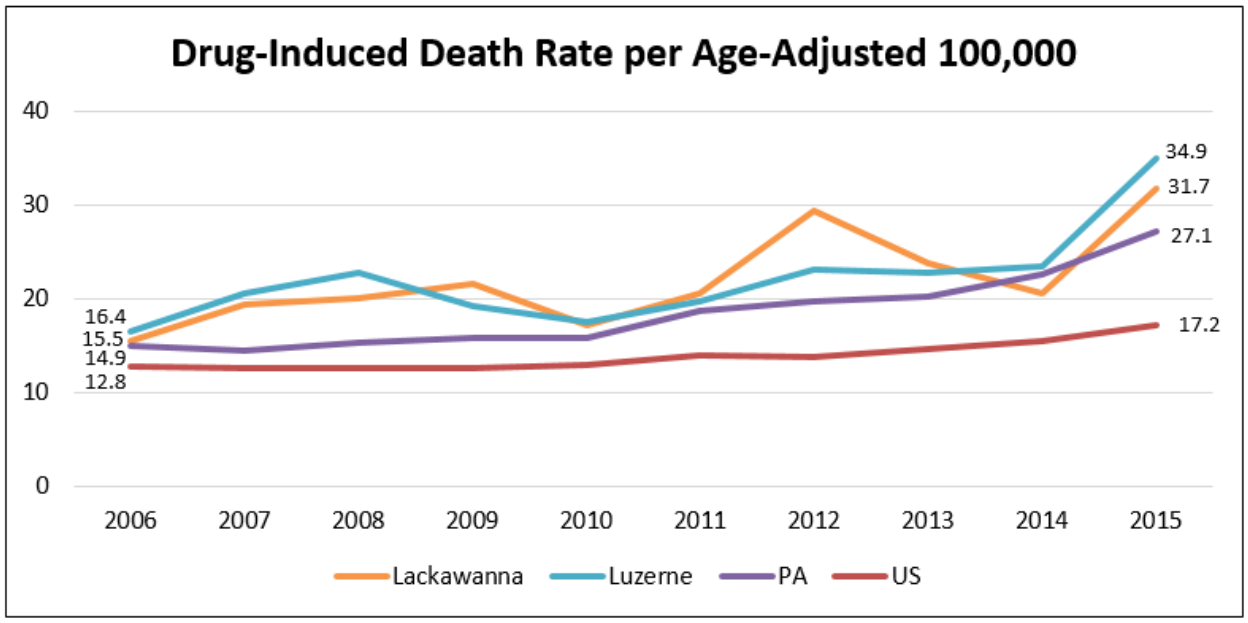
has a higher drug-induced death rate than the nation. The drug-induced death rate for Lackawanna and Luzerne Counties exceeds the state rate by 5 points and 8 points respectively. The death rate increased in both counties over the past decade. Wayne County has a similar drug-induced death rate to the state, the rate is higher than the national rate and does not meet the Healthy People 2020 goal.

The drug-induced death rate is increasing across the Northeast region; Lackawanna and Luzerne Counties had a decade high number of deaths in 2015

Substance Abuse Measures

	Excessive Drinking (Adults)	Percent of Driving Deaths due to DUI	Drug-Induced Death Rate per Age-Adjusted 100,000
Lackawanna County	17.6%	31.9%	31.7
Luzerne County	18.0%	41.7%	34.9
Wayne County	18.1%	39.5%	26.1
Pennsylvania	18.1%	32.0%	27.1
United States	18.0%	30.0%	17.2
HP 2020	NA	NA	11.3

Source: CDC BRFSS & WONDER, 2013-2015 & 2015; National Highway Traffic Safety Administration, 2011-2015; Healthy People 2020
*The drug-induced death rate for Wayne County is reported for 2013-2015 due to a low death count.



Source: CDC Wonder, 2006-2015

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

Across the Northeast region, there are 33 licensed drug and alcohol treatment facilities. The majority of facilities provide outpatient services. Outpatient services typically focus on individuals with mild addiction, providing education, counseling, and support.

The number of drug and alcohol treatment admissions declined in Lackawanna County, but increased in Luzerne and Wayne Counties from fiscal years 2013-2014 to 2014-2015. Individuals from Lackawanna County are also the least likely to be admitted for treatment more than once. Across all three counties, the majority of admissions are due to drug abuse.

Drug and alcohol treatment admissions increased in Luzerne and Wayne Counties; the majority of admissions across the region are due to drug abuse

Licensed Drug and Alcohol Treatment Facilities

	Total Facilities	Inpatient Non-Hospital	Inpatient Hospital	Partial Hospitalization	Outpatient Facilities
Lackawanna County	12	4	0	4	10
Luzerne County	17	8	0	4	10
Wayne County	4	1	0	0	3
Pennsylvania	721	177	14	125	575

Source: PA Department of Health, FY2014-2015

Admissions to State Supported Facilities by Fiscal Year (FY)

	Admissions		Number of Clients Admitted		Percent of Clients Admitted Once	
	FY 13-14	FY 14-15	FY 13-14	FY 14-15	FY 13-14	FY 14-15
Lackawanna County	1,364	1,054	1,039	862	78.4%	84.0%
Luzerne County	857	923	548	603	58.8%	64.2%
Wayne County	385	412	317	312	83.9%	72.8%

Source: PA Department of Health, FY2013-2015

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

	Drug Abuse		Alcohol Abuse		Other*	
	FY 13-14	FY 14-15	FY 13-14	FY 14-15	FY 13-14	FY 14-15
Lackawanna County	57.9%	60.1%	40.8%	37.9%	1.3%	2.0%
Luzerne County	59.3%	59.9%	31.0%	25.0%	9.7%	15.1%
Wayne County	59.6%	58.7%	35.6%	37.2%	4.7%	4.2%

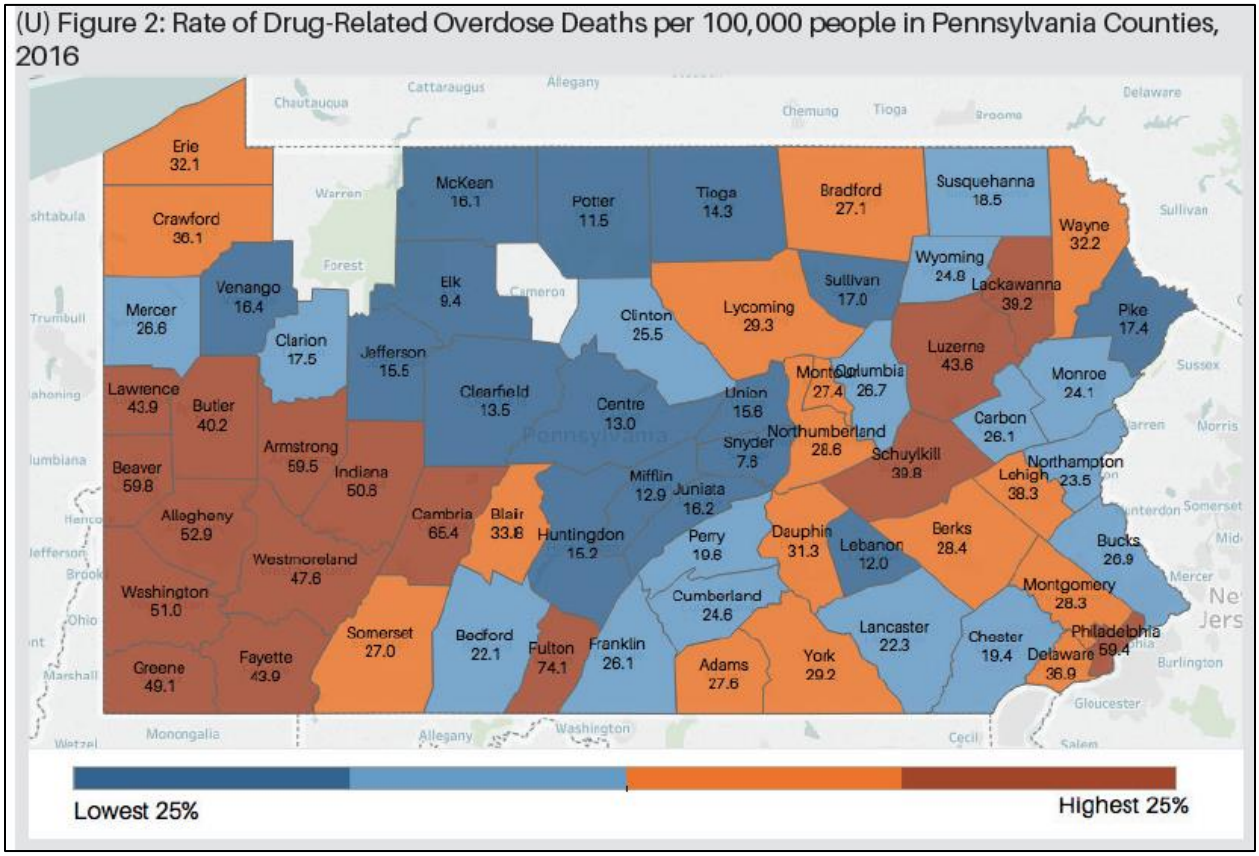
Source: PA Department of Health, FY2013-2015

*Includes family members receiving counseling.

In 2016, the Drug Enforcement Administration, Philadelphia Division released a report analyzing overdose deaths in Pennsylvania. According to the report, 4,642 drug-related overdose deaths were recorded in the state for a rate of 36.5 per 100,000, an increase of 37% from 2015. The following figure profiles the rate of drug-related overdose deaths by Pennsylvania county. Lackawanna and Luzerne Counties are among the top 25% of Pennsylvania counties with regard to overdose death rates; death rates and counts increased for both counties from 2015 to 2016.

There were 4,642 drug-related overdose deaths in Pennsylvania in 2016; Lackawanna and Luzerne Counties rank among the top 25% of counties based on death rates

(U) Figure 2: Rate of Drug-Related Overdose Deaths per 100,000 people in Pennsylvania Counties, 2016

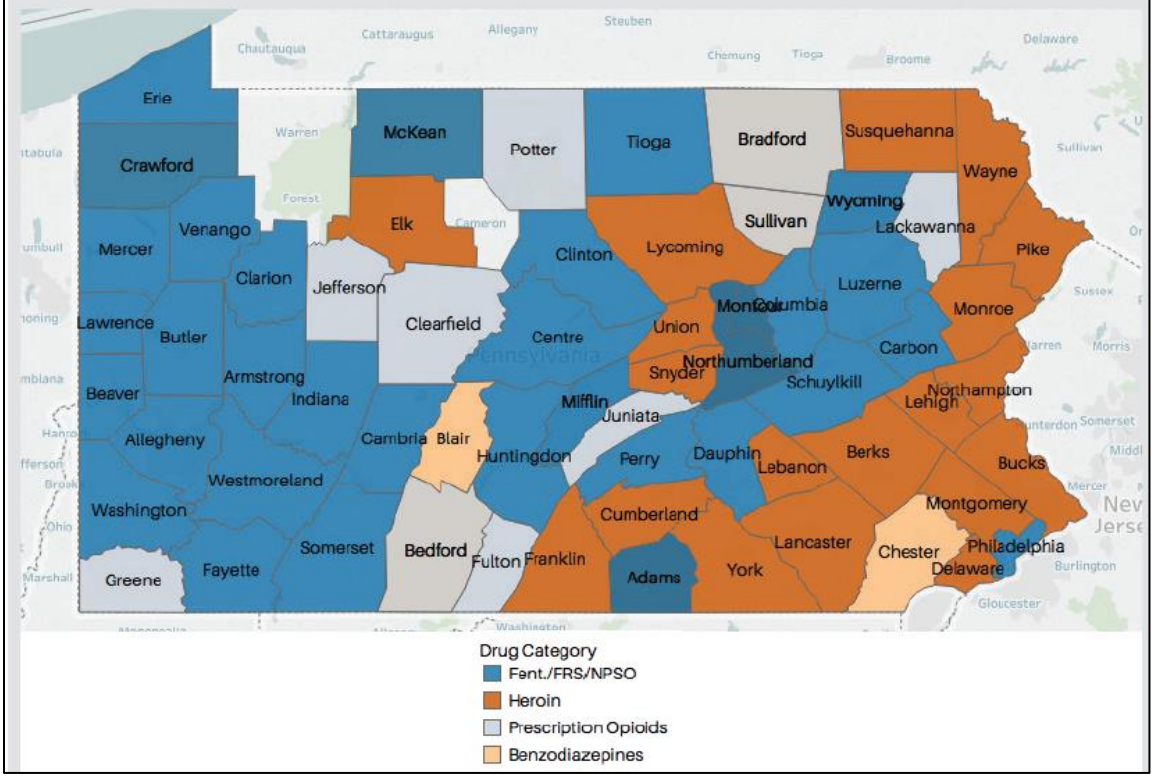


County Rankings by Rate of Drug-Related Overdose Deaths per 100,000 (2015 and 2016)

	2015			2016		
	Rank	Death Rate	Death Count	Rank	Death Rate	Death Count
Lackawanna County	14	33.0	70	16	39.2	84
Luzerne County	18	29.8	95	13	43.6	140
Wayne County	8	35.2	19	21	32.2	17

Across Pennsylvania, fentanyl and heroin are the most commonly reported drug categories among drug-related overdose deaths. The most commonly reported drug categories for Northeast region drug overdose deaths varied by county, as shown in the figure below.

(U) Figure 5: Most Frequently Reported Drug Category in Drug-Related Overdose Decedents by Pennsylvania County, 2016



Youth

A higher percentage of students in all reported grades in Luzerne County are consistently sad or depressed

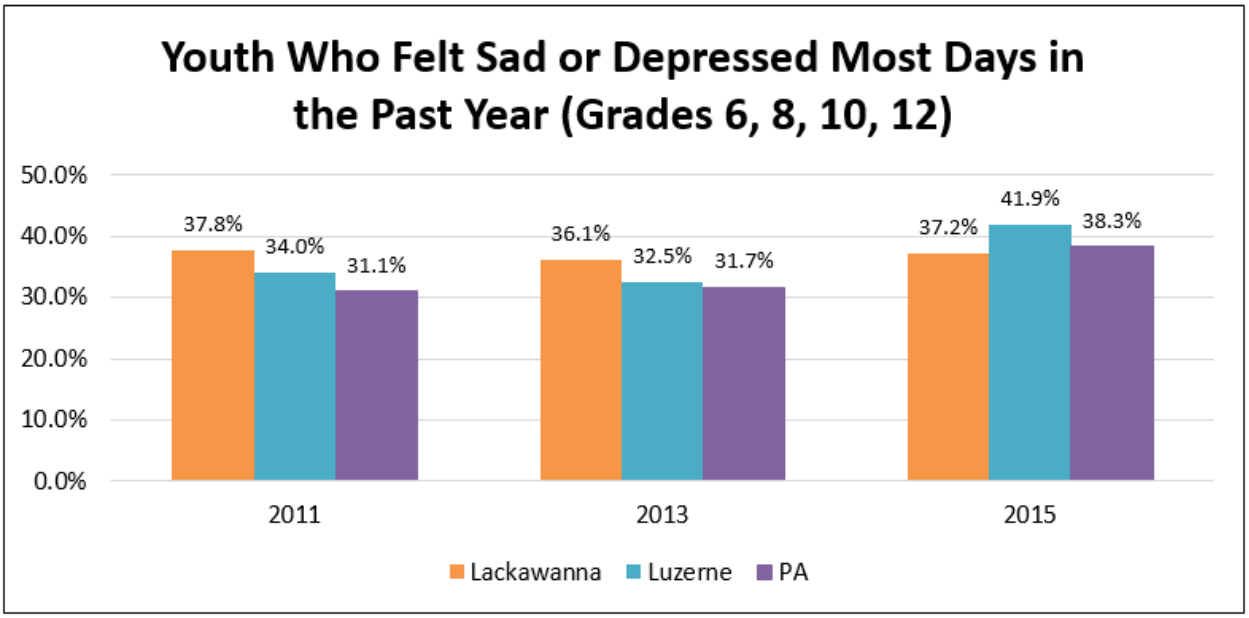
Youth who consistently feel depressed or sad may be at risk for committing suicide. The following figures depict the percentage of students in grades sixth through twelfth who felt sad or depressed on most days during the past year. Students in all reported grades in Luzerne County are more likely to be sad or depressed when compared to the state. The percentage of sad or depressed students in the county increased 9 points from 2013 to 2015. In Lackawanna County, a higher percentage of tenth and twelfth grade students are sad or depressed when compared to the state.

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

	6th Grade	8th Grade	10th Grade	12th Grade
Lackawanna County	25.8%	34.6%	45.8%	45.6%
Luzerne County	36.6%	38.9%	46.0%	48.4%
Pennsylvania	33.9%	37.7%	40.6%	40.7%

Source: Pennsylvania Commission on Crime and Delinquency, 2015

*Data are not reported for Wayne County.



Source: Pennsylvania Commission on Crime and Delinquency, 2011-2015
*Data are not reported for Wayne County.

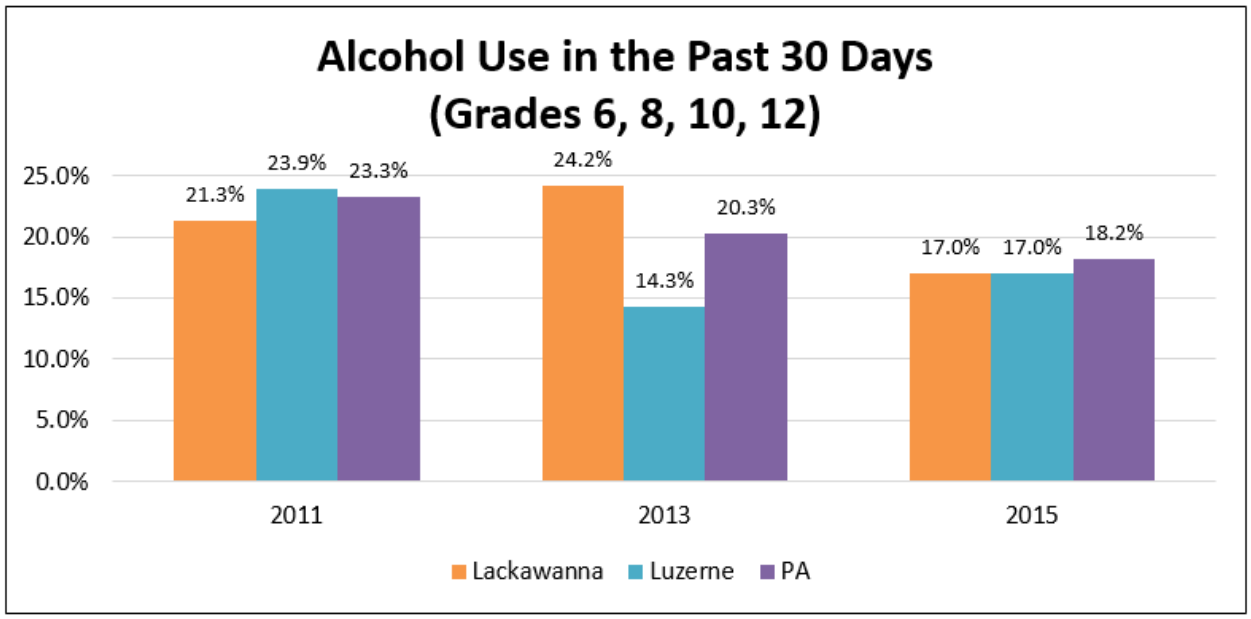
Alcohol and marijuana use is highest among students in grades ten and twelve. Tenth and twelfth grade students in Lackawanna County have the highest use rates, but students in both Lackawanna and Luzerne Counties exceed the state benchmarks. A higher percentage of sixth and eighth grade students in Luzerne County also use marijuana when compared to the state.

Alcohol and marijuana use among tenth and twelfth grade students is higher in Lackawanna and Luzerne Counties compared to the state

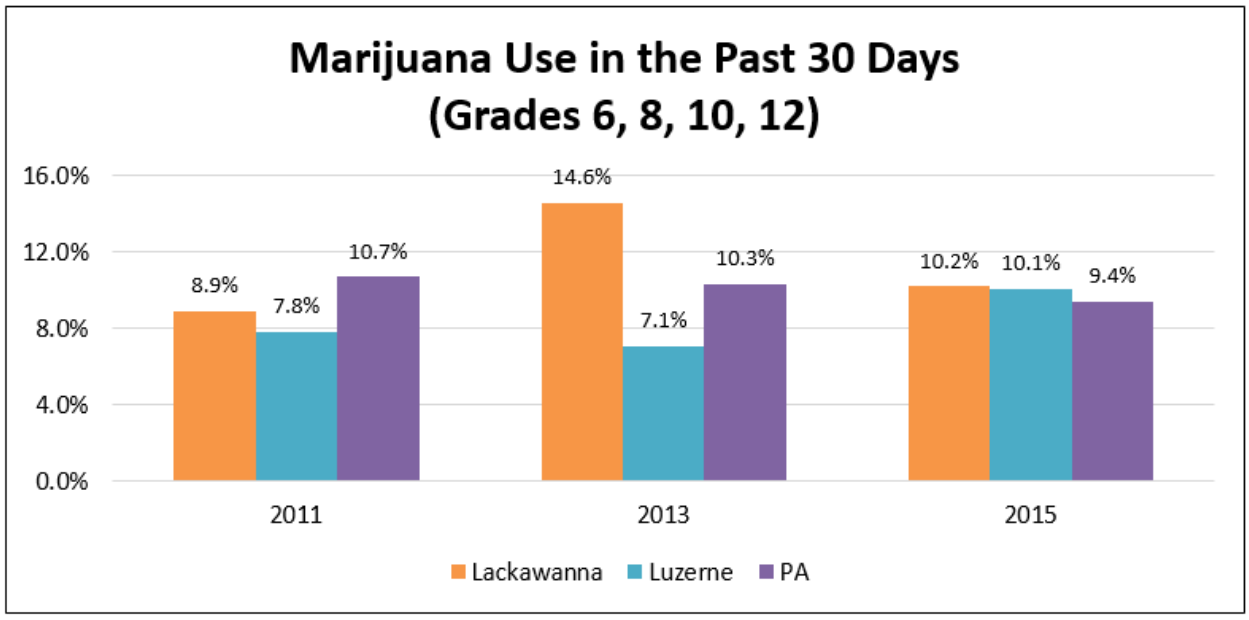
Youth Substance Abuse Measures

	6th Grade	8th Grade	10th Grade	12th Grade
Used Alcohol in the Past 30 Days				
Lackawanna County	3.6%	6.5%	26.7%	42.1%
Luzerne County	4.1%	8.6%	22.0%	41.5%
Pennsylvania	3.3%	9.5%	22.3%	37.6%
Used Marijuana in the Past 30 Days				
Lackawanna County	0.2%	3.2%	18.4%	25.6%
Luzerne County	1.3%	5.4%	13.4%	25.3%
Pennsylvania	0.6%	3.8%	12.0%	20.8%

Source: Pennsylvania Commission on Crime and Delinquency, 2015
*Data are not reported for Wayne County.



Source: Pennsylvania Commission on Crime and Delinquency, 2011-2015
*Data are not reported for Wayne County.



Source: Pennsylvania Commission on Crime and Delinquency, 2011-2015
*Data are not reported for Wayne County.

Senior Health

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

Chronic Conditions

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

Medicare Beneficiaries (65+) in Luzerne County have a higher prevalence of chronic disease and are more likely to have 4 or more chronic conditions

Luzerne County Medicare Beneficiaries have the highest rates of chronic disease. Lackawanna County Beneficiaries also have higher rates of arthritis and hypertension.

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

	Lackawanna County	Luzerne County	Wayne County	Pennsylvania	United States
Alzheimer's Disease	11.4%	10.9%	7.4%	11.8%	11.3%
Arthritis	38.7%	42.1%	33.8%	33.5%	31.3%
Asthma	8.3%	8.0%	7.8%	7.8%	7.6%
Cancer	9.9%	9.5%	9.8%	9.8%	8.9%
COPD	12.4%	13.5%	12.2%	11.0%	11.2%
Depression	15.2%	12.6%	10.8%	14.9%	14.1%
Diabetes	26.9%	27.4%	27.1%	26.5%	26.8%
Heart Failure	16.1%	15.9%	14.5%	14.7%	14.3%
High Cholesterol	53.0%	56.6%	52.3%	53.0%	47.8%
Hypertension	65.1%	66.4%	60.0%	61.0%	58.1%
Ischemic Heart Disease	32.2%	39.8%	31.5%	30.2%	28.6%
Stroke	5.0%	5.1%	4.5%	4.9%	4.2%

Source: Centers for Medicare & Medicaid Services, 2015

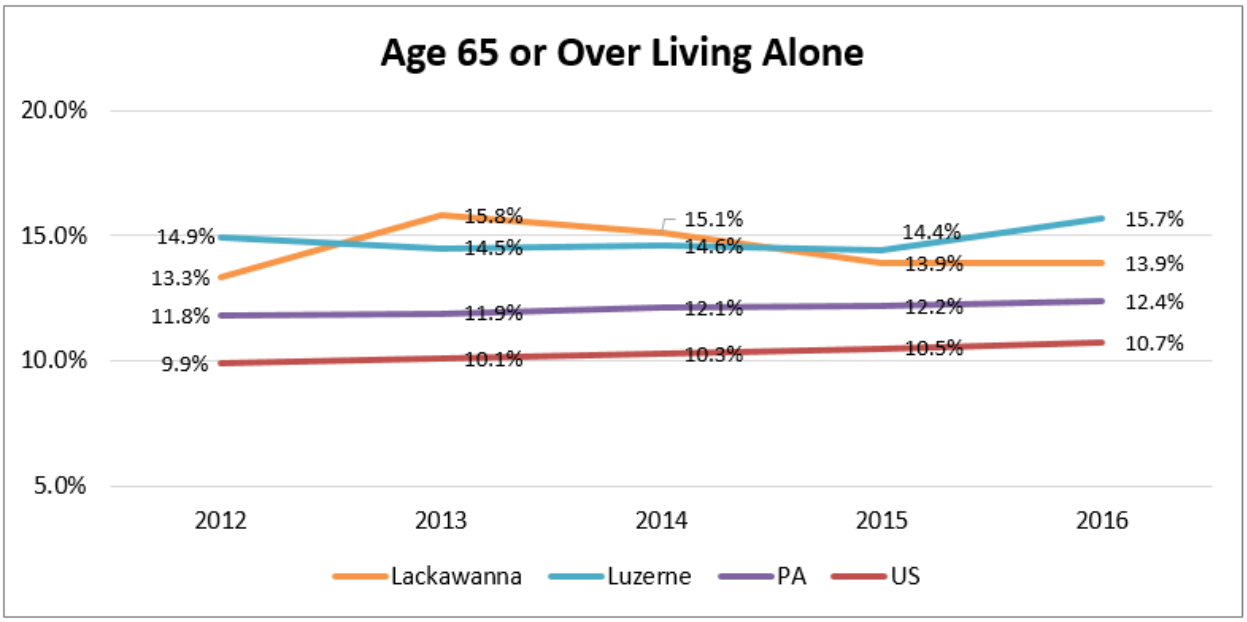
According to the CDC, "Among Medicare fee-for-service beneficiaries, people with multiple chronic conditions account for 93% of total Medicare spending." The table below notes the percentage of Northeast region Medicare Beneficiaries by number of chronic conditions. Luzerne County exceeds the state and the nation for the percentage of Beneficiaries with four or more conditions.

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

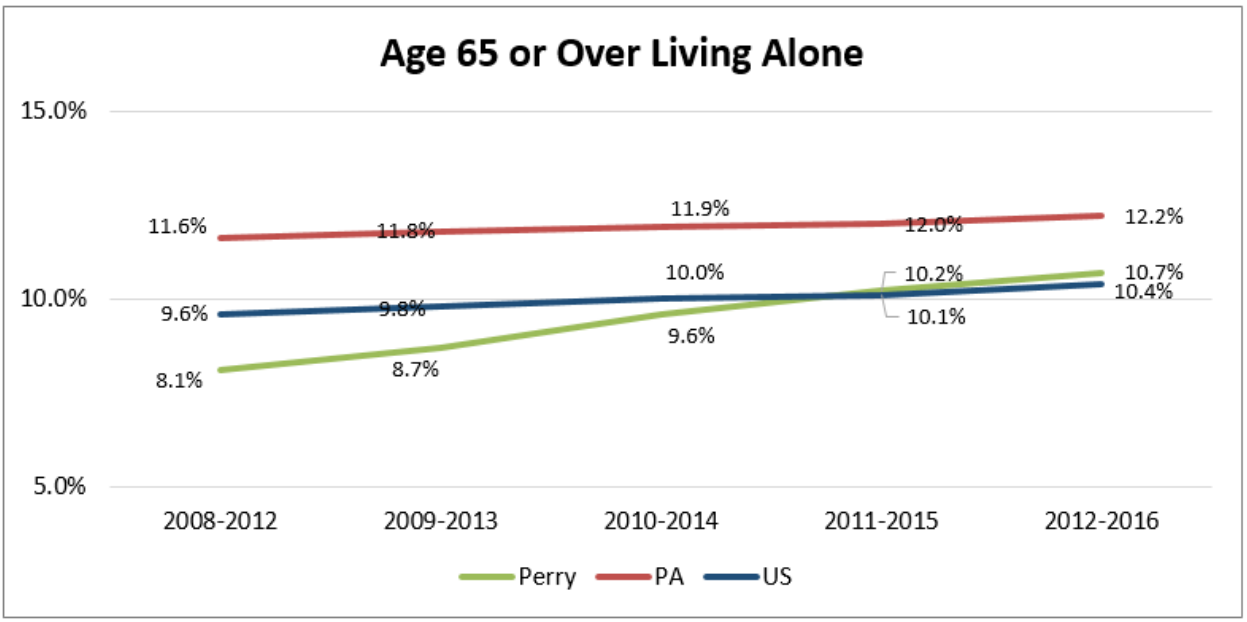
	Lackawanna County	Luzerne County	Wayne County	Pennsylvania	United States
0 to 1 condition	24.6%	23.9%	28.6%	28.5%	32.3%
2 to 3 conditions	32.6%	29.8%	33.8%	31.1%	30.0%
4 to 5 conditions	23.9%	25.3%	22.5%	22.9%	21.6%
6 or more conditions	18.8%	20.9%	15.2%	17.6%	16.2%

Source: Centers for Medicare & Medicaid Services, 2015

As seniors age, they are at risk for isolation due to physical limitations and decreasing social circles. One indicator of isolation is the percentage of seniors age 65 or over who live alone. All Northeast region counties have a higher percentage of seniors who live alone when compared to the state and the nation. The percentage of seniors who live alone increased in Luzerne and Wayne Counties.



Source: American Community Survey, 2012-2016



Source: American Community Survey, 2008-2012 – 2012-2016

Regular screenings are essential for the early detection and management of chronic conditions. The following table analyzes diabetes and mammogram screenings among Medicare enrollees. Medicare enrollees in Lackawanna and Luzerne Counties have similar screening rates as the nation; Wayne County has higher screening rates than the state and the nation.

Chronic Disease Screenings among Medicare Enrollees

	Annual hA1c Test from a Provider (65-75 Years)	Mammogram in Past Two Years (67-69 Years)
Lackawanna County	84.1%	62.2%
Luzerne County	85.0%	61.6%
Wayne County	87.0%	66.3%
Pennsylvania	86.3%	64.8%
United States	85.0%	63.0%

Source: Dartmouth Atlas of Health Care, 2014

Assistance with Activities of Daily Living (ADLs)

Chronic conditions and related disabilities can lead to limitations in activities of daily living. Approximately 5% of older adults in Pennsylvania have difficulty dressing or bathing, 25% have difficulty walking or climbing steps, and 5% have difficulty with vision. The percentage of older adults having trouble dressing or bathing and walking or climbing in Reporting Region 1, including Lackawanna and Luzerne counties, is slightly higher compared to the state.

Adults 65 Years or Over Requiring Assistance with ADLs

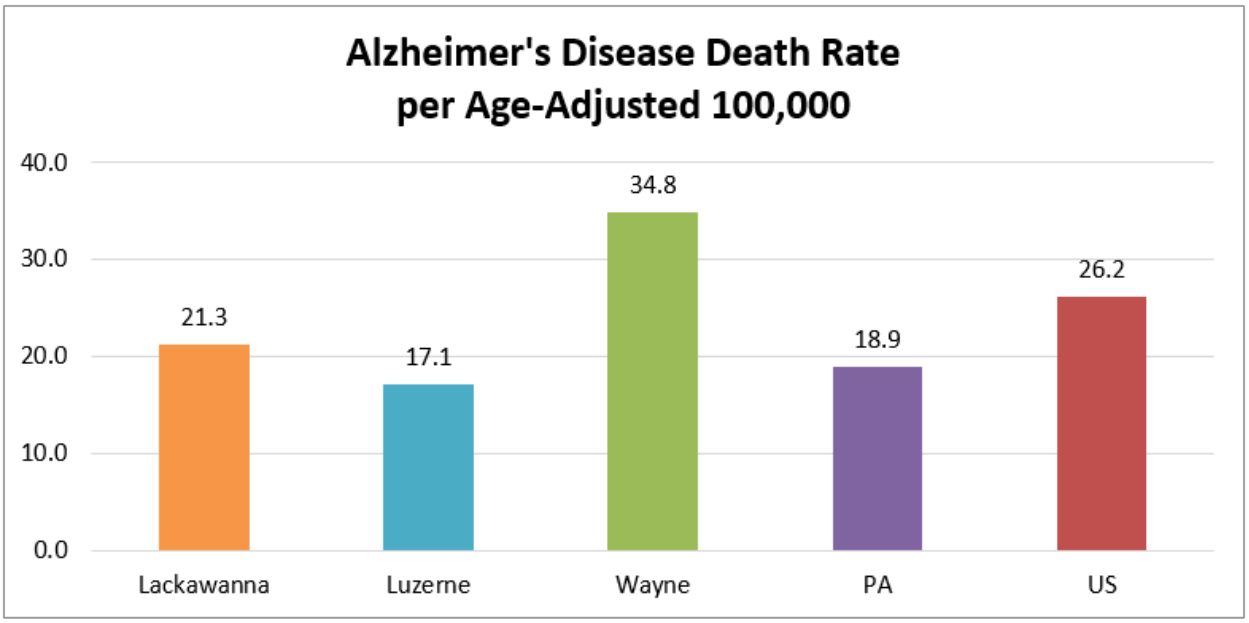
	Have Difficulty Dressing or Bathing	Have Serious Difficulty Walking or Climbing Stairs	Blind or Serious Difficulty Seeing, Even with Glasses
Region 1: Lackawanna/ Luzerne/Wyoming	8%	28%	4%
Region 2: Pike/Monroe/ Susquehanna/Wayne	5%	24%	6%
Pennsylvania	5%	25%	5%

Source: PA Department of Health BRFSS, 2014-2016

Alzheimer's Disease

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

Wayne County has the lowest percentage of Medicare Beneficiaries with Alzheimer's disease, but the county death rate due to the disease exceeds the state and the nation. Lackawanna and Luzerne County death rates are similar to the state.



Source: CDC Wonder, 2013-2015

Immunizations

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

Adults 65 Years or Over Who Received a Pneumonia Vaccination

	Ever Received a Pneumonia Vaccination
Region 1: Lackawanna/ Luzerne/Wyoming	67%
Region 2: Pike/Monroe/ Susquehanna/Wayne	64%
Pennsylvania	72%

Source: PA Department of Health BRFSS, 2014-2016

Maternal and Infant Health

Total Births

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

2015 Births by Race and Ethnicity

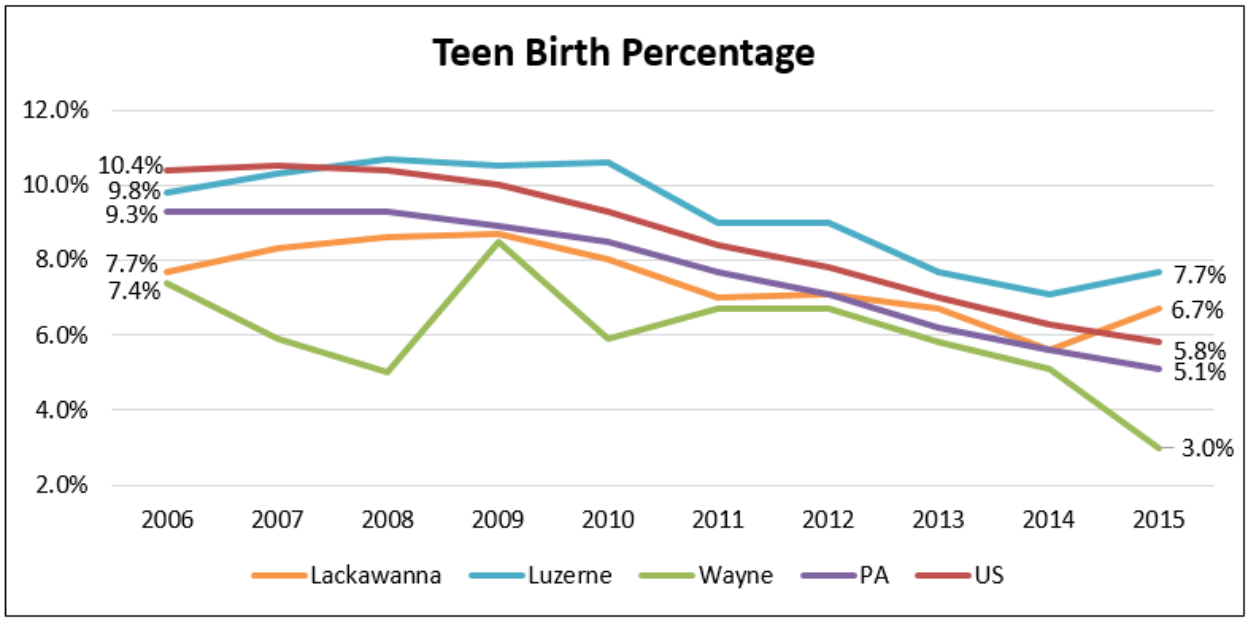
	Total Births	Birth Rate per 1,000	White Birth Count	Black/African American Birth Count	Hispanic/ Latino Birth Count
Lackawanna County	2,201	20.1	1,764	92	276
Luzerne County	3,168	19.7	2,303	209	666
Wayne County	403	16.8	376	5	20

Source: PA Department of Health, 2015

Teen Births

The percentage of births to teenagers is declining in all counties. However, both Lackawanna and Luzerne Counties saw an increase in teen births from 2014 to 2015, and current percentages exceed state and national benchmarks. Wayne County had the greatest decline in teen births over the past decade. The current teen birth percentage is the lowest in the region and lower than state and national percentages.

The percentage of births to teenage mothers is declining in all counties; Wayne County has a lower percentage than the state and the nation



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

Prenatal care should begin during the first trimester to ensure a healthy pregnancy and birth. The percentage of mothers in the Northeast region who receive first trimester has been variable over the past decade. Wayne County is the only county to meet the Healthy People 2020 goal. Mothers in Luzerne County are the least likely to receive first trimester prenatal care.

Lackawanna and Luzerne Counties do not meet HP 2020 goals for prenatal care, low birth weight, smoking during pregnancy, breastfeeding, or preterm birth

Low birth weight is defined as a birth weight of less than 5 pounds, 8 ounces. It is often a result of premature birth, fetal growth restrictions, or birth defects. The low birth weight percentage across the state and the nation has been consistent over the past decade at approximately 8%. The percentages in Northeast region counties have been variable. All counties nearly meet the Healthy People 2020 goal. Wayne County has historically met the goal, but the county experienced a rate increase from 2014 to 2015.

Wayne County meets the HP 2020 goal for prenatal care and has the highest percentage of non-smoking and breastfeeding mothers

Mothers in Northeast region counties are more likely to smoke during pregnancy and give birth prematurely and less likely to breastfeed when compared to the state. The counties do not meet Healthy People 2020 goals for the measures. Rates for smoking and breastfeeding improved across the region from 2006 to 2015. Preterm birth rates have been variable over the past decade. Current rates are similar to rates in 2006.

Across the Northeast region, Black/African American and Hispanic/Latina women are more likely than White women to have adverse maternal and child health outcomes. They do not meet the Healthy People 2020 goal for first trimester care by as much as 22 points. Black/African American women have higher rates of low birth weight and preterm infants and lower rates of breastfeeding. Hispanic/Latina women in Luzerne County are also more likely to deliver preterm infants.

Black/African American and Hispanic/Latina women have worse maternal and child health outcomes than White women

White mothers are more likely to smoke during pregnancy. In Luzerne County, 23% of White mothers smoke during pregnancy. White mothers in Luzerne County are also less likely to breastfeed when compared to Black/African American and Hispanic/Latina mothers.

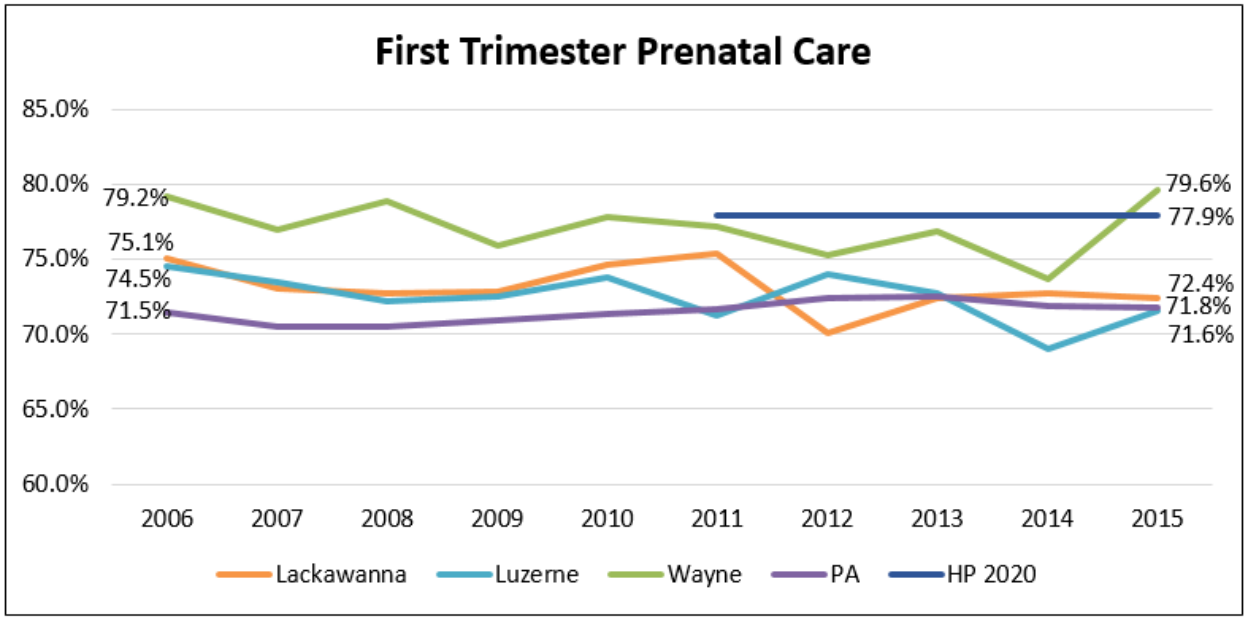
Maternal and Child Health Indicators by Race and Ethnicity

	Lackawanna County	Luzerne County	Wayne County	Healthy People 2020 Goal
Mothers with First Trimester Care				
Total Population	72.4%	71.6%	79.6%	77.9%
White	75.4%	75.2%	NA	
Black/African American	60.4%	55.3%	NA	
Hispanic/Latina	60.9%	63.9%	NA	
Low Birth Weight Infants				
Total Population	8.5%	8.1%	8.9%	7.8%
White	7.8%	6.7%	NA	
Black/African American	10.9%	13.0%	NA	
Hispanic/Latina	7.2%	9.0%	NA	
Non-Smoking Mothers during Pregnancy				
Total Population	80.4%	80.6%	81.6%	98.6%
White	78.5%	76.6%	NA	
Black/African American	80.4%	84.4%	NA	
Hispanic/Latina	91.7%	92.6%	NA	
Breastfeeding				
Total Population	67.9%	67.0%	74.2%	81.9%
White	67.1%	64.5%	NA	
Black/African American	60.4%	65.7%	NA	
Hispanic/Latina	74.4%	78.0%	NA	
Preterm Births				
Total Population	10.8%	10.3%	12.2%	9.4%*
White	10.3%	9.4%	NA	
Black/African American	NA	10.1%	NA	
Hispanic/Latina	9.1%	12.5%	NA	

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

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

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



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

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

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

Lackawanna County		Luzerne County		Wayne County	
Municipality	%	Municipality	%	Municipality	%
Clifton Twp.	59.3%	Wilkes-Barre City	59.1%	Lehigh Twp.	67.1%
Scranton City	62.0%	Shickshinny Boro.	59.4%	Cherry Ridge Twp.	67.7%
Carbondale Twp.	65.4%	Hazleton City	60.5%	Mount Pleasant Twp.	67.9%
Carbondale City	65.5%	Edwardsville Boro.	61.2%	Oregon Twp.	69.0%
Madison Twp.	66.3%	Plymouth Boro.	64.7%	Palmyra Twp.	70.0%
La Plume Twp.	66.7%	West Hazleton Boro.	65.0%	Hawley Boro.	70.1%
Ransom Twp.	66.7%	Harveys Lake Boro.	65.1%	Salem Twp.	71.0%
Taylor Boro.	67.9%	Pringle Boro.	65.2%	Lake Twp.	71.4%
Dalton Boro.	70.2%	Freeland Boro.	65.3%	Dyberry Twp.	72.7%
Old Forge Boro.	71.8%	Newport Twp.	68.0%	Manchester Twp.	73.0%
Fell Twp.	72.3%	Pittston City	69.8%	Dreher Twp.	74.1%
Newton Twp.	72.4%	Wilkes-Barre Twp.	69.9%	Paupack Twp.	74.7%
Moscow Boro.	74.2%	Black Creek Twp.	70.1%		
Covington Twp.	74.7%	Larksville Boro.	70.4%		
		Hanover Twp.	70.7%		
		Nanticoke City	70.8%		

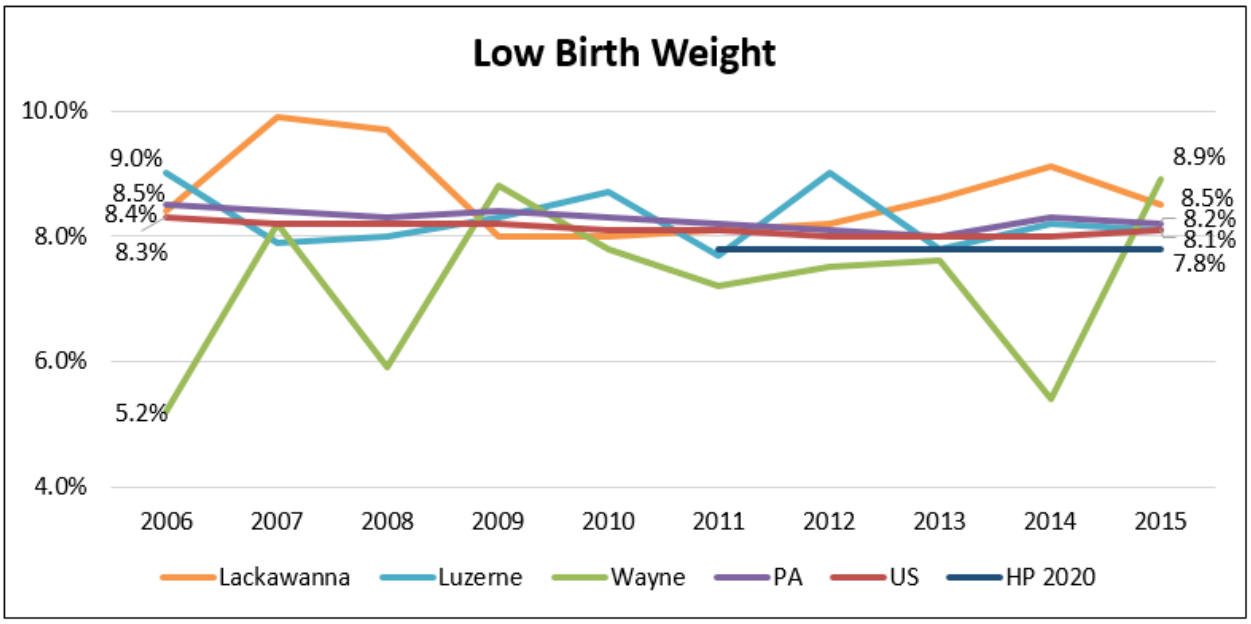
Source: PA Department of Health, 2011-2015
*Only municipalities with more than 20 reported births are included.

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

Luzerne County	
Municipality	%
Lake Twp.	70.9%
Nescopeck Boro.	70.9%
Hazle Twp.	71.6%
Union Twp.	71.6%
Kingston Boro.	71.7%
Jenkins Twp.	71.9%
Fairmount Twp.	72.1%
Salem Twp.	72.3%
Hunlock Twp.	73.3%
Ashley Boro.	73.5%
Luzerne Boro.	73.7%
Plains Twp.	74.2%
Huntington Twp.	74.4%
Sugarloaf Twp.	74.6%
Dorrance Twp.	74.7%
Wyoming Boro.	74.8%

Source: PA Department of Health, 2011-2015

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



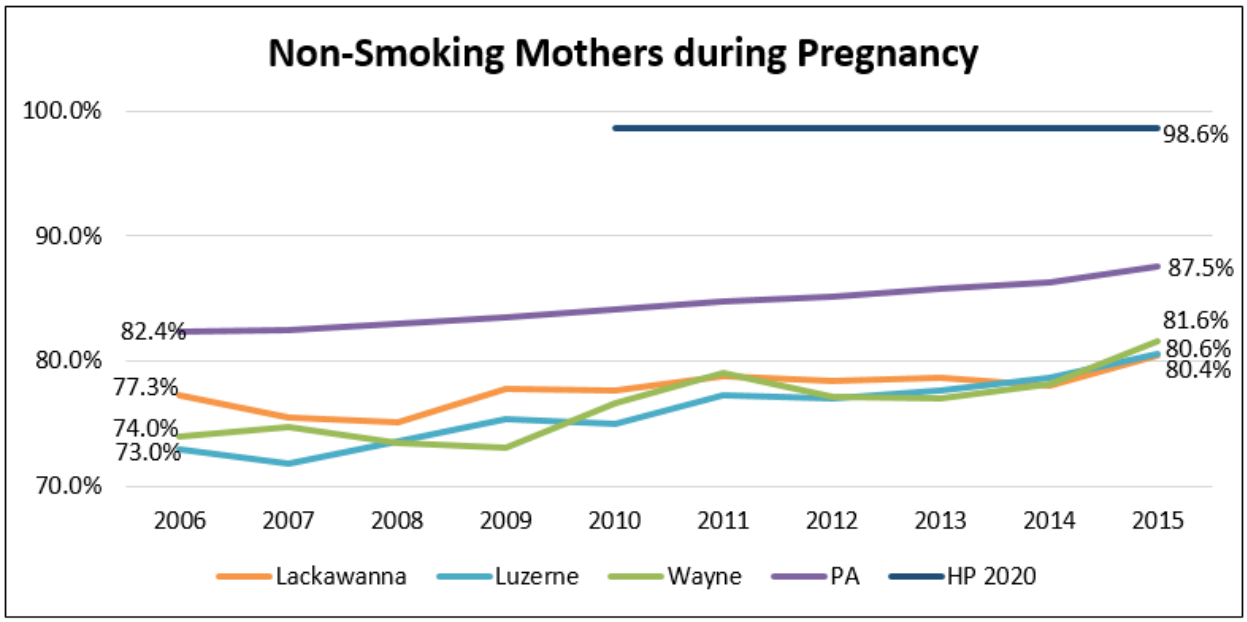
Source: PA Department of Health, 2006-2015 & Healthy People 2020

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

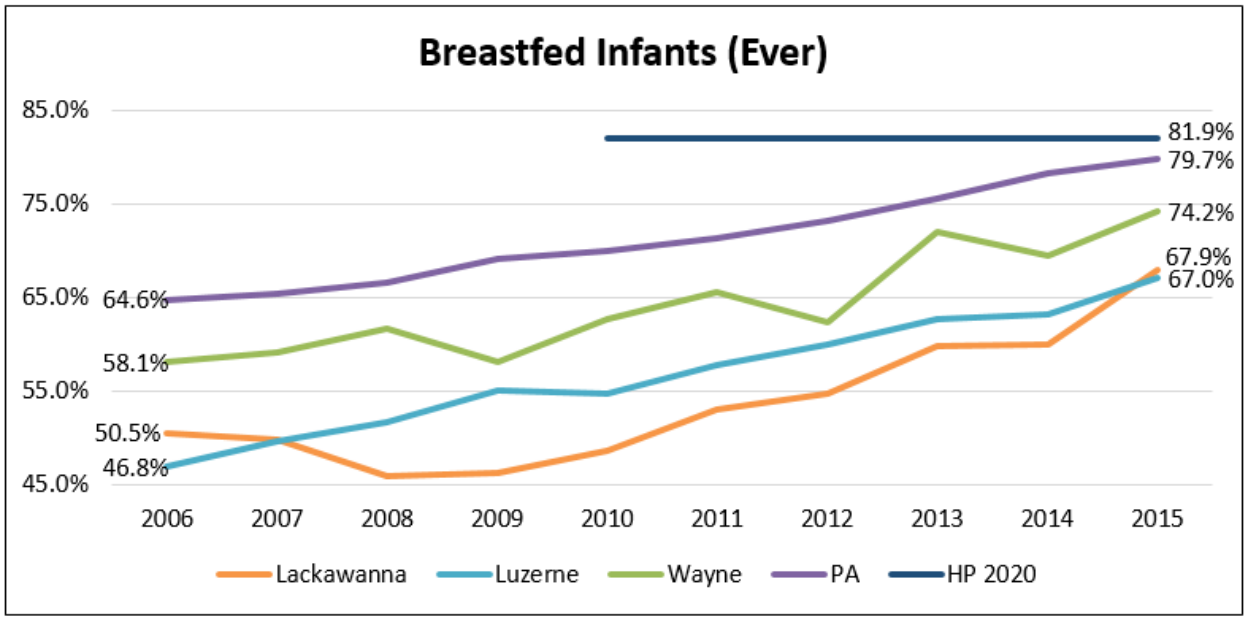
Municipalities that Do Not Meet the Healthy People 2020 Goal (7.8%) for Low Birth Weight Babies by More Than 3 Points

Lackawanna County		Luzerne County		Wayne County	
Municipality	%	Municipality	%	Municipality	%
Madison Twp.	14.5%	Shickshinny Boro.	15.6%	Clinton Twp.	14.1%
Vandling Boro.	14.3%	Black Creek Twp.	14.9%	Cherry Ridge Twp.	12.9%
Carbondale City	12.5%	Larksville Boro.	14.2%	Lehigh Twp.	12.7%
Carbondale Twp.	11.5%	Plymouth Twp.	13.8%	Preston Twp.	12.1%
Archbald Boro.	11.2%	Conyngham Boro.	12.2%	Sterling Twp.	11.1%
Dickson City Boro.	10.9%	Lake Twp.	10.9%	Waymart Boro.	10.7%
Taylor Boro.	10.1%				

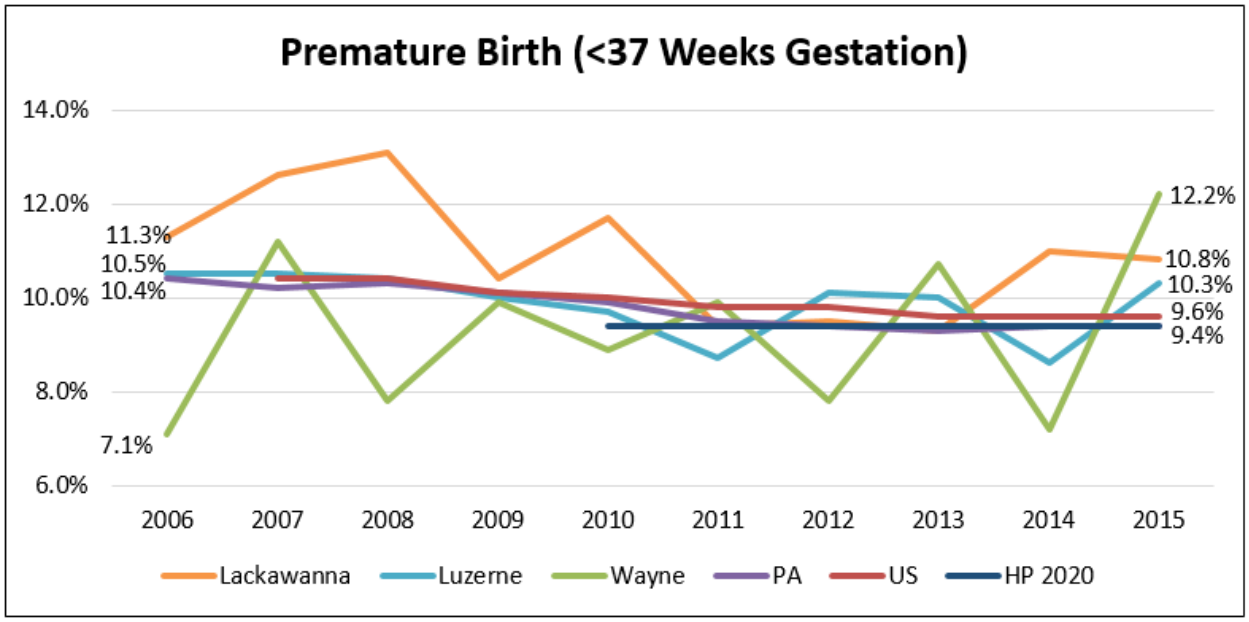
Source: PA Department of Health, 2011-2015
*Only municipalities with more than 20 reported births are included.



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



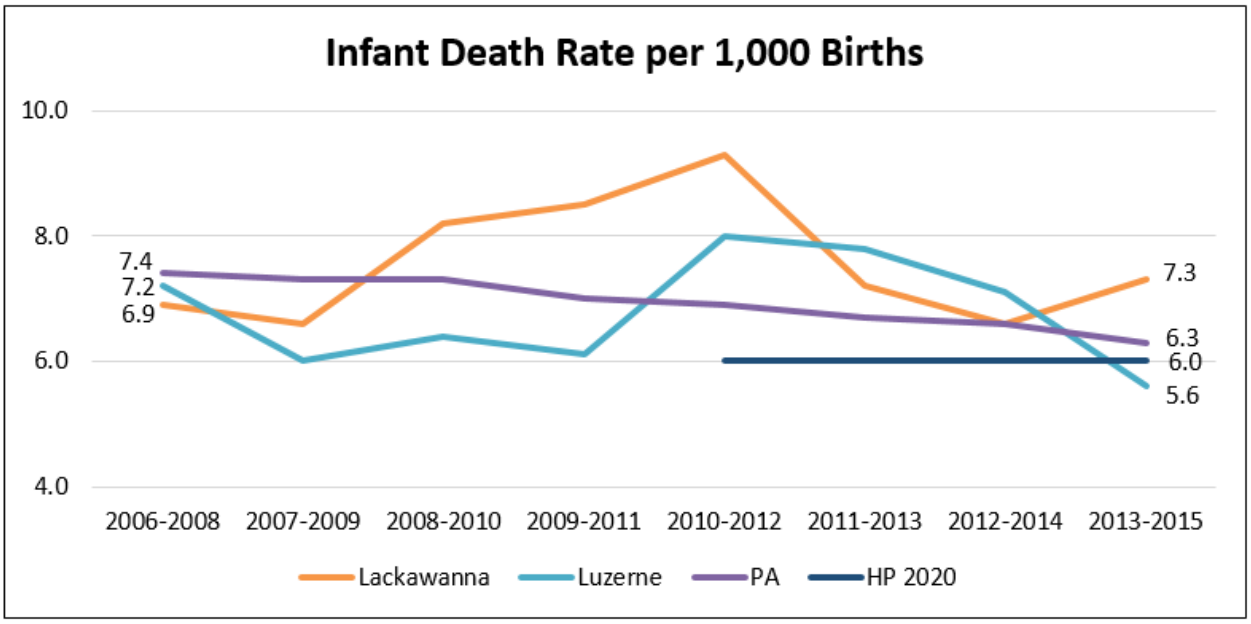
Source: PA Department of Health, 2006-2015 & Healthy People 2020



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

Maternal and child health indicators and disparities impact infant death rates. Death rates for Lackawanna and Luzerne Counties have been variable over the past decade. Luzerne County meets the Healthy People 2020 goal for infant death, but Lackawanna County exceeds both the goal and the state benchmark. The Wayne County death rate is not reported due to low death counts. Between 2006 and 2015, the county had a total of 42 infant deaths.

Death rates by race and ethnicity are reported for Luzerne County. The death rate per 1,000 births is 22.1 among Blacks/African Americans compared to 3.5 among Whites and 9.2 among Hispanics/Latinas. The Black/African American death rate accounts for 13 deaths between 2013 and 2015.



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

Key Informant Survey Summary

The Key Informant Survey was conducted with 36 community leaders representing diverse populations across the Northeast region. The most commonly served populations by key informants are shown in the table below.

Populations Served by Key Informants

	Percent of Informants*	Number of Informants
Not Applicable (Serve all populations)	50.0%	18
Seniors/Elderly	38.9%	14
Families	36.1%	13
Uninsured/Underinsured	33.3%	12
Children/Youth	30.6%	11
Low income/Poor	30.6%	11
Men	27.8%	10
Women	27.8%	10

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

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

Top Health Conditions

- Substance abuse
- Overweight/Obesity
- Cancers

Top Contributing Factors

- Ability to afford healthcare
- Drug/Alcohol use
- Health habits

Informants acknowledged the impact of social determinants, particularly affordable care and poverty, on the top contributing factors to health conditions. “High copays and deductibles are preventing patients from seeking care in a timely manner.” “Poverty/low-income makes it hard to afford or access comforts for daily stress besides unhealthy foods, tobacco use, and alcohol use.” “Patients comment on not being able to afford meat and eating pasta instead.”

Behavioral health providers were identified as the most needed resource in the community; 81% of key informants disagree that there is a sufficient number. A lack of providers, as well as stigma and social isolation, contribute to mental health and substance abuse conditions among residents. “Social isolation and lack of social support among the young and seniors is driving poor mental health, violence, substance abuse.” “With the area being a small, close community, people feel like they can't be anonymous. People will talk if they do seek out drug, alcohol, or mental health services.”

Approximately 17% to 22% of informants disagree that residents have a regular primary care provider and can access a medical specialist when they need care. The top barriers to accessing healthcare services are a lack of bilingual providers, transportation for appointments,

and providers that accept Medicaid/Medical Assistance. Informants also noted that residents may not seek regular care because they "feel healthy". Potentially related to residents not feeling like they need to go to the doctor is lack of awareness or emphasis of preventive health measures.

Social determinants of health impact the ability of individuals to access healthcare and maintain healthy lifestyles. The majority of key informants rated social determinants within the community as "average." Health and healthcare, including access to care, health literacy, etc., was rated the highest by informants (2.8 out of 5). Economic stability, including poverty, employment, etc., and neighborhood/built environment, including access to healthy food, quality of housing, etc., were rated the lowest by informants (2.6 out of 5).

> *"The biggest challenges to improving the area are the relatively low incomes and the many small municipalities that can't afford public services or large-scale improvements. Because of the small scale of municipalities there is limited capacity for healthy public policies or public health education (fluoridation for example, or bike safety programs at local parks) - only one municipality has a health department."*

Key informants were asked to share what resources are missing in the community that would help residents optimize their health. The top identified missing resources were transportation, mental health services, and health and wellness education and programs. "[A] lack of public transportation still brings the area down from good to average as people struggle to get to grocery stores/markets or even doctors since everything is spread out." "Individuals are not aware of the care they should be receiving, or have little access to receiving it for an affordable price. There is also a huge gap in behavioral health services for all ages."

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

- Advocate to legislators for better health insurance policies
- Emphasize prevention through health promotion education and outreach both in the clinical and community setting
- Improve access to behavioral health providers
- Improve transportation options for medical appointments
- Promote health literacy among all age groups
- Promote multi-sector efforts to improve community health through partnership, funding, and joint initiatives
- Publish clinic locations and hours to improve access to appointments

Key Informant Survey Analysis

Background

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

The survey was conducted with 113 key informants across the 19-county service area; 36 informants serve the Northeast region. Half of the informants serve all population groups. The most commonly served special population groups are seniors/elderly, families, and uninsured/underinsured. A list of community organizations represented by key informants, and their respective role/title, is included in Appendix B.

Northeast Region Counties Served by Key Informants

	Percent of Informants*	Number of Informants
Luzerne County	88.9%	32
Lackawanna County	83.3%	30
Wayne County	52.8%	19

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

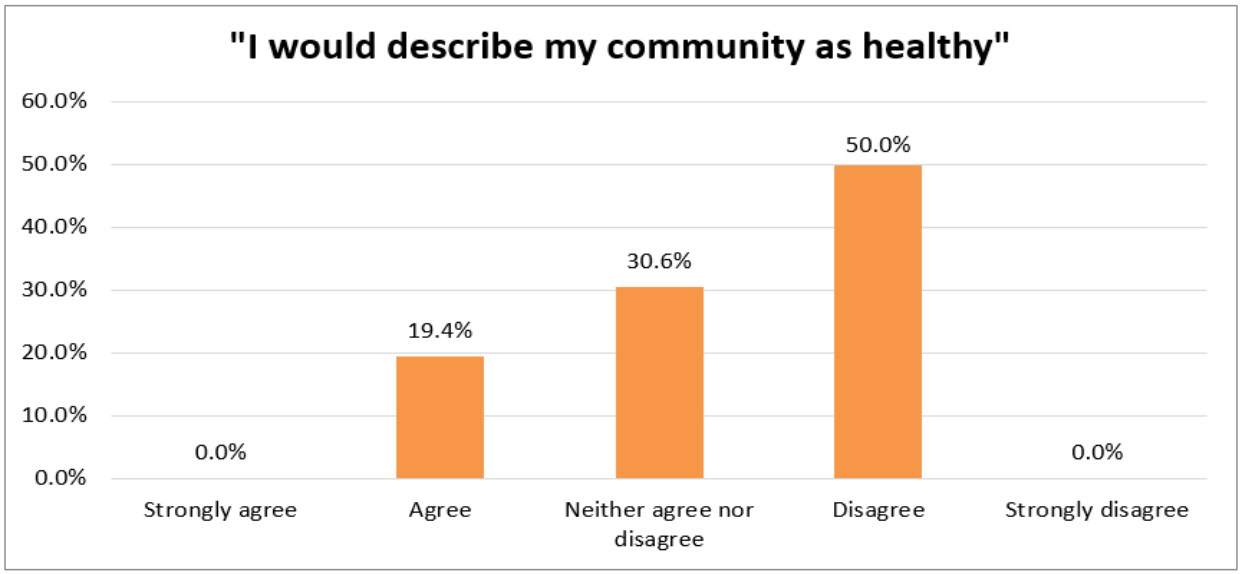
Populations Served by Key Informants

	Percent of Informants*	Number of Informants
Not Applicable (Serve all populations)	50.0%	18
Seniors/Elderly	38.9%	14
Families	36.1%	13
Uninsured/Underinsured	33.3%	12
Children/Youth	30.6%	11
Low income/Poor	30.6%	11
Men	27.8%	10
Women	27.8%	10
Disabled	25.0%	9
Hispanic/Latino	13.9%	5
Black/African American	11.1%	4
Homeless	11.1%	4
LGBTQ+ community	11.1%	4
Immigrant/Refugee	8.3%	3
American Indian/Alaska Native	2.8%	1
Asian/Pacific Islander	2.8%	1
Other**	2.8%	1

*Key informants were able to select multiple counties. Percentages may not add up to 100%.
**Other response: Persons with mental illness.

Community Health Needs

Fifty percent of informants “disagree” that their community is healthy, while less than 20% of informants “agree” that their community is healthy. When asked what health conditions are affecting residents, informants stated that substance abuse is the top concern for the region, followed by overweight/obesity and cancer. Mental health conditions are also a concern for the region; 18% of informants stated they are among the top three conditions affecting residents.



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	Substance abuse	25.0%	14.8%	16
2	Overweight/Obesity	19.4%	18.5%	20
3	Cancers	13.9%	11.1%	12
4	Diabetes	11.1%	8.3%	9
5	Mental health conditions	8.3%	17.6%	19
6	Disability	5.6%	1.9%	2
7	Other*	5.6%	2.8%	3
8	Alzheimer's disease/Dementia	2.8%	3.7%	4
9	Heart disease and stroke	2.8%	8.3%	9
10	Infectious disease	2.8%	0.9%	1
11	Respiratory disease	2.8%	1.9%	2
12	Tobacco use	0.0%	3.7%	4
13	Autism	0.0%	1.9%	2
14	Dental problems	0.0%	1.9%	2
15	Domestic violence	0.0%	1.9%	2
16	Motor vehicle crash injuries	0.0%	0.9%	1

*Other responses: Chronic conditions, disabilities that interfere with activities of daily living, physical rehabilitation.

Key informants identified the ability to afford healthcare as the top contributing factor to health conditions.

> *"High copays and deductibles are preventing patients from seeking care in a timely manner."*

Other top contributing factors, including drug/alcohol abuse and health habits, are also impacted by affordable services.

> *"Poverty/low-income makes it hard to afford or access comforts for daily stress besides unhealthy foods, tobacco use, and alcohol use."*

> *"Patients comment on not being able to afford meat and eating pasta instead."*

Contributing factors to mental health and substance abuse conditions are a lack of providers, stigma, and lack of social support. Specific comments from respondents highlight the issues:

> *"[A] lack of mental health providers is also a contributing factor in the community for mental health conditions. With the area being a small, close community, people feel like they can't be anonymous."*

> *"Social isolation and lack of social support among the young and seniors is driving poor mental health, violence, substance abuse."*

Informants highlighted the interrelatedness of contributing factors and the impact of social determinants of health.

> *"So many [issues] are interrelated. Lack of transportation, educational training beyond high school for a better paying job, and poor parenting skills are paramount problems."*

> *"It has become clear as the number of uninsured have declined, new challenges have arisen. Working on transportation, it has become evident, there is much work to be done in educating folks as to what is available within their area..."*

> *"It is clear that [residents] do not know what their insurance covers and how to navigate the healthcare systems."*

Top Contributing Factors to Conditions Affecting Residents

Ranking	Contributing Factor	Informants Selecting as the Top (#1) Contributor	Informants Selecting as a Top 3 Contributor	
			Percent	Count
1	Ability to afford healthcare	19.4%	15.7%	17
2	Drug/Alcohol use	13.9%	7.4%	8
3	Health habits	13.9%	13.9%	15
4	Health literacy	11.1%	8.3%	9
5	Environmental quality	8.3%	4.6%	5
6	Poverty	8.3%	8.3%	9
7	Other*	8.3%	5.6%	6
8	Availability of healthy food options	5.6%	1.9%	2
9	Health insurance	5.6%	4.6%	5
10	Education attainment	2.8%	2.8%	3
11	Office hours for health providers	2.8%	0.9%	1
12	Social support	0.0%	9.3%	10
13	Lack of preventive healthcare	0.0%	4.6%	5
14	Transportation	0.0%	3.7%	4
15	Availability of health and wellness programs	0.0%	2.8%	3
16	Number of healthcare providers available in the community	0.0%	2.8%	3
17	Stress	0.0%	2.8%	3

*Other responses: Opportunities for inclusion for the disabled, marketing of unhealthy foods, lack of exercise, the need for education and resource referrals among pre-diabetics to prevent diabetes, the need for more domestic violence resources for abusers.

Healthcare Access

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

Access to a regular primary care provider, medical specialists, and vision care received the highest overall mean scores, indicating greater availability within the community. However, the services are still considered limited in the region. Approximately 17% to 25% of informants “disagree” that they are available to residents.

Informants were least likely to agree that there is a sufficient number of mental health/behavioral health and bilingual providers. Transportation to medical appointments and the number of providers accepting Medicaid/Medical Assistance are also top concerns for the region.

Access to Healthcare Services

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree	**Mean Score**
Residents have a regular primary care provider/doctor/practitioner that they go to for healthcare.	0.0%	16.7%	30.6%	47.2%	5.6%	**3.42**
Residents can access a medical specialist (i.e., Cancer, Cardiovascular, Neuroscience, etc.) when they need care.	0.0%	22.2%	27.8%	47.2%	2.8%	**3.31**
Residents can receive vision care when they need it.	2.8%	22.2%	25.0%	47.2%	2.8%	**3.25**
Residents can receive dental care when they need it.	2.8%	27.8%	22.2%	44.4%	2.8%	**3.17**
Providers in the community are culturally sensitive to race, ethnicity, cultural preferences, etc. of patients.	8.6%	22.9%	48.6%	17.1%	2.9%	**2.83**
There are a sufficient number of providers that accept Medicaid/Medical Assistance in this community.	19.4%	25.0%	33.3%	22.2%	0.0%	**2.58**
Residents have available transportation (public, personal, or other service) for medical appointments and other services.	2.8%	52.8%	33.3%	11.1%	0.0%	**2.53**
There are a sufficient number of bilingual providers in this community.	19.4%	58.3%	16.7%	5.6%	0.0%	**2.08**
There are a sufficient number of mental/behavioral health providers in the community.	33.3%	47.2%	11.1%	8.3%	0.0%	**1.94**

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

Primary Reason Individuals with Insurance Do Not Receive Regular Care

Ranking	Reason	Informants Selecting as the Top (#1) Reason	Informants Selecting as a Top 3 Reason	
			Percent	Count
1	Feel healthy ("Don't need to go to the doctor")	34.3%	26.9%	28
2	Awareness/Emphasis of preventive health measures	25.7%	17.3%	18
3	Unable to afford care (copays, deductibles, prescriptions, etc.)	22.9%	21.2%	22
4	Limited office hours of providers (no weeknight/weekend office hours)	8.6%	8.7%	9
5	Fear of diagnosis, treatment	2.9%	11.5%	12
6	Lack of transportation to access healthcare services	2.9%	2.9%	3
7	Providers not accepting insurance/new patients	2.9%	5.8%	6
8	Lack of providers available in the community	0.0%	2.9%	3
9	Other	0.0%	2.9%	3

"Other" Reasons Insured Individuals do Not Receive Regular Care

- *"Lack of primary care physicians and long waiting times to get into specialists."*
- *"Many providers do not participate in Medicaid or ration the number of Medicaid patients accepted; The State's administration of Medicaid does not facilitate enrollment or provider participation. Private insurers "game" the system in their handling of claims, lack of transparency, and superficial and self-serving approach to care coordination."*
- *"Not sure what provider to go to."*
- *"Time to make and get to an appointment conflicts with other activities, fear of potential future costs, distrust of doctors/health establishment."*

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

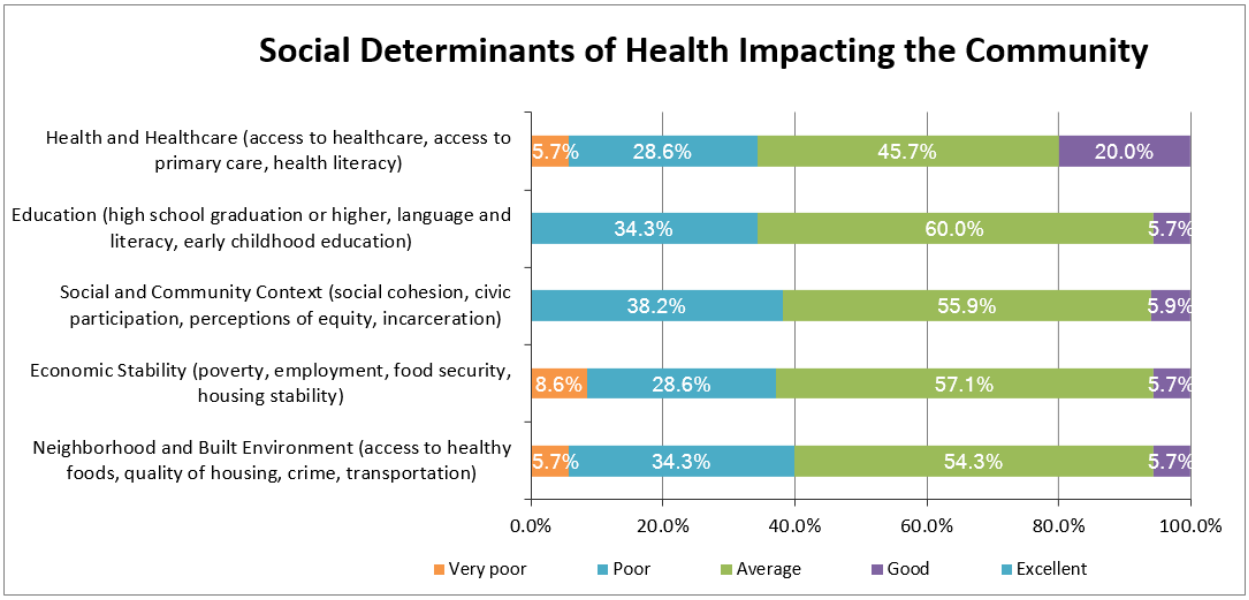
The majority of key informants rated social determinants as "average." Health and healthcare was rated the highest with an average rating of 2.80. However, 34% of informants stated it is "poor" or "very poor." Informants cited concerns related to health literacy, healthcare navigation, affordability, and lack of public transportation.

Economic stability and neighborhood and built environment were rated the lowest by key informants with an average rating of 2.60. Informants cited concerns related to low incomes, affordability of basic needs, and transportation.

> *"The biggest challenges to improving the area are the relatively low incomes and the many small municipalities that can't afford public services or large-scale improvements. Because of the small scale of municipalities there is limited capacity for healthy public policies or public health education (fluoridation for example, or bike safety programs at local parks) - only one municipality has a health department."*

The Northeast region covers a large geographic area spanning urban and rural communities. Lack of public transportation between communities impacts residents' ability to receive services.

> *"[A] lack of public transportation still brings the area down from good to average as people struggle to get to grocery stores/markets or even doctors since everything is spread out."*



Ranking	Social Determinant of Health	Mean Score
1	Health and Healthcare	2.80
2	Education	2.71
3	Social and Community Context	2.68
4	Economic Stability	2.60
4	Neighborhood and Built Environment	2.60

Other Comments to Support Perceptions of Social Determinants of Health

- *"People in the community have better access to healthcare and are used to seeking it out since Geisinger has been here so long, but many of them suffer from poor health literacy."*
- *"For many folks, access to healthcare may not seem like an issue, but when I work within the trenches and hear on a regular basis that folks can't get appointments with their PCPs"*
- *"The local area still maintains a stigma about folks that are of a different culture and color."*
- *"There is a very significant lack of understanding and training as it relates to dementia in the local provider and healthcare community. While our constituents may have access to care, they have limited access to quality care capable of responding to their needs."*

Community Resources

Key informants were asked to share what resources are missing in the community that would help residents optimize their health. Two-thirds of informants identified the need for transportation options. Transportation was identified as being "particularly difficult in rural areas" and challenging for "the physically disabled." Mass transportation, taxis, and Uber services are limited. More than half of the informants identified the need for mental health services and health and wellness education and programs.

"Individuals are not aware of the care they should be receiving, or have little access to receiving it for an affordable price. There is also a huge gap in behavioral health services for all ages."

Missing Resources within the Community to Optimize Health

Ranking	Resource	Percent of Informants	Number of Informants
1	Transportation options	67.6%	23
2	Mental health services	64.7%	22
3	Health and wellness education and programs	52.9%	18
4	Substance abuse services	47.1%	16
5	Community Clinics/Federally Qualified Health Centers (FQHC)	38.2%	13
6	Healthy food options	38.2%	13
7	Multi-cultural or bilingual healthcare providers	35.3%	12
8	Outlets for physical activity (parks, rec centers, gyms, walking trails, etc.)	23.5%	8
9	Child care providers	20.6%	7
10	Dental care	20.6%	7
11	Specialty care services	20.6%	7
12	Home healthcare services	17.6%	6
13	Primary care services	11.8%	4
14	Other	11.8%	4
15	Housing	8.8%	3
16	Vision care	8.8%	3

"Other" Missing Resources

- *"Improved care planning and coordination, particularly following acute care hospital discharge."*
- *"More parenting skills training and communication/negotiation skills trainings."*
- *"Public health capacity to create long term productive partnerships and to support municipalities in their ordinances and activities related to health (pest control, clean water, lead, safe walking etc.)."*

Other Comments to Support Selection of Top Missing Community Resources

- *"We need more and better ways to reach all parents to improve family communication skills and support, as well as overall nutrition, health and wellbeing education. We also need more support for families dealing with disabled and ill seniors or other family members, especially if they don't qualify for Medicare or Medicaid."*
- *"VIM provides medical, dental, behavioral health, lab testing, radiologic testing, and specialty services at no charge to the low income population. We are filling the gap as a safety net provider to those that would otherwise have no access to affordable care. We are in need of bilingual volunteers and there is always a need for additional specialty care. For example, colonoscopies and neurology."*
- *"The number one thing missing in the community is sustained community capacity to prioritize, plan and accomplish multi-sector projects. Many communities with local health departments are able to use staff to engage municipal departments- parks and rec, transportation, code enforcement- and partners like the YMCA and school districts and transit- to create long lasting healthy community change, like bike lanes, community gardens, improved street lighting, etc."*
- *"I have a list of over 50 folks who have contacted me to tell me that they cannot access their PCP and getting into a specialty appointment is taking months. Local PCP offices are sending many folks to urgent care since their offices do not have enough medical staff."*
- *"There are a lot of healthcare providers in the area but the long wait lists for visits, especially to specialists, can deter people from seeking care."*
- *"Home Health and In-Home Personal Care programs should be funded to take on a wider role in ongoing care for the chronically ill, individuals with disabilities."*
- *"Dental and Vision are considered by some to be optional when it is integral in taking care of your health. Coverage for dental and vision should be included in all healthcare plans to include Medicare and Medicaid."*

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

- Advocate to legislators for better health insurance policies
- Emphasize prevention through health promotion education and outreach, and integration of health services into local stores, schools, churches, community centers
- Improve access to behavioral health providers
- Improve transportation options for medical appointments
- Promote health literacy among all age groups
- Promote multi-sector efforts to improve community health through partnership, funding, and joint initiatives
- Publish clinic locations and hours to improve access to appointments

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

- Advantage Home Health Services: Advantage designed a specialized chronic care/caregiver model of care Striving Together Achieving Results (STAR) as well as health and wellness programs for independent living and assisted living facilities to improve caregiver training and patient engagement.
- Alzheimer's Association: Each chapter offers five core services to support individuals with Alzheimer's and their families: information and referral; care consultation; support groups; safety services; and education. Some chapters offer special programs for people living with early-onset Alzheimer's, rural and/or multicultural outreach, care coordination services, and training programs for families and professionals.
- Jewish Family Service of Northeastern Pennsylvania: Offer self-improvement workshops to provide tools, strategies, and experiences for healthy living.
- LiveWell Luzerne/Wilkes-Barre Family YMCA:
    - Chronic disease prevention programs: Diabetes, pulmonary and cardiac
    - Food n' Fun at the Park – A partnership with the City of Wilkes-Barre to provide daily free meals and health promotion programming
    - Imagination Playground at local events
    - Physical Activity: Walk Wednesdays; Cycle Sundays; LIVESTRONG at the Y; Enhance Fitness; walking club (planned); onsite fitness classes and programs
    - Senior-Specific: Silver Sneakers, programs funded by the Area Agency for Aging
    - Superparks Fight the StressMonster! (superparks.org)
- Penn State Extension: Offer multiple programs for youth and families: https://extension.psu.edu/.
- Pennsylvania Psychiatric Leadership Council: Developing a plan to recruit and retain psychiatrists in rural PA.

Northeast Region Partner Forums Summary

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

Northeast Region Partner Forum Logistics

January 25, 2018, 2-4:30 pm
Genetti Manor, Dickson City, Lackawanna County
47 Attendees

January 31, 2018, 2-4:30 pm
Geisinger Wyoming Valley Medical Center, Wilkes-Barre in Luzerne County
33 Attendees

Participants from the following counties were invited to the Northeast region Partner Forums.

- Lackawanna County
- Luzerne County
- Wayne County

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

Northeast Region Partner Forum Findings

A total of 80 people representing a diverse mix of community organizations attended the Northeast region Partner Forums. According to these participants, the cumulative ranking of health concerns in the Northeast region are 1) substance abuse; 2) mental healthcare; 3) access to care; 4) healthy lifestyles; 5) maternal and child health; 6) chronic disease management; 7) oral health; and 8) community violence. It is worthwhile to note that in rating the health issues, the criterion of “scope” and “severity” tended to be rated higher while “ability to impact” was ranked lowest. The voting and follow-up discussion illuminated the complexities of these issues and the myriad factors that influence our efforts to improve outcome measures for health needs.

The prevalence of substance abuse and mental healthcare conditions is increasing across the region. Partners identified adolescents/young teens, patients with comorbid behavioral health conditions, and older adults as being the most underserved by community behavioral health services. They recommended prevention initiatives to reduce initiation of substance use among youth, additional behavioral health services to diagnose and treat conditions, and specialized services for older adults and individuals with coexisting conditions, including case management.

Partner Forum participants made recommendations to improve the accessibility of behavioral health services, including improving medical appointment transportation options, offering childcare services during appointments, and offering evening/in-home appointments. Other recommendations focused on improving social support and reducing stigma for individuals in recovery, and their families.

Stigma was identified as one of the top barriers to seeking and receiving behavioral healthcare services. Mental healthcare counseling and medication assisted treatment for opioid addiction are some of the most stigmatized services. Other barriers to accessing services include insurance coverage and out of pocket costs.

Access to care was identified as the top two health concern for the Northeast region. According to partners, there are a number of organizations addressing access to care issues within the community, but their services are uncoordinated. Partners recommended cross-agency case management to improve access to care, care coordination, and outcomes for patients. Partners also recommended professional networking opportunities and provider-based coalitions to improve awareness of services among organizations.

Several population groups were identified as underserved by healthcare services, including children with behavioral health issues, homeless, housing insecure families, seniors, and residents with limited English proficiency. Participants recommended home and community based services to better care for these populations, and identified Community Health Assistants, Community Health Workers, and Social Workers as potential partners. They also recommended that providers partner with patients to identify natural community supports (friends, family, churches) to improve healthcare compliance and promote health.

Transportation is a key barrier to accessing health and social services. Public transportation is available, but it does not serve all communities. Transportation for people with disabilities and Medical Assistance is also available, but there are barriers to accessing the services, including awareness, application assistance, and the need for advance scheduling. The COLTS bus system was identified as a potential partner for improving transportation within the region.

Healthy lifestyles and chronic disease management were identified as the top three health concerns for the Northeast region. According to partners, the region lacks infrastructure and environmental factors that promote community-wide health. They recommended community coalitions and activism to address public health policies and local neighborhood planning and development. Partners identified local hospitals as potential community conveners to engage municipalities to address healthy infrastructure, including bike lanes, sidewalks, and parks in low income neighborhoods.

Partners also identified the need to increase awareness of available healthy lifestyle programs and services. They recommended partnering with media sources to advertise available services, and incorporating resources into medical waiting rooms and discharge planning for patients. Resources need to be culturally sensitive and available in multiple languages.

Partners discussed health and social service needs for specific chronic condition patients. The following patient populations were identified as underserved by local services:

- Alzheimer's disease patients: There is a need for more at-home, personal, and respite care services for patients and their families.
- Arthritis patients: The region lacks medical and non-medical pain management treatment services for arthritis patients.
- Cancer patients: Cancer patients require regular treatment, which can exacerbate access to care barriers related to transportation and cost (e.g., copays).
- Diabetes patients: Specialty healthcare and disease management resources are limited within the region, particularly for gestational diabetes and undocumented residents.
- Heart disease patients: Black/African American and Hispanic/Latino residents were identified as being underserved by heart disease prevention/healthy lifestyle programs.
- Obese children: Childhood obesity primarily affects low income and minority populations. Participants recommended community partnerships to deliver groceries to residents in food deserts, and offer physical activity opportunities to youth and their families.

Maternal and child health, including prenatal and postnatal years, was identified as the top four health concern for the region. Social determinants of health play a key role in the health of Northeast region children, especially in Lackawanna and Luzerne Counties. A higher percentage of children are from low income and minority groups; these groups are less likely to achieve in school or have appropriate access to care. Education, in particular, is one of the biggest drivers of lifelong health status. Participants recommended programs to improve pre-K enrollment for low income and minority children. The also recommended mobile health clinics to operate in underserved communities and parenting programs to support healthy youth development.

Prioritization Process

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

Identified Community Health Needs (in alphabetical order)

Lackawanna County

- Access to Care/Barriers to Services
- Chronic Disease Management
- Healthy Lifestyles
- Maternal and Child Health
- Mental Healthcare
- Oral Health
- Substance Abuse

Luzerne County

- Access to Care
- Chronic Disease Management
- Community Violence
- Dental Care
- Healthy Lifestyles/infrastructure
- Maternal and Child Health
- Mental Healthcare
- Substance Abuse

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

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

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

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

Overall Ranking	Identified Health Need	Scope of the Issue	Severity of the Issue	Ability to Impact the Issue	Overall Score
1	Substance Abuse	3.6	3.6	2.5	9.8
2	Access to Care/Barriers to Services	3.4	3.2	2.4	9.0
3	Mental Healthcare	3.3	3.3	2.4	9.0
4	Healthy Lifestyles	3.0	2.9	2.7	8.6
5	Chronic Disease Management	2.8	2.7	2.5	8.1
6	Maternal and Child Health	2.3	2.4	2.4	7.2
7	Oral Health	2.4	2.2	2.2	6.8

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

Overall Ranking	Identified Health Need	Scope of the Issue	Severity of the Issue	Ability to Impact the Issue	Overall Score
1	Substance Abuse	3.6	3.4	2.6	9.6
2	Maternal and Child Health	3.2	3.1	2.9	9.2
3	Healthy Lifestyles/ Infrastructures	3.2	3.0	2.8	9.1
4	Mental Healthcare	3.4	3.0	2.6	9.0
5	Access to Care	3.2	3.0	2.6	8.9
6	Chronic Disease Management	2.6	2.7	2.7	8.0
7	Dental Care	2.4	2.4	2.3	7.1
8	Community Violence	2.5	2.6	1.9	6.9

Small Group Discussion

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

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

Existing Community Resources

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

Underserved Populations

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

Missing Resources

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

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

Substance Abuse and Mental Healthcare

Substance abuse was ranked as the top health concern in both Northeast region Partner Forums and the Key Informant Survey. Mental healthcare was also ranked among the top identified health needs, both as a standalone issue and as a coexisting condition with substance abuse. The prevalence of substance abuse and mental health conditions is increasing across the region, underscoring the shortage of resources to meet community need.

Partner Forum participants identified the following services as missing in the community related to Substance Abuse and Mental Healthcare:

Missing Service for SUD or MH	Suggested Partner(s) for Services
Childcare for households receiving treatment	Families of overdose death patients
Evidence-based prevention education	Churches, religious organizations, non-clinical therapy providers
Flexible appointments (evening hours/in-home)	Current providers
Intensive outpatient substance abuse treatment for individuals who cannot afford money or time for inpatient treatment	Retail pharmacies
Information and awareness about where to find services	Food banks; create a centralized website for available services
Social support with religious and non-religious options for the recovery community	Peer recovery specialists, mobile social support app for community members in recovery, drug-free housing providers
Stigma reduction education	High schools
Support services for employers and family members of addicted individuals	Police departments
Transportation to appointments	Public transportation providers, shared ride services

Participants also discussed barriers for residents to access available services for substance abuse and mental health. Stigma is one of the top barriers, particularly for individuals seeking mental healthcare counseling and medication assisted treatment. Medication assisted treatment is considered to be a gold standard for the treatment of opioid addiction, but it is criticized by some for its use of “drugs” to treat chemical dependency. Other barriers include insurance coverage and costs. Participants recommended partnership with holistic providers to offer affordable, non-clinical treatment options.

The following populations were viewed by the participants as being underserved by the current substance abuse and mental healthcare system.

- Adolescents/Young teens: There is a need for youth prevention initiatives to reduce initiation of substance use, and treatment options for both mental healthcare and substance abuse. Minority youth populations particularly experience disparities.
- Patients with mental health conditions and substance abuse comorbidities: Comorbidities can worsen or exacerbate symptoms and outcomes. Participants said there is a lack of services to simultaneously diagnose and treat coexisting conditions.
- Older adults: There is a need for more healthcare options to diagnose and treat behavioral healthcare conditions among seniors. Services are needed within the community setting, as well as assisted living and long-term care facilities. Participants recommended using care navigators to assist providers and consumers in identifying and obtaining services.

Access to Care

A multitude of organizations provide diverse services within the community. However, participants thought the social service network was “uncoordinated” and providers were “isolated” from each other. Participants said that organizations typically serve a specific population and do not participate in cross-agency care coordination. “Everybody is guarding their piece of the pie.” Partners recommended using central case management to connect patients with services across the community. Networking opportunities or coalitions among health and social service providers were suggested to promote inter-agency communication and collaboration.

Participants listed the following populations as having the greatest challenges in accessing services across the health and social service system, and needed services.

- Children with behavioral health issues: The community lacks specialized treatment providers for children with mental healthcare and substance abuse issues, particularly providers that accept public health insurance.
- Homeless individuals: Partners identified the need for safe and private places to provide care for the homeless. The homeless population is also in need of health and social service case management. The Visiting Nurses Association may be a possible partner.
- Housing insecure families: Parents or caregivers may forego needed health and social services out of fear that their children will be taken out of the home due to housing instability. -
- Opioid addiction treatment: The community lacks treatment centers and wrap-around community services to support the recovery community.

- Pediatric dentistry: Participants recommended partnering with local technical schools to provide services by dental hygiene students. They also recommended a mobile dental clinic to serve low income communities.
- Primary/Specialty care: There is a lack of both primary and specialty care providers, particularly providers who accept public health insurance. Participants recommended partnering with local medical schools to provide services by students.
- Residents with limited English proficiency: There is a need for qualified interpreters and bilingual providers to serve an increasingly diverse community population.
- Seniors: Social isolation among seniors can contribute to lack of care coordination and medical compliance. Seniors without local caregivers are particularly at risk.

Partners recommended home and community based services to better care for underserved populations. “We need more people who can touch patients more frequently than we can.” Partners identified Community Health Assistants, Community Health Workers, and Social Workers as potential partners for providing the services. They also recommended partnering with patients to identify natural community supports (friends, family, churches, etc.) to improve healthcare compliance and promote health.

Transportation is a key barrier to accessing available healthcare services. The COLTS bus system was identified as a potential partner for improving transportation options. COLTS offers several programs including the Special Efforts Accessibility Transportation System (SEATS) for people with disabilities and the Medical Assistance Transportation Program (MATP) to assist individual with Medical Assistance get to medical appointments. Barriers to accessing the COLTS system are awareness of the programs, obtaining an application, and the need for advance scheduling.

Healthy Lifestyles and Chronic Disease Management

Chronic conditions are the leading cause of death and disability across the nation. Participants identified the importance of community infrastructure and environmental factors for the promotion of healthy lifestyles and chronic disease prevention. “It’s easier for people to be healthy when it’s built into the community and they don’t have to make a conscious decision to do it.”

Participants recommended community coalitions and activism to address public health policies and local neighborhood planning and development. Community residents and leaders should engage municipalities to collectively advocate for safe neighborhoods and healthy community infrastructure, including bike lanes, sidewalks, parks in low income neighborhoods, etc. Partners identified the opportunity for local hospitals to act as community conveners to drive change, and for hospital employees to volunteer time to policy and government committees.

Participants also recommended a partnership with higher education institutions to engage students in health advocacy to help make local municipalities aware of health policies and

plans, and to develop future community leaders. Leadership Wilkes-Barre and other leadership development organizations are potential partners in this type of initiative.

Participants identified the need to increase awareness of available services to promote healthy lifestyle. They recommended partnering with media sources to promote available programs, parks, trails, etc. They also recommended that resources for healthy lifestyle behaviors be incorporated into medical waiting rooms and discharge planning for patients. Resources would need to be culturally sensitive and available in multiple languages.

Participants discussed health and social service needs for patients with specific chronic conditions. The following patient populations were identified as underserved by current local services.

- Residents diagnosed with Alzheimer's disease: There is a need for more at-home, personal, and respite care services for patients and their families. A partner for addressing the needs of patients is the Alzheimer's Association.
- Residents diagnosed with Arthritis: The region lacks medical and non-medical pain management services for patients. A non-medical example provided by partners is nutrition education. Certain diets like the Mediterranean style have been shown to reduce arthritis symptoms.
- Residents diagnosed with Cancer: These patients require regular treatment, which can exacerbate access to care barriers related to transportation and cost (e.g., copays). The American Cancer Society and COLTS offer limited paratransit services.
    - Patients who receive bone marrow or stem cell transplantation were identified as especially underserved by local services. There is a lack of specialists in the region; most patients travel to Fox Chase Cancer Center in Philadelphia.
- Resident with Diabetes: Specialty healthcare for diabetes is limited within the region; patients travel to Geisinger Medical Center in Danville for services. Diabetes management resources related to healthy lifestyles are also limited. Women with gestational diabetes and undocumented residents were identified as particularly lacking services.
- Residents with Heart Disease: Black/African American and Hispanic/Latino residents are most in need of culturally sensitive healthy prevention and lifestyle programs.
- Children who are obese: Childhood obesity is more prevalent among low income and minority populations. The populations are more likely to live in food desert neighborhoods and lack transportation options to travel to grocery stores. They are also less likely to have access to safe recreational facilities. Participants recommended a partnership between grocery stores and the Access program to deliver groceries to residents in food deserts. They also recommended partnering with YMCAs and schools to offer additional afterschool physical activity opportunities for youth and their families.

Maternal and Child Health

Maternal and child health was defined by partners to include pre-and post-natal care as well as child and adolescent health. The expansion of this definition was intended to highlight the opportunity to impact health early in life to “break the cycle” of poor health and improve health across the lifespan. Partners agreed that many “unhealthy adults start as unhealthy children.”

Participants identified the social determinants of health as playing a key role in the health of Northeast region children. The region, particularly Lackawanna and Luzerne Counties, has a higher population of low income and minority children. These children are less likely to excel in school, readily access care when needed, and they are more likely to have health issues. Childhood social determinants, especially education, can impact lifelong health status. Participants recommended programs to improve pre-K enrollment among low income and minority children, as well as after school engagement opportunities. Participants also recommended mobile health clinics to operate in underserved communities and parenting programs to support healthy development among youth.

Focus Group Research Summary

Background

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

Central Region Focus Groups
Jersey Shore Senior Community Center, Jersey Shore, Lycoming County
10 Attendees

Lincoln Towers, Shamokin, Northumberland County
35 Attendees

Danville Area Community Center, Danville, Montour County
7 Attendees

Heritage House, Lewisburg, Union County
10 Attendees

Westminster Place at Bloomsburg, Bloomsburg, Columbia County
11 Attendees

Northeast Region Focus Groups
Daniel Flood Apartments, Kingston, Luzerne County
8 Attendees

Kingston Active Adult Center, Kingston, Luzerne County
13 Attendees

Linden Crest Apartments, Clarks Summit, Lackawanna County
4 Attendees

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

South Central Region Focus Groups
Susquehanna View Apartments, Camp Hill, Cumberland County
10 Attendees

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

Western Region Focus Groups
Kish Apartments, Lewistown, Juniata County
8 Attendees

Unique Findings by Region

Central Region

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

Northeast Region

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

South Central Region

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

Western Region

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

Common Discussion Themes

Where Seniors Live

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

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

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

> *"Most people are independent, but they need some help. We watch out for them."*
>
> *"People are sick or have medical conditions; that's why you don't see them."*
>
> *"Some residents don't leave their apartments, not even for the fire alarm."*
>
> *"We have families, but they don't check in with us."*
>
> *"We have formed a welcoming committee to introduce new residents and make them aware of the activities available."*

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

> *"It's hard to find help, even for someone to clean the house."*
>
> *"I've looked into home care agencies, but I don't trust the caregivers."*
>
> *"The Meadows (senior living community) is lovely, but it's expensive."*
>
> *"There is community in the low-income apartment complexes. The middle class doesn't have options. What's next?"*

Transportation Options

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

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

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

> *"The days I take rabbittransit, I call my 'county tour' days. I just leave enough time for the ride."*
>
> *"My mother is 96 years old. She can't wait 30 to 40 minutes for a bus. I just take her."*
>
> *"Rabbittransit is convenient as long as it's not an emergency."*
>
> *"Seniors can only carry a few bags at a time. Public transportation limits how much food you can buy."*
>
> *"Sometimes I am late to my appointments or miss them because the van is late."*
>
> *"Taxis are too expensive."*
>
> *"We need 'old age Uber.'"*
>
> *"We're lucky to have rabbittransit. I don't have another way to get around."*
>
> *"When I schedule transportation, they give me a three-hour window for a pick-up time. I have to sit in the lobby to make sure I don't miss them."*

Activities in the Community

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

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

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

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

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

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

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

> *"We have Geisinger, which is a real asset."*
>
> *"Evan (Evangelical Community Hospital) has a lot of great outreach programs."*
>
> *"Exercise makes me feel healthy. Silver Sneakers helped me get back on my feet."*
>
> *"I felt great when I went to the gym. My arthritis stops me now."*
>
> *"If I don't have company, I sit and watch TV all day."*
>
> *"We need resources to support healthy aging."*

Community and Individual Health

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

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

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

> *"The community is average. We have a lot of the same conditions as other communities: heart disease, diabetes, cancer."*
>
> *"You don't see children walking or playing on the sidewalks anymore. When we were young, we used to walk from one side of town to the other. We played all day at the playground or pool. You didn't come home until dinner. Now all the kids are on their screens inside and their parents are afraid to let them play alone."*
>
> *"We are right on the edge of coal country and there are a lot of health issues here."*

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

> *"It's important to get outside and get around people, keep busy."*
>
> *"The most exercise I get is walking from my apartment to the elevator."*

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

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

"Healthy food is expensive. The nutritionist tells me what to eat, but I can't."

"I don't cook as much anymore, we eat out. If you want to eat healthy, you have to cook."

"I eat frozen vegetables. They're cheaper, last longer, and they're just as good as fresh."

"I know what a healthy meal looks like; it's eating it that is hard."

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

"My husband was diagnosed with diabetes. We eat healthier now."

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

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

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

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

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

Access to Care

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

"If you were uninsured, you just didn't go to the doctor."

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

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

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

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

Provider Relationships

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

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

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

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

> *“I have a doctor, but I can’t get in to see him. If I want an appointment, it’s with a P.A.”*
>
> *“I prefer a doctor generally, but the physician assistant can be more on the ball.”*
>
> *“I would rather see a doctor and have everything taken care of at once.”*
>
> *“I would rather see a P.A. They explain things to me. The doctor doesn’t have time.”*
>
> *“If I’m paying for a doctor, I want to see a doctor.”*
>
> *“It doesn’t matter to me who I see, but I would like to see my PCP once in a while. I have to schedule with him one year in advance.”*

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

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

"My doctor shakes my hand and smiles."

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

"I ask a question, but they're writing and not listening."

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

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

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

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

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

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

"I'm comfortable asking questions, but many people are not."

"I use myGeisinger a lot to ask questions."

"If I don't understand, I tell them, 'Please speak English.'"

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

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

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

"My son takes me to the doctor. I don't know what they talk about."

"I take notes. It's helpful to have something to walk away with from the appointment."

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

"I take my dad. Otherwise he wouldn't tell me what the doctor said."

Health Behaviors

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

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

"I can't make a change overnight; I need to work at it a little at a time."

"If it's not broke, I don't fix it."

"I'm too old to change what I'm doing now."

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

"I'm 98. The doctor said I should eat healthy. My son said I should eat anything I want!"

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

Pain and Depression

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

"I had to cut back on my pain meds, they were too much. I'd rather feel alert."

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

"We need programs to help with stress management."

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

Prioritization of Community Health Needs

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

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

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

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

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

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

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

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

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

Evaluation of Impact from Prior CHNA Implementation Plan

Background

In FY2016, Geisinger Wyoming Valley Medical Center (GWV) and Geisinger South Wilkes-Barre (GSWB) completed a Community Health Needs Assessment and developed a supporting three year Implementation Plan for FY2017-2019 to address identified health priorities. The strategies implemented to address the health priorities reflect Geisinger's mission and commitment to improving the health and well-being of the community.

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

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

FY2017-2019 Evaluation of Impact

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

Improving Access to Healthcare

Action Item 1: Expand healthcare facilities at Geisinger South Wilkes-Barre.	
Objectives	1. Improve access to inpatient services and care capabilities at GSWB, thereby freeing acute beds at GWV and improving GWV's ED to inpatient bed wait time.
Anticipated Impact	1. Increase in the number of inpatient beds at GWV and reduced ED to bed wait time.
Collaborations/ Resources	1. GWV/GSWB leadership

Program Highlights:

- A new, 14-bed short stay unit opened at GSWB in September 2015. The unit increased the hospital's capacity to offer more advanced and surgical procedures, and increased the number of available beds at GWV.
- LIFE Geisinger, an innovative program designed to help older adults live independently in their homes, opened in February 2016. The program provides support services, including medical care, transportation, recreational activities, meals, and medication administration. LIFE Geisinger has enrolled 45 participants since opening at GSWB. The program's focus on community-based care, in combination with the services available at GSWB, enables participants to remain in their homes with lower ED and hospital utilization than the average nursing home resident.
- A five-bay Rapid Evaluation Unit was added to the GWV ED in December 2016, providing additional treatment spaces to care for low to moderately acute patients. Nine private

medical/surgical rooms and a 10-bay Observation Unit were later added to the hospital to address increased ED volumes and to provide additional inpatient bed capacity.

  - The following services were added to GSWB in 2017: Telemedicine for specialty care; inpatient telemetry monitoring; outpatient vascular ultrasound; and a Medication Assisted Therapy (MAT) clinic. The ED at GSWB is anticipated to reopen in July 2018.

- Geisinger South Wilkes-Barre hosted a Back to School Wellness Fair in 2015, 2016, and 2017 for children and their families. The event included screenings, games, activities and information booths staffed by health experts designed to prepare families for the new school year.
- In 2017, GSWB hosted its first annual senior health fair. The free event featured health screenings, staffed information booths, chair yoga, healthy cooking demonstrations, and physician lectures, all geared toward senior health.

Action Item 2: Continue to offer the Geisinger Mobile Health Paramedics Program (formerly Geisinger Discharge Plus Project).	
Objectives	1. Provide in-home patient treatment options to supplement traditional home health services. 2. Utilize nurses and EMTs to conduct home visits to patients with chronic conditions to assess appropriateness of treatment and compliance, and capacity for video visits with Geisinger providers.
Anticipated Impact	1. A reduction in the number of hospital readmissions and ED visits 30-days after discharge.
Collaborations/ Resources	West Health Institute Geisinger research services GWV leadership

Program Highlights:

- The Geisinger Mobile Health Paramedics Program was started in March 2014 to reduce readmissions and ED visits among high-risk patients. The program dispatches paramedics to patients' homes to provide medical follow-up care via mobile and audio-visual technology. The program allows Geisinger providers to bridge gaps in care for several key patient populations: those who frequent the ED, medically complex patients, and patients diagnosed with heart failure. Since its inception, the program has prevented 94 admissions, 495 ED visits, and 241 30-day readmissions.
- In 2015, the program was named the "Emergency Care Innovation of the Year." Since 2014, the program has served thousands of unique patients and reduced readmissions by 81% or more.

Action Item 3: Expand dental care services in the community.	
Objectives	1. Maintain the number of Geisinger Northeast pediatric clinics offering fluoride varnishes. 2. Expand oral surgery services.
Anticipated Impact	1. Improved dental care among children and adults. 2. A reduction in dental disease.
Collaborations/ Resources	1. Geisinger Pediatrics 2. Geisinger Oral Surgery Services

Program Highlights:

- The GWV dental suite was renovated and expanded to include two additional procedure rooms. An oral surgeon accepting Medicaid patients was hired by the hospital in 2016. Another oral surgeon was added in 2017.
- Geisinger is exploring partnership opportunities with Avesis to develop mobile dentistry services in the area.

Action Item 4: Improve health literacy among patients and the community.	
Objectives	1. Increase literacy among patients by adjusting patient education materials and consent forms to appropriate reading levels. 2. Participate in a system wide committee to review patient education materials and consents to improve patient literacy.
Anticipated Impact	1. Improved patient education for procedure consents and improved patient understanding of disease management care instructions.
Collaborations/ Resources	1. Hospital staff 2. Director of Patient Experience

Program Highlights:

- A system-wide health literacy committee was formed in 2015. The committee meets monthly to review patient education materials and consents with the goal of improving literacy for identified patient populations. In 2016, the committee attended a literacy seminar to include topics related to patient education, train the trainer, and literacy moments for providers.
- Geisinger implemented new interpretive devices (Stratus) across all hospitals in the system.
- All hospital patient documents were inventoried for available Spanish translation. In March 2016, 90 pages of patient consents were translated into Spanish.
- A flex pool was created for sign-language and Spanish speaking interpreters. The hospital is exploring opportunities to develop Spanish speaking clinics.
- A health literacy awareness presentation was provided at the Wellness Grand Rounds in 2017.

Addressing Needs Related to Behavioral Health and Substance Abuse

Action Item 1: Develop an Aging Brain Program at Geisinger South Wilkes-Barre.	
Objectives	1. Establish a multidisciplinary Aging Brain Program, sponsored by Neurology and Neuropsychology. 2. Establish a Driving Rehabilitation Evaluation Program.
Anticipated Impact	1. Improved access to services related to the aging brain.
Collaborations/ Resources	1. Geisinger Neurology 2. Geisinger Psychiatry 3. Geisinger Physical Therapy

Program Highlights:

- A new Geisinger Memory and Cognition Center opened at 620 Baltimore Drive, near GWV, in February 2018. The Center includes a driving simulator and a gait analyzer. New neuropsychologists were recruited to the center, and staff are evaluating options for telemedicine and community partnership.
- Geisinger hosted the Aging Brain and Behavioral Neurology Symposium in August 2016. The Symposium addressed the use of appropriate screening, diagnostics tools, and treatment for patients presenting with aging brain diagnoses. Providers discussed ways to identify and coordinate the clinical and social needs of patients and their caregivers.
- Geisinger established a monthly Memory Loss support group for patients and family members. The support group is offered in partnership with the LIFE Geisinger program and the Alzheimer's Association to provide care services for patients during the meetings. Geisinger also established an ongoing six-week Alzheimer's education series for patients and caregivers, and a six-week support group strictly for caregivers. The sessions are held at the Memory and Cognition program site at 620 Baltimore Drive.
- Geisinger neurologists participate in educational sessions and presentations for college students across the region, including Misericordia University, East Stroudsburg University, Becknell University, Marywood College, and University of Scranton. Neurologists also participate in education sessions for Geisinger Commonwealth School of Medicine and the Alzheimer’s Association.

Action Item 2: Develop an Autism and Developmental Medicine Institute (ADMI).	
Objectives	1. Establish an ADMI at the Forty Fort facility.
Anticipated Impact	1. Improved access to services for children with special developmental needs.
Collaborations/ Resources	1. ADMI Lewisburg 2. Geisinger research services 3. Geisinger Pediatric Neurology

Program Highlights:

- The ADMI program began in April 2013 in partnership with Bucknell University. The Forty Fort clinic was opened more recently as a second location. The ADMI is a multidisciplinary program offering support through clinical services, research, education, and family support.

- Recruitment efforts for the clinic are ongoing; two full-time speech language pathologists and one certified nurse practitioner have been hired.
- The RAP (Rapid Access Program) is being piloted for Luzerne and Wyoming Counties in connection with ADMI. As part of the pilot, children ages 0 to 3 will be evaluated at the Forty Fort clinic within two weeks of a referral.
- Geisinger offers a free Sensory Friendly Film Series to special needs children as part of the ADMI program. The film series is expanding with two new quarterly series kicking off in April 2018 in Berwick and Wilkes-Barre.

> In November 2015, Geisinger started a free series for educators, parents, and caregivers to provide education and community outreach related to autism. Four series have been hosted in Scranton with over 500 people in attendance.

> In October 2017, a symposium focused on innovations related to autism diagnosis and treatment was offered in partnership with the Geisinger Commonwealth School of Medicine.

Action Item 3: Develop the Marworth Clinical Outreach Program.	
Objectives	1. Increase the number of outpatient clinic sites served by Marworth specialists in order to assess patients with drug seeking behaviors and assist them with appropriate resources.
Anticipated Impact	1. Assist patients to deal with chronic pain and/or dependency issues.
Collaborations/ Resources	1. Marworth clinical outpatient specialists 2. Outpatient clinical leadership

Program Highlights:

> The following action items were completed as part of the Marworth Clinical Outreach Program:
  - Provided ongoing oversight of primarily Master's level interns from local universities.
  - Offered an onsite disease management program for mental health, substance abuse, and pain management clients at community practices in Scranton, Tunkhannock, Danville, and Wilkes-Barre. The program offered evaluation, education, and referrals for patients. Educational components address strategies to avoid pain medication abuse and misuse and behavioral alternatives for managing pain.
  - Offered NARCAN kits to EMTs to provide life-saving antidotes for opioid overdoses.
  - Collaborated with Medication Therapy Disease Management (MTDM) pharmacists in the Northeast and Central regions.
  - Partnered with Clean Slate, a physician-led program to offer Suboxone for opioid dependency.
  - Partnered with pain medicine and palliative care services to offer non-medical alternatives to pain management.

- Worked with other Geisinger departments to expand addiction services. Marworth received a Centers of Excellence grant to establish Suboxone providers and more outreach counselors to respond to the opioid epidemic.
- Opened a Medication Assisted Treatment (MAT) program at GSWB for addiction recovery in September 2017. To date, 185 new patients have been served at the clinic.
- Responded to various requests by educational institutions to speak to high school and college students about chemical dependency.
- Offered education programs regarding chemical dependency to family members of addicted individuals and community members and facilitated a peer support group.

> Geisinger implemented a medication take-back program in 2015 to include disposal boxes at several retail locations in central and northeast Pennsylvania. Seven collection sites have been established within the GSWB/GWV service area. Between 2015 and May 2018, approximately 1,409 pounds of unused or expired medicines were collected at the sites.

Improving Healthy Behaviors

Action Item 1: Expand the Geisinger Health Plan Medical Home Program.	
Objectives	1. Improve care access and coordination for underserved and high-risk patients.
Anticipated Impact	1. Increased patient awareness of resources available to assist with basic and medical needs.
Collaborations/ Resources	Geisinger Health Plan Medical Home Director Geisinger Family Special Needs Program Director GWV Care Management

Program Highlights:

> The Medical Home Program has been in place since 2006. The program uses case managers imbedded in community practices to assist patients with transitions of care, access to care, and barriers to receiving care (e.g., transportation). Case managers are also available by telephone for patients not seen at a community practice site. Case managers focus on patients at high risk for readmission.

- The program uses community health assistants (CHAs) working in conjunction with case managers to address lower level social service needs. The CHAs provide resource referrals, safety assessments, and medication reviews.
- All medical home sites are part of the Keystone Accountable Care Organization; patients receive coordination of care, case management, home care, etc.

> Geisinger collaborated with community organizations, such as the Nurse Family Partnership, Clean Slate, and Misericordia University to provide services and train CHA staff.

> The Transitions of Care Program provided medication and treatment adherence services for patients admitted with a behavioral health issue.

Action Item 2: Develop a cardiology sponsored Chronic Heart Failure (CHF) Project.	
Objectives	1. Improve outcomes for CHF patients post-discharge.
Anticipated Impact	1. Increased ability of CHF patient to manage their care at home. 2. A reduction in the number of readmission related to CHF.
Collaborations/ Resources	1. Geisinger Cardiology 2. GHP Medical Home Program

Program Highlights:

- The Heart Failure ProvenCare program was implemented to ensure heart failure patients receive standard care, including multiple consults/referrals, various screenings, patient assessments, medications, patient education, etc. Enrolled patients receive follow-up care either by outpatient care management or the Mobile Health Paramedics Program.
- Monthly support groups for heart failure and cardiac disease were implemented for patients.
- Heart failure outpatient clinic hours and staffing were expanded due to increased patient volumes. The clinic provides same day emergency appointments for patients.

Action Item 3: Assist patients to manage COPD.	
Objectives	1. Improve outcomes for COPD patients post-discharge.
Anticipated Impact	1. Increased ability of COPD patient to manage their care at home. 2. A reduction in the number of readmission related to CHF.
Collaborations/ Resources	1. Geisinger Pulmonology 2. Geisinger Physical Therapy 3. Geisinger Occupational Therapy

Program Highlights:

- The COPD Proven Care program was launched in December 2015. The program is an 8-week series providing COPD patients with physical and occupational therapy services, nutrition education, palliative care, and home management skills and resources. The program has proven effective in helping patients maintain or increase their mobility and live more independently. The program also meets the requirement of participation in a Pulmonary Rehab Program for patients awaiting lung transplants. Upon completion of the program, patients are provided with a list of community organizations that provide Pulmonary Maintenance Programs.

Action Item 4: Implement Proven Health Neighborhood.	
Objectives	1. Connect patients with available health and social service resources using community health assistants imbedded in the community.
Anticipated Impact	1. Increased patient understanding of available resources to improve their health.
Collaborations/ Resources	1. Proven Health Neighborhood Director 2. Geisinger Data Coordinator

Program Highlights:

- A Geisinger awarded grant placed CHAs in the community to help connect clients with available health and social service resources. The CHAs assisted clients in obtaining health insurance, food assistance, medication assistance, transportation, etc. The program targeted newly insured, Medicaid insured, and uninsured residents.
- The program was in operation from 2015 to 2016. The program was discontinued in 2017. Geisinger is exploring opportunities to continue the program in the future.

Implementation Plan for FY2019-2022

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

Access to Care

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

Objectives:

- Increase the number of residents who have a regular primary care provider
- Increase access to primary and specialty care physicians practicing within Medically Underserved Areas (MUAs) or Health Professional Shortage Areas (HPSAs)
- Identify opportunities to develop or augment Federally Qualified Health Centers in underserved communities
- Reduce barriers to receiving care for residents without transportation
- Foster pursuit of health careers and ongoing training of health professionals

Behavioral Health Care

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

Objectives:

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

Chronic Disease Prevention and Management

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

Objectives:

- Encourage community initiatives that support access to and availability of healthy lifestyle choices
- Initiate early stage interventions for individuals at high risk for chronic disease
- Develop integrative care models to improve outcomes for patients with chronic disease

Board Approvals and Next Steps

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

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

Appendix A: Public Health Secondary Data References

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Appendix B: Key Informants

A key informant survey was conducted with 36 community representatives. The organizations represented by key informants, and their respective role/title, included:

Key Informant Organization	Key Informant Title/Role
Abington Heights School District	Superintendent
Advantage Home Health Services, LLC	Chief Executive Officer
Allied Services	Director, PFS
Allied Services	Director, Corporate & Foundations Relations
Allied Services	Administration
Allied Services	VP Home Care Services
Allied Services	Vice President
Allied Services	Director Physician Relations
Allied Services Hospice	Director Allied Services Hospice
Alzheimer's Association	Vice President
AssuredPartners of Northeastern Pennsylvania	Executive Vice President/Principal
Geisinger	Therapy supervisor
Geisinger	Manager
Geisinger	AVP, Informatics
Geisinger	Research Project Manager II
Geisinger	Senior Director Clinical Nutrition
Geisinger	Directory of Ambulatory Care Gaps & Best Practice
Geisinger	Systems Analyst
Geisinger	Director
Geisinger	Director, Patient Liaisons and Interpretive Services
Geisinger	Director, Corporate Communications
Geisinger Community Medical Center	Stroke Program Coordinator
Geisinger Community Medical Center	Trauma Education/Injury Prevention Coordinator
Geisinger Community Medical Center	Operations Manager
Geisinger, CPIO	Research Project Manager/Med Take Back
Grey Medical Advocate, LLC	Owner
Jewish Family Service of Northeastern Pennsylvania	Executive Director
LiveWell Luzerne/Wilkes-Barre Family YMCA	Healthier Communities Coordinator
Northeast Suicide Prevention initiative	President
PA Psychiatric Leadership Council	Senior Consultant
Pagnotti Enterprises, Inc.	Chief Financial Officer/Acting HR Director
Penn State Extension	Senior Extension Educator/Registered Dietitian
Scranton Primary Health Care Center, Inc.	Chief Executive Officer
St. Joseph's Center	President/ Chief Executive Officer
Volunteers in Medicine	Executive Director
Wilkes-Barre Family YMCA	Healthy Community Coordinator

Appendix C: Partner Forum Participants

Two partner forums were conducted with 80 community representatives. The participants and their respective organization, included:

Lackawanna County Participants	Organization
Sheila Abdo	Jewish Family Services of Northeastern Pennsylvania
Helen Akhondi	Geisinger
Sassan Akhondi	Geisinger
Anthony Aquilina	Geisinger
David Argust	Allied Services
Kirsty Avery	Geisinger Community Medical Center
Mike Avvisato	Allied Services
Kimberly Bankes	Geisinger
Lisa Baumann	Geisinger Health Plan
Jim Brogna	Allied Services
William Browning	Lackawanna Department of Human Services
Carmela Carr	Geisinger
Ida Castro	Geisinger Commonwealth School of Medicine
Sam Ceccacci	Scranton Lackawanna Human Development Agency
Trudy Coleman	Northeast Regional Cancer Institute
Brenda Conlon	Saber Healthcare Group
Nicole Cruciani	Northeast Regional Cancer Institute
William Dempsey	Northeast Rehabilitation Associates, PC
Brian Ebersole	Geisinger
Theresa Gilhooley	Geisinger
Robin Green	Geisinger
Breanna Grzech	Geisinger
Joseph Hollander	Scranton Primary
Andy Hurchick	St. Joseph's Center
Karen Kearney	Allied Services
Paula Keenan	Scranton Primary
Karin Machluf	Penn State Scranton
Sabrina Maldonado	Geisinger
Lynn McAllister	FirstLight Home Care
Elizabeth McGuigan	VNA Hospice and Home Health
Stephanie Midgley	Penn State University Student Nurse
Terrie Morgan	The Times-Tribune
Barbara Norton	Allied Services
Denise Rader	Geisinger
Linda Rothermel	SpiriTrust Lutheran
Christopher Rutt	Geisinger
Karen Saunders	Northeast Regional Cancer Institute
Jessica Sevecke	Geisinger
LaTida Smith	Moses Taylor Foundation
Megan Sobieski	Geisinger
Rachel Sweeney	Geisinger
Karen Thomas	Penn State Extension
Peter Tomasi	FirstLight Home Care
Michelle Walsh	Saber Healthcare Group
Alison Woody	Geisinger
Kay Young	Geisinger
Barb Zarambo	Geisinger

Luzerne County Participants	Organization
Lisa Baumann	Geisinger Health Plan
Mary Belanchikj	Penn State Nutrition Links
Julie Bordo	Geisinger
Katrina Conrad	Geisinger Health Plan
Alysha Davis	Geisinger
Tamara M Dickey	Geisinger
Mary Ehret	Penn State Extension
Mary Erwine	Erwine Home Health
Kimberly Follett	Volunteers of America PA
Rose Gallagher	Family Service Association of Northeastern Pennsylvania
Michelle Gorey	Wilkes-Barre Area School District
Damon Hamilton	Geisinger
Bill Jones	United Way of Wilkes-Barre
Terri Klinefelter	Pennsylvania Office of Rural Health
Dawn Kolbicka	Geisinger
Dan Landesberg	Geisinger
Antoinette Lovecchio	Geisinger
Jasmine Mena	Bucknell University
Susan Mizenko	Wyoming Valley Alcohol and Drug Services, Inc.
Andrea Myers	Geisinger
Lori Nocito	Leadership Wilkes-Barre
Barbara Norton	Allied Services
Denise Rader	Geisinger
Heather Rizzo	Geisinger
Becky Ruckno	Geisinger
Gail Petorak	Geisinger
Michele Schasberger	Wilkes-Barre Family YMCA
Phyllis Scott	Geisinger
Michael Taluto	Pennsylvania Department of Transportation
Kristen Topolski	Volunteers of America PA
Patricia Wascavage	Geisinger
Bill Wellock	The Citizens' Voice
Richard Williams	Richard Williams, Architect

Appendix D: Existing Community Assets to Address Community Health Needs

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

- A Better Today Inc.
- Abington Heights School District
- Abington Senior Community Center
- Advantage Home Health Services, LLC
- Allied Services Integrated Health System
- Allied Services Hospice
- Allied Services Rehabilitation Hospital
- Alzheimer's Association
- American Cancer Society
- AssuredPartners of Northeastern Pennsylvania
- Bucknell University
- Carbondale Family Health Center
- Care and Concern Free Health Clinic
- Caring Alternatives Pregnancy Counseling
- Churches and Church Programs
- Clearbrook Treatment Center
- Clem-Mar House Inc. for Men
- Commission on Economic Opportunity
- Community Centers
- Community Intervention Center
- County of Lackawanna Transit System (COLTS)
- Daniel Flood Apartments
- Drug and Alcohol Treatment Service (DATS)
- Employer-based Wellness Programs
- Erwine Home Health
- Family Service Association of Northeastern Pennsylvania
- Federally Qualified Health Centers/Free Health Clinics
- Farmer's Markets
- FirstLight Home Care
- First Steps/Step Up (The Bridge Youth Services)
- Food Banks
- Fox Chase Cancer Center
- Geisinger Center for Pharmacy Innovation and Outcomes
- Geisinger Commonwealth School of Medicine
- Geisinger Community Health Assistants
- Geisinger Community Medical Center
- Geisinger Fresh Food Farmacy
- Geisinger Health Plan
- Geisinger Marworth Treatment Center
- Geisinger Medication Assisted Treatment (MAT) Clinic
- Geisinger South Wilkes-Barre

- Geisinger Springboard Healthy Scranton
- Geisinger Wyoming Valley Medical Center
- Grey Medical Advocate, LLC
- Grocery Stores
- Gutherz Family Health Center
- Hamlin Family Health Center
- Help Line of Northeast Pennsylvania (888-829-1341)
- Higher Education Institutions
- Highland Physicians Family Health Center
- Honesdale Family Health Center
- Jewish Family Service of Northeastern Pennsylvania
- John Heinz Rehabilitation Hospital
- Just Believe
- Kingston Active Adult Center
- Lackawanna County Human Services
- Lackawanna County/Luzerne County Drug Treatment Court
- Lackawanna County Office of Drug and Alcohol Programs
- Lackawanna Department of Human Services
- Leadership Wilkes-Barre
- Linden Crest Apartments
- LiveWell Luzerne
- Luzerne County Council
- McAndrew Family Health Center
- McKinney Homeless Clinic
- Meals on Wheels
- Media Providers
- Methadone Clinics
- Moses Taylor Foundation
- Mountain Top Walk-in Clinic
- NHS Human Services
- Northeast Regional Cancer Institute
- Northeast Rehabilitation Associates, PC
- Northeast Suicide Prevention initiative
- Northern Wayne Family Health Center
- Nurse-Family Partnership
- PA 211
- PA Psychiatric Leadership Council
- Pagnotti Enterprises, Inc.
- Parks and Playgrounds
- Penn State Extension/Nutrition Links
- Penn State Scranton
- Penn State University Student Nurses
- PennDOT
- Pennsylvania Office of Rural Health
- Pennsylvania Psychiatric Leadership Council
- Physicians/Primary Care Providers
- Ruth’s Place
- Saber Healthcare Group

- Safeline
- Schickshinny Medical Center
- School Districts
- Scranton Counseling Center
- Scranton Lackawanna Human Development Agency
- Scranton Primary Health Care Center, Inc.
- Senior Centers
- SpiriTrust Lutheran
- St. Joseph's Center
- St. Joseph's Center Baby Pantry
- St. Stephen’s Episcopal Church
- The Advocacy Alliance
- The PROSPER (**PRO**moting **S**chool-community-university **P**artnerships to **E**nhance **R**esilience) Project (Penn State)
- The Salvation Army
- The Times-Tribune
- Trails (Delaware and Lehigh National Heritage Corridor)
- United Neighborhood Program
- United Way of Wilkes-Barre
- United Way of Wyoming Valley
- Urgent Care Centers
- Valley Pediatrics
- Visiting Nurses Association
- VNA Hospice and Home Health
- Volunteers in Medicine
- Volunteers of America PA
- Waymart Family Health Center
- Wilkes-Barre Area School District
- Wilkes-Barre Family YMCA
- Wyoming Valley Alcohol and Drug Services, Inc.