

UNIVERSITY HEALTH NETWORK



## Monroe Campus Community Health Needs Assessment

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**Authors** 

Whitney Szmodis, Ph.D., M.Ed. Amanda Chapin, MA Rajika E. Reed, Ph.D., MPH, M.Ed.

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### Icon Legend

St. Luke's Partner Quote (Key Informant/Community Forum Attendee)



St. Luke's Community Health Needs Assessment Data

# **Executive Summary**

## ····· Key Findings ·····

From our analysis of primary and secondary data, as well as the Community Health Needs Assessment (CHNA) key informant interviews and work with our community members, we see significant issues facing our communities that impede healthy lifestyles. Our efforts in prevention, care transformation, research, and partnerships help support our work to promote sustainable programs and opportunities for our reach to focus on a wide range of health promotion and quality of life initiatives. While there are many issues that need to be addressed, the results from the 2022 CHNA found the top priorities for the St. Luke's network include:

2022 Community Health Needs Assessment				
Top Priority Outcomes				
COVID-19				
Access to Care				
Workforce Development				
Food Insecurity				
Obesity Reduction				
Physical Activity Promotion				
Mental Health				
Opioids and other Substance Use				
Housing				
Transportation				

The needs discussed within the health categories outlined in this document will serve as our guide in creating a detailed campus-specific implementation plan to best address the specific needs of the St. Luke's Monroe Campus service area using three pillars:

#### \*Wellness and Prevention

#### \*Care Transformation

\*Research and Partnerships

We will work collaboratively in partnership with our community and network partners to create a more equitable society with better health outcomes, especially among our most vulnerable populations such as our Hispanic communities, seniors, women, and children.

## Introduction

## ----- Background

As part of the Patient Protection and Affordable Care Act, nonprofit hospitals are required to conduct a Community Health Needs Assessment (CHNA) every three years to maintain tax-exempt status under section 501(c)(3) of the Internal Revenue Code. The goal of the assessment is to identify critical health disparities faced by residents within St. Luke's University Health Network (SLUHN) service areas. It is required to state every health priority addressed by community stakeholders, hospital professionals, and public health experts. Additionally, regional implementation plans will be crafted to build collaborative partnerships to determine the allocation of resources to address the specified health needs. To view our previous CHNA reports, please refer to the following link: <a href="https://www.slhn.org/community-health/community-health-needs-assessment">https://www.slhn.org/community-health/community-health-needs-assessment</a>. If you have any questions regarding any of these reports, please contact the Department of Community Health at (484) 526-2100.

## ····· Methodology ·····

The CHNA is comprised of both primary and secondary data. The primary data were collected through three methods. First, key informant interviews were performed with leaders from each campus community to identify high level strengths and needs in their respective communities. A list of the interview questions can be found in Appendix A. Second, a community forum was held for each campus community through SLUHN and facilitated by Dr. Christopher Borick of Muhlenberg College. A list of organizations represented at the forum can be found in Appendix B. \*Disclaimer: quotes from key informants and community forum participants are noted throughout in the text and highlighted in grey boxes unless otherwise noted. Due to the COVID-19 pandemic, key informant interviews were conducted through Microsoft Teams and the community forums were conducted through Zoom. Third, voluntary community health surveys were administered throughout our fourteen campus geographic regions, where the main priority health needs were identified for each entity, and a total of 1,041 surveys were collected from the top 80 percent zip codes in the Monroe service area. We used snowball sampling to reach respondents, especially those represented in our vulnerable populations. Snowball sampling is most effective when used to reach vulnerable populations to help shed light on social determinants of health (SDOH) within hard-to-reach populations. To reach populations with diverse resources, surveys were completed in either paper or digital format. The survey findings document, also posted online, lists questions and responses recorded from CHNA surveys conducted in 2012, 2016, 2019, and 2022. Secondary data included the use of hospital network data as well as county, state, and national level data obtained from the following: U.S. Census, the Robert Wood Johnson Foundation, Vital Statistics, Community Commons, the American Community Survey (ACS), U.S. Department of Labor, the Behavioral Risk Factor Surveillance

System, as well as other data sources, which can be found in the footnotes. The needs identified in the interviews and community forums were supplemented by the survey data and secondary data to provide a comprehensive picture of the contributing factors and needs in the community.

## **.....** Existing Monroe Community Assets ......

When asking key informants to describe the Monroe community, they described the community as vast, spread out, with the schools as the hub and only a sense of community for those who have been in the community for a substantial amount of time. One informant mentioned that "the school community is strong. I feel that the school is a strong link to the outside community." Another mentioned that tourism is a large industry in Monroe county and there is a focus on keeping the environment clean and giving back to the community. One informant mentioned that "our natural beauty is what attracts people to come here. We have invested hundreds of thousands of dollars in the last three to four years."

The Monroe campus has a variety of programs and partnerships, including the Mountain Center in Tobyhanna, a school-based partnership with Pocono Mountain School District, Walk with a Doc, Get Your Tail on the Trail, Older Adult Meals, and more. St. Luke's Monroe campus was awarded a Local Share Account to help establish a medical clinic at the Mountain Center.

Due to COVID-19, the Older Adult Meal Program at St. Luke's was suspended for four months, but in 2020 there was an average of 12 meals provided per day. Literacy programs remained strong as well, with SLUHN employees reading to 450 first and second grade students at Clear Run Elementary Center. Throughout the pandemic, SLUHN has been able to pivot and meet the needs of the community through existing relationships built with nonprofits, schools, and community-based organizations who have assisted in events, education, and providing services in our service areas.



"There is tremendous collaboration across sectors here, and this has become even more apparent during the pandemic. These relationships have been instrumental in helping address a number of gigantic challenges."

## ····· County Health Rankings ·····

Every year, the Robert Wood Johnson Foundation releases data that compare counties to state averages, as well as U.S. top performers. The table below depicts select health indicators for 2021 for each of the counties in SLUHN's service area. There are 20 indicators evaluated for each county, with the U.S. top performers being the counties at the 90<sup>th</sup> percentile in the nation. The indicators are color-coded using a stoplight approach, in which green indicates that the value is better than both state and U.S. top performers, yellow indicates that the value is

in between state and U.S. top performers, and red indicates that the value is at or worse than both state and U.S. top performers. In looking at the 2021 data table out of 180 values, 60% of values are red (108), 21% are yellow (38), and 19% are green (34). In Monroe county there are 85% red values, 10% yellow values, and 5% green values. In 2018, there were 70% red values, 25% yellow values, and 5% green values. From 2018 to 2021, there was a 21.4% increase in red values, a 60% decrease in yellow values, and no change in green values. Out of the counties where a St. Luke's hospital is located, Monroe county falls at the low end of the spectrum, along with Carbon county and Schuylkill county, with the least amount of green values. The Robert Wood Johnson Foundation reports their findings as the year 2021, but many of the measures are reported from previous years. Please see <a href="https://www.countyhealthrankings.org/">https://www.countyhealthrankings.org/</a> for more information.

2021	U.S. Top Performers*	Pennsylvania (PA)	Berks (BR) County, PA	Bucks (BU) County, PA	Carbon (CR) County, PA	Lehigh (LH) County, PA	Monroe (MO) County, PA	Montgomery (MT) County, PA	Northampton (NO) County, PA	Schuylkill (SC) County, PA	New Jersey (NJ)	Warren (WA) County, NJ
Unemployment	2.6%	4.4%	4.3%	3.8%	5.4%	4.5%	5.4%	3.5%	4.5%	5.4%	3.6%	3.3%
Uninsured	6%	7%	7%	5%	6%	8%	8%	5%	6%	6%	9%	7%
Primary care physicians	1,030:1	1,230:1	1,600:1	1,180:1	2,380:1	990:1	2,420:1	730:1	1,210:1	1,870:1	1,180:1	1,680:1
Dentists	1,210:1	1,410:1	1,780:1	1,150:1	2,290:1	1,130:1	2,580:1	920:1	1,700:1	2,210:1	1,140:1	1,350:1
Poor physical health days	3.4	4.0	4.0	3.1	4.3	4.1	4.0	3.3	4.0	4.5	3.7	3.9
Food environment index	8.7	8.4	8.6	9.1	8.3	8.4	8.0	9.1	8.7	8.3	9.4	8.7
Physical inactivity	19%	22%	22%	18%	24%	17%	24%	18%	27%	24%	27%	28%
Access to exercise opportunities	91%	84%	86%	89%	75%	82%	86%	95%	87%	75%	95%	97%
Adult obesity	26%	31%	34%	28%	34%	31%	33%	25%	31%	37%	27%	32%
Excessive drinking	15%	20%	21%	23%	22%	22%	20%	22%	22%	21%	16%	21%
Adult smoking	16%	18%	20%	16%	23%	18%	20%	14%	19%	23%	13%	17%
Poor mental health days	3.8	4.7	4.6	4.4	5.1	4.7	4.9	4.4	4.7	5.2	3.8	4.6
Mental health providers	270:1	450:1	680:1	390:1	1,600:1	510:1	830:1	280:1	420:1	1,210:1	420:1	470:1
Low birthweight	6%	8%	8%	8%	9%	8%	9%	7%	8%	8%	8%	8%
Teen births	12	17	21	6	19	21	11	7	12	22	12	9
Sexually transmitted infections	161.2	463.4	475	245.1	175.4	511.9	367.8	295.1	411.0	244.8	405.5	206.9
High school graduation	94%	91%	87%	94%	89%	89%	90%	94%	91%	89%	90%	91%
Children in poverty	10%	17%	16%	7%	14%	18%	17%	7%	10%	16%	12%	9%
Severe housing problems	9%	15%	15%	15%	14%	16%	18%	15%	14%	11%	21%	15%
Social associations	18.2	12.2	11.4	7.7	13.9	10.2	7.6	11.2	10.6	13.2	8.7	9.5
University of Wisconsin Population Healt	h Institute.	KEY	At or a	bove State/1	on Performe	er Bet	ween Top Per	formers and	l State	At or helow	State/Top Pe	erformer

Figure 1

County Health Rankings and Roadmaps. 2021.

# **Demographics**

## Population .....

For the purposes of the CHNA, we define the top zip codes as those that account for 80% of the population served by the Monroe campus (i.e., service area) (Figure 2). In the Monroe service area, 36% of the patients served reside in 18360 (Stroudsburg), 18301 (East Stroudsburg), and 18353 (Saylorsburg). Zip codes 18360 and 18301 were in the top three in the last CHNA (2019), but 18353 has replaced 18466 (Tobyhanna) in the top three.<sup>1</sup>

A total of 166,503 people live in the 533.57 square mile area outlined in Figure 3 according to the U.S. Census Bureau American Community Survey (ACS) 5-year estimates (2015-2019). The population density for this area is estimated at 312.05 persons per square mile, compared to 285.89 persons per square mile in Pennsylvania and 91.93 persons per square mile nationally. According to the 2010 Decennial Census, 63.5% of the Monroe service area lives in an urban setting and 36.5% of the service area live in a rural setting. Urban areas are defined by population density, count, size thresholds and the amount of impervious

FY20 SLMC - Zip Codes Comprising Top 80% of Facility Encounters

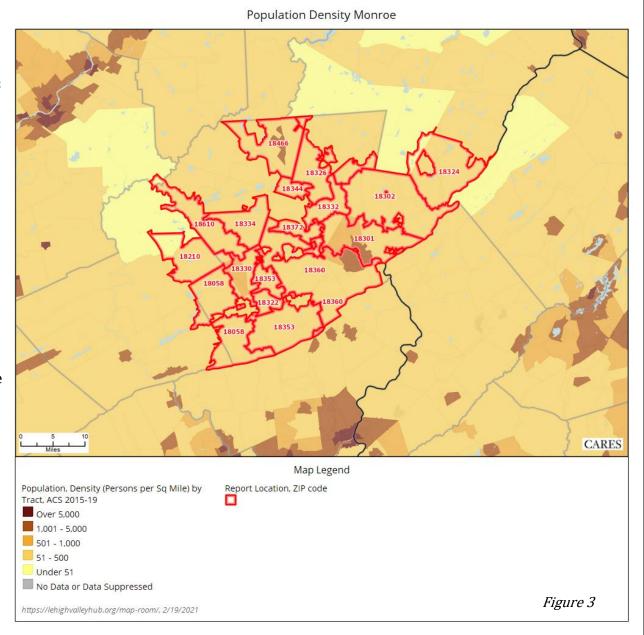
Zip Code	% SLMC Total (n = 142,743)	% Network Total (n = 1,554,201)
18360	19%	1.7%
18301	10%	1.0%
18353	7%	0.7%
18466	6%	0.6%
18330	6%	0.6%
18058	6%	0.5%
18302	5%	0.5%
18210	3%	0.3%
18324	2%	0.2%
18322	2%	0.2%
18326	2%	0.2%
18610	2%	0.2%
18372	2%	0.2%
18344	2%	0.2%
18332	2%	0.2%
18334	2%	0.1%
18321	1%	0.1%
Total	81%	7.4%

Figure 2

<sup>&</sup>lt;sup>1</sup> https://www.slhn.org/community-health/community-health-needs-assessment/-/media/

surface or development (i.e., areas impervious to water seeping into the ground, concrete-heavy areas). Rural areas are all other areas not defined as urban. The Pennsylvania percentages for urban and rural living are 78.7% and 21.3%, respectively. The United States urban and rural percentages are 80.9% and 19.1%, respectively.

The following sections give a brief overview of the populations that the Monroe campus serves. Understanding the demographics of the service area is essential to addressing needs and improving upon the region's health services. The following data comes from ACS 5-year estimates (2015-2019) by the Census Bureau and St. Luke's CHNA survey data unless otherwise noted.<sup>2</sup> Please refer to the Network and Campus Community Health Needs Assessment Survey Findings document for more detailed information from the survey.

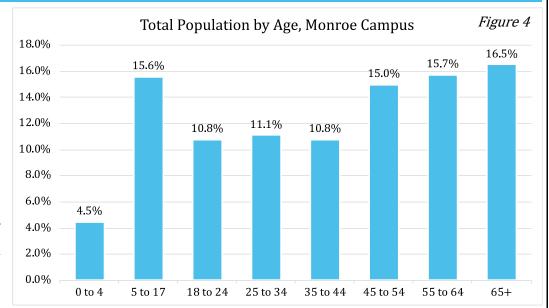


<sup>&</sup>lt;sup>2</sup> https://www.census.gov/programs-surveys/acs/

### ------ Age -----

The ACS reports 20.1% of the service area population are people under 18 years old and 16.5% are 65 years and older (Figure 4). Combined, these groups account for 36.6% of the service area population, leaving 63.4% between the ages of 18 and 64. In Monroe county, 19.8% of people are under 18 years old and 16.8% are 65 and older, leaving 63.4% between the ages of 18 and 64.

Most CHNA survey respondents from the Monroe campus service area were 55 years and above; 28% between 55 and 64, and 37% 65 years and older. Only 2% were 18-24 years old, 5% were ages 25 to 34, 11% were ages 35-44, and 17% of respondents were 45 to 54. The survey was only administered to people 18 years and older, therefore, younger ages are not reflected in survey results. The median age of respondents was 61 years old.



### ----- Sex -----

According to 5-year estimates by the ACS, 50.7% of people identified as female and 49.3% identified as male in the Monroe service area (Figure 5). This is similar to the national average, 50.8% and 49.2%, respectively. In Monroe county, 50.5% of people identify as female and 49.5% as male.

When asked about sex assigned at birth in the CHNA survey, 60% of Monroe campus service area respondents indicated female and 40% indicated male.

Total Population by Sex, Monroe Campus

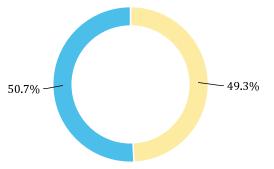
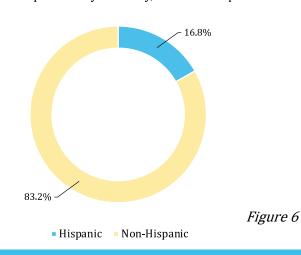


Figure 5

### ····· Ethnicity ·····

Total Population by Ethnicity, Monroe Campus



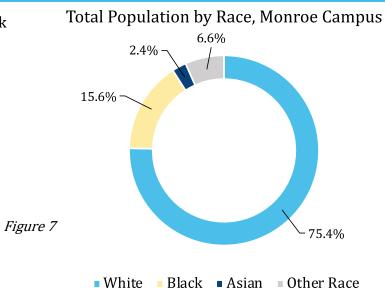
According to the ACS, 83.2% of the Monroe service area identifies as non-Hispanic and 16.8% identifies as Hispanic (Figure 6). The population in Pennsylvania is 92.7% non-Hispanic and 7.3% Hispanic; the United States population is 82% and 18%, respectively. In Monroe county, 84.1% of people identify as non-Hispanic and 15.9% as Hispanic.

The majority of respondents from the Monroe campus service area identify as non-Hispanic (83%) while 17% of respondents identify as Hispanic.

### ..... Race .....

The ACS reports that 75.4% of the service area identifies as White, followed by Black (15.6%), Other Race (6.6%), and Asian (2.4%). Data for individuals identifying as Native Hawaiian/Pacific Islander, Native American/Alaska Native, and Multiple Races were combined with Other Race due to small sample sizes. In Monroe county, 76.3% of people identify as White, followed by Black (14.7%), Other Race (6.4%), and Asian (2.4%).

The majority of CHNA survey respondents from the Monroe campus service area were White (80%), followed by Black (8%), Other Race (6%), and Asian (1%).



## ······ Vulnerable Populations ·····

The following data was retrieved from the 5-year American Community Survey (2015-2019) by the Census Bureau.<sup>3</sup>

### ..... Black, Indigenous, People of Color (BIPOC) .....

It is important to identify the BIPOC communities within the SLUHN service area to address specific needs. For example, Indigenous peoples historically lack proper access to health resources and information and often face discrimination when accessing healthcare facilities.<sup>4</sup> Additionally, in regard to the COVID-19 pandemic, more than half of infections have occurred among Black Americans, despite only comprising approximately 14% of the United States Population.<sup>5,6</sup> Disparities in access to care for BIPOC communities can be detrimental to health outcomes and generate mistrust in healthcare.<sup>7</sup> In the Monroe service area, 15.6% of the total population identifies as Black and 16.8% of the total population identifies as Hispanic. Out of the BIPOC individuals who were surveyed for the network, 33% identified as Other Race, followed by Black (32%), Multiple Races (23%), Asian (10%), and American Indian or Alaskan Native (2%).

### ····· Uninsured Population ·····

Lack of insurance or adequate coverage is a primary barrier to healthcare because it prevents people from accessing crucial services required to monitor and maintain a healthy lifestyle. Medicare, a federal healthcare program in the United States available to most of the population ages 65 years and older, helps to nearly eliminate the uninsured population in that age demographic, with only 0.4% in Pennsylvania and 0.8% in the United States ages 65 years and older uninsured. While Medicare is available to most of the population over 65 years old, lack of health insurance, or adequate health insurance, can lead to serious

Figure 8

Uninsured Population by Age, Monroe 10.0% 8.6% 9.0% 8.0% 7.0% 6.0% 5.0% 4.4% 4.0% 3.0% 2.0% 1.0% 0.0% Under 18 years old 18-64 years old 65+ years old

<sup>&</sup>lt;sup>3</sup> https://www.census.gov/programs-surveys/acs/

<sup>&</sup>lt;sup>4</sup> https://www.bsr.org/en/our-insights/blog-view/respecting-the-rights-of-vulnerable-groups

<sup>&</sup>lt;sup>5</sup> https://www.bsr.org/en/our-insights/blog-view/respecting-the-rights-of-vulnerable-groups

<sup>&</sup>lt;sup>6</sup> https://covid.cdc.gov/covid-data-tracker/

<sup>&</sup>lt;sup>7</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4194634/

barriers to care. Of the population less than 65 years old, 7% in Pennsylvania and 10.2% in the United States are uninsured.

In the Monroe service area, only 0.5% of the 65 and older population are uninsured, 8.6% of ages 18 to 64 are uninsured, and 4.4% of children under 18 years old are uninsured. According to CHNA survey results, 3.4% of all surveyed respondents in the network either have no coverage and pay cash or do not know if they have insurance. The discrepancy between service area statistics and CHNA survey respondents is important to note as we continue to increase our outreach efforts in the communities we serve to reach our most vulnerable populations, which includes the uninsured population

### ------ ALICE -----

Asset Limited, Income Constrained, Employed (ALICE) are households that earn more than the Federal Poverty Level, but less than the basic cost of living.<sup>8</sup> Because ALICE households do not qualify for Federal assistance, they cannot always pay bills and have little money left over to put towards savings. ALICE households are often forced to make difficult decisions like choosing between paying rent or quality childcare. Problems that ALICE families face are often intertwined and affect each other, all of which can pose risks to health, safety and financial stability.<sup>9</sup> These areas often include housing, childcare and education, food, transportation, health care, technology, and taxes. The most recent ALICE report (2018) found that 30% of households in Monroe county were considered ALICE<sup>10</sup>, 3% higher than the Pennsylvania state average of 27%. In Monroe county, 7,258 single or cohabitating households were ALICE, 3,320 families with children were ALICE, and 5,888 people 65 years and older were ALICE. This is partially due to the increase in living costs while wages have stayed stagnant. In 2018, the average cost of living for a single adult in Monroe county was \$2,136 a month and \$25,632 a year, while the average hourly wage was \$12.82.<sup>11</sup> Out of all of the cities, boroughs, and townships in Monroe county, Mount Pocono borough has the highest ALICE percent with 54% of households.

### ..... Children and Adolescents .....

According to 5-Year ACS (2015-2019) estimates, 20.1% of the Monroe service area is below 18 years old. Childhood is a crucial time for development in all aspects of life, thus it is important to study health behaviors and target initiatives towards addressing negative health

<sup>8</sup> https://www.unitedforalice.org/

<sup>&</sup>lt;sup>9</sup> https://www.unitedforalice.org/consequences

<sup>10</sup> https://www.unitedforalice.org/pennsylvania

<sup>11</sup> https://www.unitedforalice.org/pennsylvania

patterns in youth. The 2019 Pennsylvania Youth Survey (PAYS)<sup>12</sup> is run by the Pennsylvania Commission on Crime and Deliquency and asks questions pertaining to drug use, violence, mental health, school safety, and more. PAYS is administered (by paper or online) biennially in odd years to students in grades 6, 8, 10, and 12. According to PAYS, 38.2% of children in Monroe county report lifetime usage of alcohol and 16.4% lifetime usage of marijuana. Additionally, 26.1% of children reported experiencing bullying in the past 12 months when surveyed. Lifetime use refers to using the drug at any point in their life and 30-day use refers to using the drug in the past 30 days. The data in this section is reported from PAYS unless stated otherwise.

### ······ Tobacco, Nicotine, and Vaping ·····

In Monroe county, 6.6% of students reported a lifetime use of cigarettes, 1.8% reported a 30-day use of cigarettes, and 14.5% of students report using a vape in the past 30 days, an increase from 12.2% of students in 2017. Additionally, 35.9% of Monroe county students use nicotine and 31.7% use marijuana/hash oil in their vape. The usage of nicotine in vapes has increased by 152.8% and the usage of marijuana/hash oil has increased by 92.1% since 2017.

### ····· Other Substance Use ·····

Substance use in children and adolescents can have a significant impact on their health and well-being. <sup>14</sup> Substance use can affect their growth and development, especially brain development, lead to risky behaviors such as unprotected sex and dangerous driving, as well as contribute to health problems in adulthood (e.g., heart disease, sleep disorders). <sup>15</sup> In 2019, the PAYS survey found that lifetime alcohol use across the state was 41% and state lifetime use of marijuana was 17.3%. In Monroe county, 38.2% of students have lifetime alcohol use and 16.4% lifetime use of marijuana. In the state, lifetime use for prescription pain medication was 4.1%, and 3.9% for over-the-counter drugs. In Monroe county, lifetime prescription use was 5.1% and 4.4% for over-the-counter drugs. Students often view these drugs as safer than illicit drugs because they are prescribed by a doctor or legally available for adults. Small portions of the state used cocaine, methamphetamines, heroin, ecstasy, and synthetic drugs. However, the most frequent "other drug" used were hallucinogens, with a 2.7% lifetime use. Monroe county students had a 2.2% lifetime use of hallucinogens.

Regarding risky behavior while under the influence of drugs and other substances, 7.4% of Pennsylvania students engaged in binge drinking in the past two weeks and 1.5% of students reported driving while or shortly after drinking. Additionally, 3% of students indicated driving

<sup>&</sup>lt;sup>12</sup> https://www.pccd.pa.gov/Juvenile-Justice/Pages/Pennsylvania-Youth-Survey-(PAYS)-2019.aspx

<sup>&</sup>lt;sup>13</sup> https://www.pccd.pa.gov/Juvenile-Justice/Pages/Pennsylvania-Youth-Survey-(PAYS).aspx

<sup>14</sup> https://www.cdc.gov/ncbddd/fasd/features/teen-substance-use.html

<sup>15</sup> https://www.cdc.gov/ncbddd/fasd/features/teen-substance-use.html

after using marijuana in the past year. In Monroe county, 4.6% of students engaged in binge drinking in the past 2 weeks, 1% of students reported driving while or shortly after drinking, and 1.9% report driving after using marijuana in the past year. Finally, 34.3% of students in the state, and 36.8% of students in Monroe county, report *taking without permission* as their most frequent source/method of obtaining alcohol. The next highest source was *parents provided it for me*, which was 25.7% of students in the state and 29.8% of students in Monroe county. For obtaining prescription drugs, the most common method was *taking them from a family member living in my home*, a method used by 41.4% of students in the state and 56.6% of students in Monroe county. For willingness to use, 24.5% of students across the state and 21.9% of students in Monroe county indicated a willingness to use alcohol if presented with the chance.



"Adolescents emerging from ER discharges are waiting days for placement, and there are hardly any adolescent beds for substance abuse in PA."

### ····· Violence and Bullying ·····

It is important for all children to feel safe at school in order to learn, socialize, and develop. However, PAYS has found that violence on school property is a concern, and 22.5% of students in Monroe county reported being threatened with violent behavior on school property in the past year. Additionally, 9.6% of Monroe county students were attacked on school property, 1.5% with a weapon; both of these have decreased slightly since 2017. In Monroe county, 1% of students reported bringing a weapon to school in the past 30 days, which is similar across the state (0.9%) and has decreased 0.4 percentage points since 2017.

Bullying is also a factor contributing to violence in schools, prompting some students to skip school, and potentially lowering self-esteem. In Monroe county, 26.1% of students reported being bullied in the past 12 months, a decrease from 28.3% of students in 2017. The most common way Monroe county students reported being abused was emotional abuse, insults, and name calling (63.8%), followed by threats (24.3%), and physical injury (22.2%). In Monroe county, 13.9% of students who were bullied reported experiencing bullying via text of social media. Of the students in Monroe county that indicated having been cyberbullied, 59.3% indicated feeling so sad or hopeless every day for the past 2 weeks they stopped doing usual activities; and in the past year, 40.2% of those students seriously considered suicide, 35.6% made a suicide plan, and 31.8% attempted suicide.

## ..... Mental Health .....

Mental health is an important indicator for children and adolescents social and emotional development. Important mental health habits such as resilience and good judgment aid in overall well-being. When asked about depression, the most common depressed thought expressed by

Monroe county students was *at times I think I am no good at all* (38.7%), compared to 36.3% at the state level. Additionally, 38.0% of students in Pennsylvania and 41.3% in Monroe county reported feeling sad or depressed MOST days in the past 12 months.

PAYS also asked questions about self-harm and suicide. In Pennsylvania, 14.4% of students indicated using self-harm (e.g., cutting, scraping, burning) in the past 12 months along with 16.1% of Monroe county students, the highest percentage of students using self-harm out of the service area counties. Across the state, 16.2% of students indicated seriously considering suicide, 12.9% planned suicide, 9.7% attempted suicide, and 2% needed medical treatment as a result. Monroe county has the highest percentages in all categories, with 18.7% of students indicating that they seriously considered suicide, 15.2% planned suicide, 12.4% attempted suicide, and 2.7% needed medical treatment as a result.



"The pandemic has increased mental health problems for young people and there is not the capacity to handle it.

The severe lack of inpatient facilities has led to kids being sent as far away as Pittsburgh for treatment after
sometimes spending days in the ER. And then upon discharge there is often no place to go for follow-up. The mental
health system simply lacks resources for kids."

### ······Risk and Protective Factors ······

When asking students questions pertaining to interest in school, PAYS found that only 47.2% of students in Monroe county believe that things they are learning in school now will be important in the future and 36.1% of students enjoyed being in school last year, a 2.3% decrease since 2017. Additionally, 73.4% of students in Monroe county feel safe at school which is below the state average (80%).

Many risk and protective factors come into play when understanding observed rates of drug use and mental health issues addressed in the CHNA. A risk factor is something that poses potential harm to a student's life and a protective factor is something that can help keep the student safe. Among the highest risk factors were low commitment toward school, perceived risk of drug use, and parental attitudes encouraging antisocial behavior. Among the highest protective factors were family rewards for prosocial involvement, family attachment, and family opportunities for prosocial involvement.



"The school community is strong. I feel that the school is a strong link to the outside community. However, our district is so spread out that not having a town or focal point is missing. We are vast."

### ----- Seniors -----

According to ACS data (2015-2019), there are approximately 27,661 people 65 years and older living in the Monroe service area. In Monroe county, there is an estimated 28,274 people 65 years and older. The U.S. Census Bureau reports the 65 and older population grew 34.2% in the last ten years and by 3.2% from 2018 to 2019. The Bureau also estimates that the 65 and older population will outnumber children by the year 2034. By 2060, adults 65 and older will account for 23.4% of the population (94.7 million people).

In 2018, 17.9% of Medicare beneficiaries in the Monroe service area reported suffering from depression. In the same time frame, 18.1% of Medicare beneficiaries in Monroe county reported suffering from depression. Both of these numbers are lower than the Pennsylvania state average (19.3%) and the United States average (18.4%).



# "The mental health challenges, and particularly problems among senior citizens associated with isolation and depression have intensified."

Other important factors to observe in the senior population are the prevalence of diseases that begin to appear or worsen with age. Examples include diabetes, heart disease, high blood pressure and high cholesterol. Figure 9 illustrates the percentage of Medicare beneficiaries within the Monroe service area that report having these diseases.<sup>20</sup>

Percent of Medicare Beneficiaries							
	St. Luke's Survey	Monroe Service Area	Monroe County	Pennsylvania	United States		
Diabetes	21.2%	28.8%	28.9%	25.8%	27.0%		
Heart Attack and other Disease	11.9%	26.3%	26.0%	27.3%	26.8%		
High Blood Pressure	58.7%	59.5%	59.3%	58.5%	57.2%		
High Cholesterol	41.9%	55.3%	55.1%	52.7%	47.7%		

Figure 9: Data reported from the CHNA survey, Centers for Medicare and Medicaid Services 2018, and lehighvalleyhub.org

<sup>16</sup> https://www.census.gov/programs-surveys/acs/

<sup>&</sup>lt;sup>17</sup> https://www.census.gov/newsroom/press-releases/2020/65-older-population-grows.html

 $<sup>^{18}\</sup> https://www.census.gov/library/visualizations/2018/comm/historic-first.html$ 

<sup>19</sup> https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV\_PUF

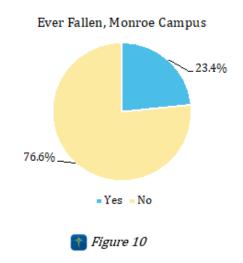
<sup>&</sup>lt;sup>20</sup> https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV\_PUF

Compared to the United States averages, there is still room for improvement. Of the adults 65 and older surveyed in the Monroe service area, 21.2% have diabetes, 11.9% have experienced a heart attack or other disease, 58.7% have high blood pressure, and 41.9% have high cholesterol. While these numbers are lower than previously reported, chronic disease in seniors continues to be a focus for healthy aging.

Food insecurity is another important factor in terms of senior health. Feeding America released a 2020 food insecurity report on seniors in America and found that 7.3% of seniors are food insecure.<sup>21</sup> The report found that of the food insecure senior population, the highest insecure rates were found in racial and ethnic minorities, those with lower incomes, those who are younger seniors (ages 60-69), and those who are renters.

Each year America's Health Rankings produces senior health reports for each state in the United States. The organization ranks the state on six categories: overall, behaviors, social and economic, physical environment, clinical care and health outcomes, on a scale of 1-50 with a score of 1 as the best. Pennsylvania's best ranking appeared in clinical care (19) and worst in physical environment (46).<sup>22</sup> Clinical care assesses factors like access to care, quality of services provided, and preventive services. Physical environment assesses factors like air and water quality, pollution, and housing conditions.

Senior mental health is a growing concern in the United States and even more so with isolation during the COVID-19 pandemic. According to the America's Health Rankings 2020 Senior Report, 8.3% of senior adults in Pennsylvania experience frequent mental health distress, while the 2020 United States Average is 7.9% of senior adults.<sup>23</sup> Frequent mental distress is defined as 14 or more poor mental health days a month and is associated with physical inactivity, insufficient sleep, obesity, smoking and alcohol consumption. Other factors that can contribute to frequent mental distress are the inability to afford healthcare, living alone, and activity limitations due to chronic conditions, physical disabilities or mental health problems.<sup>24</sup> One reason that the senior population may not receive adequate mental care is due to the fact that symptoms of some mental health issues like depression or lapses in memory often get dismissed as typical aspects of aging.<sup>25</sup> Other health conditions related to aging also impact mental health in seniors; older adults with diabetes have a higher risk of developing depression or cognitive impairment while adults with



<sup>&</sup>lt;sup>21</sup> https://www.feedingamerica.org/research/senior-hunger-research/senior

<sup>&</sup>lt;sup>22</sup> https://www.americashealthrankings.org/explore/senior/measure/overall\_sr\_3/state/PA

<sup>&</sup>lt;sup>23</sup> https://www.americashealthrankings.org/explore/senior/measure/overall\_sr\_3/state/PA

<sup>&</sup>lt;sup>24</sup> https://www.americashealthrankings.org/explore/senior/measure/mental\_distress\_sr/state/NJ

<sup>&</sup>lt;sup>25</sup> https://www.agingcare.com/articles/understanding-mental-health-issues-in-seniors-209387.htm

coronary heart disease or whom have had a stroke are more likely to have frequent mental distress.<sup>26,27</sup>

Falls are the leading cause of fatal and nonfatal injuries in older Americans.<sup>28</sup> The 2020 senior health report found that 24.2% of older adults in Pennsylvania had fallen within the last 12 months.<sup>29</sup> One in five falls among older adults causes serious injury, including hip fractures and head injuries.<sup>30</sup> Common factors that can lead to falls are balance and gait, vision, medications, environment, and chronic conditions.<sup>31</sup> However, the number of falls can be reduced through practical lifestyle adjustments, educational programs, and community partnerships.<sup>32</sup> Of the adults 65 and older surveyed in the Monroe campus service area, 23.4% have ever fallen. Of those who have fallen, 18% have fallen 1-2 times, 3% have fallen 3-4 times, and 2% have fallen 5 or more times.

Along with other health concerns that increase with aging, polypharmacy is one of the hardest to track. Polypharmacy lacks a central definition, but authors Dagli and Sharma define polypharmacy as the use of multiple medications generally referred to as five or more prescribed drugs per day.<sup>33</sup> This is common among the senior population because of the need to treat various diseases and injuries that increase with age. Symptoms of polypharmacy include tiredness, decreased alertness, incontinence, lack of appetite, falls, depression, tremors, hallucinations, and more.<sup>34</sup> In 2020 it was estimated that 44% of men and 57% of women 65 and older take five or more prescription and/or nonprescription drugs a week.<sup>35</sup> Polypharmacy has severe negative impacts on patient care and increases the risk for adverse drug reactions.<sup>36</sup>

By increasing protective factors in the community, the effects of aging can be mitigated, and the senior population can thrive. A protective factor is a condition or characteristic that helps people deal more effectively with stressful events and lessens risk of vulnerability.<sup>37</sup> Engaging in physical activities or hobbies and eating well can have a positive impact on senior well-being. Regular exercise can reduce the risk of some diseases, lower blood pressure, and help cognitive function.<sup>38</sup> Self-efficacy, the belief in one's ability to achieve goals and influence life events, is also a potential protective factor. Research indicates that self-efficacy in older adults was related to increased energy,

<sup>&</sup>lt;sup>26</sup> https://www.cdc.gov/aging/publications/coronary-heart-disease-brief.html

<sup>&</sup>lt;sup>27</sup> https://www.nia.nih.gov/health/diabetes-older-people

<sup>&</sup>lt;sup>28</sup> https://www.ncoa.org/healthy-aging/falls-prevention/preventing-falls-tips-for-older-adults-and-caregivers/

<sup>&</sup>lt;sup>29</sup> https://www.americashealthrankings.org/explore/senior/measure/falls\_sr/state/PA

<sup>&</sup>lt;sup>30</sup> https://www.americashealthrankings.org/explore/senior/measure/falls\_sr/state/NJ

<sup>31</sup> https://www.ncoa.org/healthy-aging/falls-prevention/preventing-falls-tips-for-older-adults-and-caregivers/6-steps-to-protect-your-older-loved-one-from-a-fall/

<sup>&</sup>lt;sup>32</sup> https://www.ncoa.org/healthy-aging/falls-prevention/

<sup>33</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4295469/

<sup>34</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4295469/

<sup>35</sup> https://www.uspharmacist.com/article/polypharmacy-and-drug-adherence-in-elderly-patients

<sup>&</sup>lt;sup>36</sup> https://www.npjournal.org/article/S1555-4155(19)31051-7/fulltext

<sup>&</sup>lt;sup>37</sup> https://www.respectaging.ca/training/Participant\_Manual\_-\_Module\_08.pdf

<sup>38</sup> https://www.ncbi.nlm.nih.gov/books/NBK316205/

better sleep, decreased pain or discomfort, and increased overall satisfaction with life.<sup>39</sup> Engaging seniors in meaningful relationships and coordinating resources in the community can help their overall well-being and protect against some negative effects from aging. For the senior population, Healthy People 2030 seeks to reduce the rate of hospital admissions for diabetes among older adults, reduce fall related deaths, and to reduce the proportion of older adults who use inappropriate medicines.<sup>40</sup>

### ······ Lesbian, Gay, Bisexual, Transgender (LGBT) ·······

In 2020, the Bradbury-Sullivan LGBT Community Center in Allentown, Pennsylvania, with funding from the PA Department of Health, conducted a Pennsylvania statewide LGBT Needs Assessment (N=6,582). Results showed that 23.6% of respondents did not visit the doctor for a routine check-up in a year or longer and 36% did not visit the dentist in the past year. Additionally, 1 in 3 Bradbury-Sullivan respondents feared seeking healthcare services because of past or potential negative reactions from health care providers. In the Pennsylvania LGBT Health Needs Assessment, there were 45 respondents from Monroe County. The mean age of respondents was approximately 33 years, and the ages ranged from 16 years to 68 years old; 15 respondents identified as transgender or non-binary.

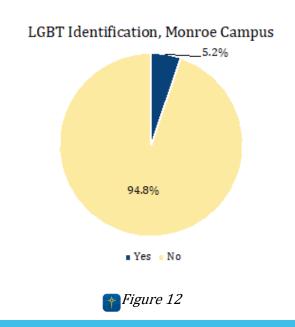
From the St. Luke's CHNA survey, 5.2% of respondents from the Monroe service area identify as LGBT. Additionally, 0.28% of all respondents in the network identify as non-binary, 0.08% identify as genderqueer, 0.06% identify as gender fluid, and 0.1% identify as another gender. When comparing Bradbury Sullivan LGBT respondents to CHNA LGBT respondents, rates of cigarette use and e-cigarette use fared similar; cigarettes are the most used tobacco product by respondents in both surveys. However, hookah use (21.9%) and cigar use (20.2%) was much higher in Bradbury-Sullivan respondents than CHNA respondents, 9.7% and 1.6%, respectively.

Figure 11

Monroe County PA Category Outcome Measures LGBT Respondents Ever Considered Suicide 55.6% Mental Health Dissatisfied with Life 36.8% Had a Mental Health Challenge in the last 12 Mental Health months 76.3% Access Seen by a Mental Health Provider in the las 12 months 50.0% Uninsured 7.3% Healthcare no Primary Care Barriers Provider 17.1% Experienced Discrimination 60.5% Discrimination and Violence **Experienced Violence** 21.1% 47.6% Financial, Food Financially Insecure and Housing 43.6% Food Insecure Insecurity **Ever Homeless** 31.6% Diabetes Diagnosis 2.6% Chronic Disease | Pre-Diabetes Diagnosis 15.4% HIV Diagnosis 2.7% **Current Cigarette** Smoker (18+ years) 11.8% Tobacco and Curren E-Cigarette Drug Use Smokers (all ages) 10.8% Ever Engaged in Chemsex

<sup>&</sup>lt;sup>39</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4437657/

 $<sup>^{40}\</sup> https://health.gov/healthypeople/objectives-and-data/browse-objectives/older-adults$ 



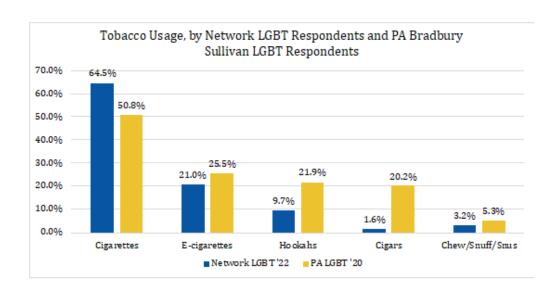


Figure 13

····· Disabled Population ·····

In the Monroe service area, 15.1% of people have a disability.<sup>41</sup> The six disability types considered in this category are hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty (serious difficulty walking or climbing stairs), self-care difficulty, and independent living difficulty.<sup>42</sup> Of those who have a disability in the Monroe service area, 6.2% are under 18 years old, 55.7% are between 18 and 64 years old, and 38.1% are 65 years and older.

····· Veteran Population ·····

Of the Monroe population 18 years and older, 8.2% are veterans. The Census Bureau classifies a veteran as "a person 18 years old or over who has served (even for a short time), but is not now serving, on active duty in the U.S. Army, Navy, Air Force, Marine Corps, or the Coast

<sup>41</sup> data.census.gov/ Table (S1810)

<sup>42</sup> https://www.census.gov/topics/health/disability/guidance/data-collection-acs.html

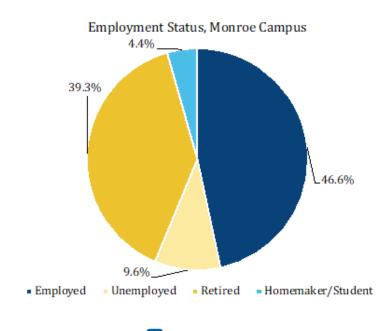
Guard, or who served in the U.S. Merchant Marine during World War II."43 Of the 8.2% of veterans in the Monroe service area, 92.7% are male and 7.3% are female.44

## Social and Economic Environment

## ····· Employment ·····

Unemployment and underemployment have serious impacts on an individual's health. Income is a social determinant of health, and in addition to affecting one's income, unemployment and underemployment can leave individuals without health insurance, paid sick leave and parental leave—exacerbating negative health outcomes when people are at their most vulnerable.

The unemployment rate is 4.4% in Pennsylvania according to the Robert Wood Johnson Foundation 2021 data. However, unemployment rates varied widely within the year due to the COVID-19 pandemic. In January of 2020, Pennsylvania had an unemployment rate of 4.7%, but that rate sky-rocketed to 16.1% by April of 2020—the highest observed since the U.S. Great Depression. Pennsylvania reached unemployment rates below 10% by September of 2020. In Monroe county, 5.4% of residents experienced unemployment. The majority of CHNA respondents in the Monroe campus service area are employed (46.6%) or retired (39.3%), and 9.6% of respondents are unemployed and 4.4% are either a homemaker or a student.



🛅 Figure 14

 $<sup>^{43}\,</sup>https://www.census.gov/content/dam/Census/topics/population/veterans/guidance/acs-topic-information-veterans.pdf$ 

<sup>44</sup> Data.census.gov/ Table (S2101)

<sup>45</sup> https://www.countyhealthrankings.org/

## ..... Household Income and Poverty .....

The 2021 Federal Poverty Level (FPL) guideline is measured at \$12,880 a year for one person and \$26,500 for a family of four.<sup>46</sup> If one person is 200% of the FPL, they make \$53,000. The ACS (2019) reports that 27.8% of the Monroe service area live 200% below the FPL, which is between Pennsylvania (28.3%) and the United States (30.9%). Zip code 18301 is most affected by poverty. The ACS also reports that the median household income in Monroe county is \$63,934, which is higher than the median household income in Pennsylvania (\$61,744) and the United States (\$62,843).<sup>47</sup>The majority of respondents surveyed in the Monroe

campus service area has a household income of \$60,000 and above (54%), 15%

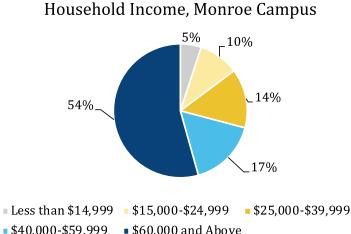
Percent Population with Income at or Below 200% FPL

0% 100%

Monroe (27.79%)
Pennsylvania (28.33%)
United States (30.86%)

Figure 15

of respondents have a household income of \$24,999 and below, while 31% of respondents have a household income between \$25,000 and \$59,999. While we cannot determine how many people live below the FPL based on household size, survey results do reveal that there are many people who could use support from food pantries, Federally Qualified Health Centers, government assistance, rent assistance, and more to supplement their income.



## 🔭 Figure 16

### ····· Education ·····

While income and employment are linked to health status, educational attainment is linked to income and employment. These lay the building blocks for the next generation to have improved socioeconomic status and health outcomes. The Healthy People 2030 high school target graduation rate is 90.7%.<sup>48</sup> In Pennsylvania, 91% of people have a high school diploma or equivalent. In Monroe county, 90% of people have completed high school or equivalent.<sup>49</sup>

<sup>46</sup> https://aspe.hhs.gov/2021-poverty-guidelines

<sup>&</sup>lt;sup>47</sup> Data.census.gov/

<sup>48</sup> https://health.gov/healthypeople/objectives-and-data/

<sup>&</sup>lt;sup>49</sup> https://www.countyhealthrankings.org

Of all Monroe Campus service area CHNA survey respondents, 95.4% have a high school degree or higher, 1.3% have less than a high school education, and 3.3% have some high school education. Broken down further, 20.9% have only a high school diploma, 35.4% have some college or an associate's degree (23.2% have some college and 12.2% have an associate's), 20.7% have a bachelor's, and 18.4% have a graduate degree. Survey results show that respondents have much higher rates of higher education than the general public (Figure 17). Additionally, survey data has lower percentages of respondents with less than a high school diploma compared to ACS findings. It should be noted that people with higher levels of education are more likely to live healthier and longer lives than those with lower education levels.<sup>50</sup> Healthy People 2030 states that children with less access to quality education are less likely to get safe, high-paying jobs and will be more likely to have health problems (e.g., heart disease, diabetes). This is of significant concern because it is crucial to identify and work with populations with lower access to education and healthcare to support healthy lifestyles and overall well-being.

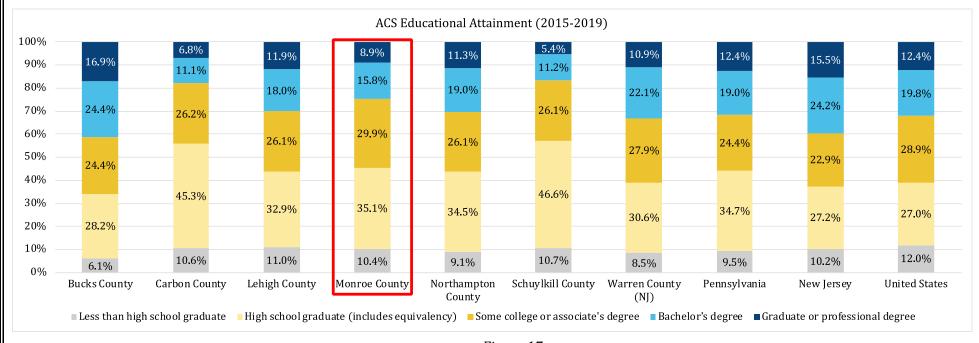


Figure 17

26

<sup>&</sup>lt;sup>50</sup> https://health.gov/healthypeople/objectives-and-data/browse-objectives/education-access-and-quality

## ······ Language ······

English is the language that is most widely spoken in the Lehigh Valley area and surrounding areas of Pennsylvania. However, many people in our service area may be identified as having limited English proficiency. Limited English proficiency is reported as the percentage of the population five years and older who speak a language other than English as home and speak English less than "very well." Respondents were not instructed on how to interpret the meaning of "very well." Speaking and understanding English is important in this service area because most health services are provided in English. Language can also be a large barrier to educational attainment, higher income, employment, accessing healthcare, and health outcomes. In the Monroe service area, 4.5% of the population are considered to have limited English proficiency, compared to 4.3% in Pennsylvania and 8.4% in the United States.

Translators and interpreters are required in locations where either 5% of the community speaks a different language or over 1,000 members speak a different language.<sup>52</sup> A translator typically only translates the written word while interpreters translate orally. Figure 18 shows the Monroe service area zip codes. Columns shown in red text indicate areas that require translator or interpreter services. In the Monroe service area, 12 zip codes require services for Spanish speakers and one zip code requires services for Russian, Polish, and other Slavic languages.

Monroe Service Area Languages							
Top Zip Codes	Percentage and Number of Spanish Speakers in Zip Code	Percentage and Number of Spanish Speakers in Zip Code Who Speak English Less than "Very Well"	Next Frequent Language				
18360	6.0% (1,564 people)	16.8% (262 people)	Other Indo-European languages (3.1%- 815 people)				
18301	10.4% (2,942 people)	22.8% (672 people)	Russian, Polish, or other Slavic languages (2.3%- 653 people)				
18353	3.3% (404 people)	0.0% (0 people)	Russian, Polish, or other Slavic languages (1.9%- 236 people)				
18466	10.3% (3,164 people)	30.5% (965 people)	Russian, Polish, or other Slavic languages (2.5%- 417 people)				
18330	4.5% (363 people)	10.7% (39 people)	Russian, Polish, or other Slavic languages (2.9%- 236 people)				
18058	0.7% (70 people)	0.0% (0 people)	Russian, Polish, or other Slavic languages (0.8%- 80 people)				
18302	10.1% (1,729 people)	21.9% (379 people)	Russian, Polish, or other Slavic languages (2.8%- 484 people)				
18210	5.2% (363 people)	24.5% (89 people)	Other Indo-European languages (1.2%- 83 people)				
18324	17.2% (1,537 people)	19.8% (289 people)	Russian, Polish, or other Slavic languages (2.5%- 227 people)				
18322	0.7% (18 people)	55.6% (10 people)	Russian, Polish, or other Slavic languages (1.7%- 43 people)				
18326	4.9% (185 people)	0.0% (0 people)	Russian, Polish, or other Slavic languages (5.4%- 206 people)				
18610	11.7% (533 people)	16.1% (86 people)	Russian, Polish, or other Slavic languages (0.5%- 22 people)				
18372	6.7% (194 people)	43.3% (84 people)	Russian, Polish, or other Slavic languages (3.9%- 113 people)				
18344	15.6% (576 people)	32.3% (186 people)	Other Indo-European languages (3.3%- 112 people)				
18332	7.0% (167 people)	12.6% (21 people)	Other Indo-European languages (3.4%- 80 people)				
18334	18.2% (815 people)	40.2% (328 people)	German or other West Germanic languages (2.7%- 119 people)				
18321	28.4% (474 people)	49.4% (234 people)	Arabic (2.5%- 41 people)				

 $<sup>^{51}\,</sup>https://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/ <math display="inline">2019\_ACSSubjectDefinitions.pdf$ 

27 *Figure 18* 

 $<sup>^{52}\,</sup>https://www.hud.gov/program_offices/fair_housing_equal_opp/promotingfh/lep-faq#q3$ 

## ····· Safety·····

Perceived safety is an important component of integrating into one's community. People who do not feel safe in their neighborhood are less likely to participate in outdoor activities and are more likely to isolate themselves, which can have negative impacts on both physical and mental health. Violent crime, defined as "offenses that involve face-to-face confrontation between a victim and a perpetrator, including homicide, rape, robbery, and aggravated assault"<sup>53</sup>, is one measure of community safety. Monroe county has a violent crime rate of 235 per 100,000, which is comparatively less than Pennsylvania's violent crime rate (315 per 100,000) but greater than the U.S. top performer rate (63 per 100,000). Violent crime rates in Monroe county have remained the same in recent years.<sup>54</sup>

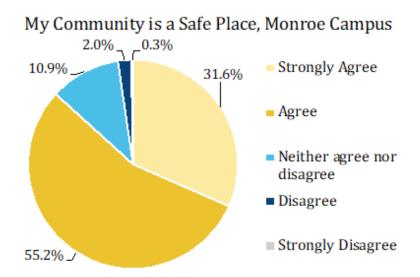


Figure 19

When asked to rate the degree to which they agree that their community is a safe place to live, the majority of CHNA survey respondents in the Monroe campus service area agreed (55.2%), 31.6% strongly agreed, and 10.9% neither agreed nor disagreed. Additionally, 2% of respondents disagreed that their community is a safe place and 0.3% strongly disagreed.

### ----- Social Associations

Related to safety, social association is a measure of the emotional and social support available to an individual. This indicator measures the number of membership associations per 10,000 population. The social association indicator in Monroe county falls at 7.6, which falls below Pennsylvania (12.2) and U.S. top performers (18.2),<sup>55</sup> demonstrating a need for more social associations and community building in this county.

<sup>&</sup>lt;sup>53</sup> https://www.countyhealthrankings.org/app/new-jersey/2021/measure/factors/43/data

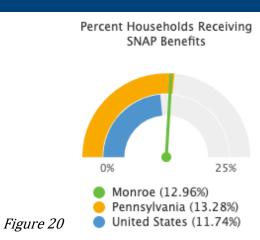
<sup>54</sup> https://www.countyhealthrankings.org

<sup>55</sup> https://www.countyhealthrankings.org

# **Physical Environment**

## ----- Food Insecurity

Food insecurity, according to the United States Department of Agriculture (USDA), is the lack of consistent access to a variety of foods for a quality diet.<sup>56</sup> A quality diet is one with access to foods that meet the individual's taste and nutritional needs. Very low food security (VLFS) is when normal eating patterns are disrupted and households lack money or other resources to obtain food. The USDA's annual report (2019) found that 10.5% of households nationwide are food insecure, 6.5% of which have low food security and 4.1% have VLFS.<sup>57</sup> Among households with children, 6.5% are food insecure and 0.6% have VLFS. The USDA report stated that households with children facing VLFS had to skip meals or not eat for entire days due to a lack of money for food.<sup>58</sup> In 2019, Pennsylvania had a food insecurity rate of 10.2% and VLFS rate of 4.1%.



Government assistance programs aim to help reduce food insecurity through national programs such as the Supplemental Nutrition Assistance Program (SNAP), the National School Lunch Program (NSLP), and Women, Infants and Children (WIC). In 2019, an estimated 49.7% of households receiving SNAP were food insecure, 36.9% of households receiving free or reduced school lunches were food insecure, and 34.1% of households receiving WIC were food insecure. Additionally, 57.7% of households classified as VLFS reported participating in one of these three federal assistance programs, with SNAP having the largest number of participants (47.8%). According to the ACS (2015-2019), almost 13% of households in the Monroe service area received SNAP benefits. Figure 21 depicts households receiving SNAP benefits by Census tract and Figure 20 depicts Monroe compared to Pennsylvania and the United States.

 $<sup>^{56}\,</sup>https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx$ 

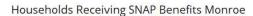
<sup>&</sup>lt;sup>57</sup> https://www.ers.usda.gov/webdocs/publications/99282/err-275.pdf?v=4396.4

<sup>&</sup>lt;sup>58</sup> https://www.ers.usda.gov/webdocs/publications/99282/err-275.pdf?v=4396.4

<sup>&</sup>lt;sup>59</sup> https://www.ers.usda.gov/webdocs/publications/99282/err-275.pdf?v=4396.4

<sup>60</sup> data.census.gov/

2022 St. Luke's University Health Network Monroe Community Health Needs Assessment



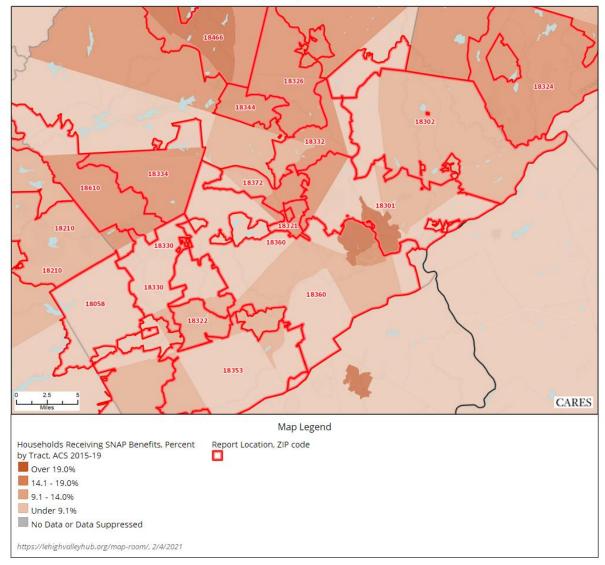


Figure 21

The COVID-19 pandemic required shutdowns across the county in 2020, resulting in many people losing jobs and their ability to afford food and other essential items to survive. Feeding America (2021) projected the potential rates of food insecurity because of COVID-19,

estimating more than 50 million people experiencing food insecurity because of the pandemic.<sup>61</sup> Feeding America projects the annual food insecurity rate to increase to 12.9% in 2021, meaning that 1 in 8 people will be food insecure, along with 1 in 6 children. Additionally, the report projects the unemployment rate to be around 6.7% and the annual poverty rate to be 12% in 2021, which is a 0.9% increase from 2020.<sup>62</sup> The food insecurity rate in Monroe county was 13.5% in 2020, a 44% increase from 2019. In 2021, Monroe county is projected to have a food insecurity rate of 11.1% and Pennsylvania is projected to be 12%. Additionally, 17.4% of children in Monroe county in 2021 are projected to be food insecure. Monroe county ranked 49 out of the 67 counties in Pennsylvania for food insecurity, with 1 ranked at the highest food insecurity rate.

Monroe County Feeding America COVID-19 Food Insecurity Projections							
Rank 2021	2021	2020	2019	Change 2019-2020	2021 Child		
49/67	11.1%	13.5%	9.4%	44.0%	17.4%		

Figure 22

Additionally, availability of food can be a concern for children. PAYS asked students if they have been worried about running out of food one or more times in the past year; 11.7% of students across Pennsylvania and 15.5% of students in Monroe county agreed with this statement.<sup>63</sup>

It is also important to note that the pandemic affected people of color (BIPOC) communities hardest in terms of unemployment and food insecurity. The Hispanic/Latino population had the highest unemployment rate among all racial and ethnic groups, spiking to 18.9% in April 2020. Additionally, Black individuals were already 2.4 times more likely to live in food insecure households than White individuals prior to the pandemic, and now 18 of the 25 counties across the country projected to have the highest food insecurity rates in 2020 are predominantly Black.<sup>64</sup>



"Food insecurity has only increased in the pandemic and the problem isn't going to be gone after the pandemic."

<sup>&</sup>lt;sup>61</sup> https://www.feedingamerica.org/research/coronavirus-hunger-research

<sup>62</sup> https://www.feedingamerica.org/research/coronavirus-hunger-research

<sup>63</sup> https://www.pccd.pa.gov/Juvenile-Justice/Pages/Pennsylvania-Youth-Survey-(PAYS)-2019.aspx

<sup>64</sup> https://www.feedingamerica.org/research/coronavirus-hunger-research

Research studies have found that stress from inconsistent access to food can play an active role in fat accumulation and chronic disease.<sup>65</sup> In non-senior adults, food insecurity is associated with decreased nutrient intakes, increased rates of mental health problems, hypertension, and poor sleep outcomes.<sup>66</sup> In children, food insecurity is associated with increased risks of asthma, lower nutrient intakes, cognitive problems, aggression, and anxiety. Food insecure children may also have higher risks of hospitalization, poor overall health, asthma, depression, and worsened oral health.<sup>67</sup> Food deserts also play a role in food insecurity and chronic disease. A food desert is an area that has limited or nonexistent access to affordable and healthy grocery stores.<sup>68</sup> Living in a food desert has been linked to a poor diet and a greater risk for obesity, while people who live near a grocery store are more likely to consume fruits and vegetables and less likely to be obese.<sup>69</sup> Typically, in food deserts, there is a large amount of fast food and corner stores with inexpensive, high calorie food that lacks nutritional value. Long term consumption of unhealthy food can increase likelihood of obesity, type 2 diabetes, heart disease, and other diet-related conditions.<sup>70</sup>

The Robert Wood Johnson Foundation ranks counties based on their food environment index; the food environment index is measured by the "percentage of the population that is low income and does not live close to a grocery store."<sup>71</sup> Monroe county scored 8.0 out of 10, with 10 as the best.<sup>72</sup>

## ····· Housing and Blight ·····

Stable and safe housing is an important factor that sets the foundation to achieve quality education, valuable social interactions, and access to nutritious foods. According to Healthy People 2030, safe housing is considered a social determinant of health, which are "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks."<sup>73</sup> Housing affects other sectors including education, health, racial equity, economic stability, homelessness, hunger, crime, the environment, and disability rights.<sup>74</sup> Over time, homeownership can help build wealth and savings, which are important in relation to health; but not everyone has had equal opportunity to homeownership. Decades of discriminatory practices and inability to

<sup>65</sup> https://doi.org/10.3945/an.112.002543

<sup>66</sup> https://www.healthaffairs.org/doi/10.1377/hlthaff.2015.0645

<sup>67</sup> https://www.healthaffairs.org/doi/10.1377/hlthaff.2015.0645

<sup>68</sup> https://foodispower.org/access-health/food-deserts/

<sup>69</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5708005/

<sup>70</sup> https://foodispower.org/access-health/food-deserts/

<sup>71</sup> https://www.countyhealthrankings.org/app/pennsylvania/2020/measure/factors/133/description

 $<sup>^{72}\</sup> https://www.countyhealthrankings.org/app/pennsylvania/2021/rankings/monroe/county/outcomes/overall/snapshot$ 

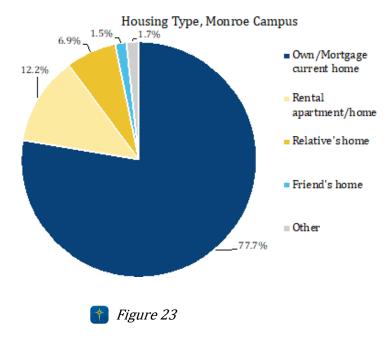
<sup>73</sup> https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

<sup>74</sup> https://www.opportunityhome.org/related-sectors/

benefit from homeownership programs has led to a disproportionate homeownership rate between races.<sup>75</sup> Healthy People 2030 has made housing a focus, including efforts to reduce the proportion of families that spend 30% or more of income on housing, increase the proportion of homeless adults who get mental health services, and to increase the proportion of homes that have an entrance without steps to make it accessible for people with disabilities.<sup>76</sup>

The COVID-19 pandemic has resulted in thousands of people losing jobs, leaving them vulnerable to evictions or foreclosures. The CDC issued a moratorium on September 4, 2020 temporarily halting evictions. The moratorium was set to end December 31, 2020, however it was pushed back until January 31, 2021 and was extended further to March 31, 2021 as the virus persists.<sup>77</sup> The moratorium was meant to keep people in their current housing situations regardless of ability to pay rent, however it did not exclude tenants from paying rent. While this was a temporary solution, people facing eviction are likely to experience high rates of depression, anxiety, and psychological distress.<sup>78</sup>

To better understand housing in the Monroe campus service area, we asked CHNA respondents to indicate their housing type. Due to small sample size, "Other" consists of individuals living in a shelter (0.10%), group home (0.19%), senior living (0.29%), or Other (1.06%). The majority of respondents own or rent their home (77.7%), followed by renting their home (12.2%), living at a relative's home (6.9%), Other (1.7%), and living at a friend's home (1.5%).



One indicator used to assess housing status is the percentage of households that are cost-burdened. According to the department of Housing and Urban Development (HUD), a household is considered cost-burdened if 30% or more of the income goes toward their mortgage or rent. These situations can be detrimental to an individual's overall well-being because there is less disposable income to pay for food, healthcare costs, transportation, and other out of pocket expenses. A 2019 report by the County Health Rankings and Robert Wood Johnson (RWJ) Foundation found that 1 in 10 households across the United States spend more than half of their income on housing costs (severe cost-

 $<sup>^{75}\</sup> https://www.countyhealthrankings.org/reports/2019-county-health-rankings-key-findings-report$ 

 $<sup>^{76}\,</sup>https://health.gov/healthypeople/objectives-and-data/browse-objectives/housing-and-homes$ 

<sup>77</sup> https://www.cdc.gov/coronavirus/2019-ncov/more/pdf/CDC-Eviction-Moratorium-01292021.pdf

<sup>&</sup>lt;sup>78</sup> https://doi.org/10.1016/j.socscimed.2017.01.010

<sup>&</sup>lt;sup>79</sup> https://www.huduser.gov/portal/pdredge/pdr\_edge\_featd\_article\_092214.html

burdened).<sup>80</sup> The report also found that severe cost-burdened households are more likely to be affected by food insecurity, child poverty, and fair or poor health.<sup>81</sup> Additionally, segregated counties across the United States have higher cost-burdened rates for both Black and White households. However, nearly 1 in 4 Black households spend more than half of their income on housing.<sup>82</sup> Cost-burdened housing is a significant problem in the St. Luke's service area as wages and housing costs are not always aligned.

Further assessing wage disparities, the National Low Income Housing Coalition (NLIHC) released a report on fiscal year 2020's housing costs and wage. Out of all states, Pennsylvania ranks 26 with the highest housing costs. In Pennsylvania, the fair market rent for a two-bedroom apartment is \$1,000, meaning that for a household to not be cost-burdened, they must earn \$3,333 a month or \$39,992 annually. In translates into an hourly wage of \$19.23, however Pennsylvania's state minimum wage is only \$7.25 an hour. Someone living on the state minimum wage would need to work 106 hours a week to afford rent each month. The Lehigh Valley (Allentown, Bethlehem, Easton) is the fourth most expensive area in Pennsylvania, requiring \$19.73 an hour to afford an apartment and not be cost-burdened. In Monroe county, the fair market rent for a two-bedroom apartment is \$1,050 a month, requiring \$20.19 an hour or \$42,000 annually. Based on the 2020 estimated hourly mean wage for renters in Monroe county, which is \$12.05, an individual would need to work 1.7 full time jobs to afford an

apartment.85

The average cost-burdened rate of the 10 lowest income census tracts is 42.5%, which is significantly higher than both the Pennsylvania and national percentages. Every census tract above has a cost-burdened percentage above 35%, which 3 tracts over 50% cost-burdened. Over half of the households in tracts 3008, 3002.01, and 3003.08 are cost-burdened. This is the most out of all the lowest income census tracts in the counties that St. Luke's serves.

Monro		vork 1.7 ran c	inc jobs to anora an
Geographic Area Name (Zip Code)	Median Household Income (lowest first)		% Cost Burdened
Census Tract 3008, Monroe County, PA (18360)	\$	41,984	50.2%
Census Tract 3002.01, Monroe County, PA (18323, 18325,			
18326, 18342, & 18357)	\$	42,692	54.2%
Census Tract 3007, Monroe County, PA (18301, 18335, &			
18341)	\$	47,021	39.7%
Census Tract 3009, Monroe County, PA (18301 & 18360)	\$	47,052	36.3%
Census Tract 3003.01, Monroe County, PA (18344, 18346,			
18347, 18424, & 18466)	\$	51,708	39.2%
Census Tract 3006, Monroe County, PA (18301)	\$	52,368	39.2%
Census Tract 3004.02, Monroe County, PA (18301, 18321,			
18328, 18332, 18360, & 18372)	\$	53,202	40.5%
Census Tract 3003.08, Monroe County, PA (18424 & 18466)	\$	53,235	50.5%
Census Tract 3001.02, Monroe County, PA (18301 & 18302)	\$	53,505	38.9%
Census Tract 3003.05, Monroe County, PA (18326, 18344, &			
18466)	\$	57,330	36.7%
Average 10 Census Tracts	\$	50,010	42.5%
Pennsylvania	\$	61,744	28.9%
National	\$	62,843	31.8%

<sup>80</sup> https://www.countyhealthrankings.org/reports/2019-county-health-rankings-key-findings-report

<sup>81</sup> https://www.countyhealthrankings.org/reports/2019-county-health-rankings-key-findings-report

<sup>82</sup> https://www.countyhealthrankings.org/reports/2019-county-health-rankings-key-findings-report

<sup>83</sup> https://reports.nlihc.org/oor

<sup>84</sup> https://reports.nlihc.org/sites/default/files/oor/files/reports/state/PA-2020-00R.pdf

<sup>85</sup> https://reports.nlihc.org/sites/default/files/oor/files/reports/state/PA-2020-00R.pdf



"The rental situation is so dismal. Residents have to look outside the county for anything affordable, with only 20 units available at about \$1100 per month. For people working part time or on Social Security disability they can't afford rent. There are room rentals, but they are expensive and not optimal."

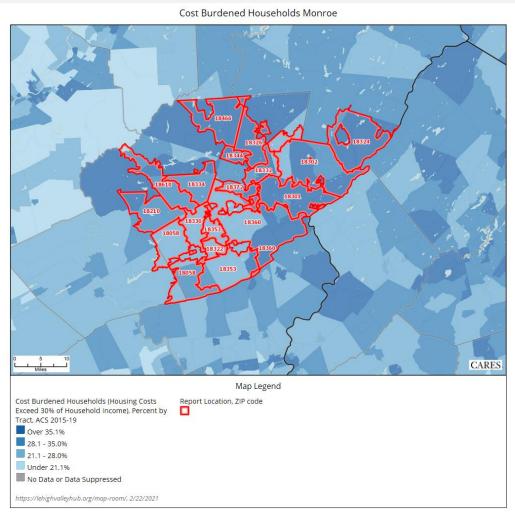


Figure 25

Two other important metrics to look at are the percentage of households that lack complete kitchens and the percentage of households that lack complete plumbing. It is important to assess the conditions inside of houses because they give an indication of living standards and assess the quality of household facilities. According to the 2019 ACS subject definitions guide, a complete kitchen must include a sink with a

faucet, a stove or range, and a refrigerator. <sup>86</sup> If a household lacks any one or more of these facilities, the household is considered to lack a complete kitchen. A complete plumbing facility must include hot and cold running water, and a bathtub or shower. Again, if a household lacks one or both facilities, the house is considered to lack complete plumbing. Without a complete kitchen, families are unable to cook nutritious meals and may rely more heavily on fast food or other ready-made food. For households lacking complete plumbing facilities, families may not be able to bathe regularly leading to worsened hygiene.

The average percent of households lacking a complete kitchen in the 10 lowest income census tracts is 1%. This is much lower than the Pennsylvania and national percentages. Census tract 3004.02 has the highest percent of households lacking a complete kitchen (2.8%). However, 6 out of 10 tracts have less than 1% of households lacking a complete kitchen, which is the best out of all of the lowest income census tracts in the counties that St. Luke's serves.

The average percent of households lacking complete plumbing in the 10 lowest income census tracts is 1.5%. This is slightly lower than the Pennsylvania and national percentages. Census tract 3001.02 has the highest percent of households lacking complete plumbing (5.3%).

Monroe						
Geographic Area Name (Zip Code)	Median Household Income (lowest first)	% Lacking complete kitchen				
Census Tract 3008, Monroe County, PA (18360)	\$ 41,984	0.9%				
Census Tract 3002.01, Monroe County, PA (18323, 18325, 18326, 18342, & 18357)	\$ 42,692	1.3%				
Census Tract 3007, Monroe County, PA (18301, 18335, & 18341)	\$ 47,021	0.7%				
Census Tract 3009, Monroe County, PA (18301 & 18360)	\$ 47,052	2.1%				
Census Tract 3003.01, Monroe County, PA (18344, 18346, 18347, 18424, & 18466)	\$ 51,708	0.0%				
Census Tract 3006, Monroe County, PA (18301)	\$ 52,368	0.0%				
Census Tract 3004.02, Monroe County, PA (18301, 18321, 18328, 18332, 18360, & 18372)	\$ 53,202	2.8%				
Census Tract 3003.08, Monroe County, PA (18424 & 18466)	\$ 53,235	0.0%				
Census Tract 3001.02, Monroe County, PA (18301 & 18302)  Census Tract 3003.05, Monroe County, PA (18326, 18344, &	\$ 53,505	1.4%				
18466)	\$ 57,330	0.7%				
Average 10 Census Tracts	\$ 50,010	1.0%				
Pennsylvania	\$ 61,744	3.4%				
National	\$ 62,843	2.8%				

Figure 26

Monroe			
Geographic Area Name (Zip Code)	Median Household Income (lowest first)		% Lacking complete plumbing
Census Tract 3008, Monroe County, PA (18360)	\$	41,984	0.0%
Census Tract 3002.01, Monroe County, PA (18323, 18325, 18326, 18342, & 18357)	\$	42,692	2.6%
Census Tract 3007, Monroe County, PA (18301, 18335, & 18341)	\$	47,021	0.0%
Census Tract 3009, Monroe County, PA (18301 & 18360)	\$	47,052	2.1%
Census Tract 3003.01, Monroe County, PA (18344, 18346, 18347, 18424, & 18466)	\$	51,708	0.0%
Census Tract 3006, Monroe County, PA (18301)	\$	52,368	0.0%
Census Tract 3004.02, Monroe County, PA (18301, 18321, 18328, 18332, 18360, & 18372)	\$	53,202	4.6%
Census Tract 3003.08, Monroe County, PA (18424 & 18466)	\$	53,235	0.0%
Census Tract 3001.02, Monroe County, PA (18301 & 18302)	\$	53,505	5.3%
Census Tract 3003.05, Monroe County, PA (18326, 18344, & 18466)	\$	57,330	0.5%
Average 10 Census Tracts	\$	50,010	1.5%
Pennsylvania	\$	61,744	2.6%
National	\$	62,843	2.1%

 $<sup>^{86}\</sup> https://www2.census.gov/programs-surveys/acs/tech\_docs/subject\_definitions/2019\_ACSSubjectDefinitions.pdf$ 

Homelessness is another important indicator when assessing housing. Each year, HUD collects homeless data across the country, also known as the Continuums of Care data. As of January 2020, an estimated 13,375 people in Pennsylvania experienced homelessness on any given day.<sup>87</sup> Of the 13,375 people who reported experiencing homelessness, 1,550 were family households, 977 were Veterans, 716 were unaccompanied young adults (ages 18-24), and 1,772 were individuals experiencing chronic homelessness.<sup>88</sup>

Each school year, the Pennsylvania Education for Children and Youth Experiencing Homelessness Program records the number of homeless students served by the program. The population includes children under the age of 5 and youth enrolled in pre-K through 12<sup>th</sup> grade.<sup>89</sup> The unique count is based on where the child was identified as homeless and attributed to the local education agency.<sup>90</sup> Of the eight counties that St. Luke's reaches in Pennsylvania, 7,656 students were identified as homeless in the 2018-2019 school year. This number does not encompass the entire child homeless population as it does not include children who were not served by this program (i.e., students not in the Pennsylvania public school system). During the 2018-2019 school year, Monroe county reported 465 homeless students, which is about the same as the previous school year which reported 461 homeless students.<sup>91</sup>



### "A year before the pandemic we had about 20 families waiting for emergency housing, and during the last year we saw this number go above 80 families on the list."

The Robert Wood Johnson Foundation produces County Health Rankings measuring many social determinants of health. One measure pertinent to housing is the percent of people living with severe housing problems. A household is considered to have a severe housing problem if one or more of these conditions is met: lacking a complete kitchen, lacking complete plumbing facilities, house is overcrowded, or the house is severely cost-burdened. Monroe county ranks 66 out of 67 Pennsylvania counties for severe housing problems, with a score of 1 having the least amount of problems. In Monroe county, 18% of residents have one or more of the housing problems listed above compared to 15% of households in Pennsylvania. Pennsylvania.

CoC\_PopSub\_State\_PA\_2019.pdf

<sup>87</sup> https://www.usich.gov/homelessness-statistics/pa/

<sup>88</sup> https://files.hudexchange.info/reports/published/

<sup>89</sup> https://www.education.pa.gov/

<sup>90</sup> https://www.education.pa.gov/

 $<sup>^{91}\</sup> https://www.education.pa.gov/Documents/K-12/Homeless\%20Education/Reports/2017-18\%20Unique\%20and\%20Duplicate\%20Counts\%20by\%20County.pdf$ 

<sup>92</sup> https://www.countyhealthrankings.org/app/pennsylvania/2020/measure/factors/136/description

<sup>93</sup> https://www.countyhealthrankings.org/app/pennsylvania/2021/measure/factors/136/data?sort=sc-2

## ..... Air and Water Quality .....

Air quality is a growing concern, especially in urbanized and industrialized areas. Poor air quality can irritate the eyes, nose, and throat, and cause long term health effects. Air quality is typically assessed by two components, ozone (O<sub>3</sub>) and Particulate Matter (PM). Ozone is a gas molecule that is harmful to breathe and aggressively attacks lung tissue. Ozone is dangerous because it can be carried by wind far downstream, causing harm to people in multiple areas. Ozone can also cause premature death, immediate breathing problems, long term exposure risks, and potential cardiovascular harm. PM is a particle that occupies the air we breathe but is small enough that we cannot see it unless there are large amounts of PM in one area. Large amounts of PM would result in reduced visibility, or haziness in the air. PM 2.5 is the smallest particle and most dangerous size because it can easily pass through lung tissue and into the blood stream. Objectives for environmental health determined by Healthy People 2030 are to increase the proportion of people with safe water is to drink, reduce the

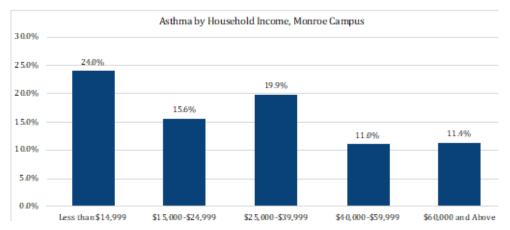
Monroe				
	Weight	Orange	Dod days	Purple
	average	days	Red days	days
High Ozone	1.7	5	0	0
High PM	0	0	0	0

*Figure 28:* Orange- unhealthy for sensitive groups, Red-unhealthy, Purple- very unhealthy, DNC- Did Not Collect

Additionally, the CHNA survey asks respondents to indicate if they have ever been diagnosed with asthma. When distributed by income, 24% of respondents in the Monroe service area who make less than \$14,999 have asthma. While there is no clear trend by income and asthma, those whose household income is

lower than \$40,000 have somewhat higher rates of asthma than above \$40,000.

amount of toxic pollutants in the environment, and to reduce the number of days people are exposed to unhealthy air. According to the American Lung Association, Monroe county earned a 'C' for high ozone days for 2016-2018. The weighted average of  $O_3$  was 1.7 and the county had a total of 5 orange days. Orange days are characterized as unhealthy days for sensitive groups. Monroe county earned an 'A' for PM days, with 0.0 weight average and 0 unhealthy days for anyone.



<sup>94</sup> https://www.sparetheair.org/understanding-air-quality/air-pollutants-and-health-effects/whos-at-risk

<sup>95</sup> https://www.lung.org/clean-air/outdoors/what-makes-air-unhealthy/ozone

<sup>&</sup>lt;sup>96</sup> https://www.lung.org/clean-air/outdoors/what-makes-air-unhealthy/particle-pollution

<sup>97</sup> https://health.gov/healthypeople/objectives-and-data/browse-objectives/environmental-health

Water quality is another important aspect of the environment. Water is delivered in two ways, through wells and through municipalities. Each municipality is required to report water quality reports each year, but well quality is difficult to track because it is usually not managed by the state. From Pennsylvania's Department of Environment Protection (DEP) water report in 2019, 11% of Pennsylvania households use well water and 89% of households use community water systems. The report tracks violations within the Maximum Contaminant Level (MCL) which is the highest level of contaminant allowed in drinking water. The water is permitted to have some contaminants if it does not exceed the MCL. This is important to note because even though a water system does not have violations, it does not necessarily mean the water is completely safe. The water report also tracks the Maximum Residual Disinfectant Level (MRDL) which limits the amount of disinfectants allowed in safe drinking water. Some of the typical contaminants tested are chlorine, fluoride, radium, turbidity, organic carbon, lead, and copper. Water contaminants can result in a variety of negative health impacts, like gastrointestinal illness, worsened nervous system or reproductive system, and a variety of diseases (e.g., cancer). The effects can also be short term or long term, while also going unseen, potentially worsening the effects over time.

Monroe county services water to residents through the Brodhead Creek Regional Authority (BCRA).<sup>102</sup> Water in this area is provided from the Broadhead creek and two on site ground water wells. The BCRA reported one violation in the 2019 water quality assessment. From July 28, 2019 to August 8, 2019, the BCRA failed to take a disinfectant residual measurement. This means that the level of disinfectants used to lower contaminant levels could have exceeded limits, potentially resulting in unsafe drinking water. The violation falls under the Disinfectant Requirements Rule. Other than this incident, no contaminants exceeded MCLs and there were no other violations. It is also important to understand the risk of lead in drinking water. While most counties in the St. Luke's service area do not have lead that contaminates drinking water from the source, lead pipes, faucets, and other risks of lead poisoning are risk factors that may exist in homes. Higher prevalence of lead poisoning is found in low income homes.<sup>103</sup>

# ····· Transportation ·····

The type of transportation a person takes to work can be a good indicator of health. Walking, biking, or taking public transportation to work promotes regular physical activity and decreases air pollution, which in turn decrease chronic diseases and obesity rates. <sup>104</sup> A goal of

 $<sup>^{98}\</sup> http://files.dep.state.pa.us/Water/BSDW/DrinkingWaterManagement/PublicDrinkingWater/PA\_DEP\_2019\_Annual\_Compliance\_Report.pdf$ 

<sup>99</sup> https://www.state.nj.us/dep/watersupply/pdf/violations2019.pdf

<sup>100</sup> http://files.dep.state.pa.us/Water/BSDW/DrinkingWaterManagement/PublicDrinkingWater/PA\_DEP\_2019\_Annual\_Compliance\_Report.pdf

<sup>101</sup> https://www.epa.gov/report-environment/drinking-water

 $<sup>^{102}\,</sup>https://www.bcrawater.com/sites/default/files/ccr\_reports/2019\_ccr\_final\_version\_.pdf$ 

<sup>103</sup> https://www.cdc.gov/nceh/lead/prevetion/populations.htm?CDC\_AA\_refVal=https%3A%2F%2F

<sup>104</sup> https://ephtracking.cdc.gov/showCommunityDesignAddLinkTypesOfTransportationToWork

Healthy People 2030 is to increase the amount of people using public transportation to get to work.<sup>105</sup> People who drive to work are less likely to reach the recommended physical activity goal for the day. Driving to work can also have a significant effect on obesity, diabetes, and heart disease.<sup>106</sup> However, it is not always feasible for someone to walk, bike, or take public transportation to work as many cities lack the proper infrastructure.

Figure 30 illustrates the modes of transportation used to get to work by people in Monroe county, Pennsylvania, and the United States. For all three geographies, the majority of people drive alone to work. Monroe county reported 78.2% of commuters drive alone to work, which is slightly higher than Pennsylvania (75.9%), and the United States (76.3%). A large portion of the Monroe population carpools to work (10.1%), the highest among all of the St. Luke's service area counties. Additionally, out of the counties which house a St. Luke's hospital, Monroe county has the highest percentage of residents who use public transportation to commute to work (4.4%).

Though a large majority of people in Monroe county commute to work by car, 5.3% of people do not have access to a car. People who do not have access to a car must then rely on public transportation, walking, or other modes of transportation. This can be an issue because

poor public transportation and lack of walkability in some parts of the county may lead to individuals missing health appointments or screenings, which are crucial to healthy living. Residents of Monroe county have access to public transportation through the Monroe County Transportation Authority (MCTA), which is also known as the Pocono Pony. MCTA offers a fixed bus route and ride share vans for people with disabilities, people who need medical assistance, people who are 65 and older, and the general public. MCTA also offers transportation services for veterans to the VA Medical Centers in Wilkes-Barre, Allentown, and Bangor. 108

Monroe			
Mode of Transportation to Work	Monroe %	PA %	US %
Drive Alone (Car, Truck or Van)	78.2%	75.9%	76.3%
Carpool	10.1%	8.5%	9.0%
Use Public Transportation	4.4%	5.6%	5.0%
Taxi	0.4%	0.1%	0.2%
Motorcycle	0.0%	0.1%	0.2%
Bike	0.0%	0.5%	0.5%
Walk	1.6%	3.6%	2.7%
Other	0.7%	0.8%	0.9%
Work From Home	4.7%	4.9%	5.2%

Figure 30



"Transportation in the region is a huge problem. It's very difficult for many people in Monroe County to get to needed services. This is especially true for older residents."

<sup>105</sup> https://health.gov/healthypeople/objectives-and-data/browse-objectives/transportation

<sup>&</sup>lt;sup>106</sup> https://ephtracking.cdc.gov/showCommunityDesignAddLinkTypesOfTransportationToWork

<sup>&</sup>lt;sup>107</sup> Data.census.gov (table B25044)

<sup>108</sup> https://www.gomcta.com/routes.php

# Clinical Care

## ······ Access to Care ······

When asked about problems in the community, a community forum attendee spoke to access to care for chronic disease:

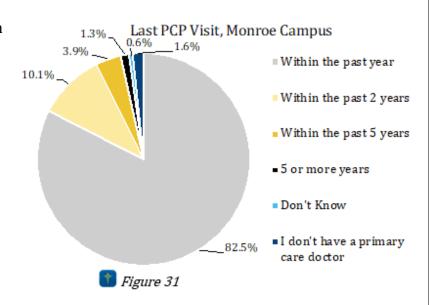


"There is a lot of deferred primary care in the region. The community wasn't that healthy before the pandemic, but many with diabetes and heart disease are not getting needed care. Access to care for those with chronic conditions is a particular problem."

## ····· Primary Care Providers (PCPs) ·····

Primary care providers (PCPs) are gatekeepers to the healthcare system. Often, they are a patient's first point of contact and referral to further care by specialists. Monroe county has a severe shortage of primary care providers with a ratio of individuals in the population per PCP of 2,420:1, which significantly underperforms compared to Pennsylvania overall ratio (1,230:1) and U.S. top performers with a ratio (1,030:1).<sup>109</sup> There are almost half as many primary care providers in Monroe county as in Pennsylvania state overall.

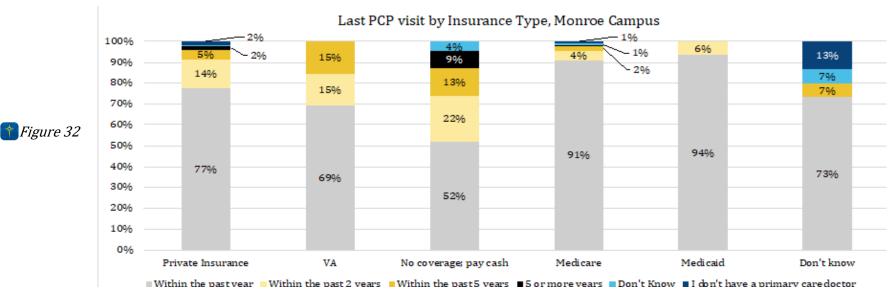
To assess the frequency of visits, the CHNA survey asked how long it had been since the respondent last visited their PCP. The majority of respondents from the Monroe campus service area have visited their PCP within the last year (82.5%), followed by within the past 2 years (10.1%), within the past 5 years (3.9%), and 5 or more years (1.3%). Additionally, 2.2% of respondents do not know the last time they have seen a PCP (0.6%) or do not have a PCP (1.6%).



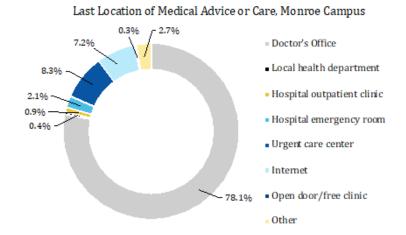
41

<sup>109</sup> https://www.countyhealthrankings.org/

It is also important to look at an individual's last visit to a primary care physician by their type of insurance. Lack of insurance or high copays may hinder individuals from seeking medical attention, which could result in worsened health conditions. As seen in the CHNA survey results, lack of insurance does hinder the frequency of doctor's visits (Figure 32). For respondents who do not have insurance coverage, only 52% have seen a PCP within the past year; this is drastically lower than Medicaid (94%), Medicare (91%), and private insurance (77%). Additionally, those who do not know their type of insurance have the highest rates of being without a PCP (13%). These findings reinforce the need for Federally Qualified Health Centers who offer services on a sliding pay scale making healthcare affordable to all patients.



Finally, the CHNA survey asks respondents where they go most often when they are sick or in need of medical advice to get an understanding of their use of service providers. The majority of respondents go to a doctor's office (78.1%), followed by an urgent care center (8.3%), using the Internet (7.2%), and other (2.7%). While a majority of respondents use a doctor's office, bringing in more PCPs who have diverse backgrounds and accept many types of insurances will allow more individuals to seek help at a doctor's office rather than on the Internet and in an emergency room.



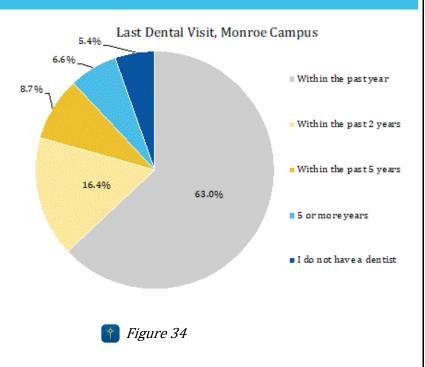
42

### ····· Dentists ·····

The Mayo Clinic refers to dental health as "a window to your overall health." 110 Oral pain can be debilitating in some circumstances and can affect one's overall daily life, impacting their ability to go to work or school. Poor oral health can also lead to a host of other issues in the body. A build-up of bad bacteria in your mouth due to poor oral hygiene can cause respiratory, digestive, and cardiovascular diseases.

Monroe county has a ratio of individuals in the population per dentist of 2,580:1, which is worse than Pennsylvania (1,410:1) and U.S. top performers (1,210:1).<sup>111</sup> In recent years, there has been a trend of an increasing number of dentists in the county, yet the number of dentists remains far below what is needed to address poor dental healthcare access.

Within the past year, 63% of CHNA respondents from the Monroe service area have seen a dentist, 16.4% have seen a dentist within the past 2 years, 8.7% within the past 5 years, 6.6% have seen a dentist 5 or more years ago, and 5.4% do not have a dentist. Additionally, 61.7% of respondents use private insurance for dental care, followed by no coverage (30.1%), Medicaid (7%), and Veteran's administration (0.9%).



## ..... Mental Health Providers

Mental health has also been identified as a significant challenge facing the communities in all our counties. The COVID-19 pandemic has greatly impacted access to mental healthcare. As an indicator of mental healthcare providers and access in the county, Monroe has an overall ratio of population to mental healthcare providers of 830:1 which is much worse than Pennsylvania (450:1), and far below U.S. top performers (270:1). There are almost half as many mental healthcare providers in Monroe county than Pennsylvania overall.<sup>112</sup>

<sup>110</sup> https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/dental/art-20047475

<sup>111</sup> https://www.countyhealthrankings.org/

<sup>112</sup> https://www.countyhealthrankings.org/



### "The shortage of mental health professionals is a major challenge. Many mental health openings are unfilled."

## ······ Health Insurance ·····

Uninsured rates represent a major barrier to access to care. Often, uninsured patients get very ill before seeking care, leading to higher medical costs. An issue that is prevalent in many areas is the lack of providers ability to take a range of insurances. Federally Qualified Health Centers (FQHC) are a crucial step in treating people without insurance and insurance that has minimal coverage. The Health Resources and Services Administration (HRSA) defines a community-based health care provider as one who offers primary care services to underserved areas. FQHCs must provide services on a sliding fee scale based on the patient's ability to pay. While FQHCs are crucial to addressing health needs, knowledge and awareness that FQHCs exist and take all or no insurance is crucial. Community Health Workers (CHW) are the next step in bridging the health gap. CHWs are defined as "a frontline public health worker who is a trusted member and/or has an unusually close understanding of the community served." The CHW is the liaison between health and social services and the community. They serve an important role in improving quality of services with cultural competency, increasing health knowledge in the community, and providing advocacy. CHWs help inform people of the services available, regardless of insurance type or being insured, helping to increase access for all.

Uninsured rates in Monroe county stand at 6.5% overall compared to 6.4% of people in the Monroe service area. When broken down by age, 4.4% of the uninsured service area is below 18 years old, 8.6% is 18-64 years old, and 0.5% is 65 and older. In Pennsylvania, 5.7% of people are uninsured and 8.8% in the United States.

In the Monroe service area, CHNA respondents with a household income less than \$14,999 primarily use Medicaid (32.8%), do not know their primary insurance (14.3%), or use Medicare (6.1%) as their primary insurance. Conversely, respondents who make \$60,000 or more primarily use private insurance (71.2%) and Veteran's Administration (46.2%). These findings reinforce the need for FQHCs in St. Luke's service areas along with doctors who accept Medicaid and uninsured patients.

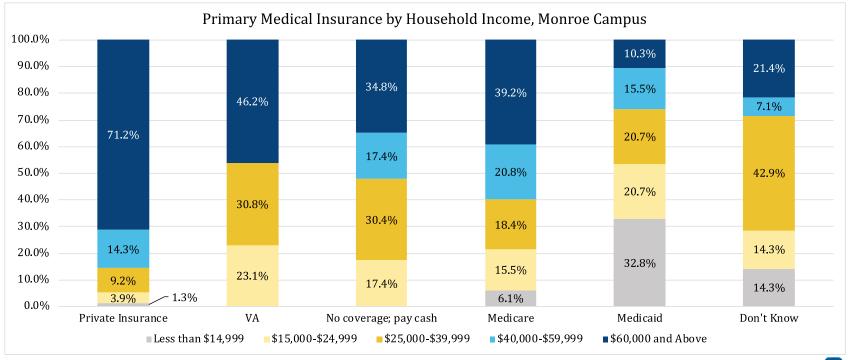
In addition, to assess the relationship between income and insurance, it is also important to look at ethnicity and insurance. Of respondents in the Monroe campus service area with private insurance, 19.5% are Hispanic; 23.1% with Veteran's Administration are Hispanic; 8.7% with no coverage are Hispanic; 10.3% with Medicare are Hispanic; 32.2% with Medicaid are Hispanic, and of those who do not know, 30.8% are Hispanic (Figure 36).

<sup>113</sup> https://www.hrsa.gov/opa/eligibility-and-registration/health-centers/fqhc/index.html

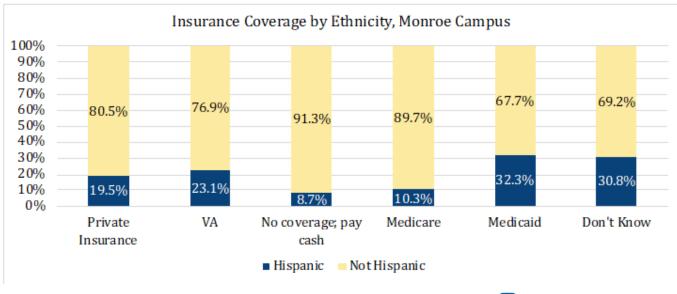
<sup>114</sup> https://www.apha.org/apha-communities/member-sections/community-health-workers

<sup>115</sup> https://data.census.gov/cedsci/

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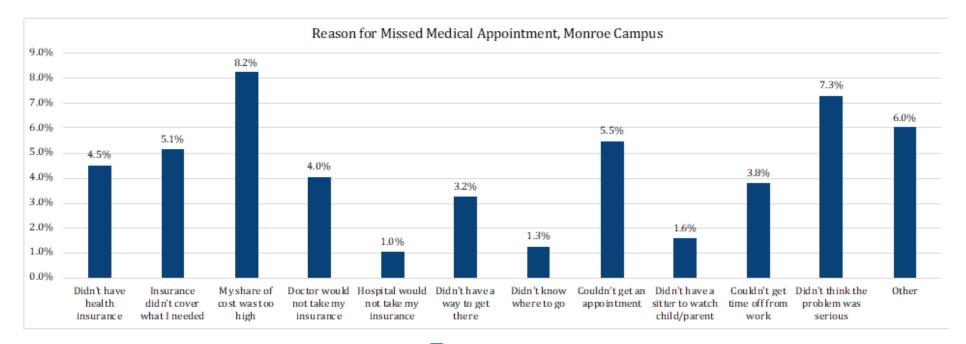




# ····· Hospital Data ·····

St. Luke's is one of two major health networks in the Lehigh Valley with a variety of health services ranging from behavioral health to cardiology to gastroenterology and more. St. Luke's addresses the inequities in healthcare and services through partnerships in the communities with nonprofits, schools, and businesses. Through these partnerships we implement enhanced care, health initiatives, support, as well as outreach for health education, healthy lifestyles, and preventative care.

When asked to indicate reasons for any recently missed medical appointments, the top three reasons reported in the Monroe service area were: the copay was too high (8.2%), did not think the problem was serious enough (7.3%), and other (6%). Only 1% of respondents indicated their reason for missing an appointment was due to the hospital not taking their insurance. These findings further reinforce the need for more adequate health insurance and facilities that offer assistance or sliding scales to lessen the financial burden of healthcare. In order to better support our service area population, St. Luke's provided \$287.3 million dollars in charity care throughout the network.



## ····· Top Reasons for Hospitalization ·····

Hospital data helps us to better understand the major health issues in our community. This allows us, from both a treatment and prevention perspective, to focus efforts on priority areas most affecting the health of our patient population. The top 10 reasons for hospitalization at St. Luke's Monroe campus are listed in Figure 38. Sepsis is the most common diagnosis during an inpatient encounter; accounting for 7.1% Monroe campus total inpatient encounters.

Principal Diagnosis	Ranking
Sepsis, unspecified organism	1
Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	2
Acute kidney failure, unspecified	3
Hypertensive heart disease with heart failure	4
Pneumonia, unspecified organism	5
Chronic obstructive pulmonary disease with (acute) exacerbation	6
Acute and chronic respiratory failure with hypoxia	7
Acute respiratory failure with hypoxia	8
Other specified sepsis	9
Cellulitis of left lower limb	10

Figure 38

## ..... Emergency Department Encounters .....

In fiscal year 2020, the average number of Emergency Department (ED) encounters per ED patient seen at St. Luke's Monroe campus was 1.78, which is above the network average of 1.75 and the second highest number of average ED encounters per patient in the network (Figure 39).



"Despite growth in health care options, getting appointments with primary care providers in the area has only gotten worse, and residents increasingly turn to urgent care and emergency rooms for treatment."

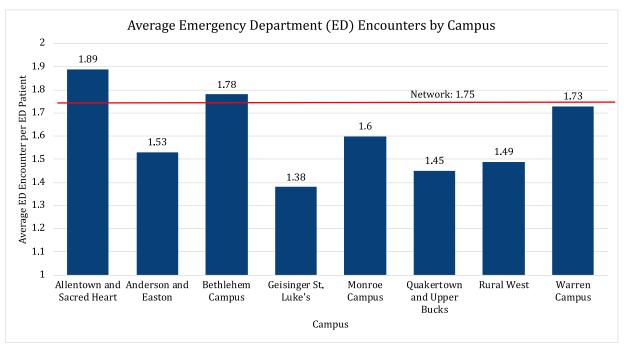


Figure 39

ED utilization can be used as an indicator to gauge the lack of PCP coverage. When comparing ED visits by household income, there is no clear pattern; 57.8% of respondents who have not visited the ER in the past year make \$60,000 and above along with 28.6% of those who have visited the ER 5 or more times in the past year. These findings may indicate that there is a large PCP shortage in general, not just a shortage of affordable PCPs, as well as a need for education related to appropriate ED use. Note that multiple service areas contain multiple hospitals and therefore multiple EDs. The ED encounters are an average of the encounters at those hospitals.

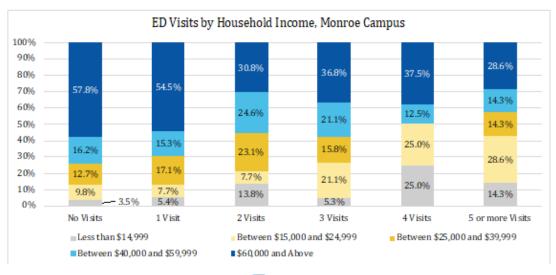


Figure 40

# **Health Behaviors**

# ····· Obesity ·····

According to the CDC, obese adults have a higher risk for developing heart disease, type 2 diabetes and certain cancers, and, as a result, obesity is estimated to cost the U.S. healthcare system \$147 billion annually. For each obese individual, their medical costs are estimated to be \$1,429 higher than the medical costs of an individual whose BMI falls into the normal weight category. Many factors play a role in the obesity epidemic and its rapid increase over the last few decades including: lack of vegetable consumption, lack of physical activity, poor portion control, and poor access to outdoor recreational activities and healthy foods.

In 2018, 42.4% of U.S. adults were obese—an almost 12% increase in obesity rates since 2000.<sup>117</sup> The 2020 report by Trust for America's Health (TFAH) reports that "socioeconomic factors such as poverty and discrimination have contributed to higher rates of obesity among certain racial and ethnic populations. Black adults have the highest level of adult obesity nationally at 49.6%; that rate is driven in large part by an adult obesity rate among Black women of 56.9%."<sup>118</sup> Additionally, concerns have risen in recent years as obesity is an underlying health condition associated with some of the most serious consequences of COVID-19. This means that 42% of all Americans are at increased risk of serious, possibly fatal, health impacts from COVID-19 due to their weight and health conditions related to obesity. TFAH reported that Pennsylvania ranks 22 out of 51 states (including Washington, DC) for percentage of adults with obesity and ranks 21 for adults who are overweight.<sup>119</sup> Additionally, 41.5% of Black adults, 30.9% of Latino adults and 31.3% of White adults in Pennsylvania are obese. The age bracket with the greatest number of adults with obesity in Pennsylvania is 45-64 years old, accounting for 38.2% of adults with obesity. When assessing childhood obesity, the most recent TFAH report found that 12.8% of children ages 2-4 and 17.4% of children ages 10-17 in Pennsylvania are obese.

Robert Wood Johnson's County Health Rankings also assess obesity by measuring the percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m². According to the CDC, "Body Mass Index (BMI) is a person's weight in kilograms divided by the square of height in meters. A high BMI can be an indicator of high body fatness. BMI can be used to screen for weight categories that may lead to health problems, but it is not diagnostic of the body fatness or health of an individual." A BMI below

<sup>116</sup> https://www.cdc.gov/obesity/adult/causes.html

<sup>117</sup> https://www.cdc.gov/obesity/data/adult.html

<sup>118</sup> https://www.tfah.org/report-details/state-of-obesity-2020/

<sup>119</sup> https://www.tfah.org/wp-content/uploads/2020/09/TFAHObesityReport\_20.pdf

<sup>120</sup> https://www.cdc.gov/healthyweight/assessing/bmi/index.html

18.5 is considered underweight, 18.5-24.9 is considered normal, 25.0-29.9 is considered overweight, and 30 or above is considered obese. The County Health Rankings reports that 31% of adults in Pennsylvania are obese. Monroe county reports that 33% of adults in the county are obese.

According to the 2022 CHNA survey, 0.5% of respondents are underweight, 21% are healthy, 34.1% are overweight, and 44.4% are obese, according to BMI. The number of respondents who are overweight has increased since 2019.

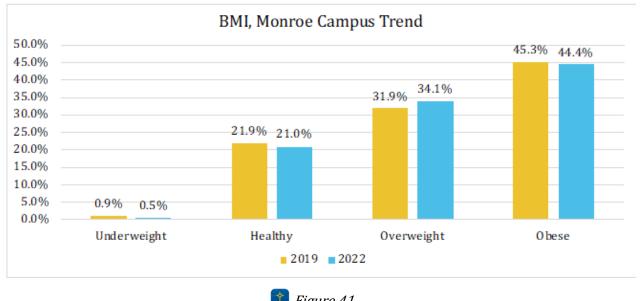


Figure 41

# ······ Physical Inactivity ··

According to the CDC, fewer than 1 in 4 children get enough physical exercise and only 1 in 4 adults meet physical activity guidelines 121. Healthy People 2030 aims to reduce the proportion of adults who engage in no leisure time physical activity and increase the proportion of adults who meet current physical aerobic physical activity recommendations of exercising 30 minutes a day for 5 days a week. 122

County Health Rankings measure physical inactivity as the percentage of adults aged 20 and over reporting no leisure-time physical activity. Robert Wood Johnson reports that "physical activity improves sleep, cognitive ability, and bone and musculoskeletal health, as well as reduces risks of dementia. Physical inactivity is not only associated with individual behavior but also community conditions such as expenditures on recreational activities, access to infrastructure, and poverty." 123 In Pennsylvania, 22% of adults have no leisure-time

<sup>121</sup> https://www.cdc.gov/physicalactivity/data/index.html

<sup>122</sup> https://health.gov/healthypeople/objectives-and-data/browse-objectives/physical-activity/

<sup>123</sup> https://www.countyhealthrankings.org/

physical activity along with 24% of adults in Monroe county, which is the lowest of all service area counties. Additionally, the Rankings measure access to exercise opportunities, which "measures the percentage of individuals in a county who live reasonably close to a location for physical activity. Locations for physical activity are defined as parks or recreational facilities. Individuals are considered to have access to exercise opportunities if they: reside in a census block that is within a half mile of a park; or reside in an urban census block that is within one mile of a recreational facility; or reside in a rural census block that is within three miles of a recreational facility."124 In Pennsylvania, 84% of individuals have access to exercise opportunities along with 86% of individuals in Monroe county.

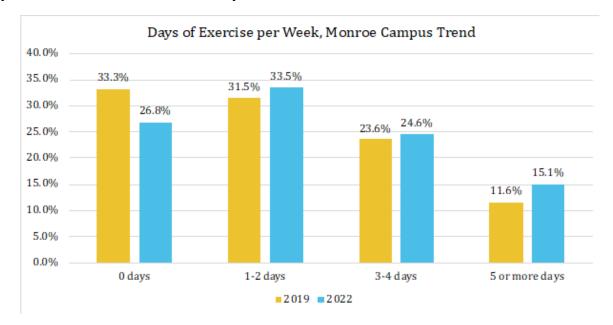


Figure 42

When asked how many days a respondent exercises 30 minutes, 26.8% of CHNA survey respondents from the Monroe service area indicated 0 days. However, 33.5% of respondents indicated exercising 1-2 days a week, 24.6% exercising 3-4 days a week, and 15.1% exercising 5 or more days a week- the Healthy People 2030 recommendation. The number of respondents who exercise has increased by each category; the number of respondents who exercise 1-2 days per week increased 2 percentage points since 2019, 3-4 days per week increased 1 percentage point, and 5 or more days increased 3.5 percentage points.

## ----- Diet -----

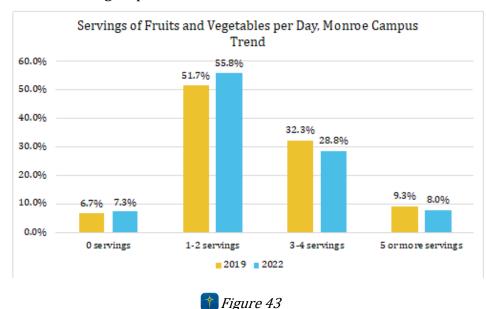
Diet (i.e., fruit and vegetable consumption) plays a large role in overall health and reducing chronic disease. The CDC states that eating a diet filled with a variety of fruits and vegetables can reduce the risk of type 2 diabetes, certain cancers, and cardiovascular disease<sup>125</sup>—all which play a role in the top leading causes of death nationally.

<sup>124</sup> https://www.countyhealthrankings.org/

<sup>125</sup> https://www.cdc.gov/nccdphp/dnpao/division-information/media-tools/adults-fruits-vegetables.html

Released in February 2021, the CDC surveyed adults 20 years and older, finding that the majority of adults consumed a serving of fruit (67.3%) or vegetable (95%) on a given day, with more women reporting eating a serving of a fruit and vegetable on a given day. <sup>126</sup> Compared to our survey results, 93.3% of network survey respondents and 92.7% of Monroe service area respondents report eating at least one serving or fruit or vegetables per day. Additionally, America's Health Rankings surveyed adults across the country asking respondents to indicate consuming two or more servings of fruit and three or more servings of vegetables daily (five servings total). <sup>127</sup> In Pennsylvania, 7% of adults consume two or more servings of fruit and three or more servings of vegetables daily along with 8% of adults in the U.S.

The sweet food consumption NHANES survey assessed sweet food consumption of snack or meal bars, sweet bakery products, candy, and other desserts, but excluded fruit and all types of beverages. Sweet foods are typically a major source of energy, added sugar, and saturated fats with limited essential ingredients. It is recommended to limit this consumption and emphasize a diet with nutrient-dense foods. The surveyed was asked to adults 20 and older, finding that 61% of adults ate sweet foods on any given day, with the percentage increasing among adults 60 years or older. Sweet food consumption was also highest among the middle and highest income groups compared to the lowest income group.



In the CHNA survey, we found that only 8.1% of respondents from the Monroe service area eat 5 or more servings of fruits and vegetables per day. The majority of respondents, 55.8%, eat 1-2 servings per day and 7.3% do not eat any servings.

The number of respondents who eat 1-2 servings per day has increased 4 percentage points since 2019. Furthermore, looking at fruit and vegetable consumption by income shows that number of servings increases with income. Of respondents who make less than \$14,999, 20.4% do not consume any fruits and vegetables. The majority of respondents in each income bracket consume 1-2 servings of fruits and vegetables a day, followed by 3-4 servings per day. Respondents who make \$60,000 and above have the highest percentage of respondents who eat 5-7 servings a day (8.4%).

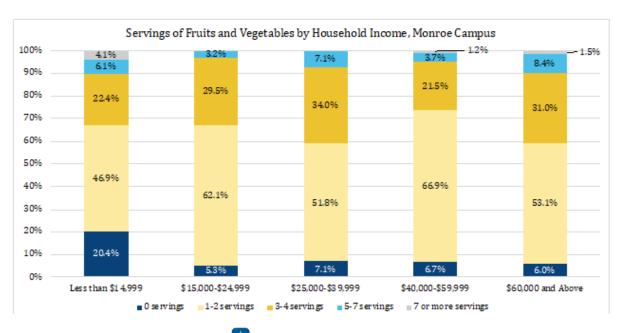
<sup>126</sup> https://www.cdc.gov/nchs/data/databriefs/db397-H.pdf

<sup>127</sup> https://www.americashealthrankings.org/explore/annual/measure/fvcombo/state/U.S.

<sup>128</sup> https://www.ars.usda.gov/ARSUserFiles/80400530/pdf/DBrief/34\_Sweet\_foods\_children\_1518.pdf

<sup>129</sup> https://www.ars.usda.gov/ARSUserFiles/80400530/pdf/DBrief/33\_Sweet\_foods\_adults\_1518.pdf

2022 St. Luke's University Health Network Monroe Community Health Needs Assessment



## 👣 Figure 44

### ····· Free or Reduced Lunch ·····

During the 2018-2019 school year, 53.3% of students in Pennsylvania were eligible for free or reduced lunch.<sup>130</sup> Free or reduced lunch is a part of the National School Lunch Program (NSLP), a federally assisted meal program providing nutritionally balanced, low cost or free school lunches each day in public, private, and residential child care institutions.<sup>131</sup> In order to qualify for the NSLP, families must have an income at or below 130% of the poverty level. In 2016, the NSLP reached 30.4 million children nationwide.

Percent of Children During 2018-2019 School Year
with Free or Reduced Lunch Eligibility

MonroeMonroe Career and Tech Inst	42.2%
MonroeStroudsburg Area (Rural)	45.1%
MonroePleasant Valley (Rural)	46.2%
MonroePocono Mountain (Rural)	54.8%
MonroeEast Stroudsburg Area (Rural)	61.4%
Average	49.9%

Figure 45

 $<sup>^{130}\,</sup>https://datacenter.kidscount.org/data/tables/2720-school-lunch--students-eligible-for-free-or-reduced-price lunch?loc=40&loct=10#detailed/2/any/false/1740/any/10325$ 

<sup>131</sup> https://www.fns.usda.gov/nslp

In Monroe county, an average of 49.9% of all students qualify for free or reduced lunch. East Stroudsburg area report the highest percentage of eligible students (61.4%), and the Monroe Career and Tech Institute reports the lowest number of children eligible (42.2%).<sup>132</sup>

# ····· Sexual Activity ·····

Healthy People 2030 reports that there are more than 20 million new cases of preventable sexually transmitted infections (STI) in the United States each year. Healthy People 2030 objectives are to increase knowledge and education of sexual education across adolescents and adults, and to decrease the rate of STIs and sexually transmitted diseases (STDs). Adolescents may experience developmental changes that affect physical and mental health, potentially increasing risky behaviors. Risky behaviors increase the chances of STIs and teen pregnancy. Healthy People 2030 objectives for teen pregnancy are to reduce pregnancies in adolescents, increase the percentage of adolescents using effective birth control, and to increase the number of adolescents who receive formal sexual education before age  $18.^{134}$ 

The Robert Wood Johnson Foundation's County Health Rankings assess two sexual activity measures: STI and teen births. The 2021 rankings use STI data that reflects the number of new chlamydia cases per 100,000 population; results indicated a 21% increase in both chlamydia and gonorrhea. Chlamydia is important to assess because it is the "most common bacterial sexually transmitted infection (STI) in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain." Chlamydia also disproportionately impacts adolescent women with 1 in 20 sexually active women ages 14-24 diagnosed with chlamydia. In Pennsylvania, the rate is 463.4 per 100,000 population. The rate in Monroe county is 367.8.

There are also strong connections between teen birth, poor socioeconomic, and/or mental health. Teenage mothers who give birth are less likely to achieve an education level beyond high school and are more likely to experience psychological distress. The measure is represented by the number of births per 1,000 female population ages 15-19 years. In Pennsylvania, the rate is 17 per 1,000 and 11 per 1,000 in Monroe county.

In addition to the impact of teen pregnancy on mothers, the prevalence of low birthweight in teen pregnancy is significant. Low birthweight is when a baby is born weighing less than 5 pounds, 8 ounces. Approximately 1 in 12 babies (8%) in the United States is born with low

<sup>&</sup>lt;sup>132</sup> https://datacenter.kidscount.org/data/tables/2720-school-lunch--students-eligible-for-free-or-reduced-price-lunch?loc=40&loct=10#detailed/2/any/false/1740/any/10325

 $<sup>^{133}\,</sup>https://health.gov/healthypeople/objectives-and-data/browse-objectives/sexually-transmitted-infections$ 

<sup>134</sup> https://health.gov/healthypeople/objectives-and-data/browse-objectives/adolescents

<sup>135</sup> https://www.countyhealthrankings.org/

<sup>136</sup> https://www.cdc.gov/std/chlamydia/stdfact-chlamydia-detailed.htm

<sup>137</sup> https://www.countyhealthrankings.org/

birthweight. A low birthweight may have significant complications, including birth defects, infections, trouble eating, and trouble gaining weight. Teen mothers (and mothers over 40) are highly likely to have a low birthweight child. Between 2015-2019, 9.3% of births in

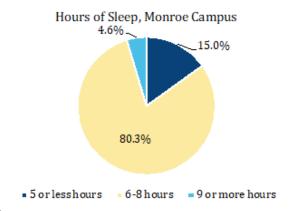
# Sleep .....

The Robert Wood Johnson Foundation indicated that sleep is an important part of a healthy lifestyle and a lack of sleep can have serious and negative health effects. Healthy People 2030 also reports that approximately 1 in 3 adults do not get enough sleep. Ongoing sleep deficiency has been linked to a number of health conditions such as heart disease, stroke, depression, and anxiety. Some of the objectives for Healthy People 2030 include the reduction of motor vehicle crashes due to exhaustion and to increase the percentage of children and adults who get enough sleep. The 2021 Robert Wood Johnson County Health Rankings assessed the percent of adults who report less than 7 hours of sleep on average. In Pennsylvania, 39% of adults report less than 7 hours of sleep and 41% of adults in Monroe county do not get enough sleep. This is the highest percentage out of the service area counties.

The 2019 PAYS survey asked students to indicate if on average, they get less than 7 hours of sleep a night.<sup>142</sup> In Pennsylvania, 37.9% of students reported averaging less than 7 hours of sleep a night and 43% of students in Monroe county do not get enough sleep, which is the highest percentage of all service area counties. The survey also asked if students "felt tired or sleepy during the day," "every day," or "several times" during the past two weeks. Across Pennsylvania, 64.7% of students indicated consistent sleepiness during the past 2 weeks and 65.4% of students in Monroe county agreed with this statement.

To get an understanding of how many hours of sleep CHNA survey respondents get, we asked respondents to indicate, on average, the number of hours they sleep in a 24 hour period. The majority of respondents in the Monroe service area (80.3%) get 6-8 hours of sleep per night, 4.6% of respondents get more than the recommended 8 hours per night, and 15% get 5 hours or less per night.





 $<sup>^{138}\</sup> https://www.marchofdimes.org/complications/low-birthweight.aspx\#$ 

 $<sup>^{139}\,</sup>https://health.pa.gov/topics/HealthStatistics/VitalStatistics/CountyHealthProfiles/Documents/current/ma$ 

<sup>&</sup>lt;sup>140</sup> https://www.countyhealthrankings.org/

<sup>141</sup> https://health.gov/healthypeople/objectives-and-data/browse-objectives/sleep

<sup>142</sup> https://www.pccd.pa.gov/Juvenile-Justice/Pages/Pennsylvania-Youth-Survey-(PAYS)-2019.aspx

## ····· Mental Health ·····

Mental health has been an increasing issue during the last 10 years, even prior to COVID-19. Mental health disorders can affect people of all age and racial groups, but some populations have disproportionately higher rates of diagnosis. Mental health disorders like anxiety and depression can affect a person's ability to take part in healthy behaviors and result in physical health problems making it harder for them to get treatment for mental disorders. Goals related to mental health for Healthy People 2030 are to increase the proportion of people who get treatment for substance use and mental health disorders, increase the proportion of children and adolescents with symptoms of trauma who get treatment, increase quality of life for cancer survivors, reduce the suicide rate, and increase the proportion of public schools with a counselor, social worker, and psychologist. To help reach, educate, and connect people with mental health disorders to care, there is a local National Alliance on Mental Illness (NAMI) or related chapter in each service area. For Carbon and Monroe there is the Carbon-Monroe-Pike Mental Health and Developmental Services. Mental Health and Developmental Services.

According to the State of Mental Health in America 2021 Report, 19% of adults prior to COVID-19 experienced a mental illness. Now, 10.8% of Americans suffering from a mental illness are uninsured and 24% of adults with a mental illness report an unmet need for treatment. The report ranks states on their prevalence rates and access to care for adults and youth. States ranked 1-13 have lower prevalence and higher access to care, while 40-51 (including The District of Columbia) have higher prevalence rates and lower access to care. For overall rankings, Pennsylvania ranks 5 for adults and 2 for youth, indicating a lower prevalence rate and more access to care. The 2021 report indicated that 19% of Americans report experiencing any mental illness (AMI) which is characterized as having a diagnosable mental, behavioral, or emotional disorder other than a developmental or substance use disorder. Pennsylvania ranks 11 with a 18.2% prevalence rate. Additionally, 4.6% of adults experience a severe mental illness. See Figure 47 for more information on questions covered in the report.



"There were significant levels of anxiety, depression and isolation in the region before COVID, and the mental health crisis has just become even worse."

<sup>143</sup> https://health.gov/healthypeople/objectives-and-data/browse-objectives/mental-health-and-mental-disorders

<sup>144</sup> https://health.gov/healthypeople/objectives-and-data/browse-objectives/mental-health-and-mental-disorders

<sup>145</sup> http://www.cmpmhds.org/

<sup>146</sup> https://www.mhanational.org/issues/state-mental-health-america

<sup>147</sup> https://mhanational.org/issues/2021/ranking-states

2022 St. Luke's University Health Network Monroe Community Health Needs Assessment

State of Mental Health in America 2021 State Adult Rankings			
	PA %	PA rank	US
Adults with Any Mental Illness (AMI)	18.2%	11	19.0%
Adults with Substance Use Disorder in the			
past year	7.3%	15	7.7%
Adults with serious thoughts of suicide	4.2%	12	4.3%
Adults with AMI who are uninsured	6.0%	8	10.8%
Adults with AMI who did not receive			
treatment	53.0%	21	57.0%
Adults with AMI reporting an unmet need	26.8%	44	23.6%
Adults with disability who could not see a			
doctor due to costs	22.5%	10	28.7%

Figure 47

The 2021 Report also ranked states by youth measures, and 13.8% of youth ages 12-17 reported suffering from at least one major depressive episode in the past year. A major depressive episode is "a period of two weeks or longer in which a person experiences certain symptoms of major depression: feelings of sadness and hopelessness, fatigue, weight gain or weight loss, changes in sleeping habits, loss of interest in activities, or thoughts of suicide." Additionally, 9.7% of youth cope with severe major depression, which often co-occurs with substance use and anxiety. See Figure 48 for more information on questions asked.

State of Mental Health in America 2021 State Youth Rankings			
	PA %	PA rank	US
Youth with at least on Major Depressive Episode (MDE) in the past year	11.9%	3	13.8%
Youth with Substance Use Disorder in the past year	7.1%	4	9.7%
Youth with severe MDE	3.4%	8	3.8%
Youth with MDE who did not receive mental health services	57.5%	28	59.6%
Youth with severe MDE who received some consistent treatment	37.1%	10	27.3%

Figure 48

 $<sup>^{148}\,</sup>https://www.bridgestorecovery.com/major-depression/what-is-a-major-depressive-episode/$ 

During the COVID-19 pandemic, the National Center for Health Statistics (NCHS) partnered with the U.S. Census Bureau for the Household Pulse Survey, which asked people about the frequency of anxiety and depression symptoms they have experienced. <sup>149</sup> The survey has been ongoing, broken up into phases. Phase 1 ran April 23, 2020 to July 21, 2020. Phase 2 ran August 19, 2020 to October 26, 2020. Phase 3 ran October 28, 2020 to March 29, 2021. Phase 3.1 ran April 14 2021 to July 5, 2021. Phase 3.2 ran July 21 to October 11, 2021. All Phases had periods of break in between. Nationally, 27.3% of adults reported experiencing symptoms of an anxiety disorder within the past 7 days at mid-October 2021, with the highest percentage at 37.2% in November 2020 and the lowest at 25.5% at the beginning of July 2021. Additionally, 21.8% of adults report experiencing symptoms of a depressive disorder within the past 7 days at mid-October 2021, with the highest percentage at 30.2% in December 2020 and the lowest 20.9% at the beginning of July 2021. When anxiety and depression symptoms were surveyed together, 31.6% of adults report experiencing symptoms of either an anxiety disorder or depressive disorder in the past 7 days at mid-October 2021, with the highest 42.6% at the end of November 2020 and the lowest at 29% at the beginning of July 2021. However, in Pennsylvania at mid-October 2021, 31% of people reported symptoms of an anxiety disorder in the past 7 days, which ranks 7 out of 51 states including Washington, DC. The higher the ranking, the higher the percentage. During this time in Pennsylvania, 24% of people report experiencing an anxiety disorder in the past 7 days, ranking 13 out of 51. Lastly, when asked together, 33.8% of people in Pennsylvania report experiencing an anxiety disorder or depressive disorder, ranking 14 out of 51.

Starting in Phase 2, the Pulse survey began asking about mental healthcare. At mid-October 2021, 11% of people in the U.S. report needing counseling or therapy in the last 4 weeks but not receiving care, and 11% of people in Pennsylvania report needing counseling and not receiving care, ranking 25 out of 51. Additionally, as of July 5, 2021, 18.6% of respondents across the U.S. delayed or did not get care in the last 4 weeks. This has been on a downward trend since June 30, 2020 when 45.7% of people delayed or did not get care. This question did not get asked again after the completion of Phase 3.1. As of July 5, 2021 in Pennsylvania, 19% of people delayed or did not get care in the last 4 weeks. Finally, in mid-October 2021, 10% of people in the U.S. at the time of the interview did not have health insurance. The uninsured rate at the time of the interview has consistently been between 10 and 14% since Phase 1. During this time in Pennsylvania, 8% of people were uninsured at the time of the interview, ranking 22 out of 51.

Prior to COVID-19, depression was still an issue facing the U.S. and the residents of our service area. The National Institute of Mental Health (NIMH) defines depression as a mood disorder that causes "severe symptoms [that] affect how you feel, think, and handle daily activities, such as sleeping, eating, or working. To be diagnosed with depression, the symptoms must be present for at least two weeks." Some signs of depression are, but not limited to: a persistent sad mood; feelings of hopelessness or pessimism; decreased energy or fatigue; difficulty concentrating, remembering, or making decisions; and thoughts of death or suicide. Depression can happen at any age but is more common in adulthood. In midlife or older adults, depression can co-occur with other serious medical illnesses (e.g., diabetes, cancer, heart disease,

<sup>149</sup> https://www.cdc.gov/nchs/covid19/pulse/mental-health.htm

<sup>150</sup> https://www.nimh.nih.gov/health/topics/depression/index.shtml

Parkinson's disease).<sup>151</sup> Risk factors include personal or family history of depression, major life changes, trauma, or stress, certain physical illnesses, and medications. Depression can be treated with medications, psychotherapy (e.g., counseling), or a combination of both. In Pennsylvania, the state asked about depression on the 2019 Behavioral Health Risk Factor Surveillance System (BRFSS), which included depression, major depression, and minor depression (i.e., dysthymia). The survey found that 20% of people in Pennsylvania were depressed. The survey broke the counties into clusters, finding that 12.2% of Monroe, Pike, Susquehanna, and Wayne report a depression diagnosis.<sup>152</sup>

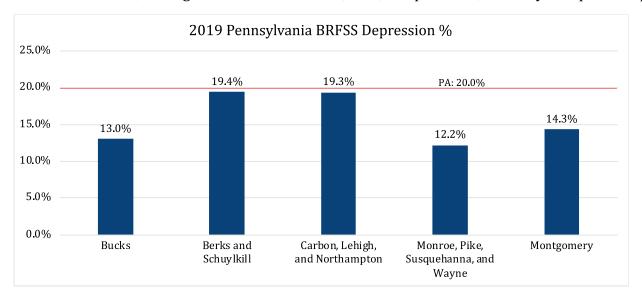


Figure 49

Anxiety is another common mental disorder that affects people across the country. Anxiety is a normal part of life, but for a disorder, it is more than temporary worry or fear. The NIMH says "for a person with an anxiety disorder, the anxiety does not go away and can get worse over time. The symptoms can interfere with daily activities such as job performance, schoolwork, and relationships." Risk factors for anxiety disorders differ for each disorder, but generally include temperamental traits of shyness or behavioral inhibition in childhood, exposure to a stressful or negative life or environmental events in early childhood or adulthood, a history of anxiety in relatives, and some health conditions. Anxiety disorders can be treated with psychotherapy, medication, or a combination. In 2020, the CDC released a report

<sup>151</sup> https://www.nimh.nih.gov/health/topics/depression/index.shtml

 $<sup>^{152}\,</sup>https://www.health.pa.gov/topics/HealthStatistics/BehavioralStatistics/BehavioralRiskPAAdults/Pages/BehavioralRisksPAAdults.aspx$ 

<sup>153</sup> https://www.nimh.nih.gov/health/topics/anxiety-disorders/index.shtml

<sup>154</sup> https://www.nimh.nih.gov/health/topics/anxiety-disorders/index.shtml

of symptoms of Generalized Anxiety Disorder (GAD) among adults in the U.S.. GAD displays excessive anxiety orworry, most days for at least 6 months, about numerous things, causing significant problems in areas of life like social interactions, school, and work. 155

The CDC survey found that 9.5% of adults experienced mild symptoms of anxiety, 3.4% experienced moderate symptoms of anxiety, and 2.7% experienced severe symptoms of anxiety in the past 2 weeks, while 84.4% of people reported no or minimal symptoms. 156 The percentage of adults who experienced all types of symptoms was highest among those 18-29 years and decreased with age. One significant finding in the study was that women are more likely to experience all levels of anxiety symptoms than men.

In addition to anxiety and depression, substance use is another disorder that has continued to affect many Americans. A substance use and suicide study done by Substance Abuse and Mental Health Services Administration (SAMHSA) in 2016 found that nearly 1 in 12 adults in the United States had a substance use disorder. 157 The NIMH describes substance use disorder as a mental disorder that affects a person's brain and behavior with drug use and can interfere with a person's ability to work, to go to school, and to have good relationships with family and friends.158

2019 CDC Percent of Adults in US Experiencing **Anxiety Symptoms** 9.5%

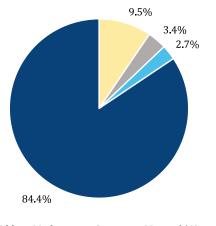


Figure 50

Mild Moderate Severe Minimal/None

Substance use disorder vulnerability can largely be attributed with genetics, but physical and emotional trauma also puts people at a higher risk. The 2021 State of America report found that 7.7% of adults in America and 7.3% of adults in Pennsylvania reported having a substance use disorder in the past year. <sup>159</sup> In 2016, the SAMHSA study found that opiates, including heroin and prescription pain killers, were present in 20% of suicide deaths in the U.S. Additionally, 22% of all suicide deaths in 2016 involved alcohol intoxication. Alcohol is a commonly used substance, but its ability to increase aggressiveness and constrict cognition, which impairs coping strategies and may increase risk of suicidal behaviors.<sup>160</sup>

Suicide involves dynamic interactions between national issues, community issues, families and relationships, and individual health and or well-being. 161 It has become a growing concern as it is now the 10th leading cause of death among all ages in the United States, but second

<sup>155</sup> https://www.nimh.nih.gov/health/topics/anxiety-disorders/index.shtml

<sup>156</sup> https://www.cdc.gov/nchs/products/databriefs/db378.htm

<sup>157</sup> https://store.samhsa.gov/sites/default/files/d7/priv/sma16-4935.pdf

<sup>158</sup> https://www.nimh.nih.gov/health/topics/substance-use-and-mental-health/index.shtml

<sup>&</sup>lt;sup>159</sup> https://mhanational.org/issues/2021/ranking-states

<sup>160</sup> https://store.samhsa.gov/sites/default/files/d7/priv/sma16-4935.pdf

<sup>161</sup> https://www.mentalhealth.va.gov/docs/data-sheets/2019/

<sup>2019</sup>\_National\_Veteran\_Suicide\_Prevention\_Annual\_Report\_508.pdf

leading cause of death for ages 10-34 and fourth for ages 35-54. Suicide is likely to remain a significant issue during, and well beyond, the pandemic. The long-term effects on the general population, the economy, and vulnerable groups is unknown, but the impact on mental health and suicide risk may also be increased during the pandemic due to the stigma towards individuals with COVID-19 and their families. Therefore, responses to suicide should target the whole population, focusing on particular risk factors like financial stressors, alcohol consumption, isolation, and access to care. 164

A CDC Suicide Mortality report in the United States from 1999-2019 was released February 2021, outlining the suicide rate over a 10-year period. The age-adjusted rate in 2019 was 13.9 per 100,000 people, which is slightly lower than the rate in 2018 (14.2). The 2019 crude rate is 24.5 per 100,000 people. In 2018, the National Hospital Ambulatory Medical Care Survey (NHAMCS) reported 312,000 emergency visits for self-injury. CDC WONDER data (1999-2019) shows the 2019 crude rate of suicide by intentional self-harm at 11.9 per 100,000 deaths.

Released in September 2020, the National Vital Statistics Report and CDC published a report on suicide among adolescent and youth ages 10-24 years from 2000-2018. The average percent increase in suicide deaths among 10-24 years in the U.S. from 2007-2009 to 2016-2018 is 47.1% nationally and 53.6% in Pennsylvania. After a period of stability from 2000-2007, the suicide rate among youth and adolescents increased 57.4%, which went from 6.8 deaths per 100,000 in 2007 to 10.7 per 100,000 in 2018. The northeast states had among the lowest suicide rates in the country from 2016-2018. Pennsylvania's suicide rate in 2016-2018 was 10.6 per 100,000 deaths.

In response to growing suicide rates, in September 2020 Pennsylvania created a suicide prevention plan, outlining 8 specific prevention goals including prevention awareness efforts that reduce stigma and promote safety, help-seeking, and wellness; promote trauma-informed approaches to support all Pennsylvania residents as part of upstream, universal suicide prevention efforts; and provide quality training on the prevention of suicide and management of suicide risk across multiple sectors and settings.<sup>172</sup>

<sup>162</sup> https://www.cdc.gov/nchs/products/databriefs/db398.htm

<sup>&</sup>lt;sup>163</sup> https://doi.org/10.1016/S2215-0366(20)30171-1

<sup>&</sup>lt;sup>164</sup> https://doi.org/10.1016/S2215-0366(20)30171-1

<sup>165</sup> https://www.cdc.gov/nchs/products/databriefs/db398.htm

<sup>166</sup> https://wonder.cdc.gov/controller/datarequest/D76;jsessionid=BF94A69A2EA7B26A79CC60EBC4B1

<sup>167</sup> https://www.cdc.gov/nchs/fastats/suicide.htm

<sup>168</sup> https://wonder.cdc.gov/controller/datarequest/D76;jsessionid=808281E7650E525FCF44896FE0B4

<sup>169</sup> https://www.phaim1.health.pa.gov/EDD/WebForms/DeathCntySt.aspx

<sup>170</sup> https://www.cdc.gov/nchs/data/nvsr/nvsr69/nvsr-69-11-508.pdf

<sup>171</sup> https://www.cdc.gov/nchs/data/nvsr/nvsr69/nvsr-69-11-508.pdf

<sup>172</sup> https://www.dhs.pa.gov/Services/Mental-Health-In-PA/Documents/PA%20Statewide%20Suicide%20Prevention%20Plan.pdf

Some populations are more vulnerable than others to mental disorders, substance use and suicide. A SAMHSA study published in June 2020 found that Hispanic populations are more likely to lack high-quality evidence-based cultural grounded treatment options and have disparities in treatment outcomes. Additionally, 1 in 20 Hispanic people do not receive services from a mental health specialist due to stigma, discrimination and lack of knowledge about services. This is a population that should be targeted by providing culturally appropriate counseling and specialized outreach and services to encourage care-seeking behaviors.

Another population particularly vulnerable to suicide is veterans. A 2019 National Veteran Suicide Prevention Report by the U.S. Veterans Affairs found that in 2017, veterans accounted for 13.5% of all deaths by suicide in the U.S.<sup>174</sup> Additionally, an average of 16.8 veterans died by suicide each day in 2017. Suicide rates in veterans tend to be affected by economic disparities, homelessness, unemployment, disability status, community connection, and personal health and well-being. Veterans served by the Veterans Health Administration (VHA) who die by suicide are more likely to have sleep disorders, traumatic brain injuries, or a mental health disorder diagnosis. These suicide rates tend to be higher of individuals who live in rural areas and individuals who are isolated. Veterans ages 18-34 years old had the highest suicide rate in 2017, 44.5 per 100,000, which has increased 76% from 2005 to 2017.<sup>175</sup> Veterans are a group that require specialized services and care that addresses the needs of the population.

## ····· Substance Use ·····

According to a 2019 U.S. Health CDC report, 11.7% of people in the United States have used an illicit drug in the past month. An illicit drug is one that is highly addictive and forbidden by law. Some of these include marijuana, opioids like fentanyl and heroin, and stimulants like cocaine and methamphetamine. The Substance Use and Mental Health Services Administration (SAMHSA) defines substance use disorders as occurring "when the recurrent use of alcohol and/or drugs causes clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home." Substance use commonly co-occurs with mental health disorders. Please refer to the mental health section for more detailed information. Substance use is a growing concern in the United States and within our service areas, particularly related to the COVID-19 pandemic. To address the concerns with alcohol, drug and tobacco use, some of Healthy People 2030's objectives are to reduce the number of adults who used drugs in the past month, increase the rate of people with a

 $<sup>^{173}\,</sup>https://mhttcnetwork.org/sites/default/files/2020-06/Mh\_Disparities\_Booklet.pdf$ 

<sup>174</sup> https://www.mentalhealth.va.gov/docs/data-sheets/2019/2019\_National\_Veteran\_Suicide\_Prevention\_Annual\_Report\_508.pdf

<sup>175</sup> https://www.mentalhealth.va.gov/docs/data-sheets/2019/2019\_National\_Veteran\_Suicide\_Prevention\_Annual\_Report\_508.pdf

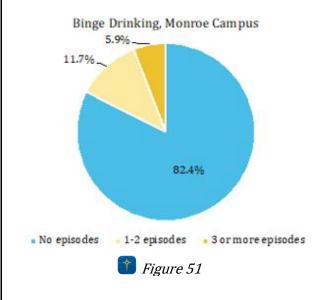
<sup>&</sup>lt;sup>176</sup> https://www.cdc.gov/nchs/data/hus/2019/020-508.pdf

<sup>177</sup> https://www.samhsa.gov/find-help/disorders

substance use disorder who got treatment in the past year, increase the proportion of adolescents who think substance use is risky, and to reduce the rate of opioid related emergency department visits.<sup>178</sup>

### ····· Alcohol ·····

A 2019 CDC alcohol use report found that 25.1% of adults 18 and older have had at least one heavy drinking day (five or more drinks for men and four or more drinks for women) in the past year. The percentage for binge drinking in women is 19.8% and 30.9% for men. Nationally, 1 in 4 adults heavily drank in the past year. In 2019, there were 24,110 alcoholic liver deaths in the U.S. and 39,043 alcoholinduced deaths, which do not include accidents and homicides. Pennsylvania's crude rate for alcohol-induced deaths was 8.2 per 100,000 population. In Monroe county, the data was unreliable as the count was too small.



Pennsylvania's Behavioral Risk Factor Surveillance System (BRFSS) surveyed binge drinking, chronic drinking, and made an assessment about how many people in each county cluster would be at risk for a drinking problem. Binge drinking is "defined as a pattern of drinking that brings a person's blood alcohol concentration (BAC) to 0.08 g/dl or above. This typically happens when men consume 5 or more drinks or women consume 4 or more drinks in about 2 hours." The CDC reports that binge drinking is the most common, costly, and deadly pattern of excessive alcohol use in the United States. Binge drinking can be associated with unintentional car crashes, violence, sexually transmitted diseases, fetal alcohol spectrum disorders, cancer, and more.

Chronic drinking is when someone drinks more than the recommended one (women) or two (men) drinks a day, and more than seven (women) and fourteen (men) drinks in a week. In 2019, the binge drinking percentage in Pennsylvania was 17% and chronic drinking was 6%. The report clustered certain counties together and reported on risk for a

<sup>&</sup>lt;sup>178</sup> https://health.gov/healthypeople/objectives-and-data/browse-objectives/drug-and-alcohol-use

<sup>179</sup> https://www.cdc.gov/nchs/fastats/alcohol.htm

<sup>180</sup> https://public.tableau.com/profile/tina.norris#!/vizhome/FIGURE9 1/Dashboard9 1

<sup>181</sup> https://wonder.cdc.gov/controller/saved/D76/D99F021

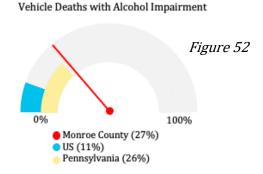
<sup>182</sup> https://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm

<sup>183</sup> https://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm

<sup>184</sup> https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking

drinking problem. The Pike, Monroe, Susquehanna, and Wayne cluster was not reported because the numbers were not statistically reliable. When asked how many binge drinking episodes a CHNA survey respondent had in the past month, 82.4% of respondents in the Monroe service area indicated no episodes. However, 11.7% have had 1-2 episodes in the past month and 5.9% had 3 or more episodes.

In 2018, the Census Bureau released a County Business Patterns (CBP) report. One of the businesses assessed were liquor stores. Liquor store access reports on places primarily engaged in retailing liquor and packaged alcoholic beverages (e.g., beer, wine). This excludes places preparing alcohol for consumption (e.g., bars, restaurants) or places that sell alcohol as a secondary retail product (e.g., gas stations, grocery stores). Research has found that liquor stores are disproportionately located in predominantly Black census tracts. <sup>186</sup> This is an issue because increased access to liquor stores gives individuals easier access and poses a higher risk of developing alcohol use and/or a substance use disorder. The number of liquor stores is reported per 10,000 population. The Monroe service area has 1.2 liquor stores per 10,000 population.



The Robert Wood Johnson Foundation also put out 2021 County Health Rankings on excessive drinking and alcohol impaired driving deaths. Excessive drinking measures the percentage of the county's adult population that reports binge or heavy drinking in the past 30 days. Pennsylvania reported 20% and Monroe county reported 20%, the lowest of all service area counties. The alcohol impaired driving measure assesses the percentage of motor vehicle deaths with alcohol impairment. Alcohol reduces brain function and impairs thinking, which can hinder driving. Drivers 21-24 years old caused 27% of all alcohol impaired deaths in 2015-2019. Pennsylvania reported 26% of all vehicle deaths with alcohol impairment and Monroe county reported 27%.

### ····· Stimulants ····

The drug overdose report for 1999-2019 by the CDC indicates that the age-adjusted rate of drug overdose deaths involving cocaine increased from 1.4 per 100,000 population in 1999 to 4.9 in 2019. It is also reported that the age-adjusted rate of drug overdose deaths involving psychostimulants, which include drugs such as methamphetamine and methylphenidate, increased from 0.2 per 100,000 population in 1999 to 5.0 in 2019. Stimulants are dangerous and easily abused because they increase alertness, attention and energy. An

 $<sup>^{185}</sup> https://www.health.pa.gov/topics/HealthStatistics/BehavioralStatistics/BehavioralRiskPAAdults/Pages/BehavioralRisksPAAdults.aspx$ 

<sup>&</sup>lt;sup>186</sup> DOI: 10.1016/s0277-9536(00)00004-6

<sup>187</sup> https://www.census.gov/programs-surveys/cbp.html

<sup>188</sup> https://www.countyhealthrankings.org/

<sup>189</sup> https://www.cdc.gov/nchs/data/databriefs/db394-H.pdf

overdose of stimulants can result in symptoms including rapid breathing, aggression, hallucinations, overactive reflexes, and more.<sup>190</sup> The 2019 Annual Surveillance Report of Drug-Related Risks and Outcomes from the CDC,<sup>191</sup> reported that in 2018, an estimated 5,529,000, or 2.0% of people 12 years and older, reported cocaine use in the past year. This is highest among people ages 26–29 (6%) and people ages 18-25 (5.8%). In 2018, an estimated 1,867,000, or 0.7% of people 12 years and older, reported methamphetamine use in the past year. This is highest among people ages 30–34 (1.6%), ages 26-29 (1.2%), and ages 35-39 (1.1%). In 2018, an estimated 5,109,000, or 1.9% of people 12 years and older, reported misuse of prescription stimulants in the past year. This is highest among people ages 18-25 (6.5%), followed by ages 26-29 (4.4%), and ages 30-34 (3.4%). Most recently according to the CDC health alert, overdose deaths involving cocaine increased by 26.5% from the 12-months ending in June 2019 to the 12-months ending in May 2020.<sup>192</sup>

There are an average of 510 new methamphetamine users a day 12 years and older, 70 new users a day 12 to 17 years old, 170 new users a day 18 to 25 years old, and 260 new users a day 26 years and older. Using data from 2018 and 2019, SAMHSA reports that 75,000 people 18 years and older in Pennsylvania used methamphetamines in the past year. 193

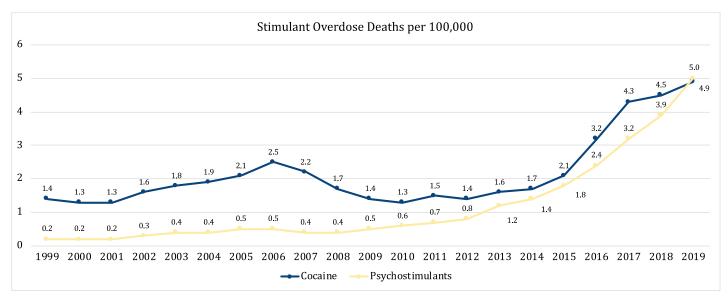


Figure 53

 $<sup>^{190}\,</sup>https://www.drugabuse.gov/publications/drugfacts/prescription-stimulants$ 

 $<sup>^{191}\,</sup>https://www.cdc.gov/drugoverdose/pubs/related-publications.html$ 

<sup>192</sup> https://emergency.cdc.gov/han/2020/han00438.asp

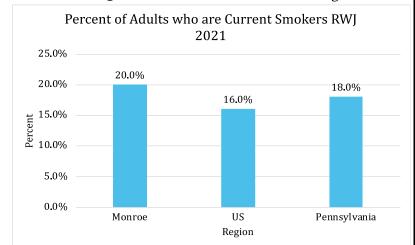
<sup>193</sup> https://www.samhsa.gov/data/sites/default/files/reports/rpt32879/NSDUHsaeTotal2019/2019NSDUHsaeTotal.pdf

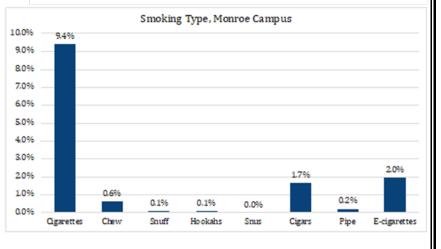
### ----- Tobacco -----

The 2019 CDC Health Report indicated that in 2018, 21.5% of the population 12 years and older used any type of tobacco product. The CDC and National Health Interview Survey of 2019 reported that 14.2% of adults 18 years and older currently smoke cigarettes and 8.1% of adolescents grades 9-12 smoked cigarettes in the past 30 days. The Robert Wood Johnson 2020 County Health Rankings report on adult smoking using data from 2018. Cigarette smoking is an important data point to capture because it has been an identified cause of various cancers, cardiovascular disease and other adverse health outcomes. Measuring tobacco use can help St. Luke's and other health networks to identify needs for smoking cessation and other smoking reduction programs. Adult smoking is measured as the percent of the adult population that report currently smoking every day or most days and have smoked at least 100 cigarettes in their lifetime. Figure 54

In Pennsylvania, 18% of adults smoke every day or have smoked at least 100 cigarettes in their lifetime, 20% in Monroe county. Additionally, the CDC National Center for Health Statistics (NCHS) released a secondhand smoke exposure report among nonsmoking adults in February 2021. Using data from 2015-2018, the report indicated that 20.8% of nonsmoking U.S. adults 18 and over were exposed to secondhand smoke, which was measured by cotinine in their blood, a metabolite of nicotine. Some negative effects of secondhand smoke exposure include acute respiratory effects, coronary heart disease, stroke, lung cancer, and premature death. The prevalence of secondhand exposure was highest for adults 18-39 (25.6%) than for adults 40-59 (19.1%) and adults 60 and over (17.6%). The highest secondhand exposure for adults by race and ethnicity were for non-Hispanic Black adults (39.7%) and lowest for Hispanic adults (17.2%). The prevalence of secondhand exposure declined from 27.7% in 2009 to 20.8% in 2018.







 $<sup>^{194}\,</sup>https://www.cdc.gov/nchs/data/hus/2019/020\text{-}508.pdf$ 

<sup>195</sup> https://www.cdc.gov/nchs/data/nhis/earlyrelease/EarlyRelease202009-508.pdf

<sup>196</sup> https://www.cdc.gov/nchs/data/hus/hus19-508.pdf#fig09

<sup>197</sup> https://www.countyhealthrankings.org/

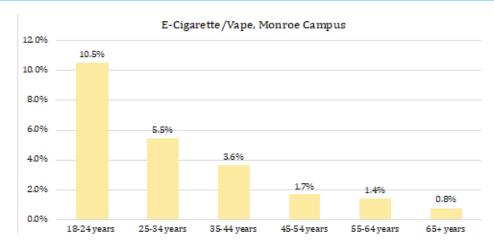
<sup>198</sup> https://www.countyhealthrankings.org/

<sup>199</sup> https://www.cdc.gov/nchs/data/databriefs/db396-H.pdf

When asked if CHNA survey respondents smoke, 11.1% of respondents from the Monroe service area responded yes. Of those who do smoke, cigarettes are the most common form of tobacco (9.4%), followed by e-cigarettes (2%), cigars (1.7%); 0.6% of respondents use chew, 0.2% use pipes, 0.1% use snuff, 0.1% use hookahs, and 0% use snus.

## ······ Vape ·····

Vaping is another form of smoking nicotine, a highly addictive substance that is especially harmful to children and adolescents. Vapes, also known as e-cigarettes or electronic cigarettes, are "electronic devices that heat a liquid and produce an aerosol or mix of small particles in the air." The CDC and National Health Interview Survey in 2019 found that 4.4% of adults 18 years and older use e-cigarettes and 20.8% of adolescents grades 9-12 have used e-cigarettes in the past 30 days. Electronic cigarettes were introduced in the United States around 2007 and the highest percentage of use is seen in adolescents. Figure 56



Nicotine is most harmful for children and adolescents because the substance hinders brain development, which occurs until around age 25. Particularly, nicotine impacts attention, learning, mood, and impulse control, all of which are built and refined through childhood.<sup>204</sup> An ecigarette study among middle and high school students in the United States was performed in accordance with the CDC in 2020. Results from this study found that 19.6% of high school students and 4.7% of middle school students reported current e-cigarette use.<sup>205</sup> Of the current users, 82.9% used flavored e-cigarettes, including 84.7% of high school users and 73.9% of middle school users. The introduction of flavors such as fruit, candy and mint has increased youth initiation into the use of tobacco products.<sup>206</sup> Another CDC study found that 23.6% of high

<sup>&</sup>lt;sup>200</sup> https://www.cdc.gov/tobacco/basic\_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html

 $<sup>^{201}\,</sup>https://www.cdc.gov/nchs/data/nhis/earlyrelease/EarlyRelease202009-508.pdf$ 

<sup>202</sup> https://www.cdc.gov/nchs/data/hus/hus19-508.pdf#fig09

<sup>&</sup>lt;sup>203</sup> https://www.cdc.gov/nchs/data/nhis/earlyrelease/EarlyRelease202009-508.pdf

<sup>&</sup>lt;sup>204</sup> https://www.cdc.gov/tobacco/basic\_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html

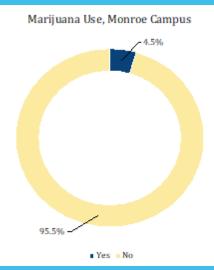
<sup>&</sup>lt;sup>205</sup> https://www.cdc.gov/mmwr/volumes/69/wr/mm6937e1.htm?s\_cid=mm6937e1\_w%20

<sup>&</sup>lt;sup>206</sup> https://www.cdc.gov/mmwr/volumes/69/wr/mm6950a1.htm

school students and 6.7% of middle school students reported 30-day use of any tobacco product.<sup>207</sup> According to PAYS data, 19% of students in Pennsylvania used an e-cigarette or vape within the last 30 days.<sup>208</sup> The CHNA survey found the age group that uses e-cigarettes/vape most frequently are 18-24 year old (10.5%), ages 25-34 (5.5%), followed by ages 35-44 (3.6%), ages 45-54 (0%), ages 55-64 years (1.4%), and 0.8% 65 years and older.

## ······ Marijuana ······

Marijuana is a psychotropic drug that is commonly used throughout the United States. In the short-term, marijuana can alter senses, change mood, impair memory, and impair body movement. In the long-term, marijuana can affect thinking, memory, and learning functions crucial to brain development. Marijuana can also have physical effects which result in breathing problems and increased heart rate. The CDC 2019 U.S. Health Report indicated that 10.1% of people 12 an older used marijuana in the past 12 months during 2018. However, the 2019 Annual Surveillance Report of Drug-Related Risks and Outcomes reported that 15.9% of people in the U.S. during 2018 who are 12 years and older used marijuana in the past 12 months. This usage was highest among people 18-25 (34.8%) and people 26-34 (29.6%); 4.5% of respondents from the Monroe service area indicate use of marijuana.



## ····· Opioids ·····

The CDC reports that the opioid epidemic has occurred in three phases.<sup>212</sup> First, prescription opioids increased in the 1990s with overdose deaths continually increasing since 1999. The second phase began around 2010 with increased overdoses involving heroin. Heroin is an

<sup>&</sup>lt;sup>207</sup> https://www.cdc.gov/mmwr/volumes/69/wr/mm6950a1.htm

<sup>&</sup>lt;sup>208</sup> https://www.pccd.pa.gov/Juvenile-Justice/Pages/Pennsylvania-Youth-Survey-(PAYS).aspx

<sup>&</sup>lt;sup>209</sup> https://www.drugabuse.gov/publications/drugfacts/marijuana

<sup>210</sup> https://www.cdc.gov/nchs/data/hus/2019/020-508.pdf

<sup>&</sup>lt;sup>211</sup> https://www.cdc.gov/drugoverdose/pubs/related-publications.html

<sup>&</sup>lt;sup>212</sup> https://www.cdc.gov/drugoverdose/epidemic/index.html

alternative to prescription opioids due to its similar effect on the body. The third phase began in 2013 with the introduction of synthetic opioids, like illicitly manufactured fentanyl. The CDC provides descriptions on the most commonly used opioids: prescription opioids, fentanyl, and heroin. Prescription opioids can be used to treat pain and are often prescribed following surgery, an injury, or to manage a disease like cancer. However, there has been a dramatic increase in the prescription of opioids for chronic pain such as back pain or osteoarthritis, "despite serious risks and the lack of evidence about their long-term effectiveness." Prescription opioids are highly addictive, and once addicted it is incredibly difficult to stop using. As many as one in four patients receiving long-term opioid therapy in a primary care setting struggle with an opioid addiction. Osteoarchiological description opioids are Methadone, Oxycodone (OxyContin), Hydrocodone (Vicodin), and Benzodiazepines such as alprazolam (Xanax) and diazepam (Valium).

Fentanyl produced pharmaceutically is a synthetic opioid used to treat severe pain. It is 50 to 100 times more potent than morphine. However, the increase in overdose has been linked to illegally made fentanyl which has a heroin-like effect.<sup>215</sup> The CDC reports that rates of overdose deaths involving synthetic opioids other than methadone, which includes fentanyl and fentanyl analogs, increased over 16% from 2018 to 2019. Overdose deaths involving synthetic opioids were nearly 12 times higher in 2019 than in 2013."<sup>216</sup> Heroin is an illegal and highly addictive drug that is typically injected, and heroin use increases the risk of serious infections like HIV, Hepatitis C, Hepatitis B, and bacterial infections. Heroin use has increased by 5 times from 2010 to 2018.<sup>217</sup> This is problematic because heroin is typically used with other substances, which can increase the risk of an overdose.

The CDC released a report (2020) on drug overdose in the United States from 1999-2019. The age-adjusted rate of drug overdose deaths involving synthetic opioids increased from 1.0 per 100,000 population in 2013 to 11.4 in 2019. The average annual increase rate was lower from 2017-2019 (9% per year) than 2013-2017 (75% per year). The age-adjusted rate of drug overdose deaths involving natural and semisynthetic opioids, like oxycodone and hydrocodone, increased from 1.0 per 100,000 population in 1999 to 2.7 in 2011, then increasing again to 4.4 in 2016 and 2017. The rates in 2018 (3.8) and 2019 (3.6) were lower than 2017.

The Pennsylvania Health Care Cost Containment Council (PHC4) collects data for each calendar year (CY) on opioid overdose hospital admissions and opioid use disorder (OUD) hospital admissions. In CY 2019, there were 23.2 hospital admissions for an opioid overdose per

<sup>&</sup>lt;sup>213</sup> https://www.cdc.gov/drugoverdose/opioids/prescribed.html

<sup>214</sup> https://www.cdc.gov/drugoverdose/opioids/prescribed.html

<sup>215</sup> https://www.cdc.gov/drugoverdose/opioids/fentanyl.html

<sup>&</sup>lt;sup>216</sup> https://www.cdc.gov/drugoverdose/opioids/fentanyl.html

<sup>217</sup> https://www.cdc.gov/drugoverdose/opioids/heroin.html

<sup>&</sup>lt;sup>218</sup> https://www.cdc.gov/nchs/data/databriefs/db394-H.pdf

<sup>&</sup>lt;sup>219</sup> https://www.cdc.gov/nchs/data/databriefs/db394-H.pdf

100,000 people and 293.2 hospital admissions with opioid use disorder per 100,000 people in Pennsylvania.<sup>220</sup> Monroe has the lowest rate of overdose admissions, 17.4, and their rate of admissions with OUD is 430.9 per 100,000 people.

Opioid use while pregnant can have severe negative outcomes for the child, potentially resulting in Neonatal Abstinence Syndrome (NAS). NAS births occur "in a newborn who was exposed to addictive substances while in the mother's womb. The most common opiate drugs that are associated with NAS are heroin, codeine, oxycodone (oxycontin), methadone and buprenorphine."<sup>221</sup> The effects of NAS usually occur within 48-72 hours of birth, suffering from withdrawal, low birth weight, tremors, vomiting, fever and more. In Pennsylvania, there have been 5,596 NAS births from January 1, 2018 to March 6, 2021.<sup>222</sup> In 2018, Monroe county had 24.3 NAS births per 1,000 births (35 NAS births in total).<sup>223</sup>

As a result of the COVID-19 pandemic, the CDC issued a health alert on December 17, 2020 indicating an increase in fatal drug overdoses across the United States driven by synthetic opioids before and during the pandemic. The purpose of the report was to alert public health departments, healthcare professionals, medical examiners, and coroners of substance use increase and drug overdoses across the U.S. with "a concerning acceleration of the increase in drug overdose deaths, with the largest increase recorded from March 2020 to May 2020, coinciding with the implementation of widespread mitigation measures for the COVID-19 pandemic." The alert indicated that overdose deaths increased 18.2% from the 12-month period between June 30, 2019 and May 31, 2020. Overdose deaths went from 74,185 in February 2020 to 75,696 deaths in March 2020 to 77,842 deaths in April 2020, which is the largest monthly increases documented since January 2015 when monthly provisional estimates began. The report also claims that synthetic opioids are the primary driver of the increases in overdose deaths; "the 12-month count of synthetic opioid deaths increased 38.4% from the 12-months ending in June 2019 compared with the 12-months ending in May 2020." Of the 38 jurisdictions in the U.S. with available synthetic opioid data, 37 jurisdictions reported increases in synthetic opioid overdose deaths, and 18 of the jurisdictions reported increases greater than 50%. Provisional state data is available based on records that meet certain data quality criteria. They should not be considered comparable with the final data and are subject to change. The 12 month-ending provisional counts of drug overdose deaths ending August 2020 for Pennsylvania is 5,008. These numbers are underreported due to incomplete data and should not be assumed to be final. To prevent against the increase in

<sup>&</sup>lt;sup>220</sup> Phc4.org/m/Opioids/

<sup>&</sup>lt;sup>221</sup> https://nj.gov/health/populationhealth/opioid/opioid\_nas.shtml

<sup>222</sup> https://data.pa.gov/stories/s/9q45-nckt/

<sup>&</sup>lt;sup>223</sup> https://data.pa.gov/Opioid-Related/Annual-Rate-of-Neonatal-Hospital-Stays-with-Withdr/drhe-nauc

<sup>224</sup> https://emergency.cdc.gov/han/2020/han00438.asp

<sup>&</sup>lt;sup>225</sup> https://emergency.cdc.gov/han/2020/han00438.asp

<sup>226</sup> https://emergency.cdc.gov/han/2020/han00438.asp

<sup>227</sup> https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

overdose deaths, the CDC recommends states expand the use of naloxone with overdose prevention education; expand access to treatment for substance use disorders; intervene early with individuals at high risk for overdose; improve detection of overdose outbreaks.

### ····· Overdose ·····

Overdose has been discussed previously, as it is a growing concern with prevalence rates increasing, especially during the pandemic.<sup>228</sup> Drug overdose deaths are the leading contributor to premature death and are largely preventable.<sup>229</sup> Since 2000, the rate of drug overdose deaths

has increased by 137% across the county, which can be largely attributed to opioids, as there has been a 200% increase in

opioid overdose deaths since 2000.<sup>230</sup> The NORC, National Opinion Research Center, reports on drug overdose deaths in the United States. From 2015-2019, there has been a rate of 28.7 drug overdose deaths per 100,000 people in the U.S. aged 15-64 years old.<sup>231</sup> In Pennsylvania, the rate is 53.3 per 100,000 population. In Monroe county, the rate is 32.6 overdose deaths per 100,000 people, which is the lowest of all service area counties. The CDC also published a drug overdose death report for 1999-2019 in December 2020. They report that the age adjusted rate of drug overdose deaths in 2019 was 21.6 per 100,000, which is higher than in 2018 (20.7 per 100,000).<sup>232</sup> Adults 35-44 had the highest rate of drug overdose deaths of any age group in 2019, (40.5 per 100,000 population).

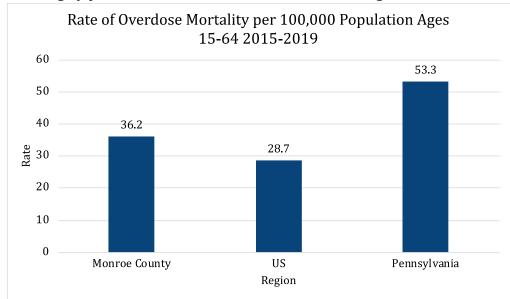


Figure 58

Increasing from 2012, drug overdose deaths involving cocaine increased from 1.4 to 4.9 per 100,000 population in 2019 and those deaths involving psychostimulants with abuse potential, such as methamphetamine and amphetamine, increased from 0.8 to 5.0 per 100,000

<sup>228</sup> https://emergency.cdc.gov/han/2020/han00438.asp

<sup>&</sup>lt;sup>229</sup> https://www.countyhealthrankings.org/explore-health-rankings/

<sup>&</sup>lt;sup>230</sup> https://www.countyhealthrankings.org/explore-health-rankings/

<sup>&</sup>lt;sup>231</sup> https://opioidmisusetool.norc.org/

<sup>232</sup> https://www.cdc.gov/nchs/data/databriefs/db394-H.pdf

population, more than 6-fold.<sup>233</sup> As of 2018, Pennsylvania ranks 4 overall for age-adjusted drug overdose deaths in the United States.<sup>234</sup> During this time, Pennsylvania had 4,415 drug overdose deaths. Of the total drug overdose deaths in Pennsylvania, 65% involved opioids, (2,866 deaths).<sup>235</sup>

## ····· Stigma ·····

Stigma is another important component to substance use disorder regarding usage and receiving or accessing help. Stigma is defined as "a strong feeling of disapproval that most people in a society have about something." Stigma may be a barrier to seeking help for someone suffering from substance use due to fear of disapproval toward the substance use from family or friends. St. Luke's has worked with our own staff and other community organizations to inform people about stigma and how it can be minimized to help the most amount of people.

In the Fall of 2019, a stigma reduction survey was sent to all the campuses whose employees are directly related to substance use disorders (SUD) as part of the Opioid Stewardship Program. 2,898 of 4,500 inpatient and outpatient network providers, nurses, and support staff received and completed the confidential stigma survey and education. Stigma campaigns are being piloted with phase two involving the entire network.

Beginning in the Fall of 2020, St. Luke's Rural Community Opioid Response committee partnered to develop Community Stigma Presentations. With the presentations, we have been able to reach 299 people as of December 2021. The stigma education included partners such as child development organizations, business organizations, churches, first responders, and mental health service organizations.

## ····· Naloxone ·····

Naloxone is a drug that can quickly reduce the effects of an opioid overdose. The National Institute of Drug Abuse defines naloxone as "an opioid antagonist—meaning that it binds to opioid receptors and can reverse and block the effects of other opioids. It can very quickly restore normal respiration to a person whose breathing has slowed or stopped as a result of overdosing with heroin or prescription opioid pain medications." Naloxone is safe and can be administered in three ways: injected, auto injected, or as a nasal spray. It is important for a variety of people to understand how to administer naloxone as it can quickly save someone's life. In response to opioid use and substance use, St. Luke's was awarded a Health Resource Service Administration (HRSA) Rural Community Opioid Response Planning (RCORP) grant

<sup>&</sup>lt;sup>233</sup> https://www.cdc.gov/nchs/data/databriefs/db394-H.pdf

<sup>&</sup>lt;sup>234</sup> https://www.cdc.gov/drugoverdose/data/statedeaths/drug-overdose-death-2018.html

<sup>&</sup>lt;sup>235</sup> https://www.drugabuse.gov/drug-topics/opioids/opioid-summaries-by-state

<sup>&</sup>lt;sup>236</sup> https://dictionary.cambridge.org/us/dictionary/english/stigma

<sup>&</sup>lt;sup>237</sup> https://www.drugabuse.gov/drug-topics/opioids/opioid-overdose-reversal-naloxone-narcan-evzio

in 2018 to work within a consortium to improve OUD prevention, treatment, and recovery response. With the grant, along with funding from Lehigh County Authority on Drugs and Alcohol to fund our Sacred Heart Initiative, St. Luke's ran an urban (St. Luke's Sacred Heart) and rural (St. Luke's Miners Campus) pilot, which has educated and distributed naloxone to 730 and 255 people, respectively.

## ····· Warm Hand Off ·····

A warm hand off is a process that has been implemented in St. Luke's and defined as "a transfer of care between two members of the health care team, where the handoff occurs in front of the patient and family. This transparent handoff of care allows patients and families to hear what is said and engages patients and families in communication, giving them the opportunity to clarify or correct information or ask questions about their care."238 Screening, Brief Intervention, and Referral to Treatment (SBIRT) is another approach adopted in St. Luke's care. SBIRT is used for early intervention in substance use disorders to quickly assess the severity of substance use and identify the appropriate level of care.<sup>239</sup> During CY 2021, a total of 2,637 patients have received full SBIRT at 10 St. Luke's campuses. Of those SBIRT patients, 56% have been referred with warm hand off and 32% have entered substance use treatment.

# ····· Opioid Encounters ·····

While opioid use and overdoses have been increasing, especially in relation to the COVID-19 pandemic, St. Luke's has been rising to meet the needs of the community with support services including: Stigma training, naloxone education and distribution, SBIRT, and warm hand offs. From July 2019 to January 2021, St. Luke's has encountered 6,319 opioid use disorder cases and 2,097 overdose encounters. Encounters have fluctuated each month for both Opioid Use Disorder (OUD) and overdose, with no significant changes.

SUD Response at St. Luke's Monroe, St. Luke's Lehighton, St. Luke's Miners, and Geisinger St. Luke's is sponsored in part by the Pocono Mountains United Way and the All One Foundation as well as the Health Resource and Service Administration (HRSA)\* Rural Community Opioid Response Program.

\*"This program was sponsored in part and supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$1,000,000 (implementation grant) with approximately 50% financed with nongovernmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS or the U.S. Government."

<sup>&</sup>lt;sup>238</sup> https://www.ahrq.gov/patient-safety/reports/engage/interventions/warmhandoff.html

<sup>&</sup>lt;sup>239</sup> https://www.samhsa.gov/sbirt

# **Health Outcomes**

In the 2021 Robert Wood Johnson Foundation County Health Rankings, Monroe county ranks 36 overall in Pennsylvania for health outcomes. It is ranked among the lower middle range of counties in Pennsylvania, falling in the 25-50th percentile. America's Health Rankings ranks Pennsylvania 34 out of 50 for health outcomes. For both organizations, a ranking closest to 1 indicates healthier outcomes.

# ..... Morbidity, Mortality, and Life Expectancy .....

Morbidity, mortality, and life expectancy are key health outcomes that help us to determine the overall health of the populations we serve. The 2021 Robert Wood Johnson Foundation County Health Rankings data reports a premature death health outcome, which measures the age-adjusted years of potential life lost before age 75 per 100,000 population. Monroe county has a premature death rate of 7,300 deaths per 100,000 which is slightly better than Pennsylvania (7,500) but much worse than top U.S. performers (5,400). Since 1998, there has been no significant trend in premature deaths within the county.<sup>240</sup>

According to the CDC, the average life expectancy from birth in the U.S. is 78.8 years.<sup>241</sup> The Robert Wood Johnson County Healthy Rankings measures life expectancy as an age-adjusted, average number of years a person can expect to live.<sup>242</sup> In Pennsylvania, the life expectancy is 78.4 and the range of life expectancy in the counties of Pennsylvania is 74.9-83. Life expectancy in Monroe county is 78.9.

Finally, low birthweight is another health outcome that can contribute to life expectancy. Low birthweight is measured by the percentage of live births who are under 2,500 grams (5 pounds, 8 ounces), which can be an indicator for future health problems such as growth problems, cardiovascular disease, respiratory conditions, and visual, auditory, and intellectual impairments.<sup>243</sup> The overall low birthweight percentage is 8% in Pennsylvania and 6% for U.S. top performers. The low birthweight percentage is 9% in Monroe county.

COVID-19 has also impacted mortality rates around the world. While we have yet to understand the impact the premature death rate due to pandemic, as of the end of December 2021 there were more than 57 million confirmed cases in the United States and more than 800,000

<sup>&</sup>lt;sup>240</sup> https://www.countyhealthrankings.org/

<sup>&</sup>lt;sup>241</sup> https://www.cdc.gov/nchs/fastats/life-expectancy.htm

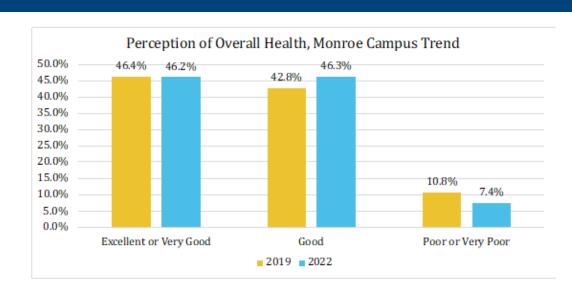
<sup>&</sup>lt;sup>242</sup> https://www.countyhealthrankings.org/

<sup>&</sup>lt;sup>243</sup> https://www.countyhealthrankings.org/

deaths, a mortality rate of 1.4%.<sup>244</sup> In Pennsylvania, there were 2,147,482 cases reported (16,774.6 per 100,000), 37,111 deaths, and a mortality rate of 1.7%. <sup>245</sup> In Monroe county, there were 27,954 cases (16,491.4 per 100,000), 420 deaths, and a mortality rate of 1.5%.

# $\cdots$ Perceptions of Health $\cdots$

It is important to assess a community's perceived sense of health status to interpret their overall well-being, as well as highlight areas where health education would benefit the community. According to the 2022 CHNA survey, most individuals in the service area reported good health (46.3%), followed by excellent or very good (46.2%), and poor or very poor (7.4%).



🚹 Figure 59

# ····· Chronic Disease ·····

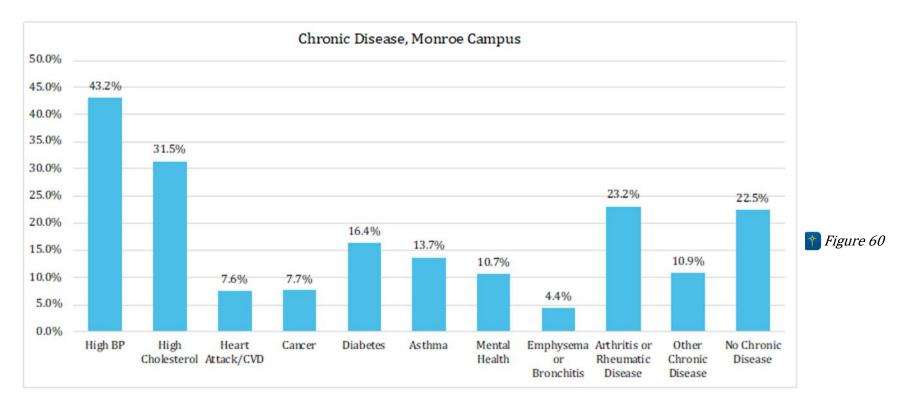
A 2020 study analyzing data from the 2018 National Health Interview Survey (NHIS) concluded that more than half of all U.S. adults have at least one chronic disease, and more than 1 in 4 have multiple chronic conditions. <sup>246</sup> Among the most common chronic conditions, diabetes, hypertension and hyperlipidemia frequently plague U.S. adults leading to a myriad of health complications and a heavy cost to the healthcare system. Our 2022 survey results conveyed that the highest percentage of Monroe service area respondents have high blood pressure

<sup>&</sup>lt;sup>244</sup> https://coronavirus.jhu.edu/map.html

<sup>&</sup>lt;sup>245</sup> https://www.health.pa.gov/topics/disease/coronavirus/Pages/Cases.aspx

<sup>&</sup>lt;sup>246</sup> https://www.cdc.gov/pcd/issues/2020/20\_0130.htm

(43.2%), followed by high cholesterol (31.5%), and arthritis or a rheumatic disease (23.2%). While 22.5% of respondents do not have any chronic diseases, only 20.7% of respondents over 45 years of age reported not having a chronic illness of any kind.



# ····· Diabetes ·····

According to the 2020 CDC National Diabetes Statistics Report, an estimated 34.2 million Americans (13.0% of all U.S. adults) have diabetes 90 to 95% of all diabetes is type 2. Additionally, 21.4% of adults with diabetes were not aware they had diabetes and thus it went undiagnosed. According to the 2017 Behavioral Risk Factor Surveillance System (BRFSS), a national, health related survey, 12.5% of adults in Monroe county aged 18 years and older have been diagnosed with diabetes.<sup>247</sup> See Figure 61, which compares Monroe county diabetes diagnosis rates to other service area counties and the U.S. overall.

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<sup>&</sup>lt;sup>247</sup> https://chronicdata.cdc.gov/500-Cities-Places/PLACES-Local-Data-for-Better-Health-County-Data-20/swc5-untb/data

2022 St. Luke's University Health Network Monroe Community Health Needs Assessment

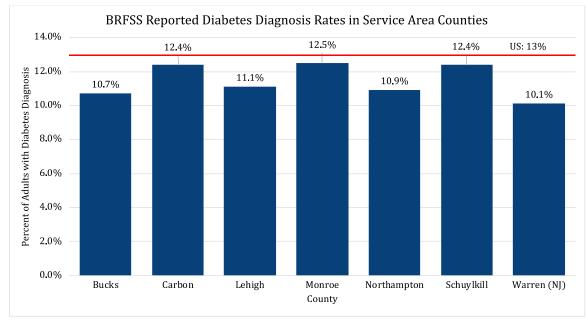
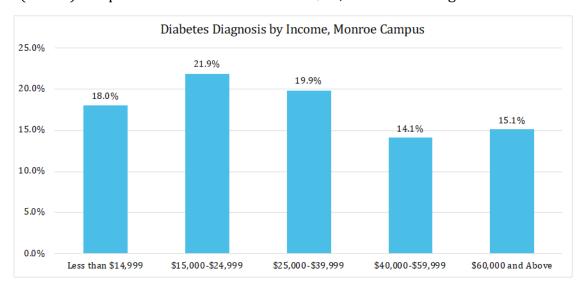


Figure 61

Of all CHNA survey respondents from the Monroe service area, 16.4% have diabetes. When broken down by income, respondents whose household income is \$15,000-\$24,999 have the highest rates of diabetes (21.9%) and respondents whose household income is \$40,000-\$59,999 have the lowest rates (14.1%). Respondents who make less than \$40,000 have the highest rates of diabetes.



# ······ Hypertension ·····

Hypertension is defined as having a blood pressure that is at or above a systolic value of 130 mm Hg, which measures the pressure in your arteries when your heart beats,<sup>248</sup> and a diastolic value of 80 mm Hg, which measures the pressure in your arteries when your heart rests between beats. In comparison, a normal blood pressure is less than 120/80 mmHg. Data regarding hypertension also includes individuals who are taking medications for hypertension that would otherwise be uncontrolled. According to the CDC 2019 report, the crude prevalence of hypertension in U.S. adults aged 20 and over is 49.6%. According to the 2017 Behavioral Risk Factor Surveillance System (BRFSS), a national, health related survey, 31.7% of adults in Monroe county aged 18 years and older have been diagnosed with high blood pressure.<sup>249</sup> See Figure 63, which compares Monroe county hypertension diagnosis rates to other service area counties and the U.S. overall.

Of all Monroe service area CHNA survey respondents, 43.2% have high blood pressure. When broken down by income, respondents whose household income is \$15,000-\$24,999 have the highest rates of high blood pressure (56.3%) while respondents whose household income is less than \$14,999 have the lowest rates (36%). It is important to note that all of these rates are relatively high, regardless of income.

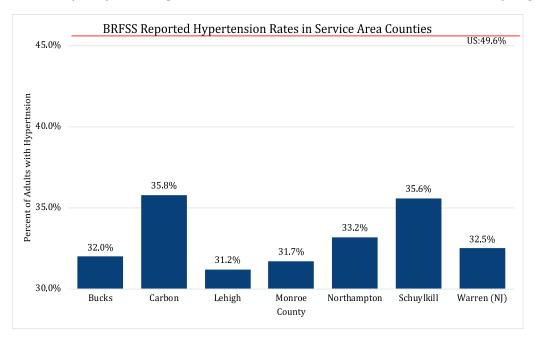
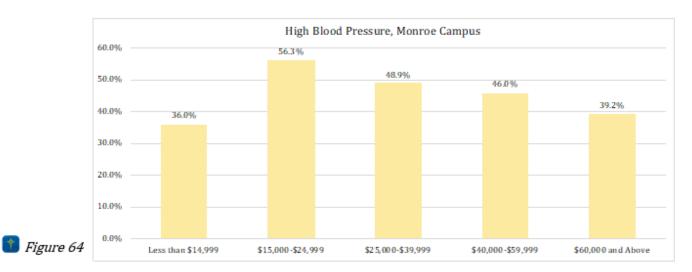


Figure 63

<sup>&</sup>lt;sup>248</sup> https://www.cdc.gov/bloodpressure/about.htm

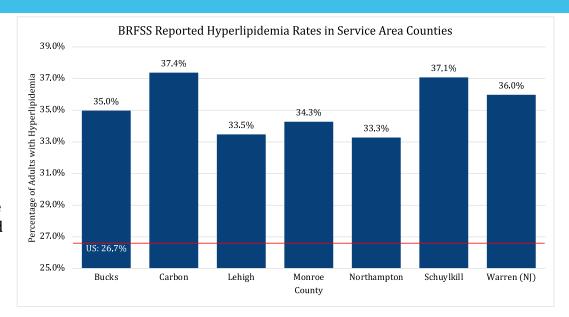
<sup>&</sup>lt;sup>249</sup> https://chronicdata.cdc.gov/500-Cities-Places/PLACES-Local-Data-for-Better-Health-County-Data-20/swc5-untb/data

2022 St. Luke's University Health Network Monroe Community Health Needs Assessment



# ······ Hyperlipidemia ······

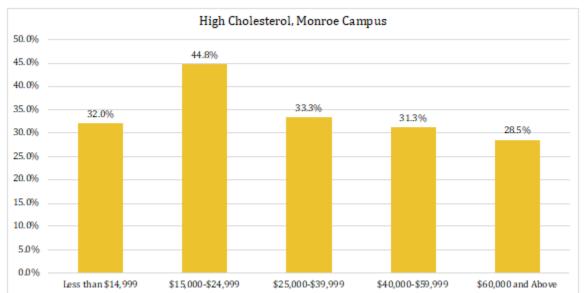
Hyperlipidemia, or high cholesterol, is defined as a total serum cholesterol at or above 240 mg/dL, which stands for milligrams per deciliter and is a unit of measure that shows the concentration of a substance in a fluid. Data regarding hyperlipidemia also includes individuals who are taking medications to control their high cholesterol. According to the 2019 CDC report, 26.7% of U.S. adults aged 20 and over have been diagnosed with hyperlipidemia; that is more than 1 in 4 U.S. adults. According to the 2017 BRFSS, 34.3% of adults in Monroe county aged 18 years and older, who have been screened in the past 5 years have been diagnosed with high cholesterol. See Figure 65, which compares Monroe



<sup>250</sup> https://chronicdata.cdc.gov/500-Cities-Places/PLACES-Local-Data-for-Better-Health-County-Data-20/swc5-untb/data

county hyperlipidemia diagnosis rates to other service area counties and the U.S. overall.

Of all CHNA survey respondents from the Monroe service area, 31.5% have high cholesterol. When broken down by income, respondents whose household income is \$15,000-\$24,999 have the highest rates of high cholesterol (44.8%) and respondents whose household income is \$60,000 and above have the lowest rates (28.5%).



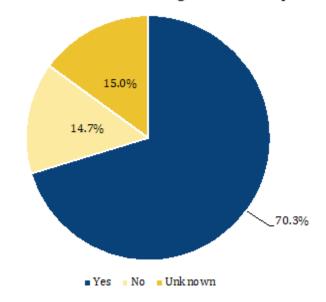
🚹 Figure 66

## ····· Cancer ·····

In the U.S., 1.7 million people are diagnosed with cancer each year and comes with an estimated healthcare cost of \$174 billion. Cancer is the 2<sup>nd</sup> leading cause of death nationally with over half a million deaths each year. According to the National Cancer Institute, cancer incidence in the U.S. is 448.7 per 100,000. Pennsylvania has a cancer incidence of 484.6 per 100,000 which falls higher than the U.S. overall. Monroe county has a cancer incidence of 486.8 per 100,000 which is about the same, only slightly higher, than the state's cancer incidence overall. There are certain risk factors that increase one's chance of getting cancer. Among them, include being overweight or obese, smoking and secondhand smoke exposure, exposure to sun and tanning beds, excessive alcohol use and some

🚹 Figure 67

Colorectal Cancer Screening, Monroe Campus



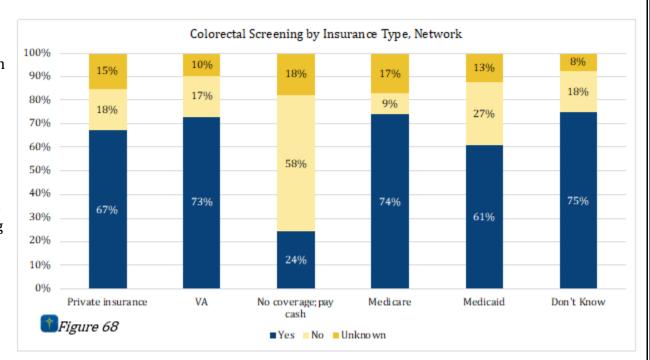
 $<sup>^{251}\,</sup>https://www.cdc.gov/chronic disease/about/costs/index.htm$ 

<sup>&</sup>lt;sup>252</sup> https://www.cdc.gov/chronicdisease/resources/publications/factsheets/cancer.htm

<sup>&</sup>lt;sup>253</sup> National Cancer Institute's State Cancer Profiles, 2013-2017

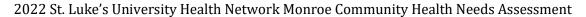
infectious diseases. These health behaviors have been discussed in earlier sections of this document and are also discussed in detail, as they related to cancer, in the St. Luke's Cancer Needs Assessment (CNA). The CNA helps set the strategy around cancer outreach and education in our communities.

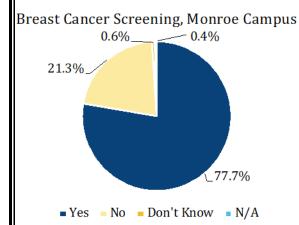
In order to be considered up to date with screenings for this analysis, respondents must have had a screening date fall in the recommended time frame for their screening type (Figure 69). If a respondent was missing an answer to one of the questions, their screening status was marked "Unknown." The CHNA survey asked respondents ages 50-74 to indicate their most recent colon cancer screening. Of all Monroe service area respondents, 70.3% have been screened, 14.7% have not been screened, and 15% are unknown. The survey also assesses colon cancer screening by insurance type to uncover any disparities and perhaps see if insurance is a barrier to cancer screenings. A large percentage (58%) of respondents ages 50-74 who do not have insurance have never been screened for colon cancer. Since colon cancer can be prevented or caught early with screenings, this is a large gap in care. Additionally, 27% of respondents who use Medicaid have never been screened. Network data is used due to small sample size by campus.



Time Frame for Colorectal Screening based on Screening Type	
Colonoscopy	Within 10 years
Sigmoidoscopy	Within 5 years
Stool Blood Test (i.e.: FIT/FOBT)	Within 1 year

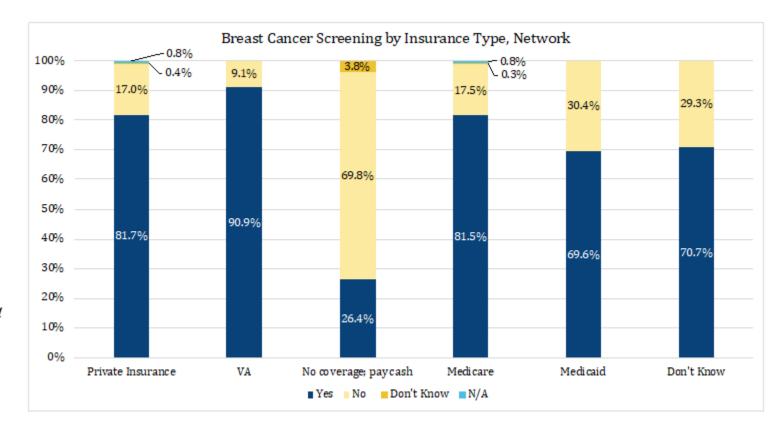
Figure 69





Respondents were also asked about breast cancer screening and we compared breast cancer screening rates to insurance. Of all Monroe service area respondents ages 40-74 years old, 75.7% had a mammogram, 21.3% have not, 0.6% do not know, and 0.4% is not applicable. When looking at breast cancer screening by insurance, only 26.4% of respondents who do not have insurance had a mammogram, which is drastically lower than any other type of insurance. The network data is used for insurance due to small sample size.

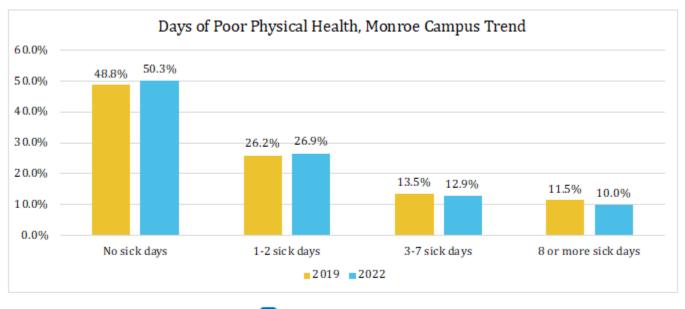
🚹 Figure 70



🛅 Figure 71

# ..... Days of Poor Physical Health .....

According to Healthy People 2030, daily physical activity can prevent disease, disability, injury, and premature death.<sup>254</sup> Robert Wood Johnson County Health Rankings assesses the number of poor physical health days people have because it can be a predictor for negative outcomes associated with health like unemployment, poverty, and mortality. The poor physical health days question is measured by the average number of physical unhealthy days in the past 30 days. In Pennsylvania, the average is 4.0 unhealthy days, with Monroe at 4.0 unhealthy days. Many CHNA respondents indicated no physically unhealthy days in the past 30 days (50.3%), 26.9% of respondents indicated 1-2 sick days, 12.9% indicated 3-7 sick days, and 10% indicated 8 or more sick days in the past 30 days.



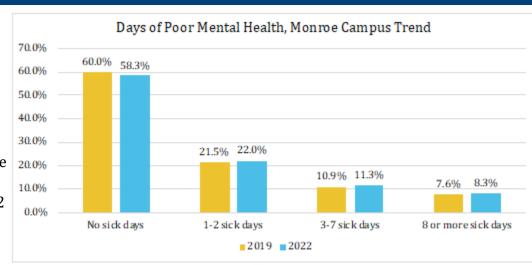
<sup>🚹</sup> Figure 72

83

<sup>&</sup>lt;sup>254</sup> https://health.gov/healthypeople/objectives-and-data/browse-objectives/physical-activity

# ······ Days of Poor Mental Health ······

Poor mental health days is important to assess because it can be a good indicator for overall well-being. The Robert Wood Johnson County Health Rankings assess poor mental health days by the average number of mentally unhealthy days in the past 30 days. The poor mental health days question is measured by the average number of mentally unhealthy days in the past 30 days. In Pennsylvania, the overall average is 4.7 unhealthy days, with Monroe county at 4.9 unhealthy days. The majority of CHNA survey respondents indicated no mentally unhealthy days in the past 30 days (58.3%), 22% indicated 1-2 sick days, 11.3% indicated 3-7 sick days, and 8.3% indicated 8 or more sick days in the past 30 days.



🚹 Figure 73

# ..... Unintentional Injury .....

In 2019, the United States had 52.7 unintentional injury deaths per 100,000 population, which was the third ranked cause of death. <sup>256</sup> In 2018, there were 24.5 million visits to the emergency room for unintentional injuries and in 2016, there were 39.5 million visits to physician offices for unintentional injuries. <sup>257</sup> Unintentional injuries are unplanned and preventable when using proper safety precautions; they are also a substantial contributor to premature death. When broken down further for the United States, there were 12 per 100,000 population unintentional fall deaths, 11.5 per 100,000 population motor vehicle traffic deaths, and 20 per 100,000 population unintentional poisoning deaths. <sup>258</sup> In Pennsylvania, the unintentional injury death rate was 67.1 and Monroe county was 60.5 per 100,000 population. <sup>259</sup> Healthy People 2030 has set objectives for injury deaths because unintentional injury deaths are so prominent. Some of which are to reduce

<sup>&</sup>lt;sup>255</sup> https://www.countyhealthrankings.org/app/new-jersey/2021/measure/outcomes/42/description

<sup>&</sup>lt;sup>256</sup> Wonder.cdc.gov

<sup>&</sup>lt;sup>257</sup> https://www.cdc.gov/nchs/fastats/accidental-injury.htm

<sup>258</sup> Wonder.cdc.gov

<sup>259</sup> Wisqars.cdc.gov

unintentional injury deaths, reduce deaths involving opioids, and to reduce emergency department visits for nonfatal injuries and unintentional injuries.

# **COVID-19 Impact**

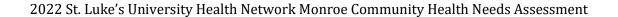
..... COVID-19 .....

In December 2019, the SARS-CoV-2 virus (i.e., COVID-19), was discovered in Wuhan, China and quickly spread across the world. COVID-19 spreads when an infected person breathes out droplets that contain the virus, which can then be breathed in by other people or land on their eyes, nose, and mouth, resulting in quick transmission from person to person. On March 11, 2020, the World Health Organization declared COVID-19 a pandemic, resulting in worldwide shutdowns of workplaces, schools, and stores. To stop the transmission of the virus, the CDC recommended wearing a mask indoors, social distancing at least 6 feet away from other people, and to get vaccinated as vaccines became available. Many pharmaceutical companies worked on vaccines to fight the virus and multiple vaccines were approved by the Food and Drug Administration (FDA) across all age groups and were readily available to everyone in the U.S. On July 27, 2021, the CDC recommended stricter guidelines in response to the Delta variant, which showed to be more contagious and caused more severe illness compared to the previous COVID-19 strains. In late 2021, the Omicron variant emerged, proving to be more contagious than previous COVID-19 variants, but not necessarily more deadly. The most common symptoms of COVID-19 include fever or chills, cough, shortness of breath, headache, and new loss of taste or smell.

Monroe county is home to the St. Luke's Monroe campus. With a population of 828,604, Monroe county is the most populous out of the counties in the SLUHN service area. Monroe county had substantial community transmission of COVID-19 during both waves in a symmetric fashion as illustrated in Figure 74. By the beginning of 2022, with the new Omicron variant and high levels of transmission, the highest number of new cases in one day was 486 in Monroe county.

<sup>&</sup>lt;sup>260</sup> https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html

<sup>&</sup>lt;sup>261</sup> https://www.cdc.gov/coronavirus/2019-ncov/variants/omicron-variant.html



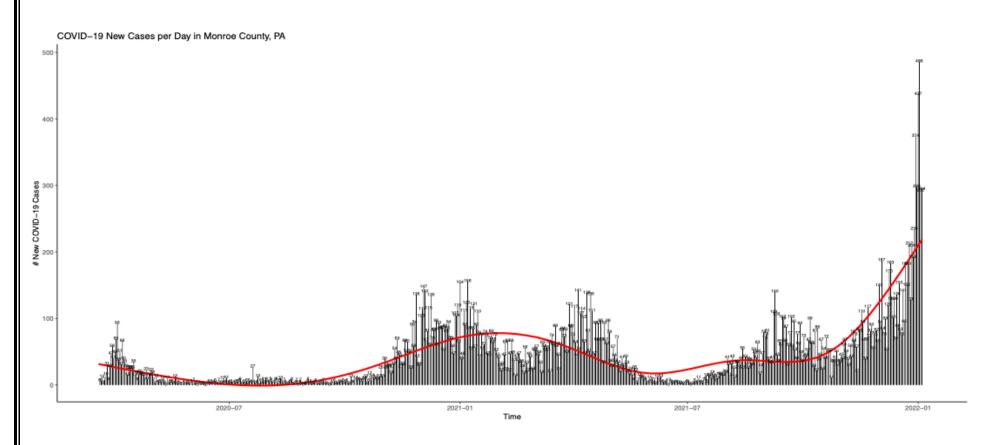
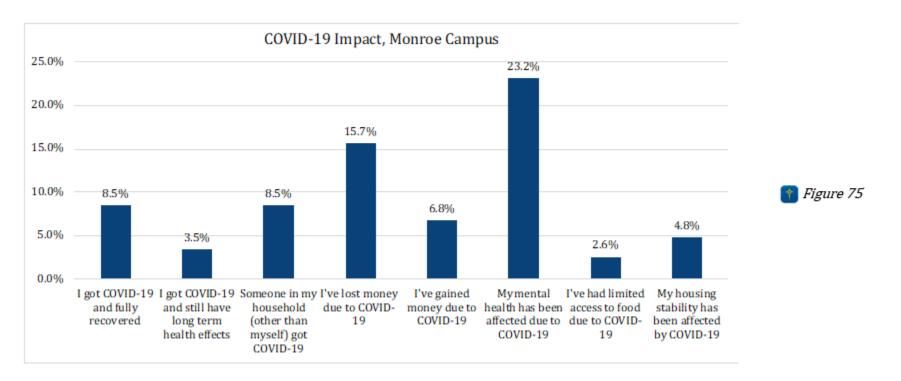


Figure 74

To get an understanding as to how COVID-19 impacted the Monroe service area we asked respondents to indicate if any of the categories in Figure 75 applied to them. Of those who indicated they had been impacted by COVID-19, the greatest number of respondents say their mental health has been affected (23.2%), 15.7% of respondents say they have lost money due COVID-19, 8.5% say they had COVID-19 and fully recovered, while 8.5% say someone else in their household got COVID-19. However, 3.5% say they got COVID-19 and are still having long term effects, 2.6% have had limited food access, and 4.8% have had housing instability due to the pandemic, while 6.8% have gained money due to the pandemic.

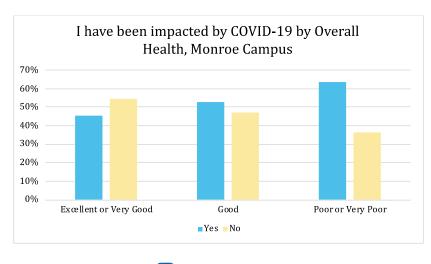
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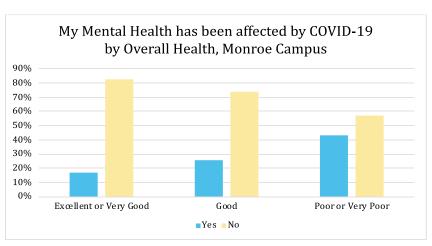


The COVID-19 pandemic is of universal concern and has far-reaching impacts in our communities. On the surface, it appears as though approximately half of the population (49.9%) in the Monroe Campus service area has not been affected by the pandemic. Yet, when we examine these results further, we begin to understand that this is not the case for our vulnerable populations. Results from the community health survey in the Monroe Campus service area shed light on some key differences among populations and highlight the impact that COVID-19 has on at-risk populations.

## ..... Overall Health and COVID-19

Overall health status can be an indicator of the ways COVID-19 affects individuals. Poor health, including cancer, illness, and chronic conditions, can make some individuals more susceptible to complications, hospitalization, and death compared to those in overall good health. Survey respondents in the Monroe Campus service area that reported excellent/very good health were less likely (45%) to report being impacted by COVID-19 compared to respondents reporting good health (49%) or poor/very poor health (61%). This is also the case when reporting the impacts of COVID-19 on mental health, with 17% of respondents in excellent/very good health, 26% in good health, and 43% in poor/very poor health reporting mental health issues due to the pandemic. The relationship between overall perceived health and the impacts of COVID-19 must be considered when analyzing the impact of the pandemic on the health of our already vulnerable populations.





🚹 Figure 76

Figure 77

## Gender and COVID-19

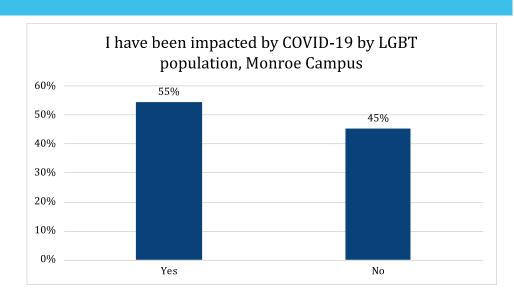
When assessing the impact of COVID-19 based on gender (i.e., sex assigned at birth), national findings indicate that women are more likely than men to worry about COVID-19 (e.g., if someone will get sick, financial burdens, children schooling). Almost 4 in 10 women (compared

<sup>&</sup>lt;sup>262</sup> https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html

to 3 in 10 men) reported anxiety and other mental health concerns because of the pandemic.<sup>263</sup> Findings from the CHNA survey in the Monroe Campus service area showed similar discrepancies between gender, with female respondents more likely to be impacted by COVID-19 (52%) than males (47%). These findings are further supported when looking at the impact of COVID-19 on mental health, with female respondents having their mental health impacted by COVID-19 at higher rates (26%) than males (19%).

## ..... LGBT and COVID-19 .....

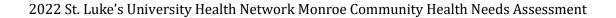
The LGBT population also faces significant challenges related to the COVID-19 pandemic, and nationally the LGBT population faces more economic hardships and mental health issues than their peers. CHNA survey results from the Monroe Campus also reflect these differences, with more than 55% responding that they had been impacted by the pandemic, compared to 50.1% of non-LGBT respondents in the Monroe Campus service area. In addition, 38% of the LGBT respondents said their mental health had been affected by the COVID-19 pandemic, compared to 23.2% of total respondents in the service area.



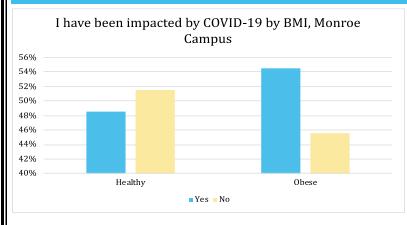
<sup>🚹</sup> Figure 78

<sup>&</sup>lt;sup>263</sup> https://www.kff.org/coronavirus-covid-19/issue-brief/coronavirus-a-look-at-gender-differences-in-awareness-and-actions

<sup>&</sup>lt;sup>264</sup> https://www.kff.org/coronavirus-covid-19/poll-finding/the-impact-of-the-covid-19-pandemic-on-lgbt-people/







Obesity puts people at risk for having serious complications and illness from COVID-19 and triples the risk of hospitalization when infected.<sup>265</sup> Obesity is shown to have negative impacts on COVID-19 recovery and outcomes. With a large population of the Monroe Campus service area struggling with obesity (44.4%), the CHNA survey results reflect the correlation between obesity and COVID-19, with only 49% of respondents with a healthy weight being impacted compared to 54% of people living with obesity.

+

Figure 79

# Ethnicity and COVID-19

The COVID-19 pandemic highlights the systemic issues of inequity in the public health sector, and the rates of illness and death are significantly higher for minority populations. While social determinants of health and health equity historically illustrate the marginalization of minority populations, issues such as discrimination, employment, education, and housing all contribute to the discrepancies in rates of illness and access to care during the pandemic. When asked if the COVID-19 pandemic had impacted their lives, 55% of Hispanic CHNA survey respondents in the Monroe Campus service area said yes, compared to 49% of non-Hispanic respondents.

## ..... Income and COVID-19 .....

Income is often seen as one of the most significant social determinants of health, as financial status either provides or denies access and opportunity to everything from housing to education to healthcare. Income also correlates with the impact of COVID-19 on individuals, and a

<sup>&</sup>lt;sup>265</sup> https://www.cdc.gov/obesity/data/obesity-and-covid-19.html

<sup>&</sup>lt;sup>266</sup> https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html

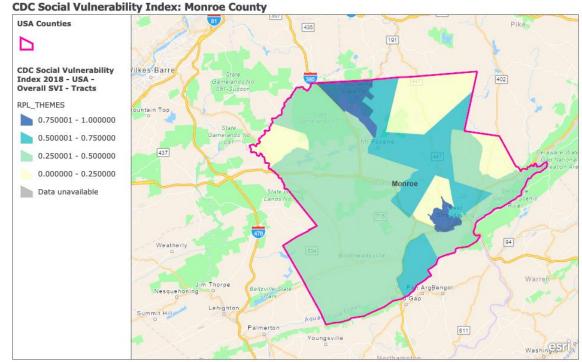
recent study in the Journal of the American Medical Association found that income and COVID-19 illness and mortality rates are correlated with income. These findings were also seen in the CHNA survey in the Monroe Campus service area, with 64% of respondents earning \$14,999 or less responding that they were impacted by COVID-19, compared to 49% of respondents making \$60,000 and above.

# ····· Social Vulnerability ·····

Figure 81 displays the CDC Social Vulnerability Index map, which takes into account factors such as socioeconomics, housing/transportation, language barriers, etc. in determining how vulnerable a population is to an unforeseen disaster, like COVID-19. Social vulnerability is defined by the CDC as "the resilience of communities (the ability to survive and thrive) when confronted by external stresses on human health, stresses such as natural or human-caused disasters, or disease outbreaks." Reducing social vulnerability can minimize the impacts of stressors and or disasters, decreasing human suffering and economic loss. The index is scored from 0 (lowest vulnerability) to 1 (highest vulnerability).

Monroe Social Vulnerability	
Overall	0.31
Socioeconomic	0.46
Household Composition and Disability	0.15
Minority Status and Language	0.78
Housing Type and Transportation	0.12

Figure 80



<sup>&</sup>lt;sup>267</sup> https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2779417

data.pa.gov, New Jersey Office of GIS, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS

 $<sup>^{268}\,</sup>https://www.atsdr.cdc.gov/placeandhealth/svi/at-a-glance\_svi.html$ 

East Stroudsburg and Stroudsburg are among the most socially vulnerable areas in Monroe county. All other social vulnerability section maps mirror this overall map (Figure 81). Several of these factors are associated with higher rates of COVID-19 infection. Some of the most vulnerable populations during the pandemic crisis included the homeless population, who faced challenges being exposed to COVID-19 and not having private shelter to quarantine; school-aged children and their parents who had to undertake the momentous task of virtual learning, most for the very first time; those experiencing mental/ behavioral health problems or substance use disorder, as challenging times not only exacerbated these issues but exhausted the amount of resources available to deal with them.

Through key informant interviews, we learned that many pre-COVID-19 problems, especially regarding economic inequities and psychological health have been exacerbated and new challenges, such as virtual learning for students, have created new issues to address. But we also learned that the Monroe community is one that responds quickly to provide for its community members in need.



"If we see a need and an issue, we just go in and do it. When restaurants were shut down, we put a restaurant and hospitality fund in place and raised over \$150,000... If we have the capability, we just go out and do it."



"Community members are putting off mental and physical health, and only seek to get their problems addressed when things hit the crisis level. This situation has been greatly exacerbated by the COVID-19 pandemic."

# Conclusion

Through this extensive review of the primary and secondary data, it is evident that there are significant needs to address within our communities. For the upcoming three-year (2022-2025) cycle, St. Luke's University Health Network will continue to work toward addressing the health priorities identified network-wide to improve the community's overall health and well-being. The three main priorities identified include: reducing health disparities; preventing chronic disease; and improving mental and behavioral health. To analyze our findings in these areas, SLUHN has adopted the categorization system from the Robert Wood Johnson Foundation (Figure 82). The social determinants of health shape the status of a person's health and provide guidance for community health priorities. When addressing the priority health needs, it is crucial to consider the social determinants of health and lifestyle behaviors to effectively tackle the service area's health disparities.

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<sup>&</sup>lt;sup>269</sup> https://www.sciencedirect.com/science/article/pii/S0749379720302592

Some significant survey findings, which are consistent with trends seen widely, are related to health outcomes and income, access to care for minority and marginalized populations, healthy eating (i.e., fruit and vegetable consumption), diabetes and other chronic illnesses, the opioid epidemic, and other substance use.

From our analysis of primary and secondary data, as well as the key CHNA informant interviews and work with our community members, we see significant issues facing our communities that impede healthy lifestyles. Our efforts in prevention, care transformation, research, and partnerships help support our work to promote sustainable programs and opportunities for our reach to focus on a wide range of health promotion and quality of life initiatives.

While there are many that need to be addressed, the results from the 2022 CHNA found the most pressing needs to be specifically in areas related to:

- o COVID-19
- o Access to Care
- o Food Insecurity
- o Obesity Reduction
- o Physical Activity Promotion
- o Opioids and other Substance Use
- o Mental Health
- o Housing
- o Transportation

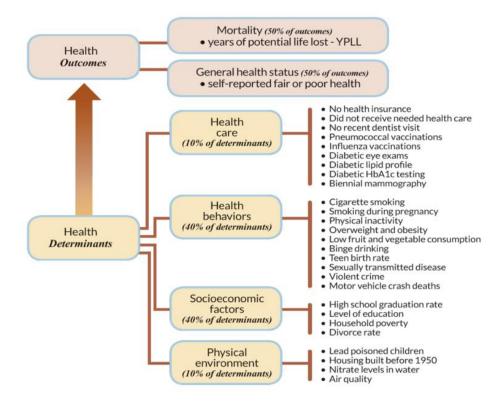


Figure 82

The needs discussed within the health categories outlined in this document will serve as our guide in creating a detailed campus-specific implementation plan to best address the specific needs of the Monroe Campus service area using the three pillars of: Wellness and Prevention; Care Transformation; and Research and Partnerships. We will work collaboratively in partnership with our community and network partners to create a more equitable society with better health outcomes, especially among our most vulnerable populations such as our Hispanic communities, seniors, women, and children.

#### Appendix A

#### 2022 CHNA Key Informant Interview

St. Luke's University Health Network (SLUHN) is a nationally recognized non-profit health network that has facilities serving counties in both Pennsylvania (Lehigh, Northampton, Carbon, Schuylkill, Bucks, Monroe) and New Jersey (Warren). As part of the Patient Protection and Affordable Care Act, all non-profit hospitals are required to conduct a Community Health Needs Assessment (CHNA) every three years. In order to accomplish our goals, St. Luke's is conducting key informant interviews to identify health needs within the community. Since you are a vital member of our community, you are being asked for your feedback to assist us in data collection. Your answers will be compiled by St. Luke's to determine health needs in the community.

Please note that your name will not be associated with your responses. Additionally, please complete your responses in a word document and email responses to the Community Health Needs Assessment Liaison for facilitated follow up during the interview.

- 1. Name:
- 2. Title:
- 3. Organization:

#### Please answer the following by including pre-covid and current covid impacts

- 4. How long have you been a part of this community and in what capacities?
- 5. When thinking about others you interact with here, do you feel a sense of community?
- 6. How would you describe your community?
- 7. What are the major needs/challenges within this community?
- 8. What are some of the challenges specific to your organization?
- 9. How do you feel this community has been successful in meeting its needs?
- 10. What improvements in policy and community infrastructure would assist you in meeting community needs?
- 11. Who are some of the key players in your community and what organization do they belong to?

- 12. What are some of the strengths and resources of your community?
- 13. Do you feel these strengths are shared and evenly distributed throughout the community? Please explain.
- 14. What are some concrete examples of strengths and challenges across the lifespan related to the following topics in your community?
  - a. Health disparities/Access to care (example: access to medical, mental, dental and vision care)
  - b. Healthy Living (example: diet and physical activity)
  - c. Chronic Disease (example: diabetes, heart disease and cancer)
  - d. Mental/Behavioral Health (example: substance misuse/use disorder, depression and anxiety)
- 15. What are the **top three issues** that need to be addressed in your community?
- 16. Any additional comments?

#### Appendix B

### 2022 CHNA Community Forum Invited Organizations- Monroe Campus

- Business Development
- Carbon-Monroe-Pike Drug & Alcohol
- Children & Youth
- Clear Run Elementary
- Community Church
- East Stroudsburg School District
- East Stroudsburg University
- Family advocate and Summer Camp
- Family Promise of Monroe County
- Health and Nutrition Lead
- Monroe County Area Agency on Aging
- Monroe County CareerLink
- Monroe County Grants
- Monroe County Mental Health
- Monroe County Mental Health Systems Care
- National Association for the Advancement of Colored People (NAACP)

- Northampton Community College Monroe
- PA Department of Health
- Path To Change Treatment Center
- Pocono Mountain Economic Development
- Pocono Mountain School District
- Pocono Mountain United Way
- Pocono Services for Families and Children
- Pocono Services for Family and Children
- Red Cross
- Resources for Human Development Inc
- Retired and Senior Volunteer Program (RSVP) of Monroe County
- Salvation Army
- Summit Schools
- The Friendly Community Center
- Treatment Trends
- Women's Resources of Monroe County
- Youth Empowerment Services