



# COMMUNITY HEALTH NEEDS

## 2019 ASSESSMENT

HEALTH IS WHERE WE LIVE, LEARN AND WORK



**TOWER HEALTH**

Advancing Health. Transforming Lives.

[TowerHealth.org](https://www.TowerHealth.org)



# TABLE OF CONTENTS

1. About the Report.....	5
2. Letter to the Community.....	8
3. Health Starts Where We Live, Learn and Work .....	11
4. How Did We Get Here.....	14
5. Overview of Community Engagement Around the Factors that Impact Health.....	15
6. Common Themes on the Factors that Impact Health.....	16
7. Health is Where We Live.....	20
8. Health is Where We Learn.....	68
9. Health is Where We Work.....	88
10. Activity Makes for a Healthier You.....	100
11. Access to Care.....	103
12. Where Do We Go From Here .....	111



Tower Health serves residents in Berks, Chester, Montgomery and Philadelphia Counties located in Southeastern Pennsylvania, often referred to as the Lehigh Valley. The region is as diverse as the residents who reside within it. The Tower Health region encapsulates the City of Brotherly Love and is home to the Liberty Bell, as well as over a thousand acres of lush botanical gardens. Whether you are a sports fanatic or history buff there is something to meet the unique needs and interests of our residents. We hope to continue to grow to meet the ever-changing needs of our community. Tower Health is committed to improving the lives of the residents we serve and the communities we call home.



## ABOUT THIS REPORT

**A** Community Health Needs Assessment (CHNA) helps to gauge the health status of a community and guide development and implementation of strategies to create a healthier community, promotes collaboration among local agencies and provides data to evaluate outcomes and impact of efforts to improve the population health.

Facilitated by Strategy Solutions, Inc., the Tower Health CHNA follows best practices as outlined by the Association for Community Health Improvement, a division of the American Hospital Association, and ensures compliance with Internal Revenue Service (IRS) guidelines. The process has taken into account input from those who represent the broad interests of the communities served by Tower Health including those with knowledge of public health, the medically underserved, and populations with chronic disease.

*The demographic data in this report is based on the primary service area of the Tower Health region*

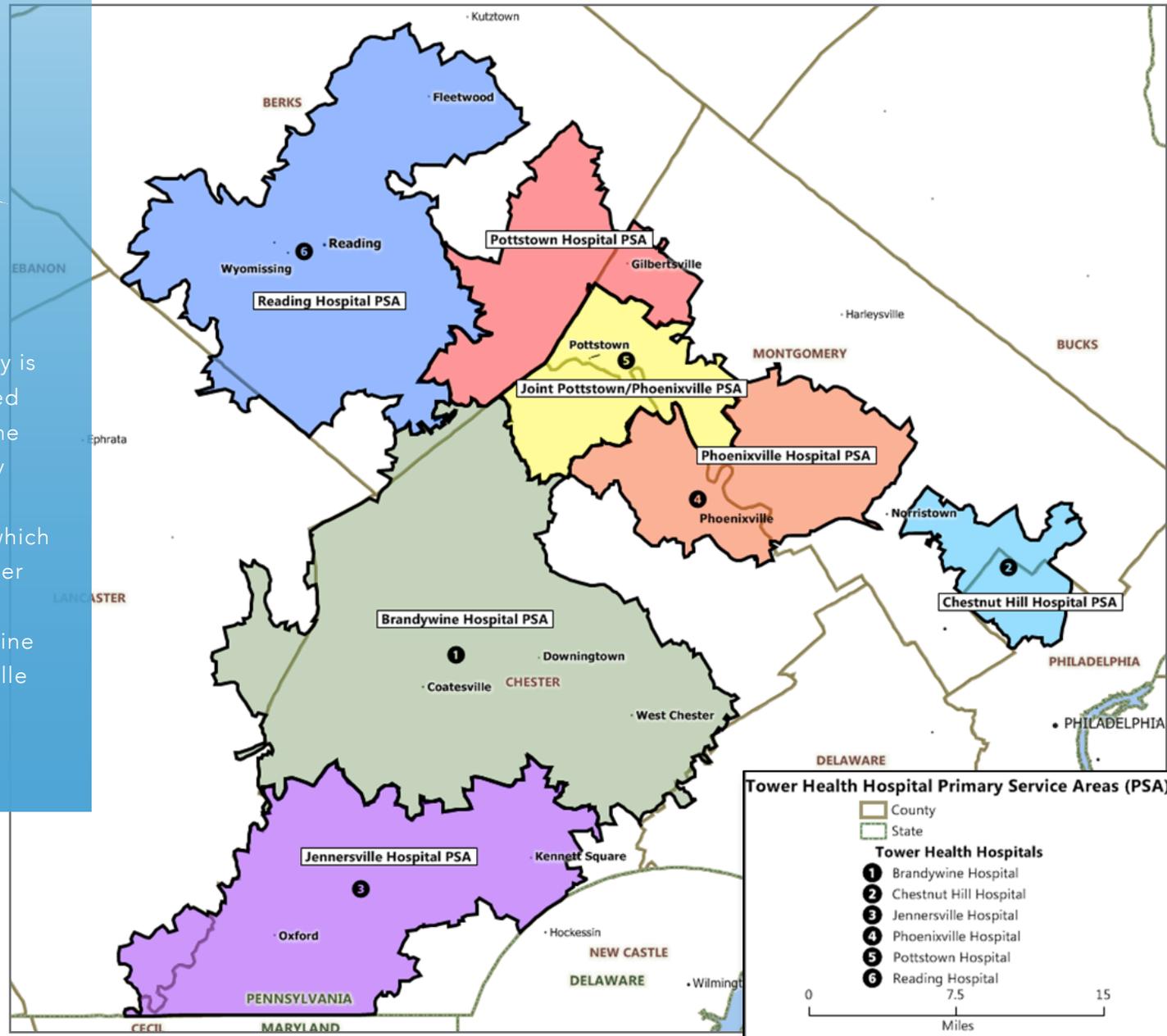
*(where there are comparisons) based on zip code. The secondary data in this report is provided at the county level.* The primary research includes stakeholder interviews, focus groups, key informant surveys and intercept surveys. Strategy Solutions, Inc. also utilized the services of Professional Research Consultants, Inc. to complete a population telephone survey (referred to as the Community Survey). This survey was conducted to provide a more in-depth analysis of Behavioral Risk Factors Surveillance System questions to gauge the health and needs of the Tower Health region.

On November 6, 2018, leadership from each of the six Tower Health Hospitals met to review the findings from the assessment and to prioritize the identified needs. During the first week of December, each of the hospitals reviewed their individual hospital findings from the assessment and prioritized the identified needs. The strategies developed for addressing the findings in this document will be made publicly available November 2019.



## Figure 1: Report Service Area

**F**or this assessment, the community is defined as the geography included on the map shown in **Figure 1**. The community encompasses the entire county of Berks, along with portions of Chester, Montgomery, and Philadelphia counties, which represents the primary service area of Tower Health. Tower Health, formed in October 2017, is made up of six hospitals: Brandywine Hospital, Chestnut Hill Hospital, Jennersville Hospital, Phoenixville Hospital, Pottstown Hospital, and Reading Hospital.



## TOWER HEALTH

ADVANCING HEALTH. TRANSFORMING LIVES.

**T**ower Health, which formed and began operations on October 1, 2017, is a strong, regional, integrated healthcare provider/payer system that offers leading-edge, compassionate healthcare and wellness services to a population of 2.5 million people.

Together, our six hospitals and other entities provide a full range of medical care — from prevention, screenings, and education; to the latest clinical services and surgeries available; to rehabilitation. We also offer wellness programs and public health services that ensure our communities are the healthiest they can be. Our caring, highly trained physicians and staff are committed to patient safety and patient satisfaction.

With more than 12,000 team members, Tower Health includes Reading Hospital, a teaching hospital based in West Reading; Brandywine Hospital in Coatesville; Chestnut Hill Hospital, a teaching hospital in Philadelphia; Jennersville Hospital in West Grove; Phoenixville Hospital in Phoenixville; and Pottstown Hospital in Pottstown. We also operate Reading Hospital Rehabilitation at Wyomissing and Reading Hospital School of Health Sciences. We have a comprehensive physician network. All of our facilities participate in our partnership with the Tower Health UPMC Health Plan.

Tower Health also includes the Tower Health Medical Group which is a connected network of over 2,000 physicians, specialists, and providers across 125 convenient locations. Tower Health at Home is another critical service which provides home healthcare services throughout the region. A network of 22 urgent care facilities across the service area are also provided by Tower Health Urgent Care. Collaboration across Tower Health enables our hospitals, providers, leadership and staff to leverage best practices across the health system. Our patients benefit from access to a broad range of services — all right here in our region.

### TOWER HEALTH MISSION

The Mission of Tower Health is to provide compassionate, accessible, high quality, cost-effective healthcare to the community; to promote health; to educate healthcare professionals; and to participate in appropriate clinical research.

### TOWER HEALTH VISION

Tower Health will be an innovative, leading regional health system dedicated to advancing the health and transforming the lives of the people we serve through excellent clinical quality; accessible, patient-centered, caring service; and unmatched physician and employee commitment.

# LETTER TO THE COMMUNITY

## OUR MESSAGE TO THE RESIDENTS OF THE TOWER HEALTH SERVICE AREA

Tower Health is committed to meeting the health needs of our region and growing with our communities to provide access to high quality care, close to home. To achieve this goal, we must understand the community's evolving unmet health needs. To that end, Tower Health — in collaboration with our six acute-care hospitals and community partners — completed the 2019 Community Health Needs Assessment (CHNA), which identifies the region's health priorities and our collective path forward.

Hospitals are required to conduct a CHNA every three years to retain their nonprofit status. Tower Health was formed in October 2017, and at that time, the five newly acquired hospitals — which previously had been for-profit facilities — adopted the health priorities identified in Reading Hospital's 2016 CHNA. Each hospital conducted internal and external research including focus groups, stakeholder interviews, and key informant surveys. In addition, a community survey was completed with 1,450 community residents.

Based on the results of this process, our health system, hospitals, and community partners will work together to develop strategies to address each of the following regional health priorities:

- Obesity
  - Reduce the number of overweight/obese residents
- Mental Health
  - Increase access to and integration of mental health services
- Addiction
  - Increase coordination and availability of services to treat addiction
- Access to Care
  - Decrease barriers to access healthcare

## Clint Matthews



resident & CEO  
Tower Health



As a healthcare leader, Tower Health is committed to advancing health and wellness in all the communities we serve. Our work extends far beyond the walls of our hospitals and health system. Together with our community partners focused on the health needs in our communities, we are implementing life-changing programs and services.

My sincere thanks to the 3,404 citizens and stakeholder participants throughout all of the Tower Health communities who generously offered their time and valuable insights during the comprehensive CHNA process. I would also like to recognize the time and talent of each hospital's advisory groups, comprised of hospital staff and representatives from community organizations.

The most important aspect of the CHNA process is community partnership and engagement. Resident feedback pertaining to the health status of the community is integral to planning and executing interventions, programs, and activities. Each of our community partners bring significant and unique expertise. We look forward to our continued work together to ensure that vulnerable individuals receive the care and services they need. We are much stronger together than we would be individually, and the community benefits from our collaboration.

I am very grateful for your continued feedback, involvement, and support. Together, we are Advancing Health and Transforming Lives across our region.

Sincerely,

A handwritten signature in black ink, appearing to read "Clint Matthews". The signature is fluid and cursive, with a long horizontal stroke at the end.

Clint Matthews  
President & Chief Executive Officer  
Tower Health



# HEALTH STARTS WHERE WE LIVE, LEARN AND WORK

**I**

n order to improve health and create a healthy community, we must not only focus on health status, we must also look at those factors that impact health.

The American Public Health Association (APHA) defines a healthy community as one “that:

- *Meets everyone’s basic needs such as safe, affordable and accessible food, water, housing, education, health care and places to play;*
- *Provides supportive levels of economic and social development through living wages, safe and healthy job opportunities, a thriving economy and healthy development of children and adolescents;*
- *Promotes quality and sustainability of the environment through tobacco and smoke-free spaces, clean air, soil and water, green and open spaces and sustainable energy use; and*
- *Places high value on positive social relationships through supportive and cohesive families and neighborhoods, honoring culture and tradition, robust social and civic engagement and violence prevention.”<sup>1</sup>*

These factors that create a healthy community have a big impact on a person’s ability to make healthy choices and, ultimately, be healthy. If individuals and organizations work together to make changes, we can improve the quality of our lives.

When looking at Robert Wood Johnson Foundation’s Vulnerable Populations Portfolio, a person’s health is impacted by where and how we live, learn, work and play, and it is important that a community looks at the role that nonmedical factors play in where health starts— long before illness—in our homes, schools and jobs.

---

<sup>1</sup> [http://www.apha.org/topics-and-issues/healthy-communities?gclid=CIL2qNfMhMwCFQ8vaQod\\_cYAag](http://www.apha.org/topics-and-issues/healthy-communities?gclid=CIL2qNfMhMwCFQ8vaQod_cYAag)

## Where We Live

In America, a person's health is influenced as much by the zip code they live in as the health insurance coverage they have. No environment is more influential on health than the home. By 'home,' we mean the type of housing, the safety of the neighborhood, a family's access to transportation, food security, the age of family members, culture, etc. Only solutions aimed at addressing environmental hazards, safety in the home and neighborhood, and basic needs such as housing, transportation and food will truly address health.



## Where We Work

People work to make money, and use the money to buy shelter, food and clothing, and to stay healthy. Work is an essential means to an end. For the vast majority of Americans, employment is still the primary source of income, and therefore critical to their life and livelihood. One's type of employment often dictates their benefits and wages. Health status is directly related to having a living wage and health insurance.

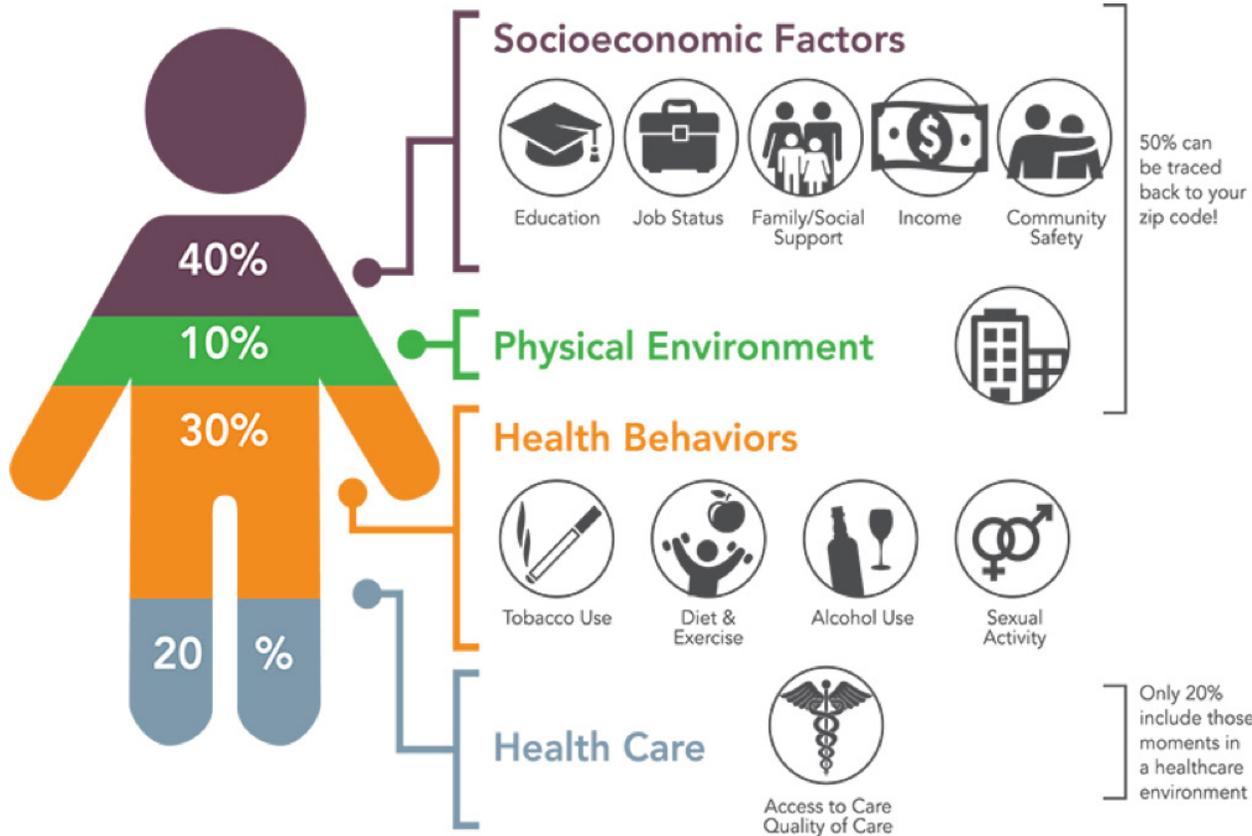


## Where We Learn

We all know that better education leads to better career opportunities, but it also can lead to a longer and healthier life. If a person does not graduate from high school, they are likely to earn less money and struggle to make ends meet. They are also likely to work longer hours and maybe even two jobs just to feed their family and live in a compromised neighborhood without access to healthy food. They are not likely to be as healthy as a post-secondary educated professional. Education is also linked to health literacy which is a person's ability to obtain, process, and understand basic health information and services to make appropriate health decisions. Other factors that impact how people learn are their access to internet/broadband service and computers.



Figure 2: Factors that Influence Health



Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

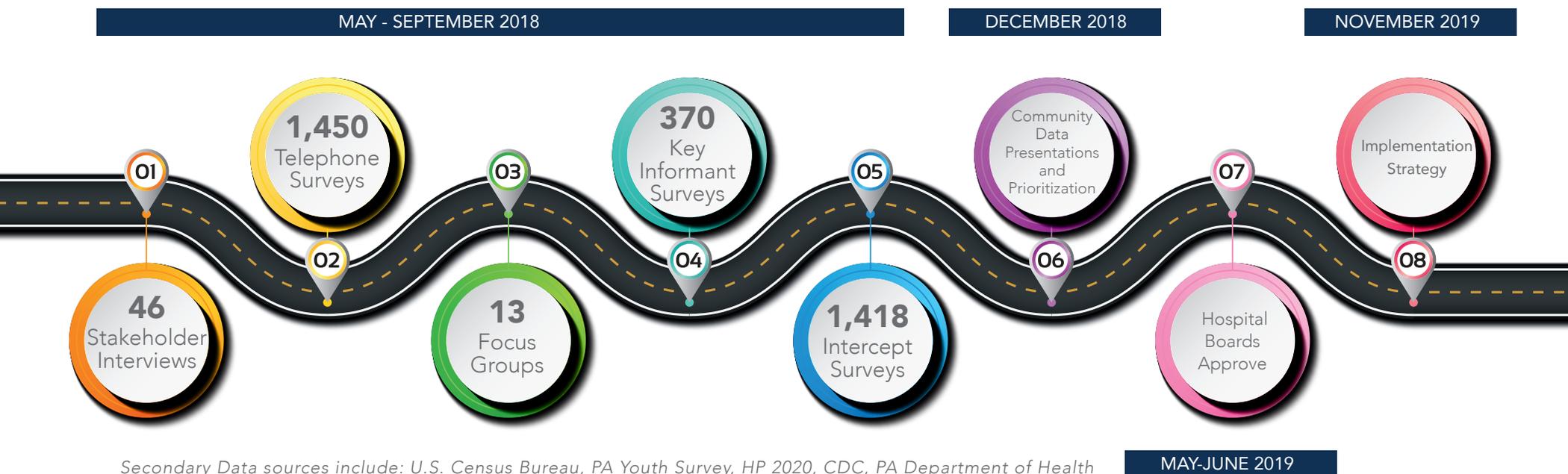
# WHAT GOES IN TO YOUR HEALTH

There are a variety of factors that influence the health of an individual, often referred to as Social Determinants of Health (SDOH). This report will explore all of them as they relate to the health in the service area. Social Determinants of Health (SDOH) are complex circumstances in which individuals are born and live that impact their health. They include intangible factors such as political, socioeconomic and cultural constructs, as well as place-based conditions including accessible healthcare and education systems, safe environmental conditions, well-designed neighborhoods and availability of healthful food. Figure 2, left, illustrates factors that influence health.

## HOW DID WE GET HERE

This assessment is intentionally designed to frame health status in the context of “factors that impact health.” Data from numerous qualitative and quantitative sources were used to validate the findings, using the data CHNA roadmap outlined in **Figure 3**.

**Figure 3: 2019 CHNA Roadmap**



Source: Tower Health Primary and Secondary Data Collection, Strategy Solutions, Inc.

### DATA LIMITATIONS

The primary and secondary data collected for this assessment includes several limitations. Much of the secondary data is from the County level and is not specific to the Hospital's service area due to geographic limitations of currently available data. In addition, researchers were limited to the collection of the most recent publicly available data sources of which many are two (2) or more years old. All primary data is also qualitative and does not necessarily reflect a representative sample of the service area since it was collected through convenience sampling. The Pennsylvania Department of Health performs statistical analysis to determine indicators where a county is significantly different when compared to the state. Indicators where a county is significantly lower when compared to the state are noted on a chart with blue numbers, while those that are significantly higher are noted with red numbers. It is important to note that not all indicators that are significantly higher when compared to the state are negative (i.e. a higher percentage of mothers who breastfeed is positive for the county). The color coding simply reflects areas that of statistical significance and whether are not the county is significantly higher or lower when compared to the state. In this report rates are reported per 100,000 residents unless otherwise noted.

# OVERVIEW OF COMMUNITY ENGAGEMENT AROUND THE FACTORS THAT IMPACT HEALTH

## COMMUNITY ENGAGEMENT

As part of this needs assessment, during the months of May through September 2018, 1,450 telephone surveys, 370 key informant surveys and 1,418 intercept surveys were completed, and 46 stakeholder interviews and 13 focus groups were conducted with a wide range of residents, professionals and leaders in the Tower Health service area in order to understand the community needs and issues, as well as factors that impact health.

**Figure 4**, right, shows the representation of community organizations and/or stakeholders that Tower Health engaged.

**Figure 4: Focus Group And Stakeholder**



# COMMON THEMES ON THE FACTORS THAT IMPACT HEALTH

The following **Figure 5** shows the summary of identified needs. These needs were determined by the frequency mentioned by primary data sources or through negative trends or significant differences in secondary data. Appendix C lists all identified needs.

**Figure 5: Common Themes On The Factors That Impact Health**

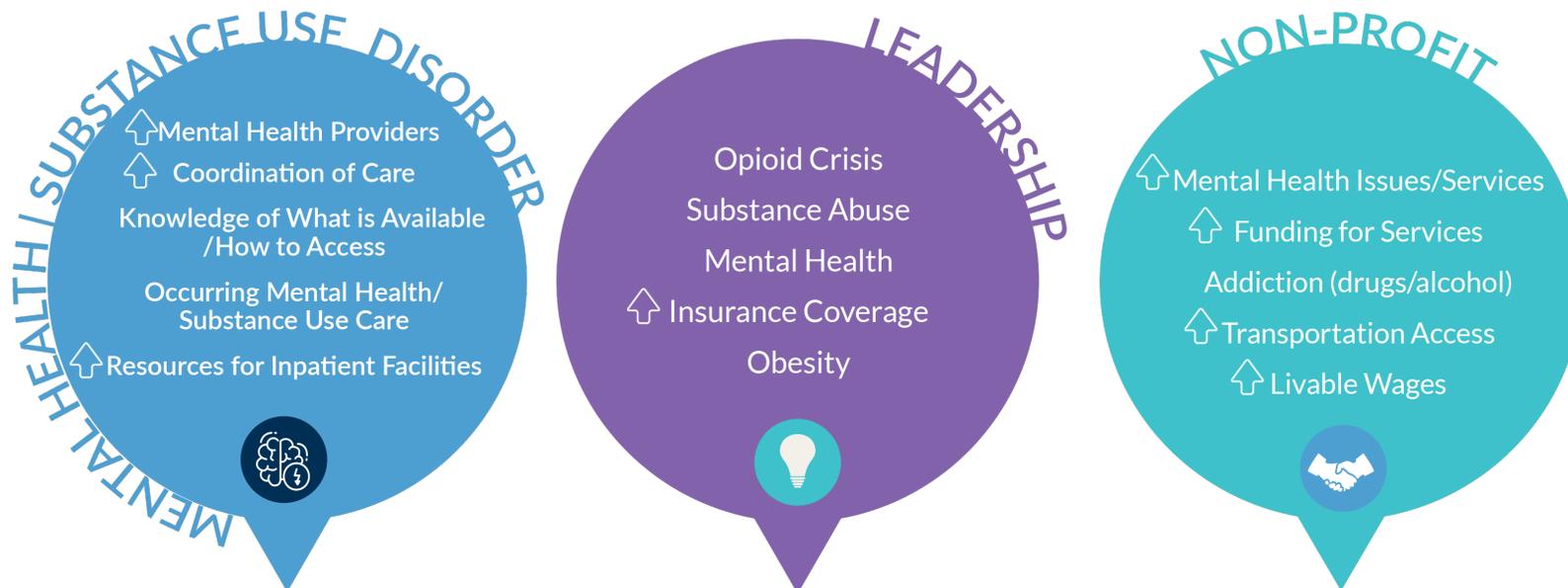


Source: Tower Health Primary and Secondary Data Collection, Strategy Solutions, Inc.



Figure 6 shows the top five community health needs by focus group type.

Figure 6: Top 5 Community Needs by Focus Group Type



Source: Tower Health Focus Groups, Strategy Solutions, Inc., 2018

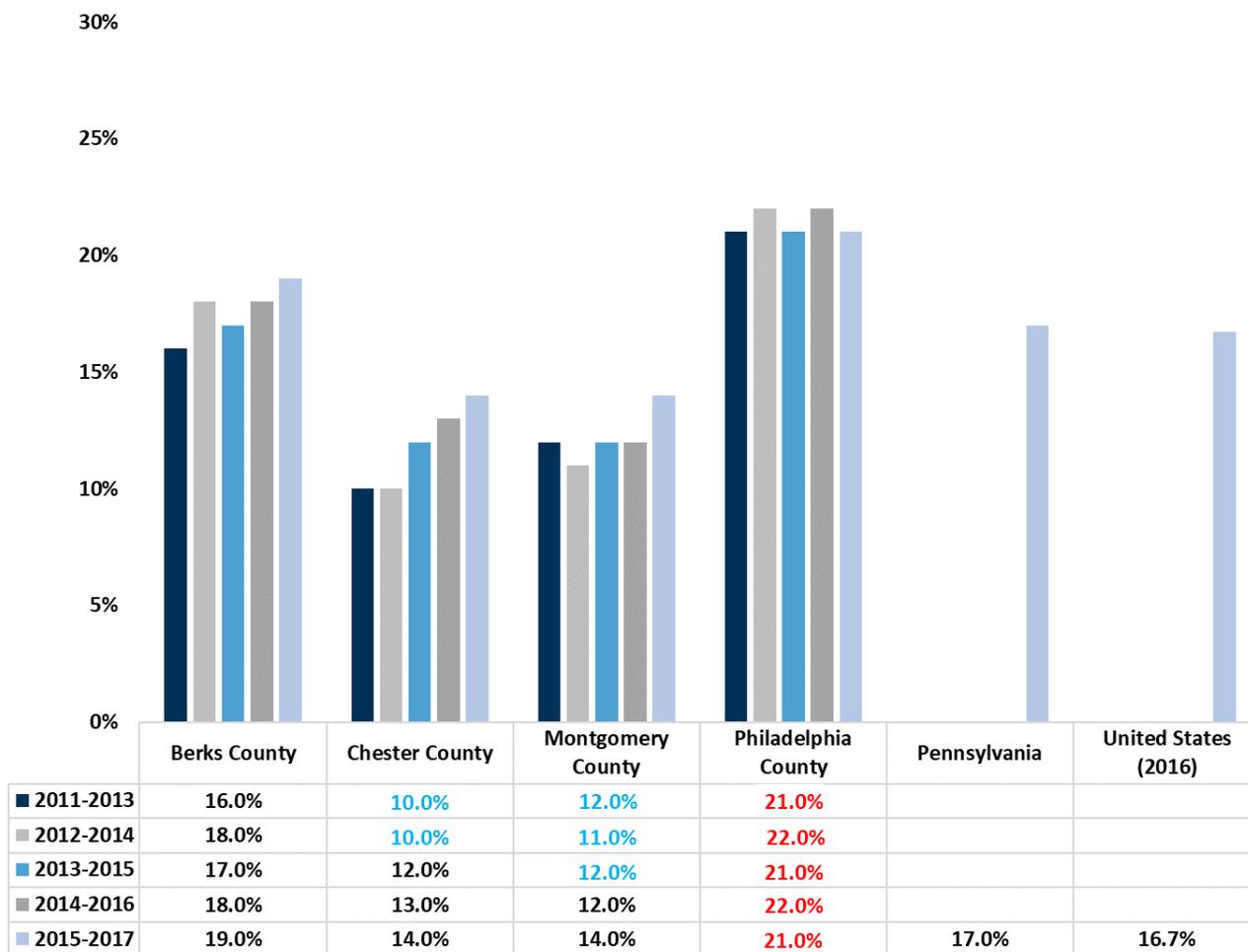
## VISION FOR A HEALTHY COMMUNITY

According to focus group and interview participants, as well as survey respondents, “a healthy community” is one where the focus is on health and wellness and where everyone has access to quality, affordable healthcare. A healthy Tower Health community would offer all residents access to a full continuum of physical and mental health services. There would be a focus on wellness and prevention which would result in increased healthy lifestyles and a decrease in obesity and other chronic conditions.

### OVERALL HEALTH STATUS

**Figure 7** illustrates the percentage of residents in the counties served by Tower Health as well as the state and nation who report their personal health as fair or poor. In 2015-2017, residents in Philadelphia County (21.0%) were significantly more likely to report their health as fair or poor when compared to the state (17.0%). Although not significantly, residents in Berks County (19.0%) were also more likely to report their personal health as fair or poor when compared to the state (17.0%) and nation (16.7%). A smaller percentage of residents in Chester (14.0%) and Montgomery (14.0%) counties reported their health as fair or poor when compared to both the state and nation.

**Figure 7: Personal Health, Fair or Poor**



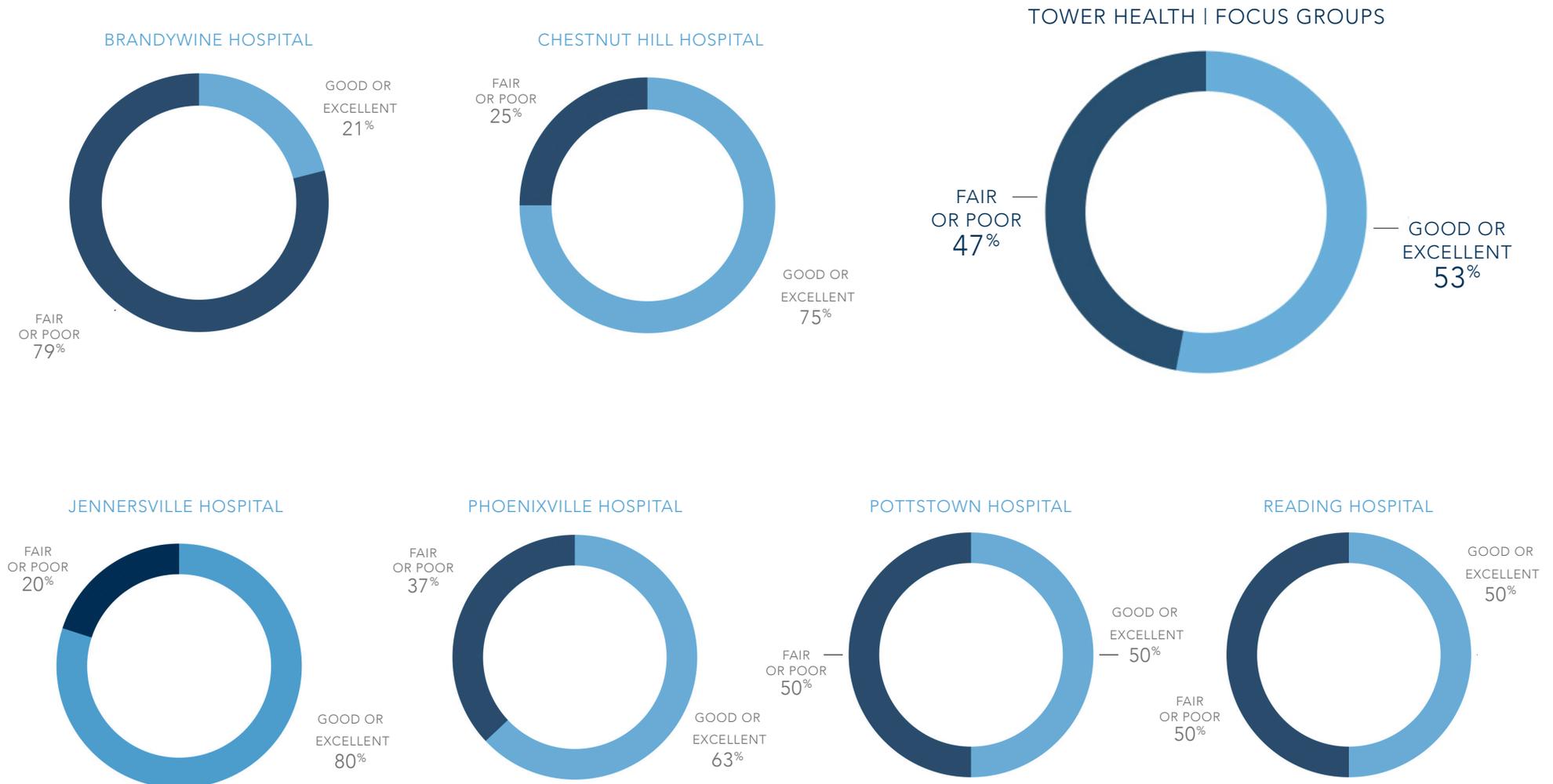
Sources: Department of Health Informatics, Behavioral Risk Factor Surveillance System Data, Pennsylvania Department of Health for Berks/Schuylkill, Chester and Montgomery counties, 2011-2017, Centers for Disease Control, 2016



## WHAT THE COMMUNITY IS SAYING

Just over half (53.0%) of nonprofit focus group participants rated the overall health of the Tower Health community as Good or Excellent. When looking across the system this varied by hospital with focus group participants in the Jennersville Hospital service area having the highest percentage of respondents rate the health of the community as Good or Excellent (80.0%) and Brandywine Hospital the lowest (21.0%). **Figure 8** below, shows the overall health status for each hospital and the system.

**Figure 8: Overall, Health Status**





# HEALTH IS WHERE WE LIVE

Figure 9 shows that the population in Tower Health’s Primary Service Area is projected in increase by 1.8% over the next five years.

Table 1 shows the marital status for residents who reside in the primary area served by the Tower Health System. One-third of the residents (33.3%) have never married, while 46.4% are currently married, 9.7% are divorced, 6.4% are widowed and 4.2% are separated.

Table 1: Demographic Snapshot: Marital Status

Marital Status	Tower Health System
Married	46.4%
Separated	4.2%
Divorced	9.7%
Widowed	6.4%
Never Married	33.3%

## HOW GENDER IMPACTS HEALTH

Table 2 shows the population breakdown by gender in the service area. There are slightly more females (51.4%) in the Tower Health service area than males (48.6%).

Figure 9: Demographic Snapshot: Population



TOWER HOSPITAL PRIMARY SERVICE AREA  
 Projected to increase from  
 895,472 in 2018  
 to  
 911,578 in 2023

Table 2: Demographic Snapshot: Gender

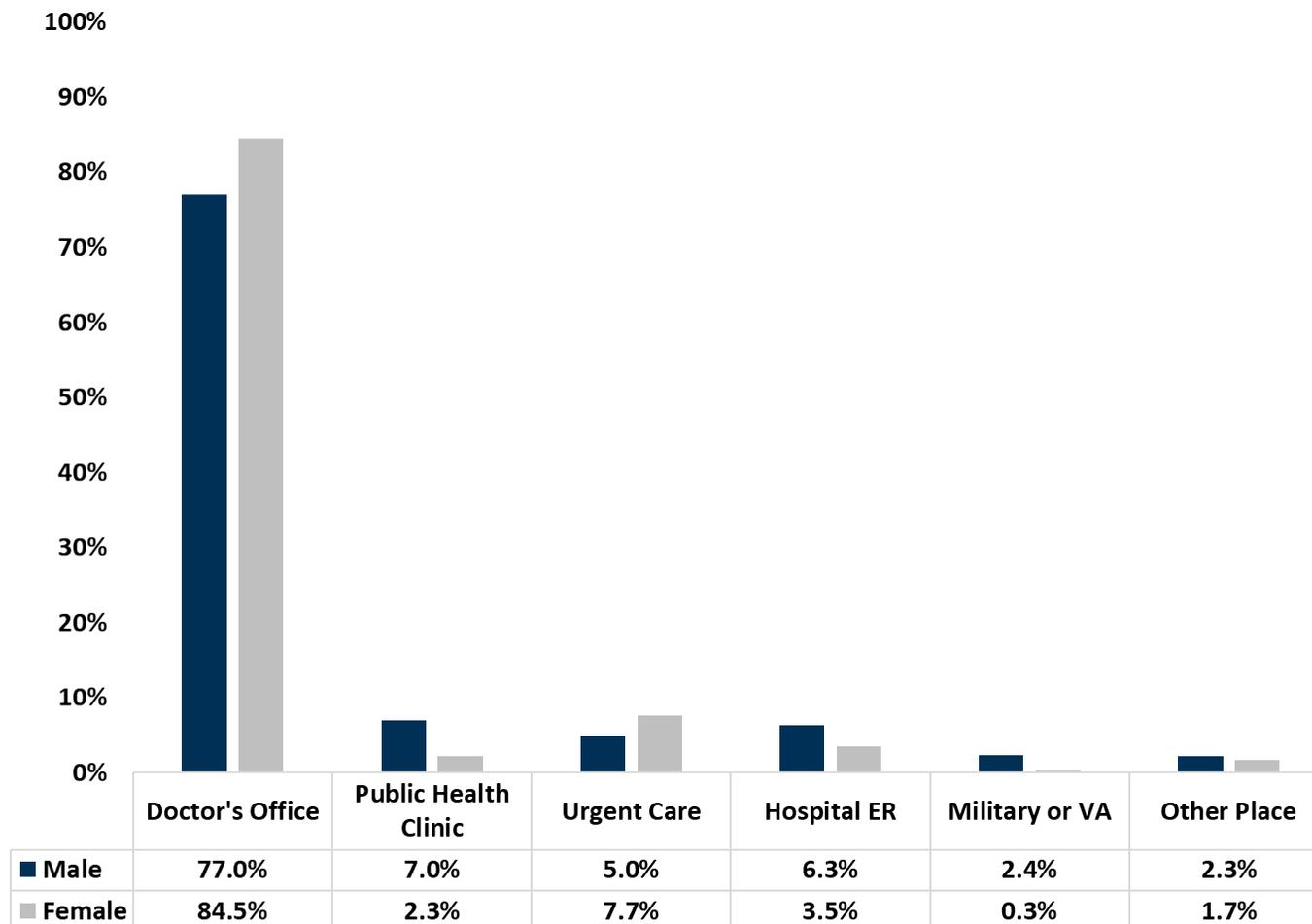
Gender	Tower Health System
Male	48.6%
Female	51.4%

Source (Table 1 & 2, Figure 9): Claritas - Pop-Facts Premier 2018, Environics Analytics

IMPACTS OF GENDER ON CHRONIC CONDITIONS

**Figure 10** illustrates the percentage of community survey respondents for the Tower Health System by gender in terms of where respondents typically go for routine health care. Female respondents were significantly more likely to indicate they receive routine health care from a doctor’s office or urgent care. Male respondents were significantly more likely to receive their routine health care from a public health clinic, hospital ER or a military or VA facility.

**Figure 10: Have a Routine Place Go for Health Care**



Source: Tower Health Community Survey, Professional Research Consultants, 2018

**Table 3** shows significant differences by gender from the Tower Health community survey. Male respondents were significantly more likely to have had a routine check up in the past year and to have received a pneumonia shot when compared to female respondents. Female respondents were significantly more likely to have had a dental visit in the past year compared to male respondents.

**Table 3: Preventative Care**

	Male	Female	Overall
Routine checkup within the past year	79.3%	72.3%	75.6%
Dental visit within the past year	72.0%	75.9%	74.0%
Pneumonia shot	46.4%	37.8%	41.8%

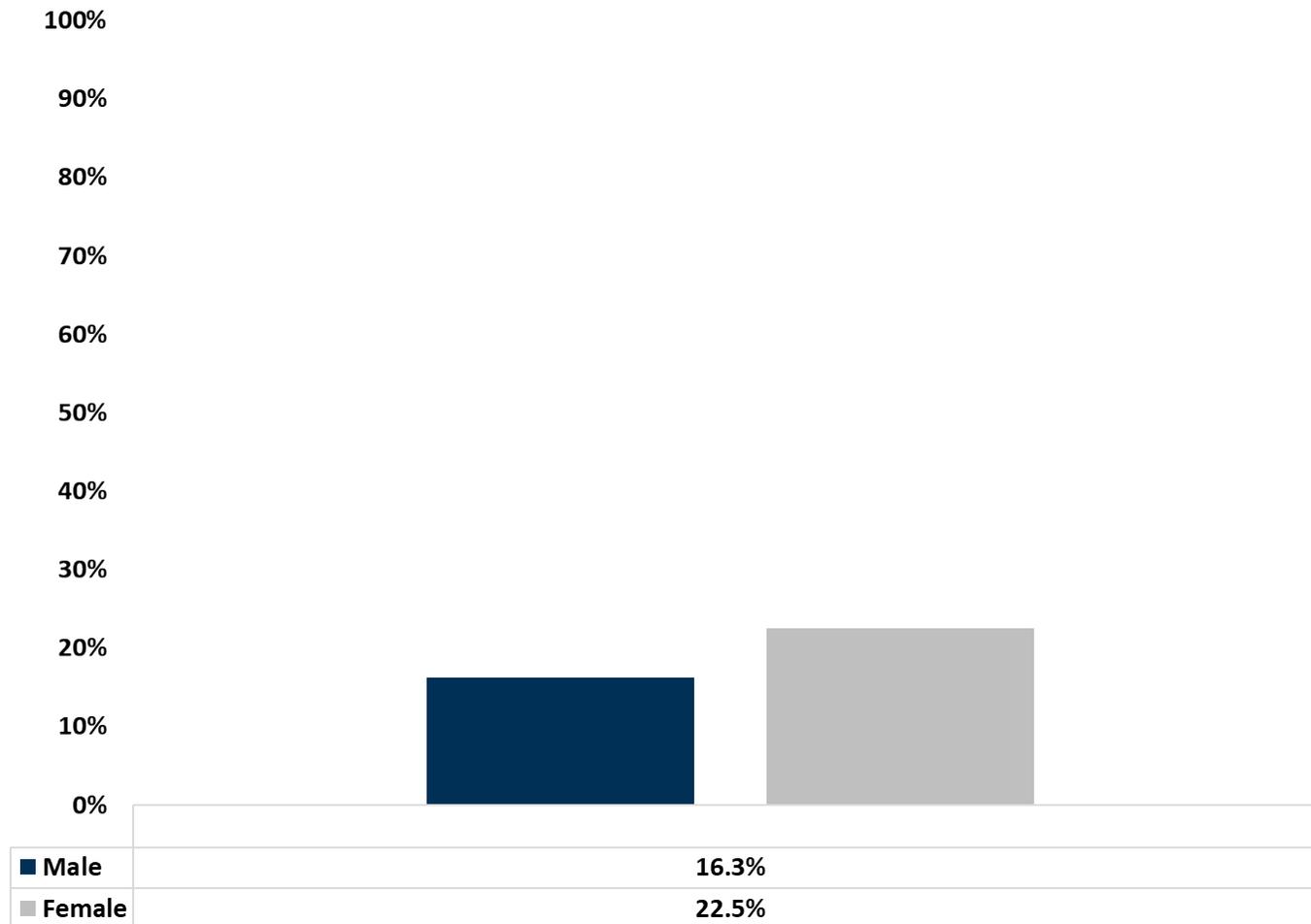
**Table 4** illustrates the percentage of community survey respondents for the Tower Health System who have ever been told they had the following chronic conditions where there was a significant difference based on gender. Male survey respondents were significantly more likely to have ever been told they have kidney disease, coronary heart disease, stroke, diabetes, high blood pressure, high cholesterol or have had a heart attack compared to female respondents. Female respondents were significantly more likely to have osteoporosis compared to male respondents.

**Table 4: Chronic Conditions by Gender**

	Male	Female	Overall
Osteoporosis	4.8%	9.7%	7.4%
Kidney disease	6.7%	2.8%	4.6%
Heart attack/MI	7.7%	2.5%	5.0%
Angina/coronary heart disease	7.0%	3.4%	5.1%
Stroke	7.1%	4.2%	5.6%
Diabetes	15.6%	11.2%	13.3%
High blood pressure	42.6%	33.7%	37.9%
High cholesterol	41.8%	30.5%	35.9%

**Figure 11** shows significant differences by gender from the Tower Health community survey for respondents who were unable to see a doctor due to cost. Female respondents (22.5%) were significantly more likely to have been unable to see a doctor due to cost when compared to male respondents (16.3%).

**Figure 11: Needed to See a Doctor but Could Not Due to Cost**

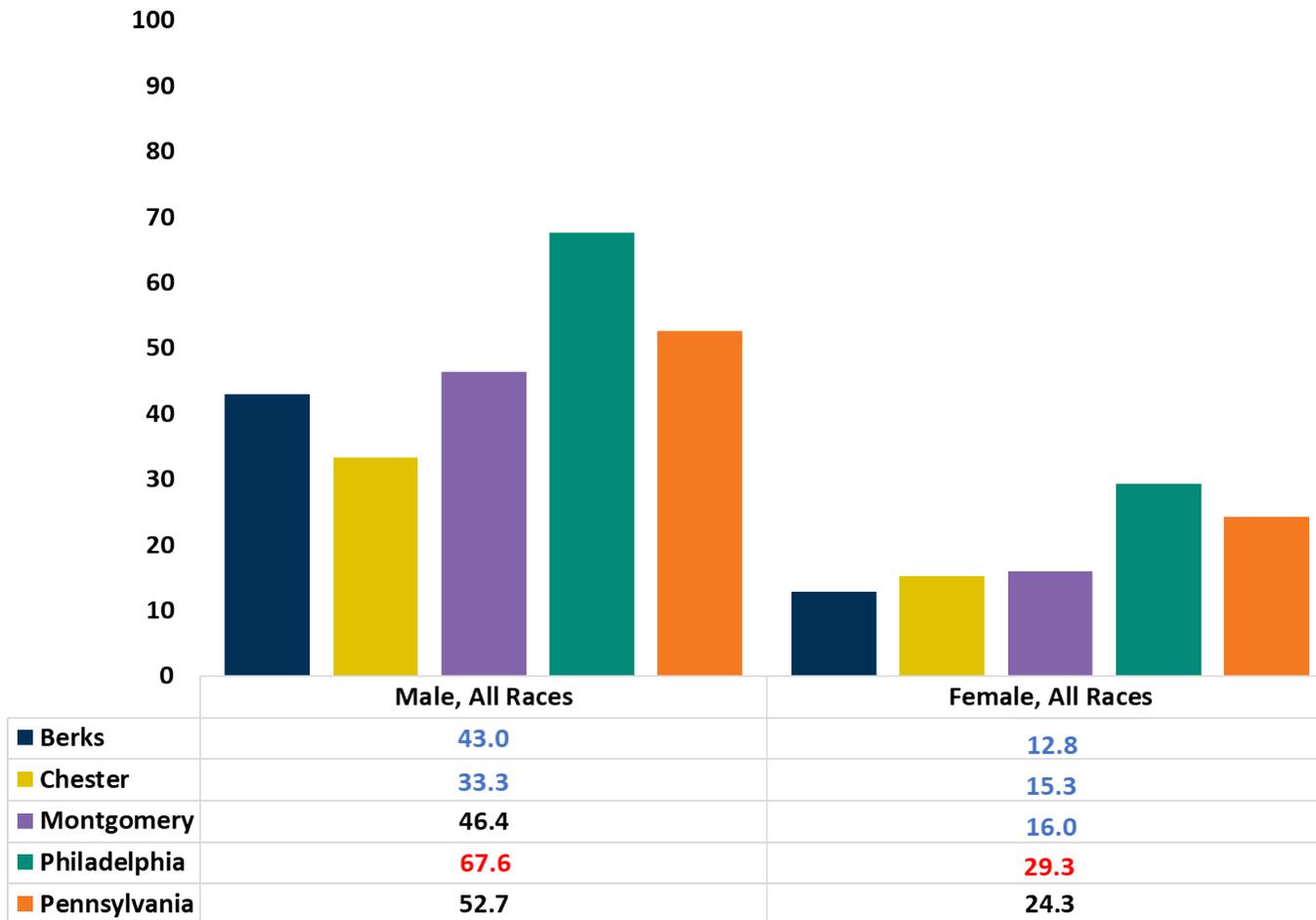


Source: Tower Health Community Survey, Professional Research Consultants, 2018

### IMPACTS OF GENDER ON BEHAVIORAL HEALTH

**Figure 12** shows the significant differences by gender for residents in Berks, Chester, Montgomery and Philadelphia counties compared to the state for drug-induced mortality. The rate for males in Berks (43.0) and Chester (33.3) counties was significantly lower when compared to the state (52.7) while the rate in Philadelphia County (67.6) was significantly higher. There was not a significant difference for male respondents in Montgomery County. The drug induced mortality rate for females was significantly lower in Berks (12.8), Chester (15.3) and Montgomery (16.0) counties when compared to the state (24.3). The rate for females in Philadelphia County (29.3) was significantly higher when compared to the state.

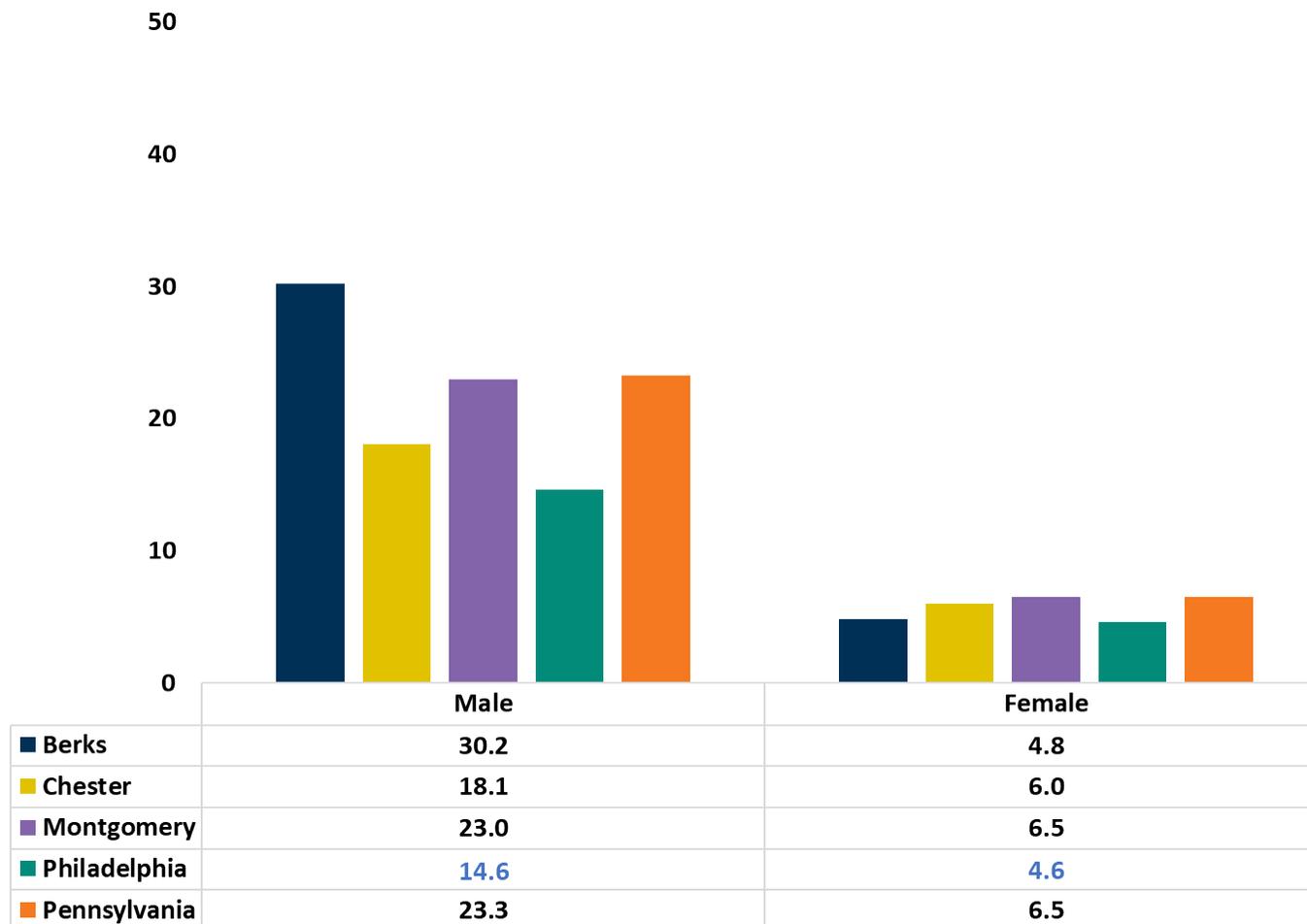
**Figure 12: Drug-Induced Mortality**



Source: Department of Health Informatics, Pennsylvania Department of Health for Berks, Chester, Montgomery and Philadelphia counties, 2011-2016

**Figure 13** illustrates the suicide mortality rate by gender for Berks, Chester, Montgomery and Philadelphia counties compared to the state. The suicide mortality rate in Philadelphia County was significantly lower for both males (14.6) and females (4.6) when compared to the state (23.3 and 6.5 respectively). In all service area counties the rate for females was lower when compared to males. Although not significant, the rate for males in Chester County was lower than the state while the rate for females was lower in Berks and Chester counties.

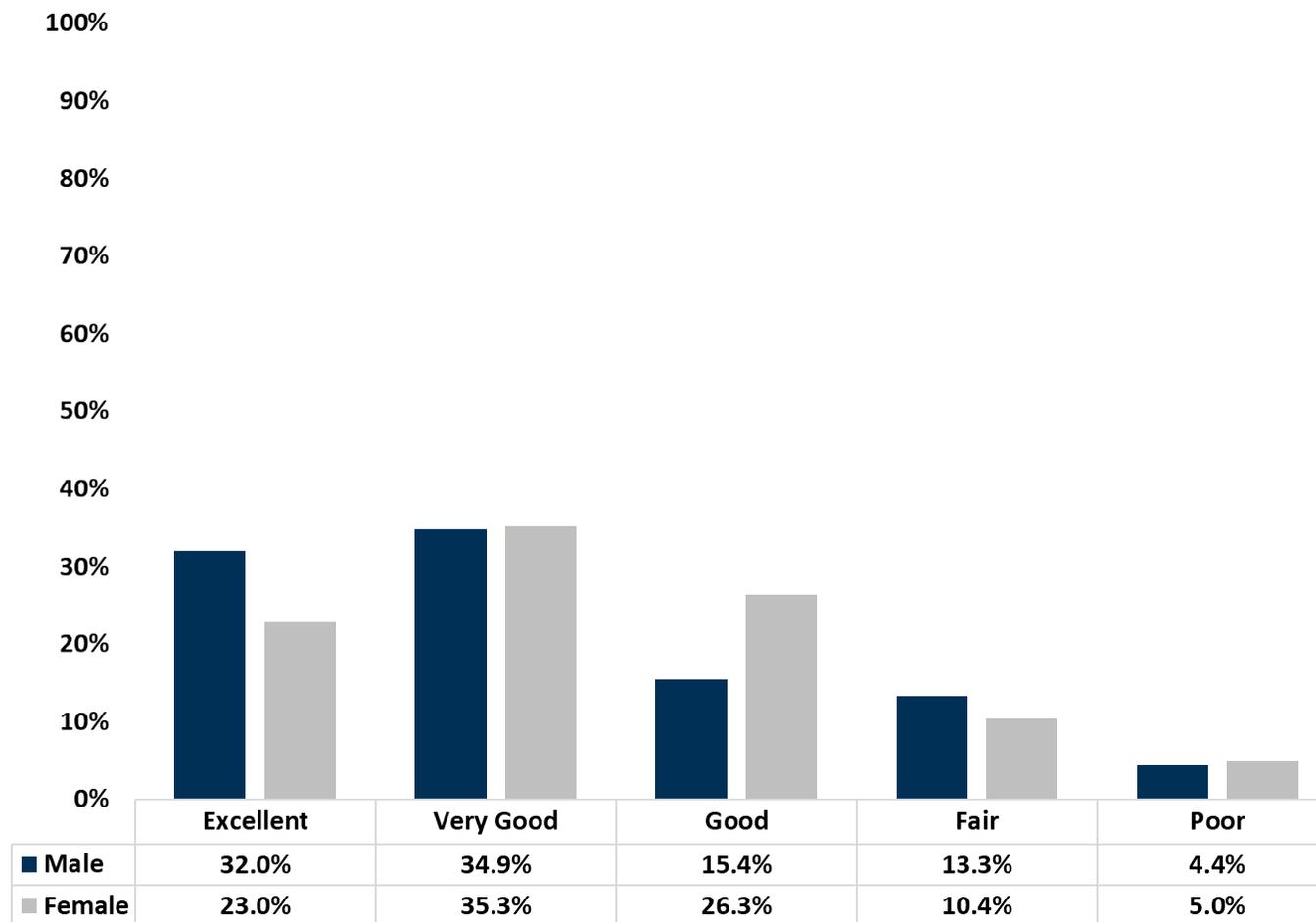
**Figure 13: Suicide Mortality**



Source: Department of Health Informatics, Pennsylvania Department of Health for Berks, Chester, Montgomery and Philadelphia counties, 2011-2016

**Figure 14** illustrates responses to the community survey regarding personal mental health status. Male respondents were significantly more likely to rate their mental health as fair or poor (17.7%) compared to female respondents (15.4%).

**Figure 14: Personal Mental Health Rating**

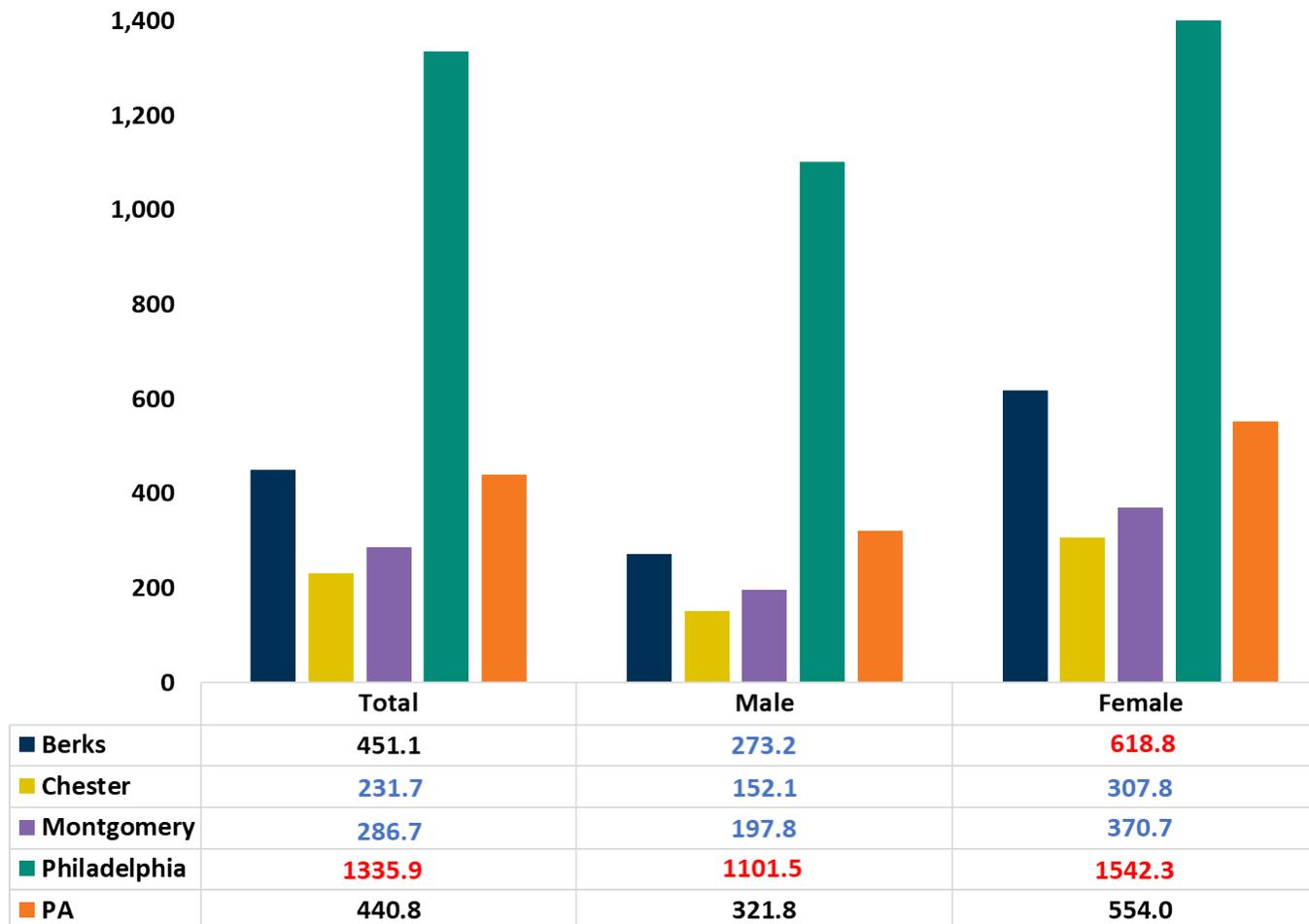


Source: Tower Health Community Survey, Professional Research Consultants, 2018

IMPACTS OF GENDER ON INFECTIOUS DISEASE

**Figure 15** illustrates the significant differences by gender in Berks, Chester, Montgomery and Philadelphia counties when compared to the state for Chlamydia. Females in Berks (618.8) and Philadelphia (1542.3) counties had a significantly higher Chlamydia rate when compared to females in Pennsylvania (554.0). The rate for females in Chester (307.8) and Montgomery (370.7) counties was significantly lower than the state. The Chlamydia rate for males in Berks (273.2), Chester (152.1) and Montgomery (197.8) counties was significantly lower when compared to the state (321.8). The Chlamydia rate for males in Philadelphia County (1101.5) was significantly higher when compared to the state.

**Figure 15: Chlamydia Rate Per 100,000**

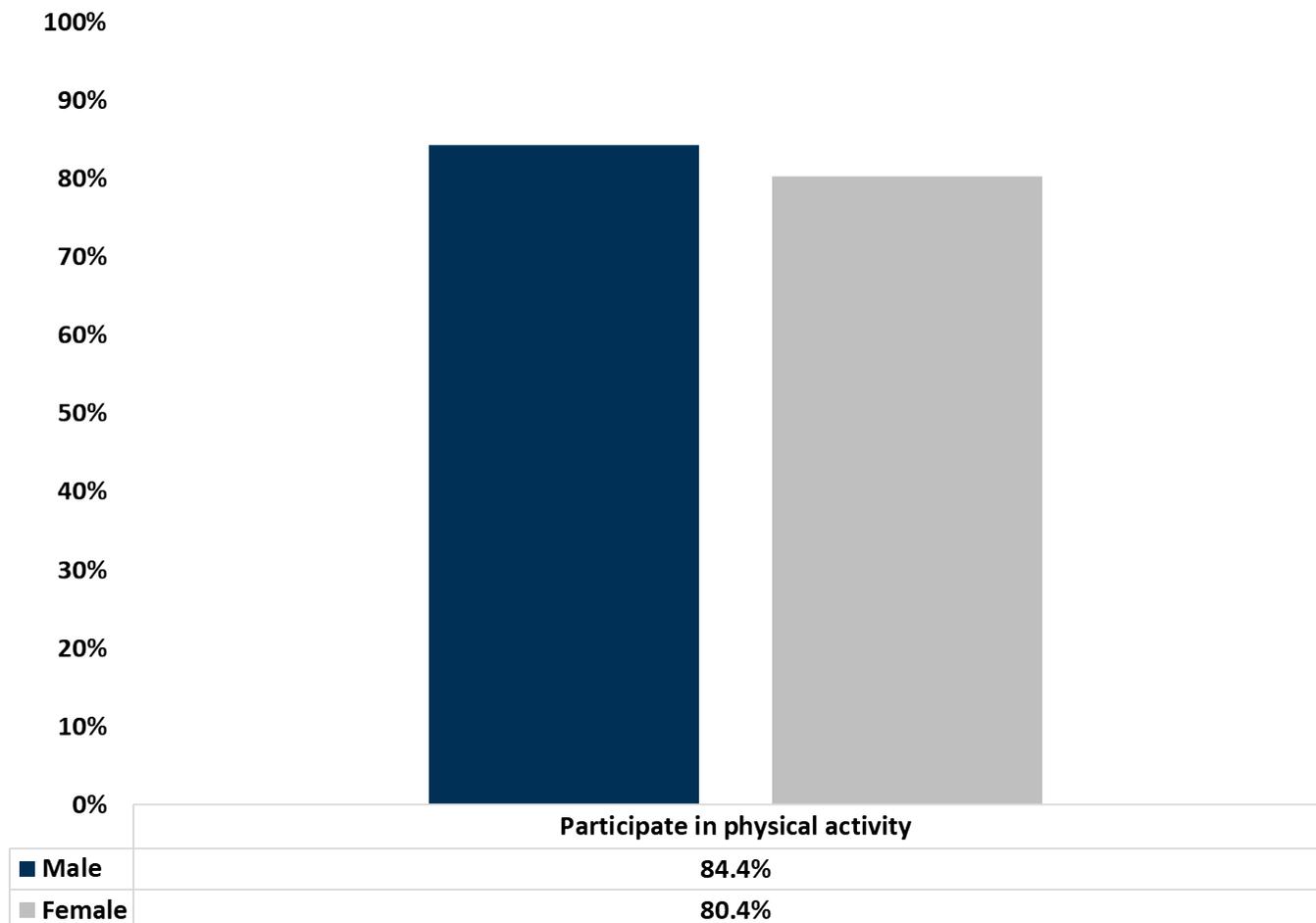


Source: Department of Health Informatics, Pennsylvania Department of Health for Berks, Chester, Montgomery and Philadelphia counties, 2011-2016.

## IMPACTS OF GENDER ON PHYSICAL ACTIVITY

**Figure 16** shows the significant differences by gender from the community survey respondents who report they have participated in a physical activity in the past month. Male respondents (84.4%) were significantly more likely to have participated in a physical activity within the past month than female respondents (80.4%).

**Figure 16: Participated in Physical Activity, Past Month**



## HOW AGE IMPACTS HEALTH

**Table 5** shows the population breakdown by age in Tower Health's Primary Service Area. The median age is 39.8 and is projected to increase slightly (40.5 in 2023).

**Table 5: Demographic Snapshot: Age**

Age	Tower Health System
Median Age	39.8
0 – 17 years	23.2%
18 – 34 years	20.9%
35 – 54 years	26.4%
55 – 64 years	13.4%
> 65 years	16.1%

Source: Claritas - Pop-Facts Premier 2018, Environics Analytics

## IMPACTS OF AGE ON ACCESS TO CARE

**Table 6** shows the significant differences by age for Tower Health community survey respondents for indicators related to access. Young respondents (age 18 to 39) were significantly more likely to experience barriers when accessing healthcare compared to older respondents. Respondents age 65 and older were significantly more likely to have received a routine check up in the past 12 months when compared to younger respondents.

**Table 6: Access to Care**

Access Indicators	18 to 39	40 to 64	65 and Over
Difficulty finding a doctor	15.4%	9.7%	3.7%
Difficulty getting an appointment to see a doctor	20.9%	20.8%	7.8%
Cost of health care	10.9%	9.1%	2.6%
Lack of transportation	10.3%	5.8%	5.2%
Office hours were not convenient	57.2%	38.8%	4.0%
Use of urgent care or emergency room for care	19.1%	7.6%	7.0%
Received a routine checkup within the last 12 months	71.0%	73.8%	89.5%

Source: Tower Health Community Survey, Professional Research Consultants, 2018

## IMPACTS OF AGE ON CHRONIC CONDITIONS

**Table 7** identifies chronic disease-related indicators from the community survey that are significantly impacted by age. Older residents age 65 and over were significantly more likely to have been told that they have all of the chronic conditions listed below with the exception of asthma and obesity. Respondents ages 18 to 39 were significantly more likely to have asthma while those ages 40 to 64 were significantly more likely to be considered obese compared to other respondents.

**Table 7: How Age Impacts Health: Chronic Disease**

<b>Ever Been Told That You Have:</b>	<b>18 to 39</b>	<b>40 to 64</b>	<b>65 and over</b>	<b>Overall</b>
<b>COPD</b>	7.3%	9.1%	13.8%	9.3%
<b>Arthritis/rheumatism</b>	8.4%	26.1%	49.3%	24.1%
<b>Sciatica or chronic back pain</b>	13.4%	24.8%	30.5%	21.7%
<b>Cancer (not skin)</b>	1.2%	7.8%	20.6%	7.8%
<b>Skin cancer</b>	3.0%	7.1%	19.8%	8.0%
<b>Osteoporosis</b>	0.6%	8.1%	18.6%	7.4%
<b>Kidney disease</b>	2.8%	4.6%	7.9%	4.6%
<b>Heart attack (MI)</b>	3.2%	4.7%	9.0%	5.0%
<b>Kidney disease</b>	2.8%	4.6%	7.9%	4.6%
<b>Angina or coronary heart disease</b>	1.2%	5.8%	11.2%	5.2%
<b>Stroke</b>	4.2%	5.4%	8.6%	5.5%
<b>Asthma</b>	21.7%	17.5%	13.0%	18.2%
<b>Diabetes</b>	7.8%	14.5%	20.9%	13.2%
<b>Overweight</b>	34.4%	35.6%	38.5%	35.7%
<b>Obese</b>	27.8%	36.4%	32.1%	32.5%

Source: Tower Health Community Survey, Professional Research Consultants, 2018



## IMPACTS OF AGE ON FOOD AND NUTRITION

**Table 8** shows the significant differences by age for food and nutrition related items from the community survey. Respondents ages 65 and over were significantly less likely to worry they would run out of food before they had money to buy more, food purchased did not last and did not have money to buy more or be food insecure compared to younger respondents.

**Table 8: How Age Impacts Health: Food and Nutrition**

Food and Nutrition by Age				
	18 to 39	40 to 64	65 and Over	Overall
Worried food would run out before had money to buy more	19.7%	19.8%	7.1%	17.4%
Food purchased did not last and did not have money to buy more	16.7%	14.9%	5.1%	13.7%
Not food secure	23.1%	21.0%	8.3%	19.4%

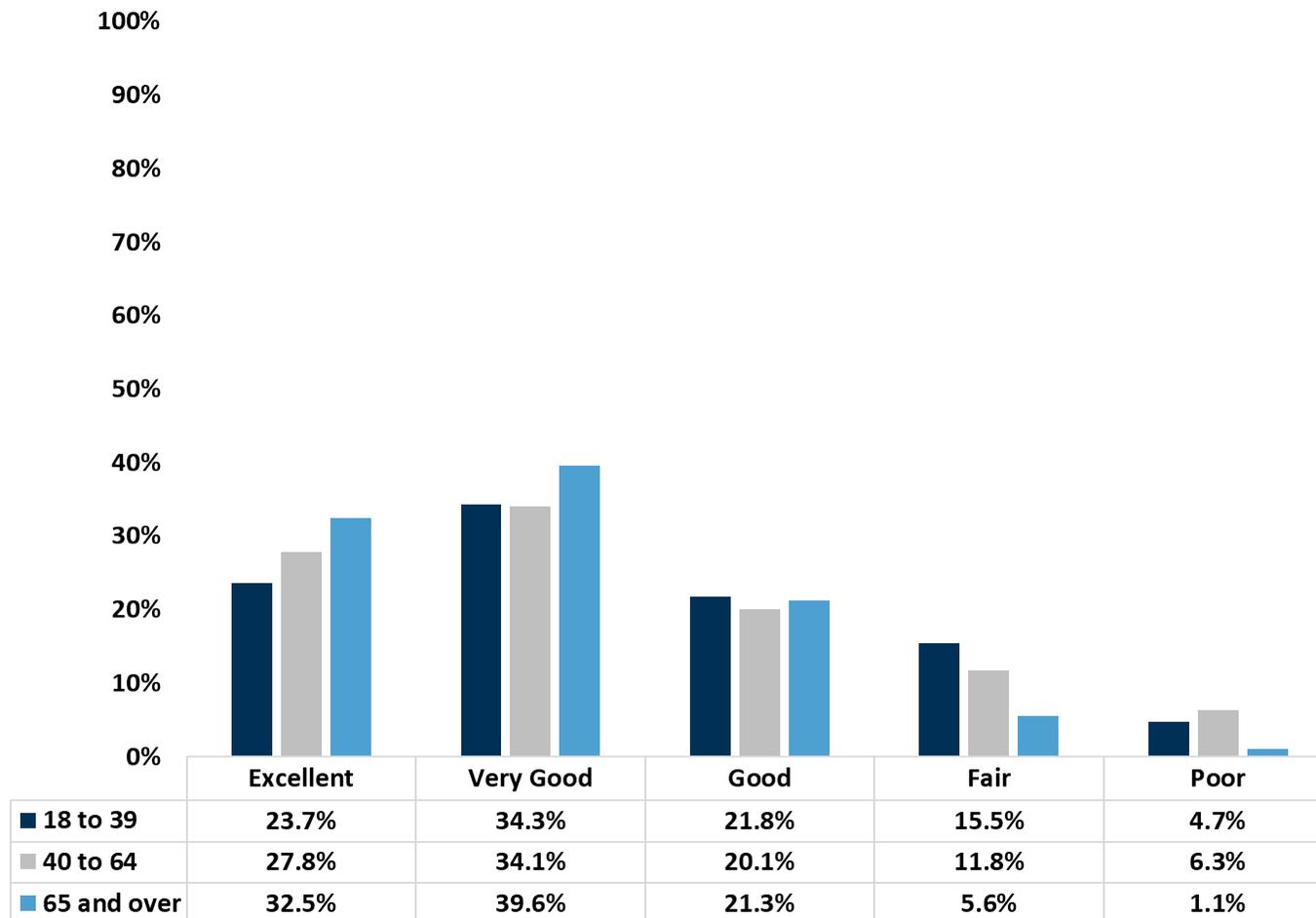
Source: Tower Health Community Survey, Professional Research Consultants, 2018



IMPACTS OF AGE ON BEHAVIORAL HEALTH

**Figure 17** illustrates the significant differences for personal mental health rating by age of community survey respondent. Community survey respondents age 18 to 39 (20.2%) were significantly more likely to rate their health as fair or poor when compared to older respondents.

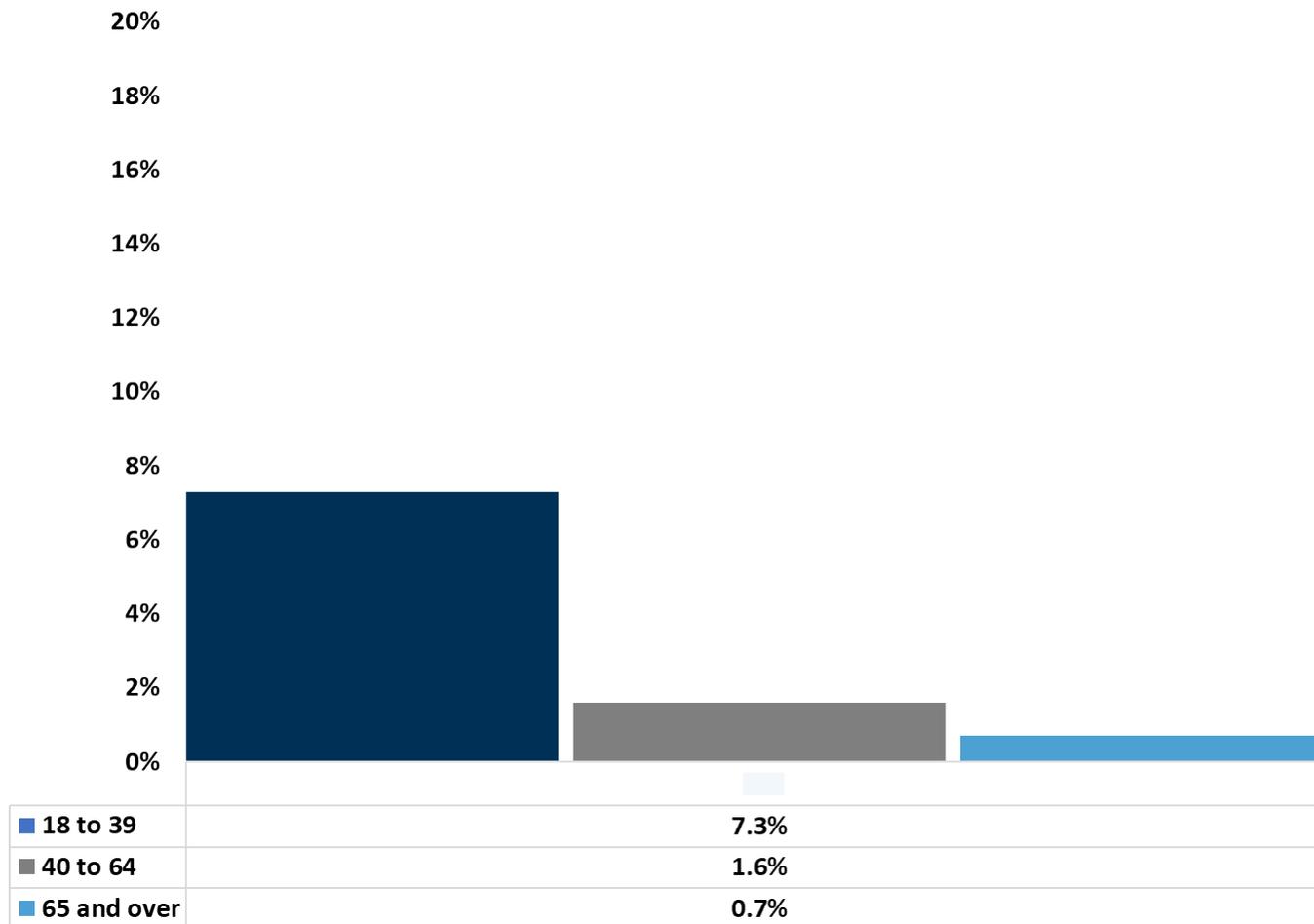
**Figure 17: Personal Mental Health Rating**



Source: Tower Health Community Survey, Professional Research Consultants, 2018

**Figure 18** shows the significant differences by age for community survey respondents who report having used an illegal drug or taken prescription medication not prescribed to them. Survey respondents age 18 to 39 (7.3%) were significantly more likely to have used an illegal drug or prescription medication that was not prescribed to them when compared to older respondents.

**Figure 18: Used Illegal Drug or Taken Prescription Medication Not Prescribed to Individual**

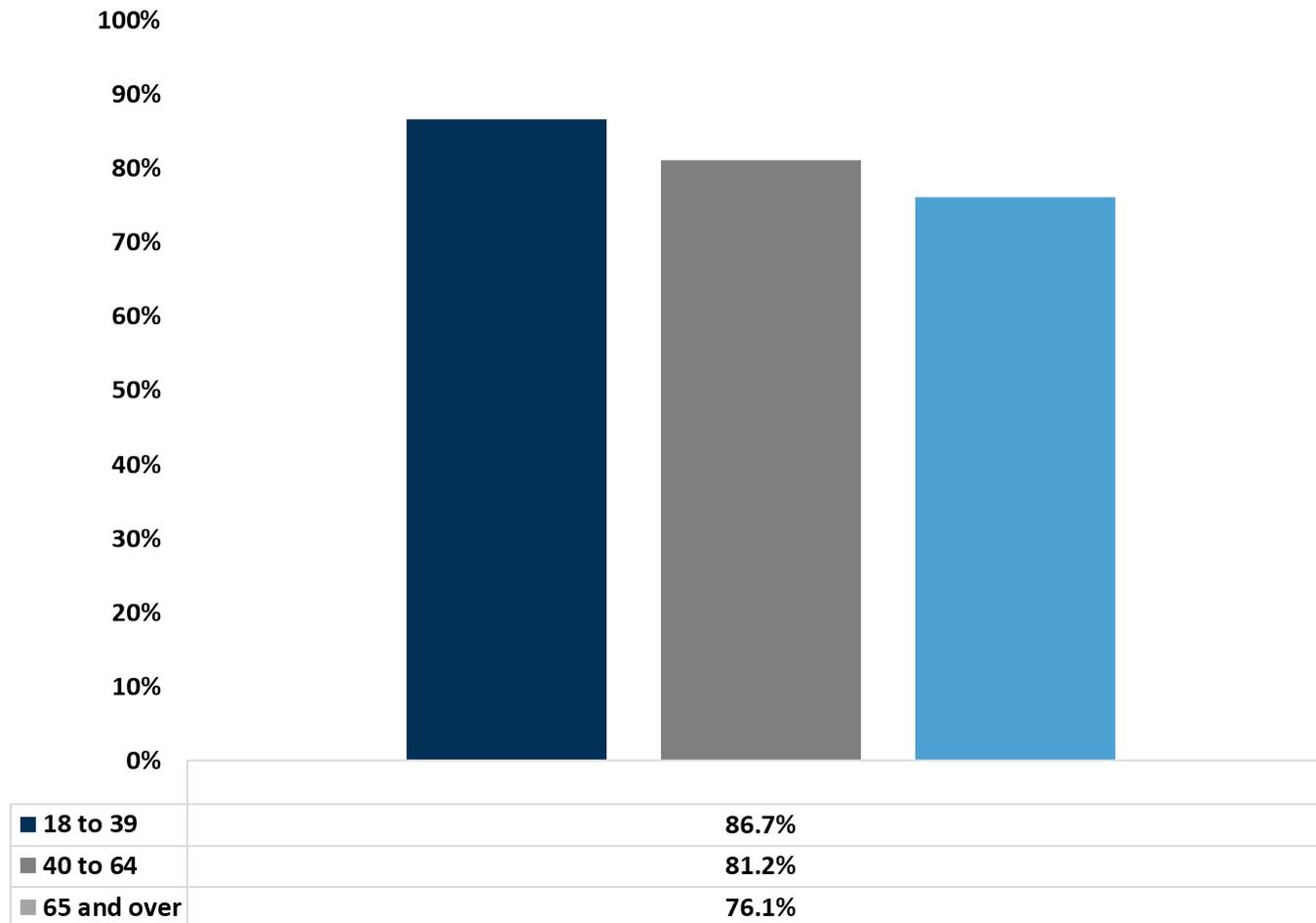


Source: Tower Health Community Survey, Professional Research Consultants, 2018

## IMPACTS OF AGE ON PHYSICAL ACTIVITY

**Figure 19** shows the significant differences for community survey respondents who have participated in physical activity over the past month by age of respondent. Older respondents (age 65 and over) were significantly less likely to have participated in physical activity when compared to younger respondents.

**Figure 19: Participated in Physical Activity, Past Month**

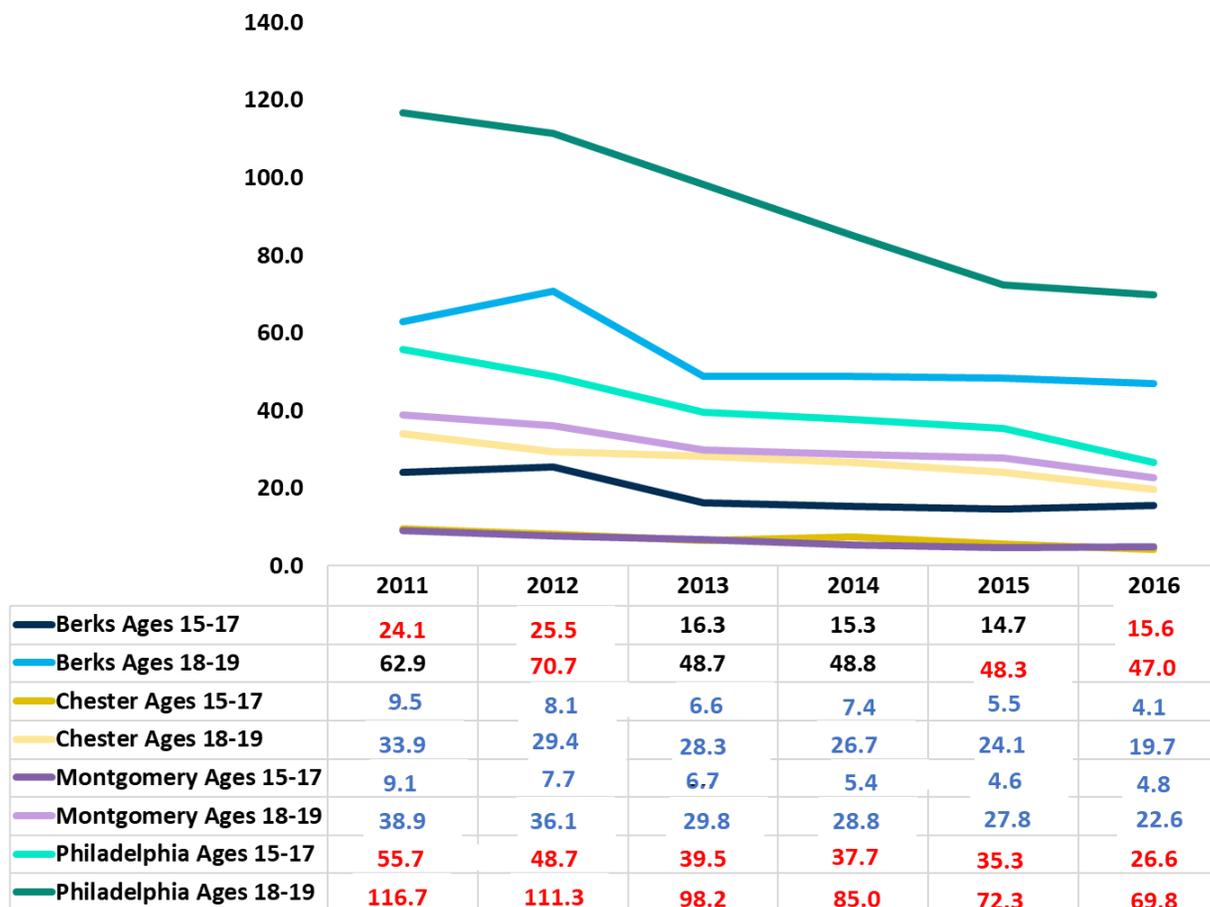


Source: Tower Health Community Survey, Professional Research Consultants, 2018

IMPACTS OF AGE ON MATERNAL AND CHILD HEALTH

**Figure 20** illustrates the teen pregnancy rate per 1,000 in Berks, Chester, Montgomery and Philadelphia counties between 2011 and 2016. While decreasing for teens both Ages 15-17 and Ages 18-19, the rates in Philadelphia County are still significantly higher than the state rate for all years. The rate for both age groups has also decreased in Berks County, but in 2016 remained significantly higher when compared to the state. The rates in Chester and Montgomery counties have also decreased for ages 15-17 and 18-19 and have been significantly lower when compared to the state.

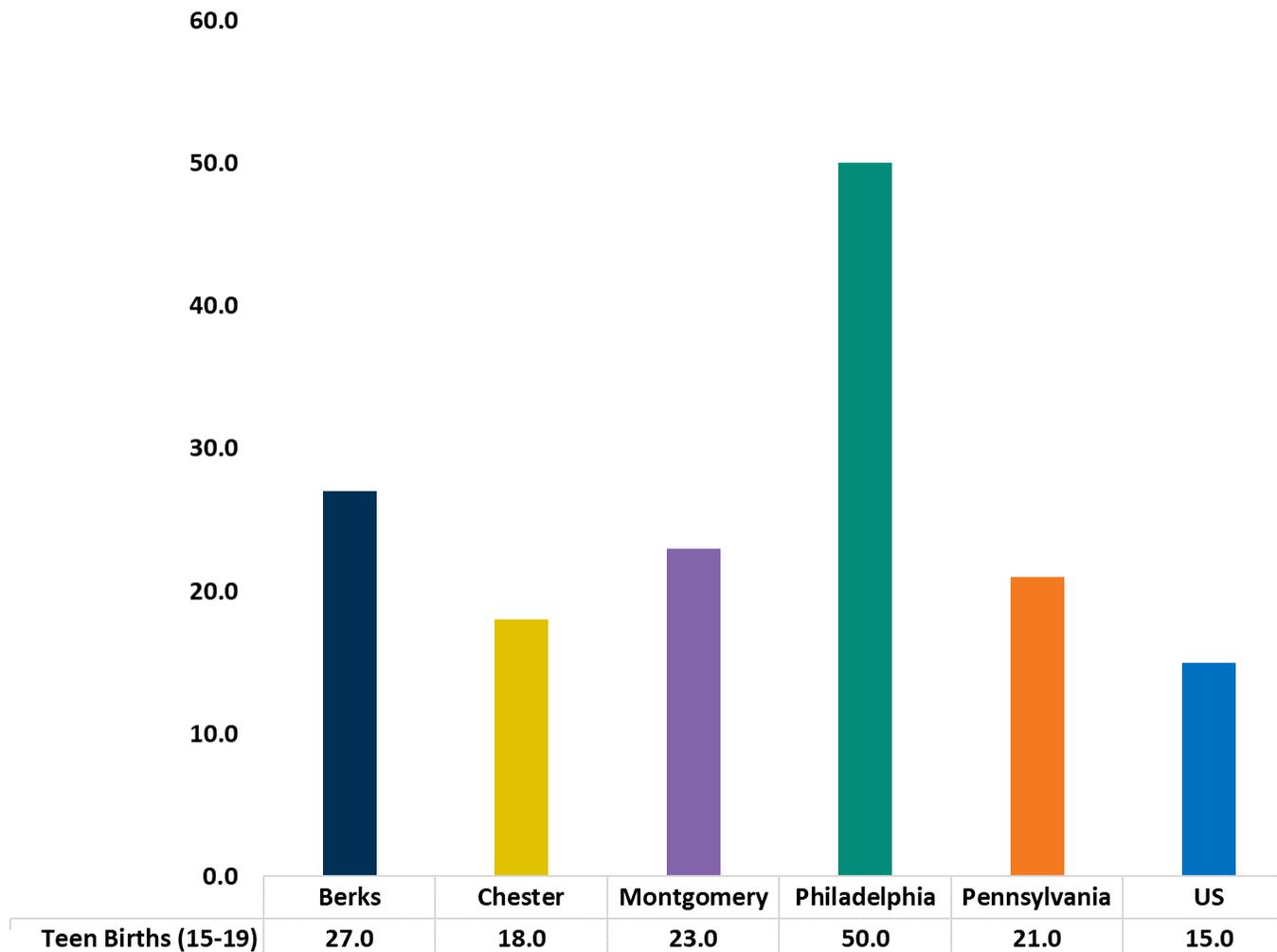
**Figure 20: Teen Pregnancy Rate Per 1,000, Berks, Chester, Montgomery and Philadelphia Counties**



Source: Department of Health Informatics, Pennsylvania Department of Health for Berks, Chester, Montgomery and Philadelphia counties, 2011-2016.

**Figure 21** below outlines the teen birth rate per 1,000 births for ages 15-19. The rate in Berks (27.0), Montgomery (23.0) and Philadelphia (50.0) counties were higher than both the state (21.0) and the U.S. (15.0), while the rate in Chester County (18.0) was lower than the state but above the nation.

**Figure 21: Teen Births Per 1,000 Age 15-19**



Source: County Health Rankings and Roadmaps for Berks, Chester, Montgomery and Philadelphia counties, 2018

## HOW BEING A CHILD IMPACTS HEALTH

Childhood is an important period in a young person's life. Children need safe housing, food, medical, proper educational stimulation and nurturing relationships for healthy development. The first years of life build the foundation for future cognitive, emotional and behavioral skill development. Strong relationships with caregivers and stable, safe environment play a pivotal role in building a strong foundation for later growth and learning.

As of 2017, there were 83.1 million Millennials in the United States (those born between 1982 and 2000), according to the U.S. Census Bureau. Just like the Baby Boom generation before it, this cohort of young people carries influence. In the healthcare space, Millennials are prompting greater emphasis on technology, faster delivery of care, telemedicine adoption, a fee-for-outcome model and a shift toward consumer-oriented service.<sup>2</sup>

**Table 9**, on page 39, outlines the youth-related data from the County Health Rankings for Tower Health's Primary Service Area. High school graduation rates have increased in Chester, Montgomery and Philadelphia counties, while they decreased slightly in Berks County. The percentage of children living in poverty has not changed much in the service area counties, with the highest percentage in Philadelphia County (37.2%) and lowest in Chester County (7.5%). The percentage of children living in single parent homes has increased in Berks and Chester counties while remaining steady in the others. Disconnected youth are those ages 16 to 19 who are neither working nor in school. Data is only available on disconnected youth for 2017 and 2018 during which time the percentage did not change in any of the counties.

---

<sup>2</sup> JT Ripton, Five ways Millennials are changing the healthcare industry. Becker's Hospital Review. March 1, 2017.

Table 9: How Being a Child Impacts Health: Youth-Related Indicators

<b>COUNTY HEALTH RANKINGS</b>	<b>Youth-Related Indicators</b>				
<b>Berks County</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
High School Graduation Rates	84.7%	83.5%	84.6%	83.9%	83.9%
Children Living in Poverty	22.0%	21.2%	21.4%	19.9%	19.9%
Children Living in Single Parent Homes	35.7%	35.4%	35.6%	35.6%	36.7%
Disconnected Youth	**	**	**	12.3%	12.3%
<b>Chester County</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
High School Graduation Rates	86.1%	84.7%	81.6%	89.0%	89.0%
Children Living in Poverty	8.5%	8.4%	9.2%	7.4%	7.5%
Children Living in Single Parent Homes	17.2%	17.7%	18.1%	18.6%	19.3%
Disconnected Youth	**	**	**	7.5%	7.5%
<b>Montgomery County</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
High School Graduation Rates	92.6%	92.1%	92.5%	93.6%	93.6%
Children Living in Poverty	7.8%	8.2%	8.9%	7.5%	7.8%
Children Living in Single Parent Homes	20.6%	20.4%	21.1%	20.9%	20.8%
Disconnected Youth	**	**	**	9.8%	9.8%
<b>Philadelphia County</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
High School Graduation Rates	59.0%	65.2%	72.0%	69.8%	69.8%
Children Living in Poverty	37.0%	36.3%	36.9%	38.4%	37.2%
Children Living in Single Parent Homes	59.0%	58.6%	59.3%	59.4%	59.8%
Disconnected Youth	**	**	**	19.9%	19.9%

County Health Rankings and Roadmaps for Berks, Chester, Montgomery and Philadelphia counties, 2018

\*\*New indicator and unavailable for prior years

**Table 10** outlines the Pennsylvania Youth Survey Data for the Tower Health Primary Service Area. When compared to the state (43.3%) youth in Berks (44.5%) and Philadelphia (49.3%) were more likely to have used alcohol in their lifetime. Youth in these counties were also more likely to have used marijuana when compared to the state. The percentage of youth who drove after drinking or using marijuana has increased in Philadelphia County, while decreasing in all others. Vaping has increased in Chester and Montgomery counties.

**Table 10: Youth Survey Data, 2017**

PENNSYLVANIA YOUTH SURVEY DATA, 2017																				
PAYS Data Mental Health and Substance Abuse	BERKS COUNTY				Trend +/-	CHESTER COUNTY				Trend +/-	MONTGOMERY COUNTY				Trend +/-	PHILADELPHIA COUNTY			Trend +/-	PA 2017
	2013	2015	2017			2013	2015	2017			2013	2015	2017			2013	2015	2017		
Alcohol lifetime use	48.9%	47.0%	44.5%	-	41.8%	41.2%	41.4%	-	45.6%	42.1%	40.8%	-	56.2%	51.5%	49.3%	-	43.3%			
Marijuana lifetime use	20.8%	19.3%	19.2%	-	16.4%	16.0%	16.0%	-	19.0%	17.3%	17.1%	-	22.7%	19.4%	22.9%	+	17.7%			
% drove after drinking	2.6%	2.1%	2.0%	-	2.6%	1.5%	1.6%	-	2.2%	1.5%	1.4%	-	1.3%	2.6%	2.0%	+	2.2%			
% drove after marijuana use	3.8%	3.7%	2.6%	-	4.4%	3.4%	3.6%	-	4.0%	3.6%	3.6%	-	1.6%	1.6%	2.0%	+	3.5%			
Prescription narcotics lifetime use	8.0%	6.5%	5.3%	-	5.1%	4.3%	3.7%	-	5.5%	4.7%	3.9%	-	5.6%	6.4%	7.3%	+	5.1%			
Vaping/E-Cigarettes (30-day use)	ND	16.6%	14.6%	-	ND	12.3%	16.2%	+	ND	13.0%	15.7%	+	ND	18.9%	18.3%	-	16.3%			
Vaping – just Flavoring (past year)	ND	68.9%	66.5%	-	ND	69.4%	60.2%	-	ND	71.7%	64.8%	-	ND	72.4%	62.2%	-	67.3%			
Vaping – nicotine (past year)	ND	15.2%	17.9%	+	ND	<b>21.2%</b>	<b>41.7%</b>	+	ND	<b>18.1%</b>	<b>31.6%</b>	+	ND	11.4%	1.8%	-	29.4%			
Vaping – marijuana or hash oil (past year)	ND	8.9%	11.5%	+	ND	13.7%	18.5%	+	ND	12.3%	20.0%	+	ND	7.6%	4.9%	-	12.6%			
Vaping – other substance (past year)	ND	1.0%	1.7%	+	ND	1.7%	1.4%	-	ND	1.3%	1.4%	+	ND	2.4%	6.1%	+	1.3%			

Source: Pennsylvania Youth Survey for Berks, Chester, Montgomery and Philadelphia counties, 2017

ND = No data available



WHAT THE COMMUNITY IS SAYING



Key Informant survey respondents were asked to identify underserved populations in the community. Seniors/aging/elderly were identified as underserved by 20.3% of the respondents. Very few respondents identified young adults (9.7%) or children/youth (8.6%) as an underserved population.

## HOW RACE IMPACTS HEALTH

**Table 11** shows the demographic breakdown of residents in Tower Health’s Primary Service Area. While the highest percentage of residents in the county are Caucasian (70.6%), just under one in five (16.2%) are African American/Black and 14.0% are Hispanic/Latino.

**Table 11: Demographic Snapshot: Race/Ethnicity**

Race/Ethnicity	Tower Health System
Caucasian	70.6%
Hispanic/Latino	14.0%
African American/Black	16.2%
Asian	3.4%

Source: Claritas - Pop-Facts Premier 2018, Environics Analytics

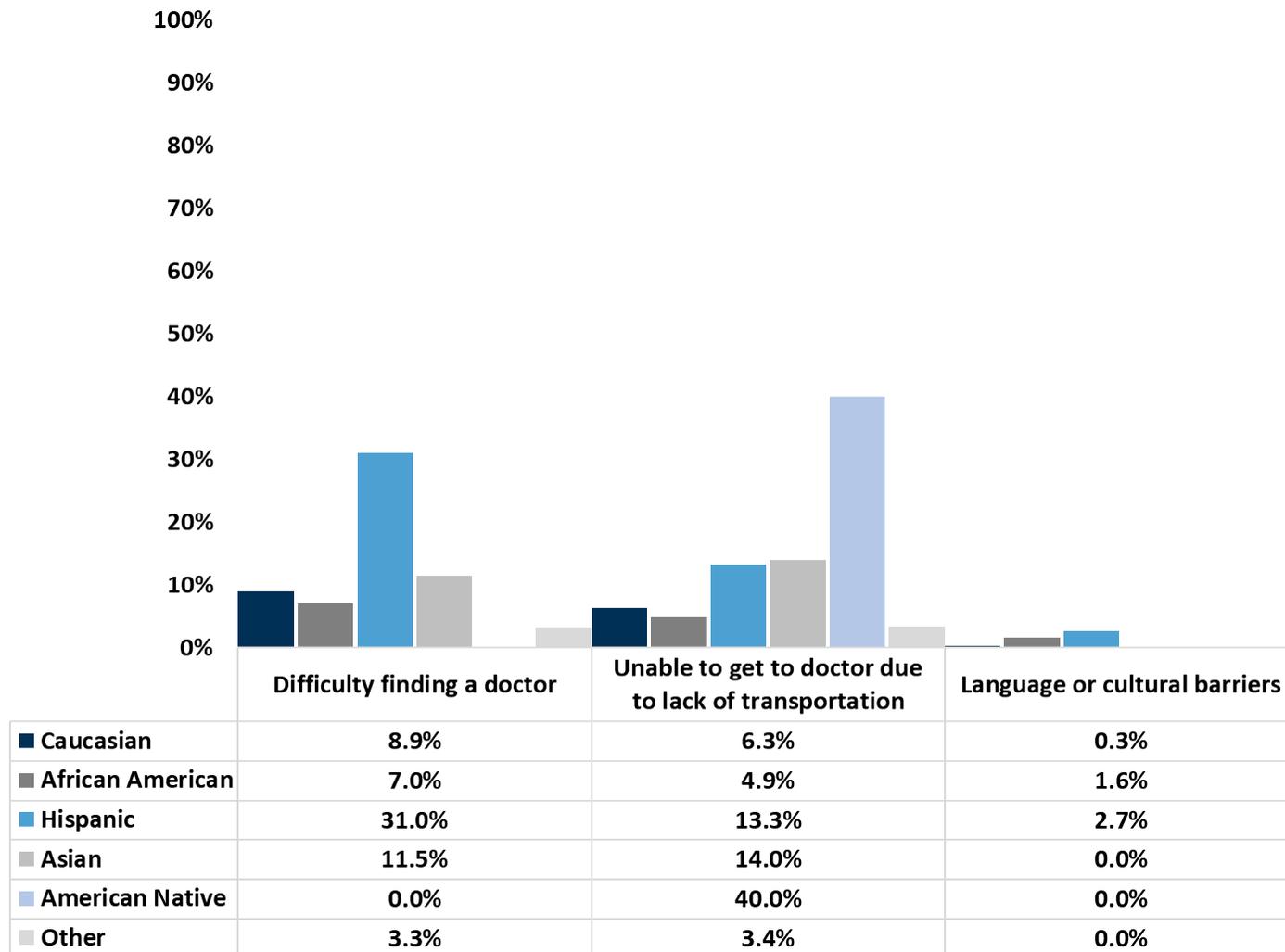
Source Figure 22 (pg 43): Tower Health Community Survey, Professional Research Consultants, 2018



IMPACTS OF RACE/ETHNICITY ON ACCESS TO CARE

**Figure 22** illustrates barriers to care that community survey respondents report having experienced. This chart shows those access indicators that are significantly different based on the race/ethnicity of the respondent. Hispanic respondents were significantly more likely to have difficulty finding a doctor or experience language or cultural barriers compared to other respondents. American Native respondents were significantly more likely to have been unable to get to a doctor due to lack of transportation.

**Figure 22: Barriers To Care**



## IMPACTS OF RACE/ETHNICITY ON CHRONIC CONDITIONS

**Table 12** below outlines chronic diseases by ethnicity that are significantly different when compared to the state. The numbers in red are significantly higher than the state while those numbers in blue are significantly lower than the state. Berks County White residents (245.2) have a significantly higher cardiovascular disease mortality rate compared to the state rate (218.2), while Black residents (224.6) have a significantly lower rate for the same indicator compared to the state (299.9). White residents of Berks County (178.5) have a slightly higher rate of heart disease mortality when compared with the state (170.3). White residents in Chester County (150.6) have a significantly higher breast cancer mortality rate compared to the state (132.4), as well as the highest among the service area counties. In Chester County the White bronchus/lung cancer mortality, cardiovascular mortality, diabetes mortality and heart disease mortality rates were all significantly lower when compared to the state. The White breast cancer mortality rate in Montgomery County (145.3) was also significantly higher when compared to the state. In Montgomery County the rate for White and Black lung/bronchus mortality, White diabetes mortality, White and Black heart disease mortality and cardiovascular mortality were all lower when compared to the state. In Philadelphia County, the White lung/bronchus mortality, White, Black and Hispanic cardiovascular disease and heart disease mortality were significantly higher when compared to the state. The White and Black diabetes mortality rate in Philadelphia County was significantly lower when compared to the state.

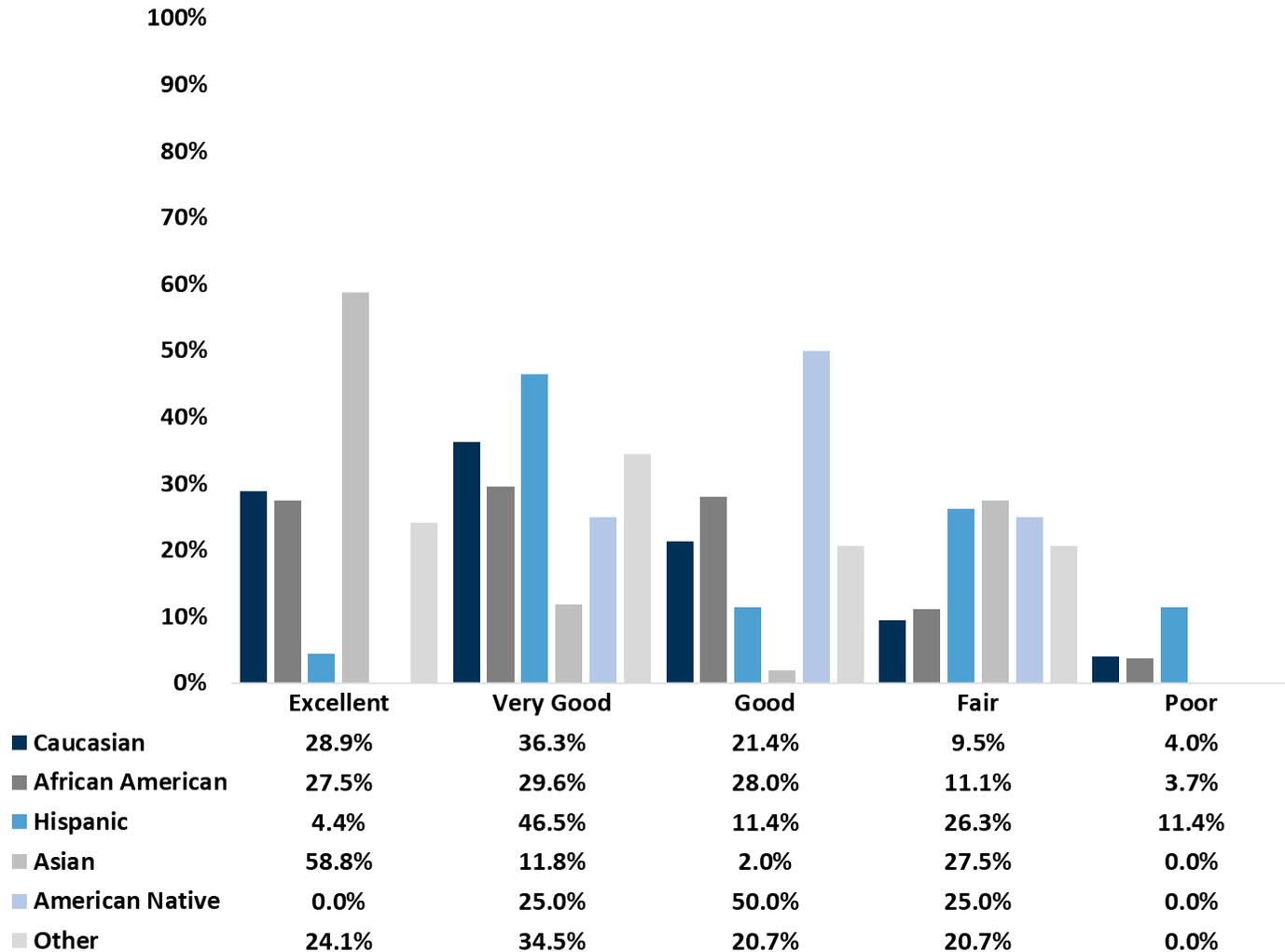
**Table 12: Race/Ethnicity Impact Health: Chronic Disease**

Chronic Diseases <u>By</u> Race/Ethnicity, Per 100,000, Tower Health					
Indicator	Berks	Chester	Montgomery	Philadelphia	Pennsylvania
Breast cancer mortality, White	120.1	150.6	145.3	129.6	132.4
Breast cancer mortality, Hispanic	93.4	ND	ND	67.8	69.0
Breast cancer mortality, Black	ND	60.1	67.3	79.9	74.1
Lung/bronchus cancer mortality, White	66.3	54.4	53.7	79.7	62.7
Lung/bronchus cancer mortality, Black	ND	73.9	44.8	76.3	71.2
Lung/bronchus cancer mortality, Hispanic	ND	ND	ND	38.8	23.6
Cardiovascular disease mortality, White	245.2	178.2	198.1	230.8	218.2
Cardiovascular disease mortality, Black	224.6	304.6	251.1	323.7	299.9
Cardiovascular disease mortality, Hispanic	170.0	110.8	168.0	183.4	148.9
Diabetes mortality, White	18.1	10.3	10.6	16.1	19.1
Diabetes mortality, Black	ND	44.6	ND	26.3	30.3
Diabetes mortality, Hispanic	ND	ND	ND	24.9	20.5
Heart disease mortality, White	178.5	138.3	145.2	183.3	170.3
Heart disease mortality, Black	187.5	226.5	175.7	254.0	229.4
Heart disease Mortality, Hispanic	103.1	84.4	109.8	144.6	111.2

IMPACTS OF RACE/ETHNICITY ON BEHAVIORAL HEALTH

Figure 23 shows the significant differences from community survey respondents by race/ethnicity for their personal mental health rating. Hispanic respondents were significantly more likely to rate their mental health as fair or poor (37.7%) compared to other respondents.

Figure 23: Personal Mental Health Rating

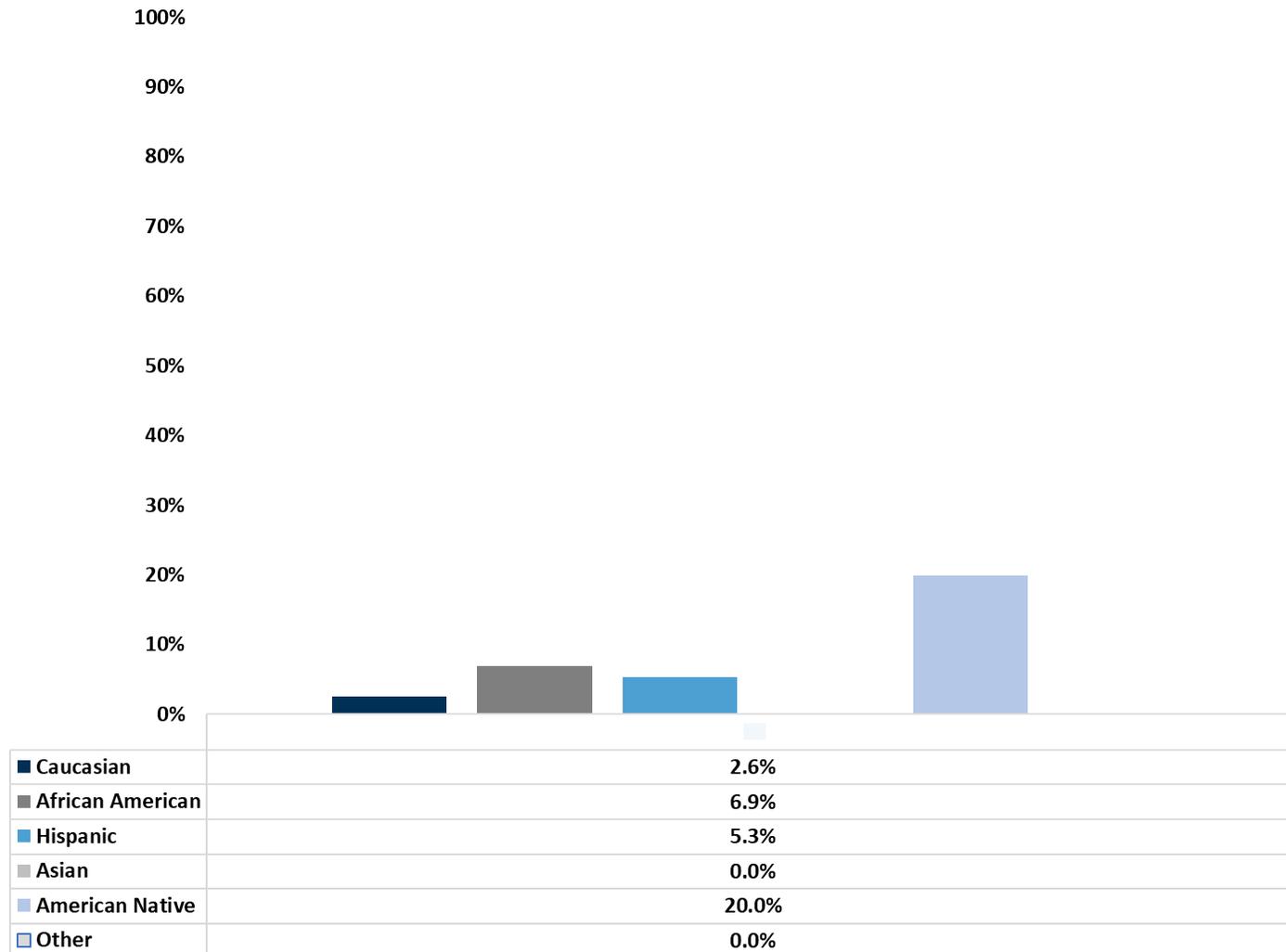


Source: Tower Health Community Survey, Professional Research Consultants, 2018

Source Table 12 (Pg 44): Department of Health Informatics, Pennsylvania Department of Health for Berks, Chester, Montgomery and Philadelphia counties, 2015 and 2016

**Figure 24** shows the responses from the community survey by race/ethnicity for those who report having used an illegal drug or prescription medication not prescribed to them. American Native respondents (20.0%) were significantly more likely to have used an illegal drug or taken a prescription not prescribed to them compared to other respondents.

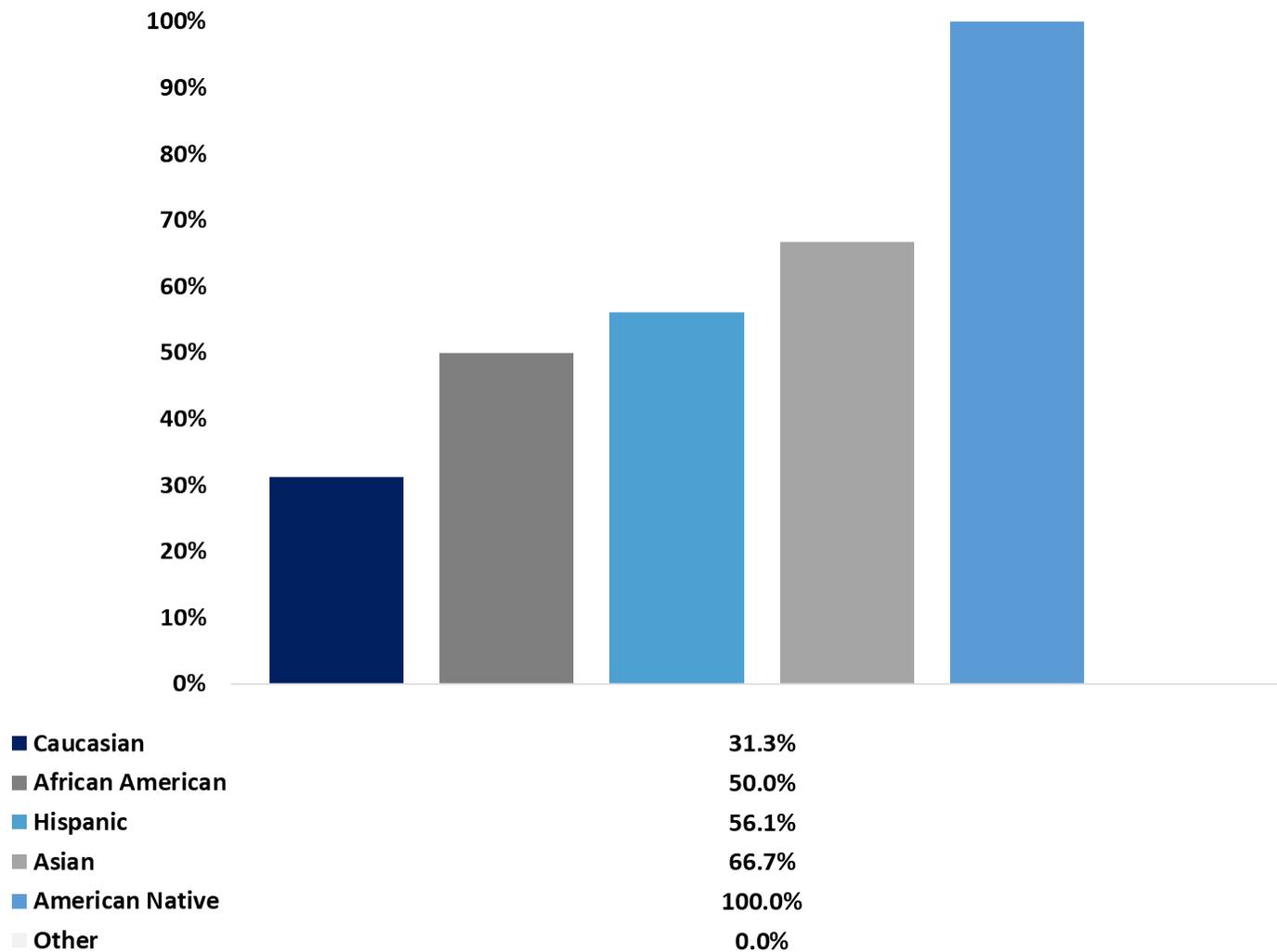
**Figure 24: Used Illegal Drug or Taken Prescription Medication Not Prescribed to Individual**



## IMPACTS OF RACE/ETHNICITY ON PHYSICAL ACTIVITY

**Figure 25** shows the percentage of respondents to the community survey who have participated in an activity to strengthen their muscles in the past month by race/ethnicity. American Native respondents were significantly more likely to have participated in an activity to strengthen their muscles compared to other respondents.

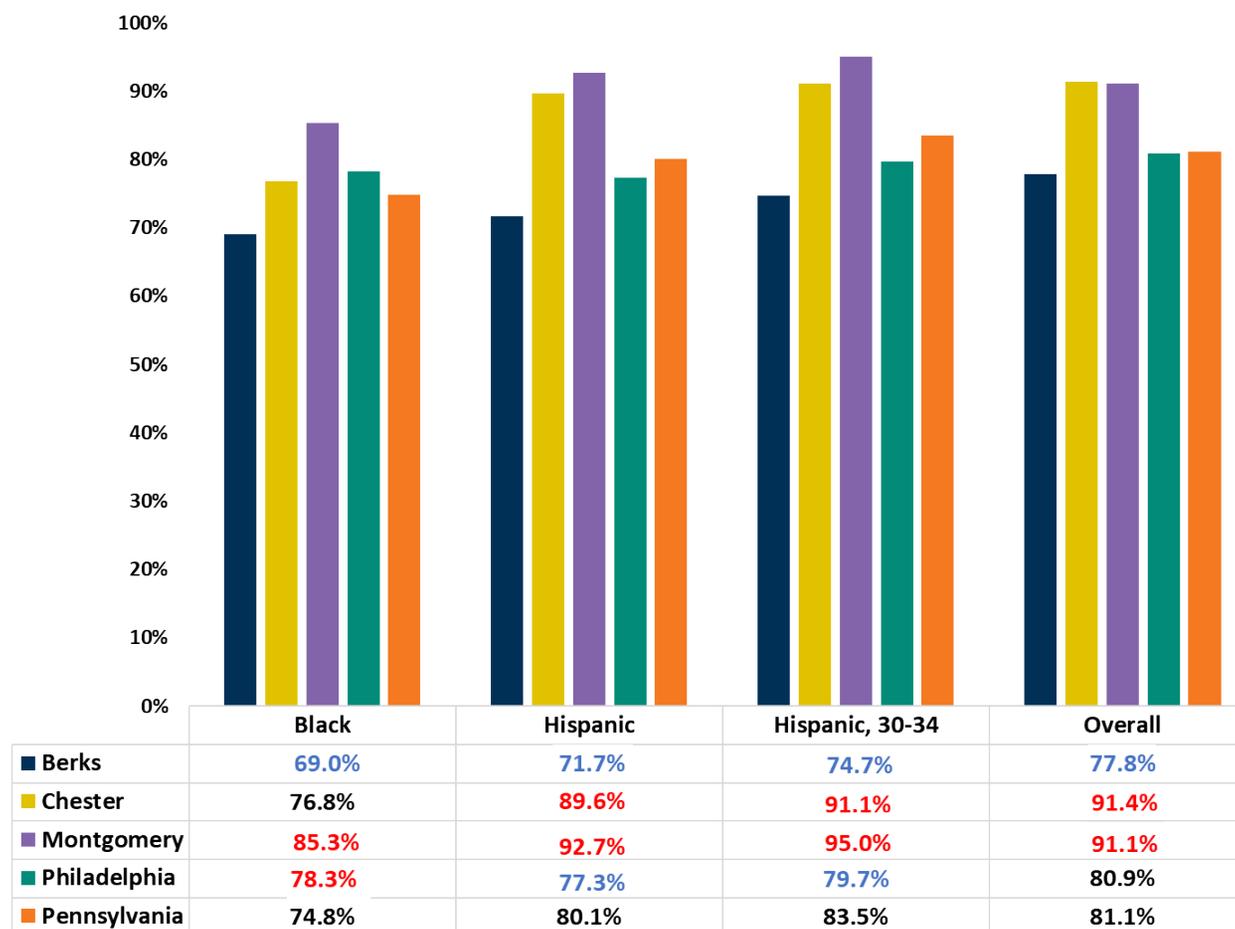
**Figure 25: Participated in Activity to Strengthen Muscles, Past Month**



## IMPACTS OF RACE/ETHNICITY ON MATERNAL AND CHILD HEALTH

**Figure 26** illustrates significant differences by race for mothers who breastfeed. Black mothers in Montgomery (85.3%) and Philadelphia (78.3%) counties were significantly more likely to breastfeed when compared to the state (74.8%), while Black mothers in Berks County (69.0%) were significantly less likely to breastfeed. Hispanic mothers in Chester and Montgomery counties were significantly more likely to breastfeed compared to the state, while Hispanic mothers in Berks and Philadelphia counties were significantly less likely. The same is true when looking specifically at Hispanic mothers ages 30 to 34.

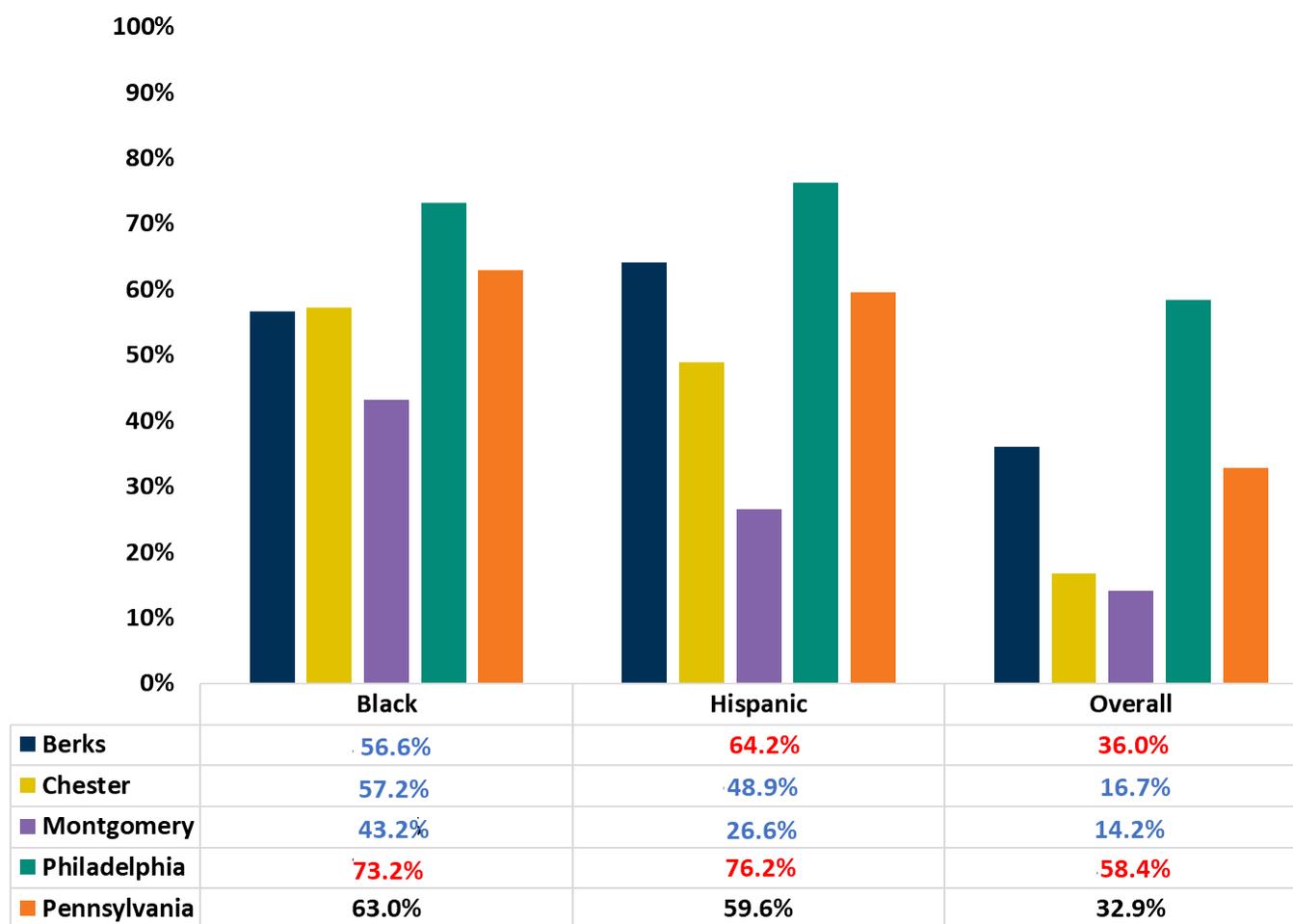
**Figure 26: Breastfeeding by Race**



Source: Department of Health Informatics, Pennsylvania Department of Health for Berks, Chester, Montgomery and Philadelphia counties, 2011-2016.

**Figure 27** illustrates significant differences by race/ethnicity for mothers who report medicaid assistance. When compared to the state a significantly lower percentage of black mothers in Berks (56.6%), Chester (57.2%) and Montgomery (43.2%) counties report using Medicaid Assistance when compared to the state (63.0%), while the percentage in Philadelphia County (73.2%) was significantly higher. In Berks (64.2%) and Philadelphia (76.2%) counties, a significantly higher percentage of Hispanic mothers are on Medicaid Assistance when compared to the state, while Chester (48.9%) and Montgomery (26.6%) counties were lower.

**Figure 27: Mothers Reporting Medicaid Assistance**



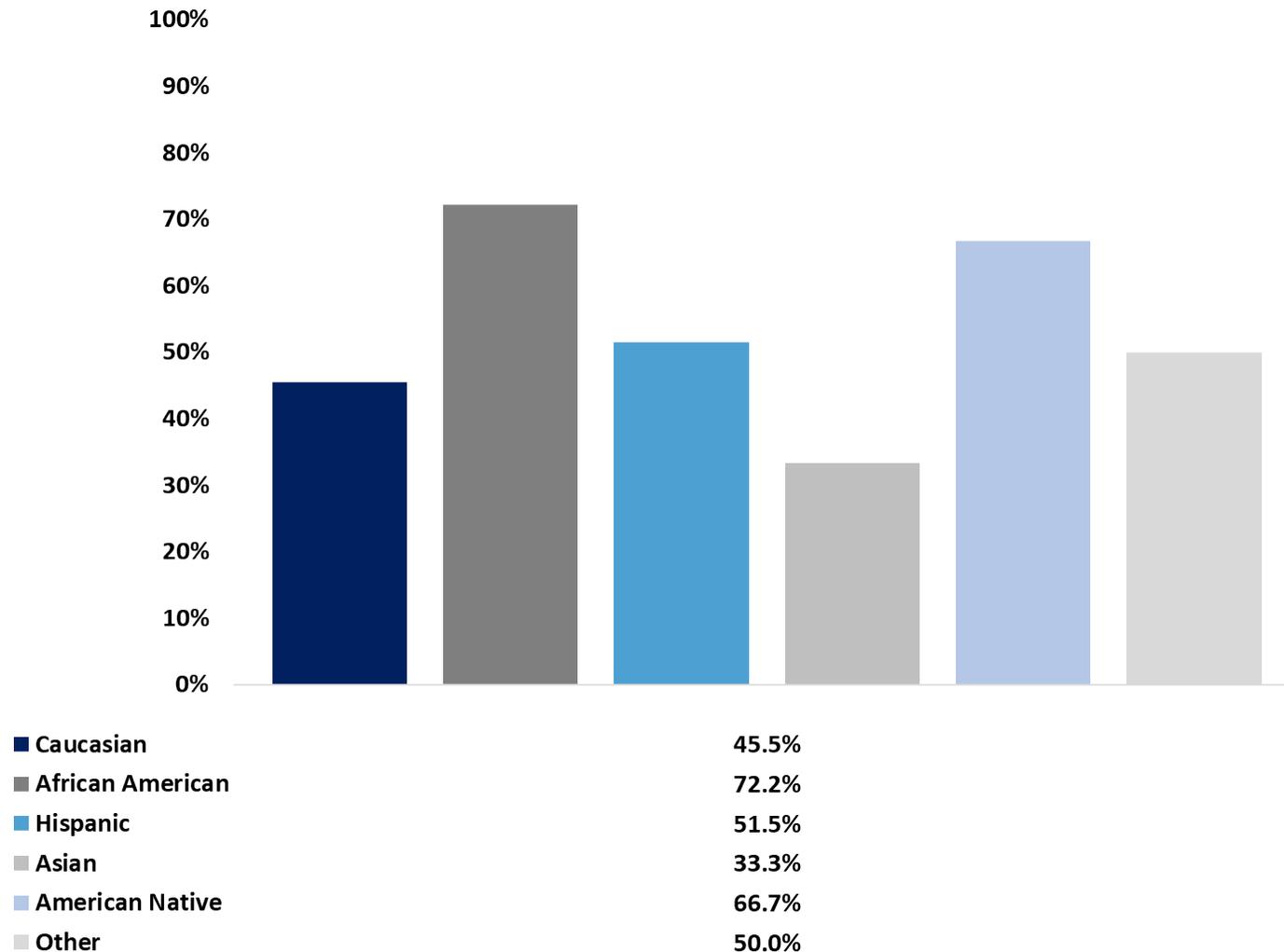
Source: Department of Health Informatics, Pennsylvania Department of Health for Berks, Chester, Montgomery and Philadelphia counties, 2011-2016.



## IMPACTS OF RACE/ETHNICITY ON HOUSING

**Figure 28** illustrates the percentage of community survey respondents, by race/ethnicity, who have worried about having enough money for housing. African American respondents were significantly more likely to worry about having enough money for housing than other respondents.

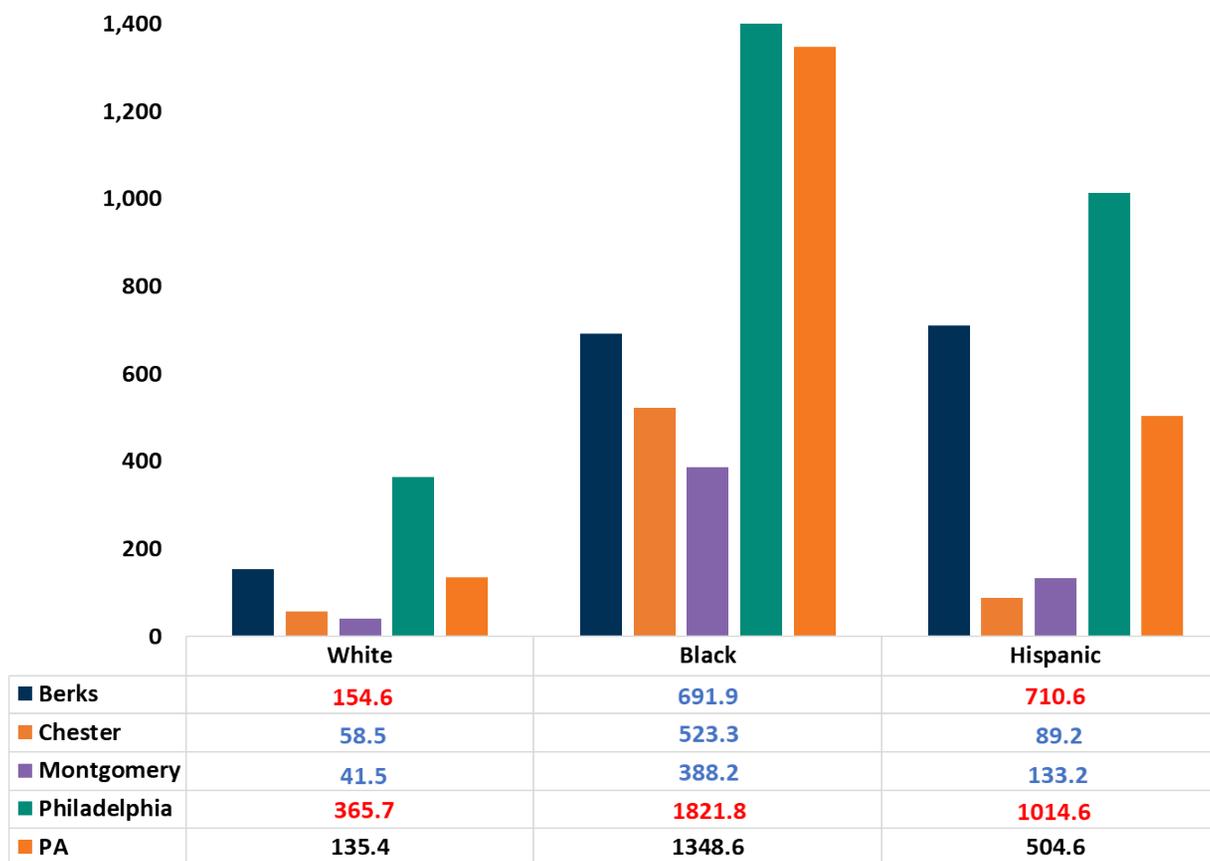
**Figure 28: Worried About Having Enough Money for Housing**



## IMPACTS OF RACE/ETHNICITY ON INFECTIOUS DISEASE

**Figure 29** illustrates the significant differences based on race/ethnicity when Berks, Chester, Montgomery and Philadelphia counties are compared to the state. The figure illustrates the Chlamydia rate per 100,000 for the county and state based on select race/ethnicity indicators. The Chlamydia rate in Berks County is significantly higher for White (154.6) and Hispanic (710.6) residents when compared to the state (135.4 and 504.6, respectively). The Chlamydia rate for Black residents is significantly lower in Berks County (691.9) when compared to the state (1348.6). The rate in Chester and Montgomery counties is significantly lower when compared to the state for White, Black and Hispanic residents. The Chlamydia rate in Philadelphia County is significantly higher for White, Black and Hispanic residents.

**Figure 29: Chlamydia Rate, Per 100,000**





## WHAT THE COMMUNITY IS SAYING

Key Informant survey respondents were asked to identify underserved populations in the community. The Hispanic/Latino population was identified as underserved by 18.6% of the respondents. Very few (7.8%) identified Black/African Americans as an underserved population.

## HOW TRANSPORTATION IMPACTS HEALTH

People need transportation to access health services, to earn a living, to get to school and be part of a community.

**Table 13** shows that on average residents who reside in Tower Health's Primary Service Area own 1.7 vehicles. Most (77.7%) drive alone to work, while just under one in ten residents (8.2%) carpool to work. Very few residents use public transportation, walk, bike or work at home.

**Table 13: Demographic Snapshot: Transportation/Commuter Information**

	Tower Health System
Average Number of Vehicles	1.7
<b>Transportation to Work</b>	
Drive Alone	77.7%
Carpool	8.2%
Public Transportation	4.9%
Walk	3.0%
Bicycle	0.3%
Work at Home	4.9%

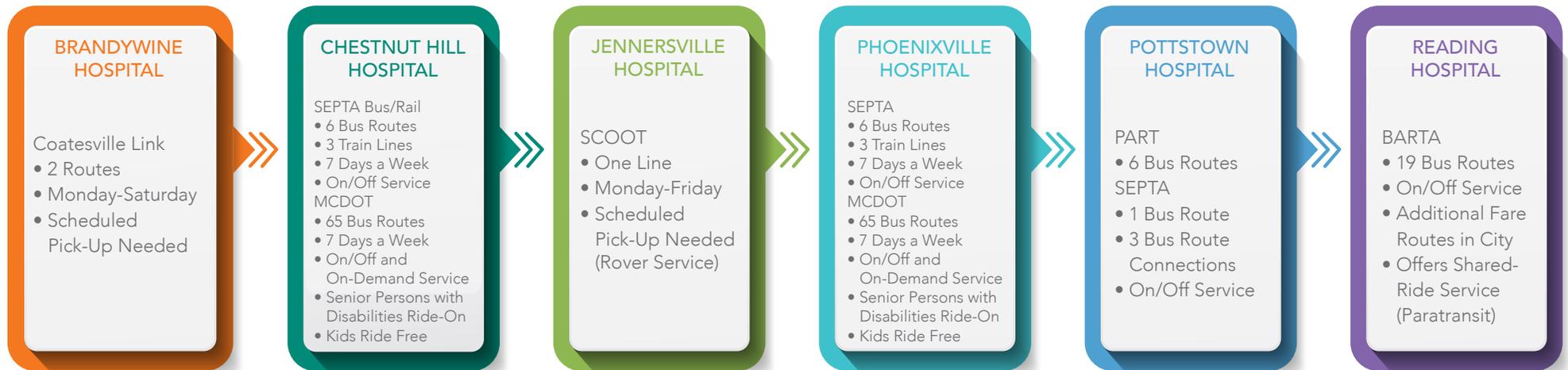
Source: Claritas - Pop-Facts Premier 2018, Environics Analytics



Figure 30 illustrates the public transportation system information that is available on the Internet regarding transportation available in the Tower Health Primary Service Area for residents to utilize for medical appointments, shopping, entertainment, exercise, etc.

While other transportation options may be available for people who are aware of them, the information about the options may not be readily accessible.

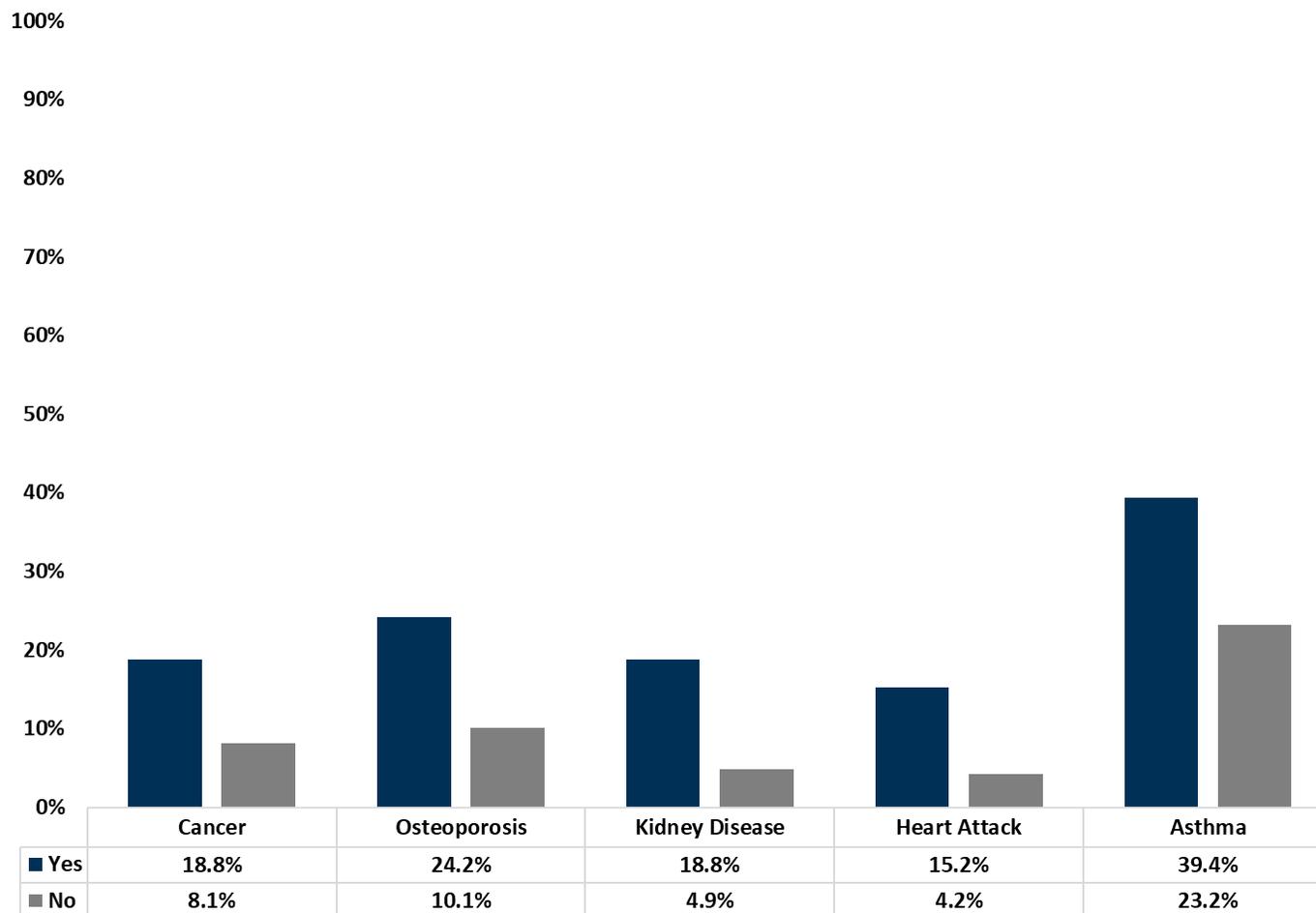
Figure 30: Public Transportation Systems Available in Berks, Chester, Montgomery and Philadelphia Counties



Sources: Coatesville Link, Southeastern Pennsylvania Transit Authority, SCOOT, Pottstown Area Rapid Transit, Berks Area Rapid Transit Authority, KRAPP Authority, Montgomery County Department of Transportation. Refer to these sources for a complete list of transportation services.

From the Tower Health Community Survey, **Figure 31** illustrates the chronic diseases experienced by the residents who indicated that they have had a transportation barrier for medical care in the past 12 months. Respondents who experience transportation barriers were significantly more likely than other residents to have cancer, osteoporosis, kidney disease, heart attack or asthma.

**Figure 31: Transportation Impact on Health Status, Tower Health Primary Service Area**



Source: Tower Hospital Community Survey, Professional Research Consultants, 2018



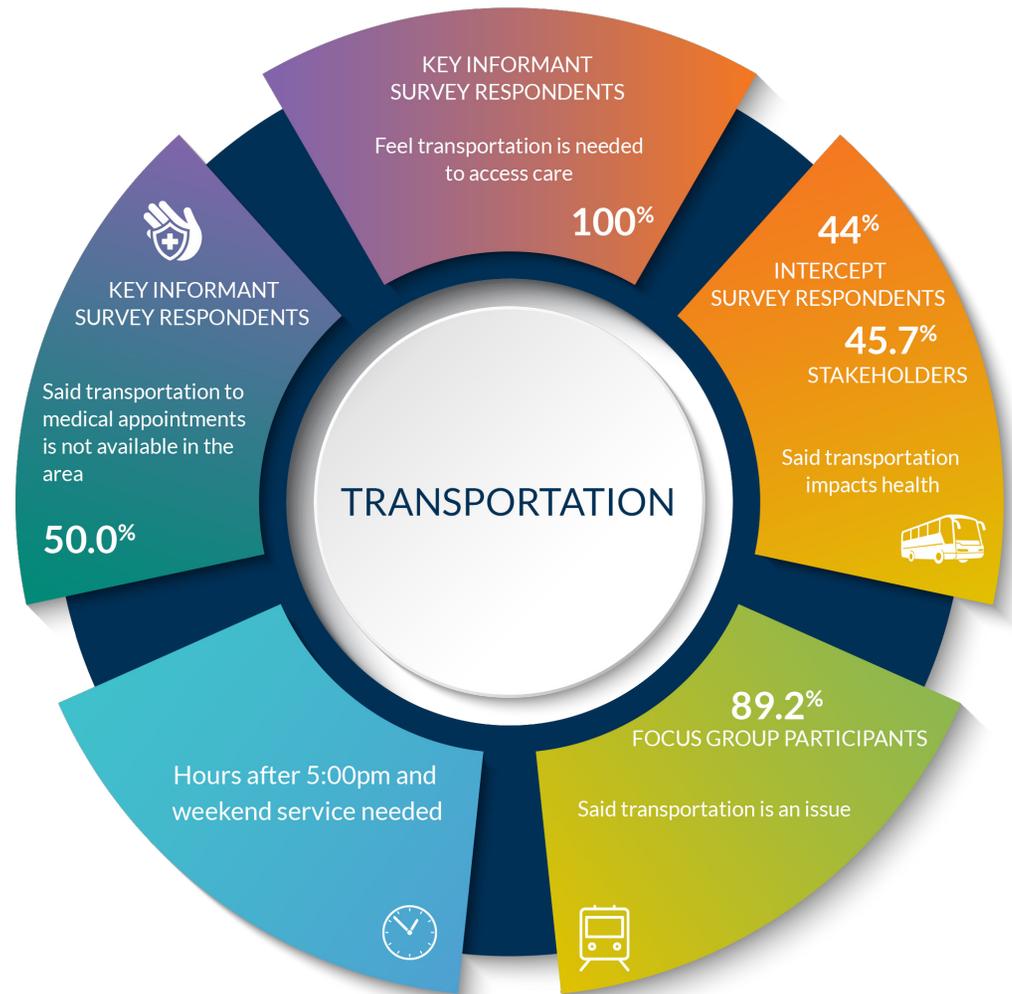
WHAT THE COMMUNITY IS SAYING

**Figure 32** illustrates what was heard through survey respondents, focus group participants and stakeholder interviews regarding transportation and the needs of community members. All of the key informant survey respondents feel transportation is needed to access care. Most (89.2%) of the focus group participants said that transportation was an issue. Half of the key informants said transportation to medical appointments is not available (50.0%).

Issues mentioned by focus group participants, intercept survey and key informant survey respondents and stakeholders due to a lack of transportation include:

- Better access to transportation is needed
- Lack of evening and weekend transportation options
- Hours spent accessing transportation in order to get to an appointment
- Affordable transportation
- Cannot access grocery stores that sell fresh produce or exercise areas as this is no transportation
- Inability to navigate the transportation system
- Lack of transportation outside of the area to access specialty care
- Need for more senior transportation
- Needed transportation outside of cities; more rural area transportation

**Figure 32: Primary Data Sources – Transportation**



## HOW FOOD IMPACTS HEALTH

Food acts as medicine to prevent, maintain and treat disease. The food we eat provides information and materials to our bodies that they need to function properly. If we do not get the right information, our metabolic processes suffer and our health declines. If we get too much food, or food that gives our bodies the wrong instructions, we can become overweight, undernourished and at risk for the development of diseases and conditions, such as arthritis, diabetes and heart disease.

**Table 14** indicates that in the Tower Health Primary Service Area, the percentage of the population that is food insecure declined slightly over the past three years in Berks, Chester and Montgomery counties. The percentage has remained steady in Philadelphia County. However, the percentage of the population with limited access to healthy foods has increased in all counties. The percentage of children receiving free or reduced lunch has also increased in all the service area counties.

**Table 14: County Health Rankings: Nutrition Indicators**

Nutrition Indicators from County Health Rankings												
Nutrition Indicators	Berks County			Chester County			Montgomery County			Philadelphia County		
	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018
Food insecurity	11.3%	10.3%	9.4%	9.5%	8.6%	8.4%	10.7%	10.0%	9.7%	21.2%	21.7%	21.0%
Limited access to healthy foods*	2.9%	2.9%	3.5%	5.9%	5.9%	6.2%	3.3%	3.3%	3.7%	0.2%	0.2%	0.5%
Free or reduced lunch	37.8%	49.3%	51.0%	17.2%	23.1%	22.0%	18.6%	26.8%	28.0%	76.8%	84.0%	95.4%

Source: County Health Rankings and Roadmaps for Berks, Chester, Montgomery and Philadelphia counties, 2018

\*Limited Access to Healthy Foods is the percentage of the population that is low income and does not live close to a grocery store. Living close to a grocery store is defined differently in rural and nonrural areas; in rural areas, it means living less than ten miles from a grocery store; in nonrural areas, less than one mile. "Low income" is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size.



## WHAT THE COMMUNITY IS SAYING

**Figure 33** illustrates the percentage of Tower Health residents who participated in the community survey and their responses to food related questions. One in five (19.4%) respondents were food insecure, while 16.0% find it very or somewhat difficult to buy fresh produce. Almost two-thirds of survey respondents (62.2%) report eating five or more servings of fruit and/or vegetables daily.

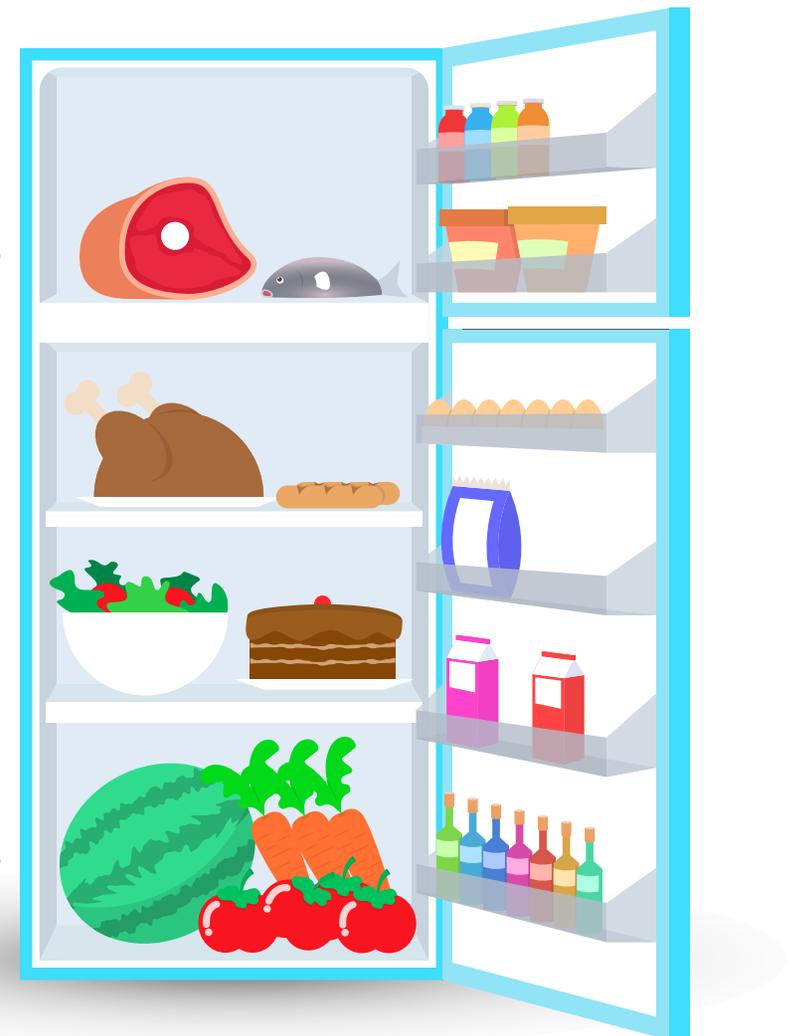
Approximately half of intercept survey respondents indicated that poor nutrition (48.4%) or access to healthy food (54.0%) has the highest impact on one's health.

Focus group participants discussed the lack of grocery stores in the city or communities that are considered a food desert, noting people shop at corner stores which often do not carry healthy foods and fresh produce. They added, that residents are unable to access, as well as afford, healthy food, and that many are food insecure.

Stakeholders also talked about the residents inability to access fresh, affordable healthy food, noting the lack of grocery stores and overall cost of healthy food. Many suggested the need for nutrition education and healthy cooking demonstrations.



**Figure 33: Community Food And Nutrition**



## HOW HOUSING IMPACTS HEALTH

**Table 15** shows housing demographics for the residents in Tower Health’s Primary Service Area. Most residents (69.6%) own their own home and reside in a single-family home (75.3%).

**Table 15: Demographic Snapshot: Housing**

	Tower Health System
<b>Home Ownership</b>	
Own	69.6%
Rent	30.4%
<b>Residential Type</b>	
Single Family	75.3%
Multi-Family	22.8%
Mobile Home/Trailer	1.9%

Source: Claritas - Pop-Facts Premier 2018, Environics Analytics

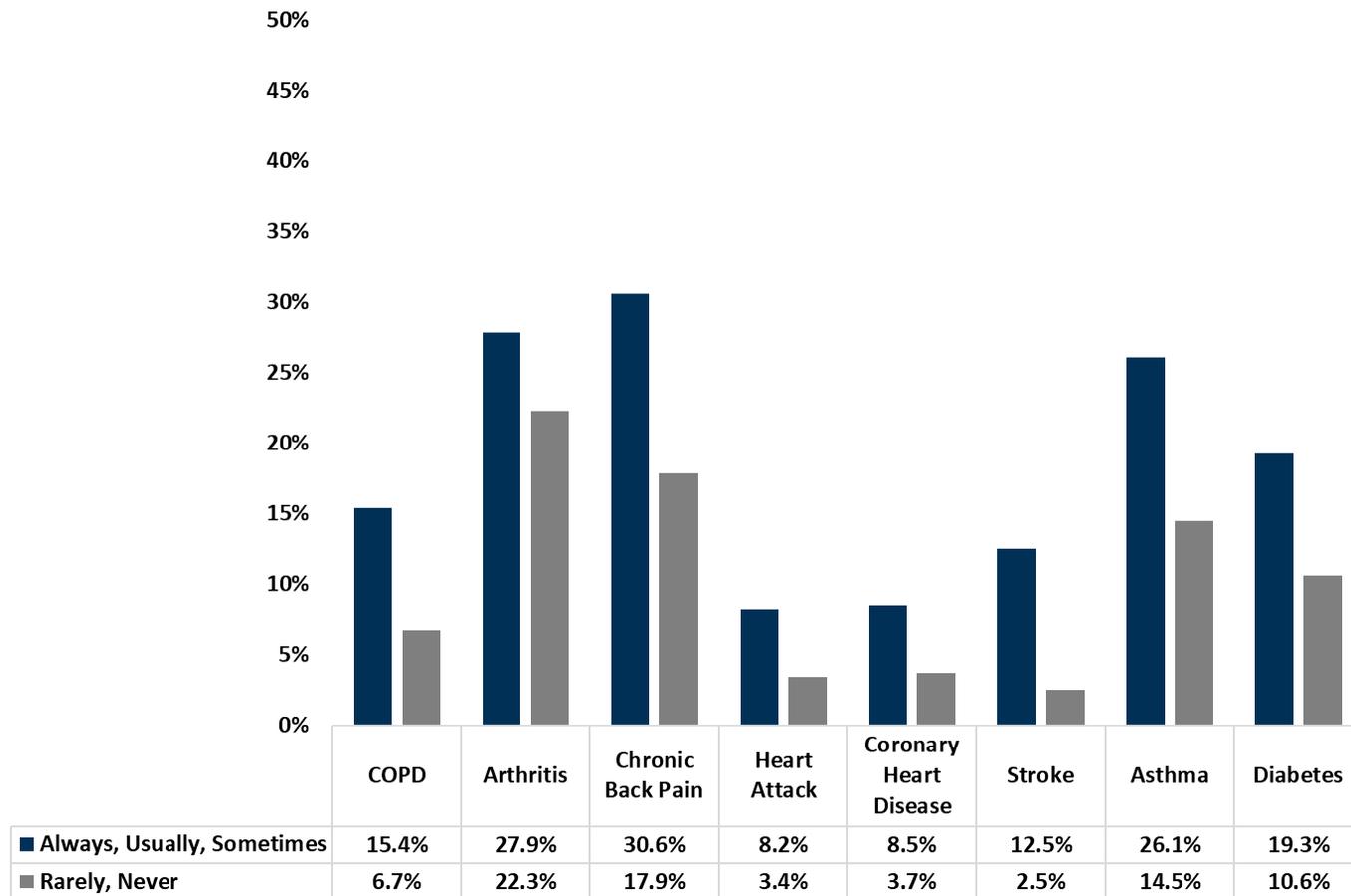
Living on the street or in homeless shelters exacerbates existing health problems and causes new ones. Chronic diseases – such as hypertension, asthma, diabetes, mental health problems and other ongoing conditions – are difficult to manage under stressful circumstances and may worsen. Acute problems such as infections, injuries and pneumonia are difficult to heal when there is no place to rest and recuperate. Living on the street or in shelters also brings the risk of communicable disease (such as STDs or TB) and violence (physical, sexual and mental) because of crowded living conditions and the lack of privacy or security. Medications to manage health conditions are often stolen, lost or compromised due to rain, heat or other factors.

Stable housing also decreases the risk associated with further disease and violence. In many ways, housing itself can be considered a form of healthcare because it prevents new conditions from developing and existing conditions from worsening.<sup>3</sup>

<sup>3</sup> National Health Care for the Homeless Council. What is the relationship between health, housing and homelessness? 2019

**Figure 34** illustrates the impact of housing on chronic diseases in the Tower Health Primary Service Area. Those with housing insecurity are significantly more likely to have COPD, arthritis, chronic back pain, coronary heart disease, stroke, asthma and diabetes.

**Figure 34: Housing Insecurity Impact On Health**



Source: Tower Health Community Survey, Professional Research Consultants, 2018

## HOMELESSNESS

According to the Point in Time Homelessness Survey conducted in January 2019, there were a total of 452 homeless individuals in Berks County compared to 403 homeless individuals in 2018. Chester County had 528 homeless individuals in 2019 compared to 579 in 2018. Montgomery County had 246 individuals in 2019 compared to 291 in 2018 and Philadelphia County had 5,735 individuals in 2019 compared to 5,788 in 2018. This is outlined in **Table 16**. Not all counties report data by type of shelter or by household.

**Table 16: Homelessness, January 2019**

Homeless Point in Time Survey, January										
	HOUSEHOLDS					INDIVIDUALS				
	Emergency	Transitional	Unsheltered	Safe Haven	Total	Emergency	Transitional	Unsheltered	Safe Haven	Total
Berks County 2018	23	28	0	0	51	237	155	11	0	403
Berks County 2019	27	19	0	0	46	305	137	11	0	452
Chester County 2018	164	256	13	0	433	266	300	13	0	579
Chester County 2019	149	268	13	0	430	209	299	20	0	528
Montgomery County 2018	143	22	18	0	183	226	45	20	0	291
Montgomery County 2019	124	13	19	0	156	184	43	19	0	246
Philadelphia County 2018	2,430	582	1,083	225	4,320	3,420	1,050	1,083	235	5,788
Philadelphia County 2019	2,656	523	973	247	4,399	3,565	950	973	247	5,735
Total 2018	2,956	823	1,005	247	5,031	4,263	1,429	1,023	247	6,961
Total 2019	2,760	888	1,114	225	4,987	4,149	1,550	1,127	235	7,061

Source: Individual County Continuum of Care Homeless Statistics, 2019



## WHAT THE COMMUNITY IS SAYING

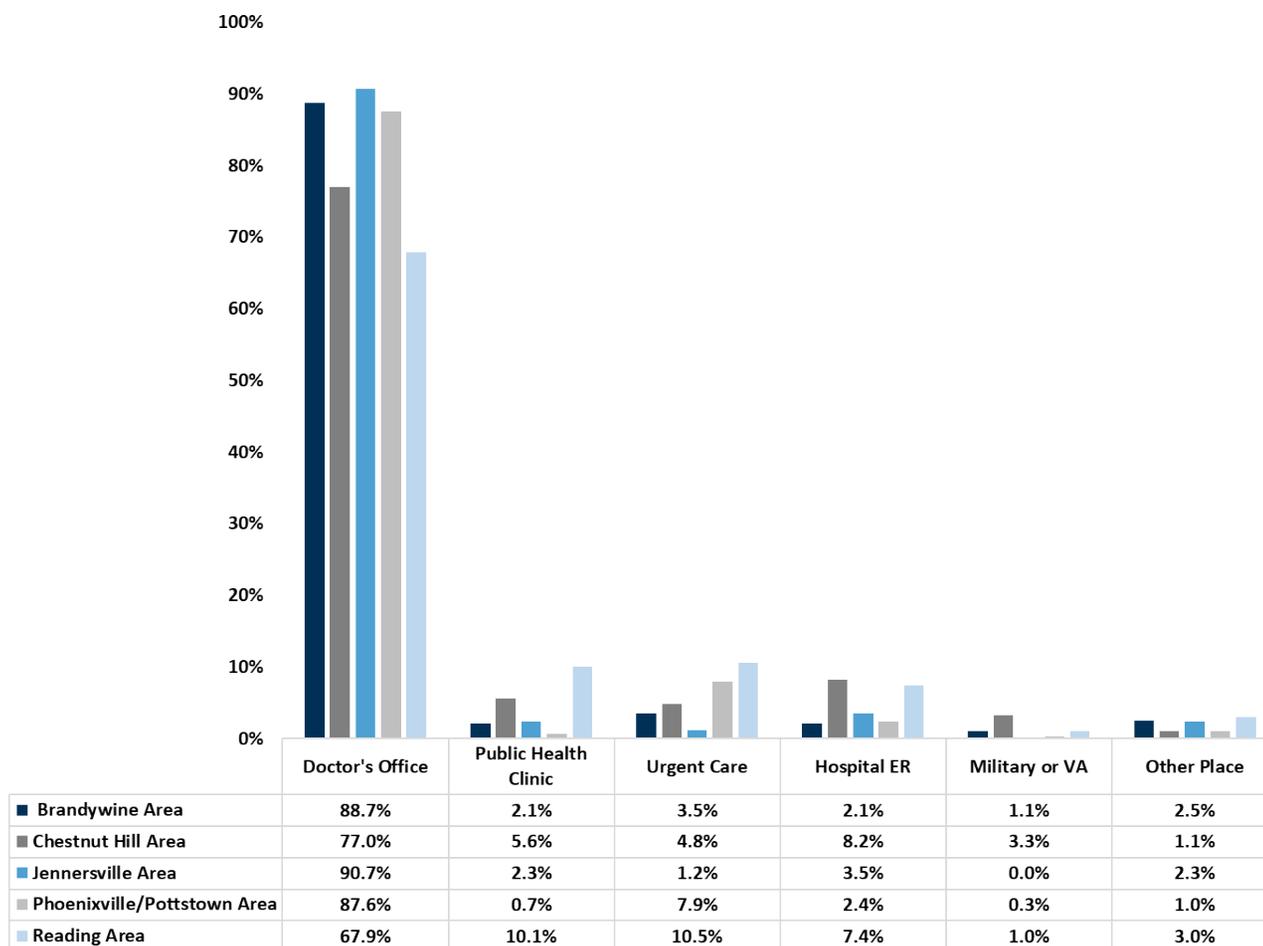
Over half (57.8%) of intercept survey respondents indicated that affordable and quality housing has the highest impact on one's health. Homeless individuals were identified as an underserved population by about one-third of the key informants (30.3%).



### HOW WHERE ONE LIVES IMPACTS HEALTH

**Figure 35** illustrates the significant differences by hospital from the community survey in terms of where respondents typically go for health care. Respondents in the Reading Hospital Area were significantly more likely to go to a Public Health Clinic for care and/or advice about their health compared to respondents from other areas. Those in the Chestnut Hill area were more likely go to the Hospital ER or Military or VA than other respondents. Respondents in the Jennersville and Brandywine Hospital service areas were most likely to go to the doctor’s office. Respondents from the Phoenixville/Pottstown service areas were more likely to go to urgent care than other respondents.

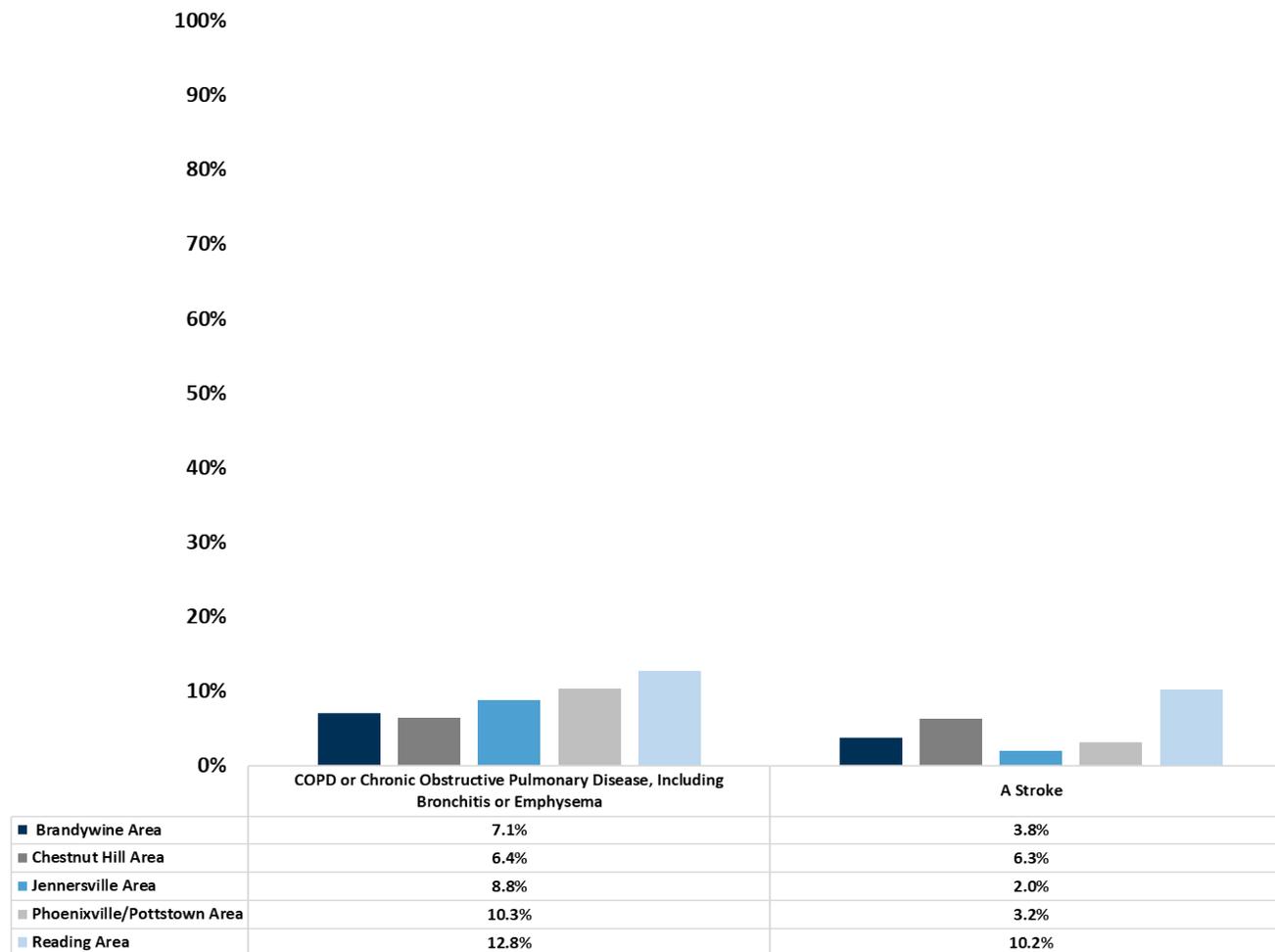
**Figure 35: Where Residents Go For Care**



Source: Tower Health Community Survey, Professional Research Consultants, 2018

**Figure 36** illustrates the significant differences by hospital from the community survey in terms of respondents who have ever been told they have a chronic condition. Respondents in the Reading Area were significantly more likely to have ever been told they have COPD or a stroke compared to respondents in other areas.

**Figure 36: Health Conditions**



Source: Tower Health Community Survey, Professional Research Consultants, 2018

## HOW ENVIRONMENT IMPACTS HEALTH

**Table 17** shows the daily average air-pollution particulate matter score, as well as the presence of drinking water violations in 2018. Berks, Chester and Philadelphia counties all had a higher daily air pollution particulate matter count compared to the state, while the count in Montgomery County was comparable. Berks, Chester and Montgomery counties all had the presence of a drinking water violation.

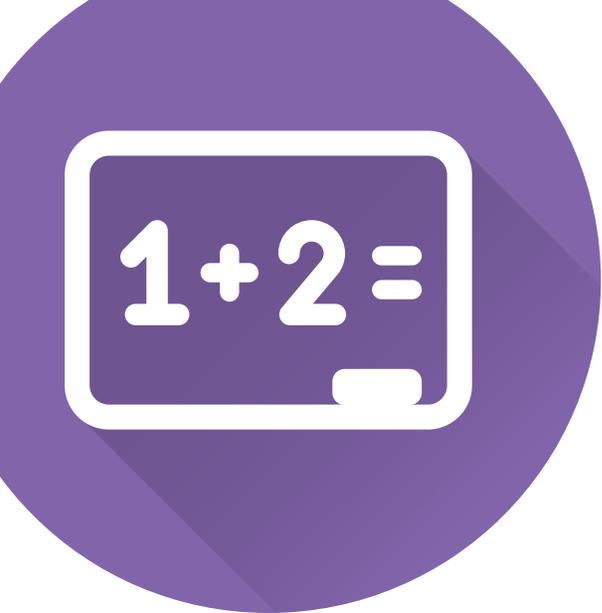
**Table 17: Air and Water Quality**

	<b>Air pollution - particulate matter</b>	<b>Drinking water violations</b>
	<b>Average Daily PM2.5</b>	<b>Presence of violation</b>
<b>Berks County</b>	11.3	Yes
<b>Chester County</b>	11.4	Yes
<b>Montgomery County</b>	10.0	Yes
<b>Philadelphia County</b>	11.2	No
<b>Pennsylvania</b>	10.4	N/A

Source: County Health Rankings and Roadmaps for Berks, Chester, Montgomery and Philadelphia counties, 2018







## HEALTH IS WHERE WE LEARN

Education plays a role in the health and well-being of a population. Dropping out of school is associated with multiple social and health problems. Individuals with less education are more likely to experience a number of health risks, such as:

- Obesity
- Substance abuse
- Intentional and unintentional injuries

Higher levels of education are associated with:

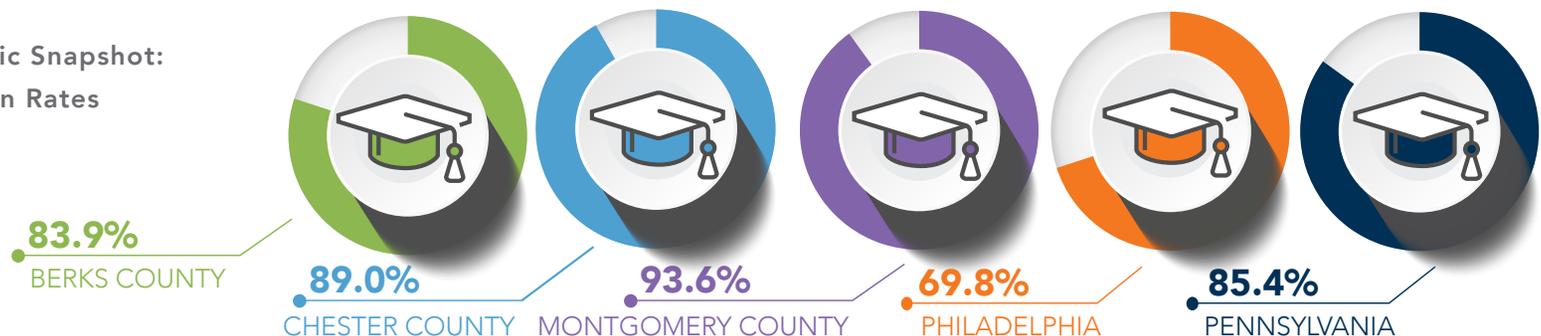
- A longer life
- Increased likelihood of obtaining or understanding basic health information and services to make appropriate healthcare decisions

### HOW EDUCATION IMPACTS HEALTH

Low education levels can be barriers to health. This is seen in those residents who have less than a high school education. These individuals are significantly more likely to report their health as fair or poor, to struggle with food, housing and access to health care.

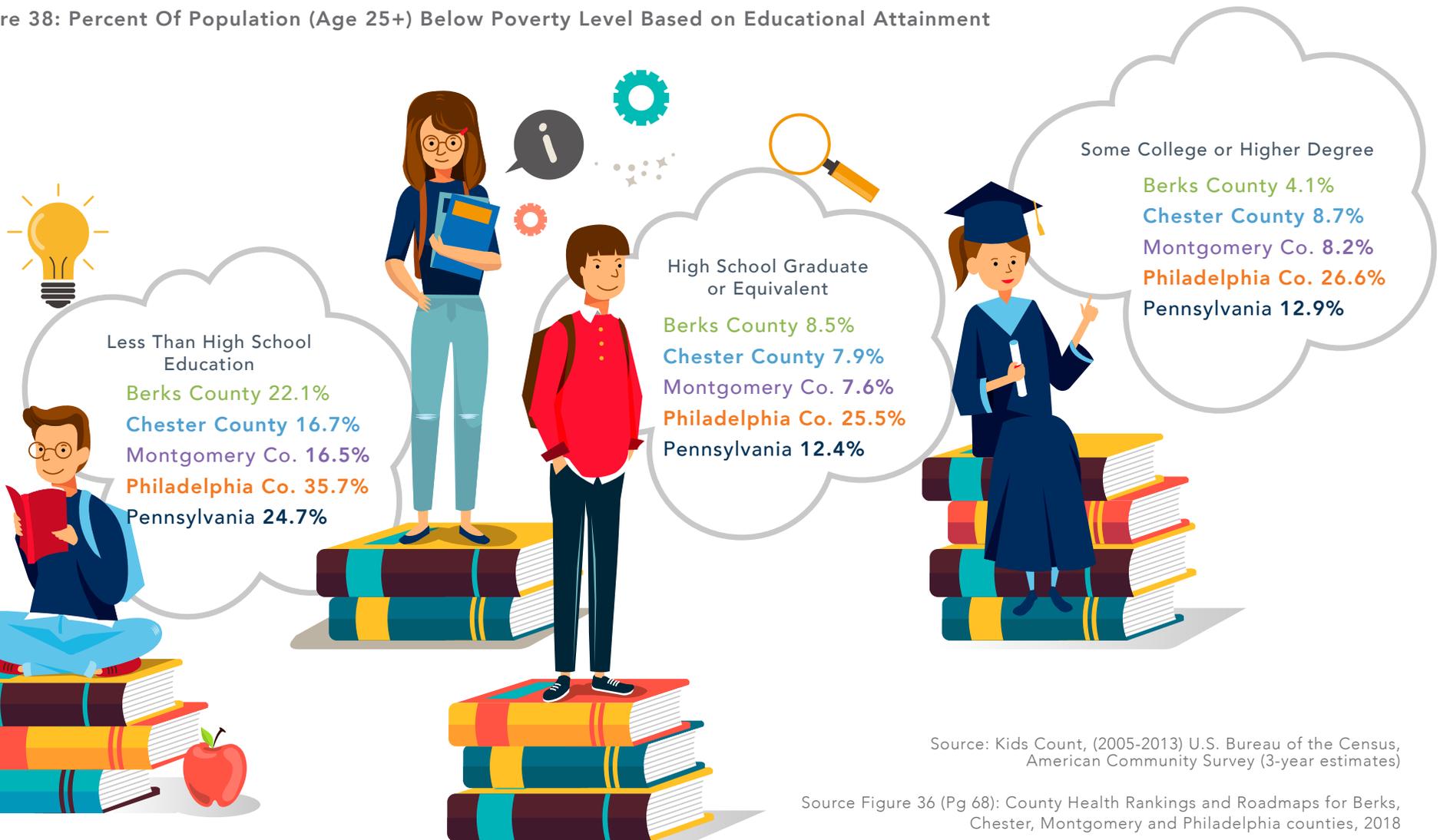
As **Figure 37** illustrates, Berks, Chester, Montgomery and Philadelphia counties' high school graduation rates compared to the state. Graduation rates in Montgomery (93.6%) and Chester (89.0%) counties are higher when compared to the state (85.4%), while Berks (83.9%) and Philadelphia (69.8%) counties are lower.

**Figure 37: Demographic Snapshot: High School Graduation Rates**



Generally, the higher the education level, the lower the percentage of the population that lives in poverty. The poverty level by educational attainment is shown in **Figure 38**. Over two-thirds (35.7%) of residents in Philadelphia County that have less than a high school education are living below poverty. Over one in four residents in Philadelphia County who are high school graduates (25.5%) or have some college degree or higher (26.6%) are also living below poverty. One in five residents (22.1%) in Berks County with less than a high school education are living in poverty. Philadelphia County has a higher percentage of residents with all levels of education living in poverty when compared to the state.

**Figure 38: Percent Of Population (Age 25+) Below Poverty Level Based on Educational Attainment**



Source: Kids Count, (2005-2013) U.S. Bureau of the Census, American Community Survey (3-year estimates)

Source Figure 36 (Pg 68): County Health Rankings and Roadmaps for Berks, Chester, Montgomery and Philadelphia counties, 2018

## HOW EDUCATION IMPACTS ACCESS TO CARE

**Table 18** shows significant differences for overall health and preventative care based on highest level of educational attainment from the Tower Health community survey. Those who did not complete high school were significantly more likely to have needed medical care, but had difficulty finding a doctor, been unable to see a doctor due to cost or lack of transportation, been unable to get needed care for a child or skipped a dose or taken a smaller amount than prescribed to make a prescription last compared to other respondents. Those with some college or technical school were significantly more likely to have had difficulty getting an appointment to see a doctor than other respondents. College graduates were significantly less likely to have office hours be a barrier to care when compared to other respondents.

**Table 18: Access by Education**

<b>Access Past 12 Months, Percent "Yes"</b>	<b>Did Not Complete High School</b>	<b>High School Graduate</b>	<b>Some College/ Technical School</b>	<b>College Graduate</b>
Needed medical care, but had difficulty finding a doctor	27.9%	7.5%	15.0%	7.3%
Had difficulty getting an appointment to see a doctor	14.5%	15.4%	23.8%	16.3%
Needed to see a doctor, but could not because of the cost	22.6%	5.9%	11.2%	6.3%
Lack of transportation made it difficult/prevented from seeing a doctor/making a medical appointment	25.8%	8.8%	10.0%	3.0%
Not able to see a doctor because the office hours were not convenient	16.1%	8.2%	16.3%	5.9%
Skipped doses/took smaller doses in order to make your prescriptions last longer and save costs	14.5%	6.5%	12.7%	6.7%
Needed medical care for child, but could not get it	41.7%	3.7%	2.2%	4.0%

Source: Tower Health Community Survey, Professional Research Consultants, 2018

## HOW EDUCATION IMPACTS CHRONIC CONDITIONS

**Table 19** illustrates the percentage of community survey respondents who experience the following chronic conditions that were significantly different based on educational attainment. Respondents who are college graduates were significantly less likely to have been told they have COPD, asthma, heart disease, diabetes or have a child with asthma compared to respondents with a lower level of educational attainment. Respondents who did not complete high school were significantly more likely to have arthritis, kidney disease, heart attack, stroke, high cholesterol or depression compared to respondents with a higher level of educational attainment.

**Table 19: Chronic Conditions**

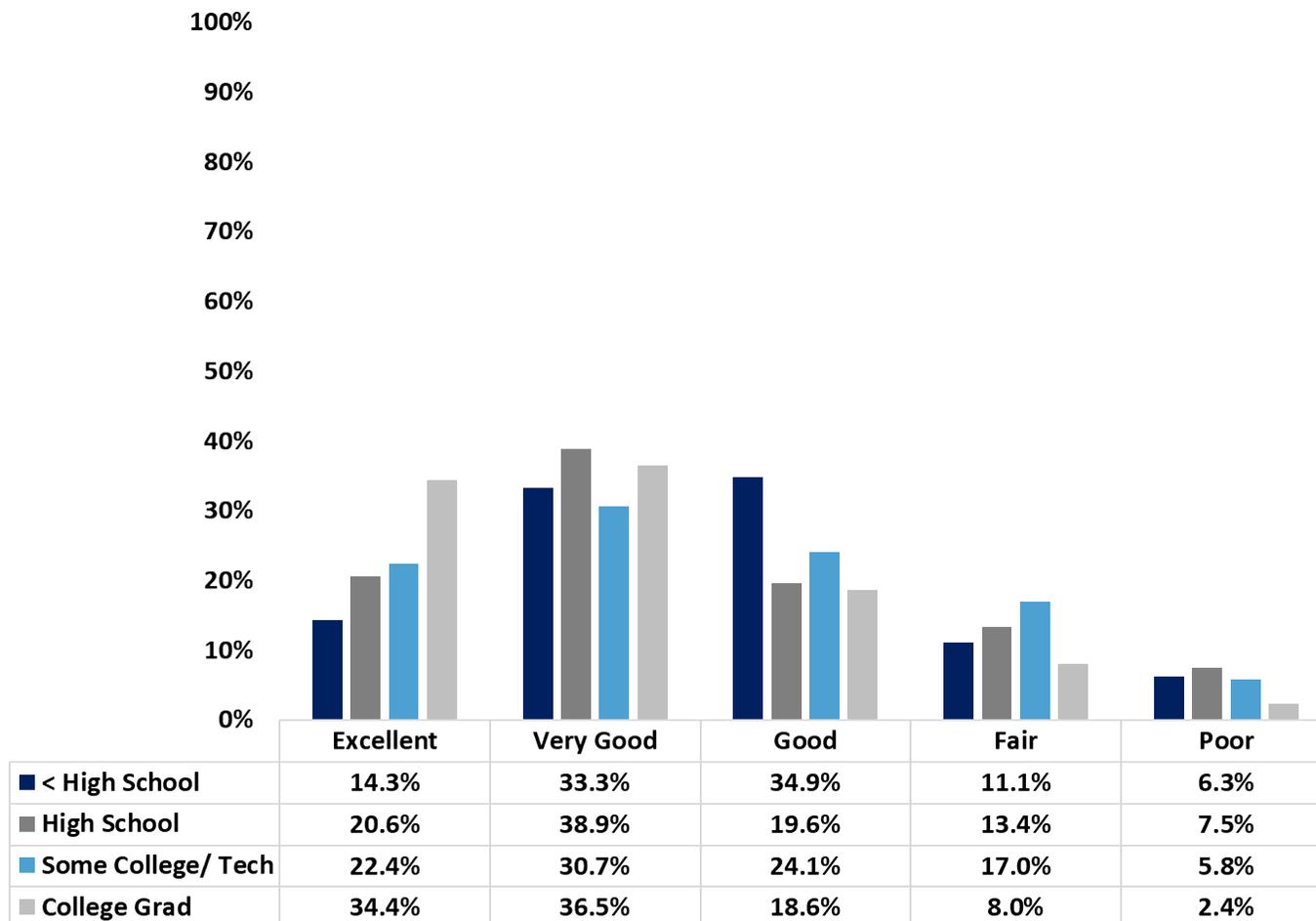
<b>Chronic Conditions, Percent "Yes"</b>	<b>Did Not Complete High School</b>	<b>High School Graduate</b>	<b>Some College/ Technical School</b>	<b>College Graduate</b>
COPD or Chronic Obstructive Pulmonary Disease, Including Bronchitis or Emphysema	32.3%	12.3%	12.2%	4.0%
Arthritis or Rheumatism	41.9%	26.4%	25.7%	20.5%
Sciatica or Chronic Back Pain	37.1%	23.9%	21.7%	19.5%
Kidney Disease	16.1%	4.7%	4.9%	3.0%
Heart Attack or Myocardial Infarction	17.7%	6.2%	4.9%	3.1%
Angina or Coronary Heart Disease	6.6%	7.9%	5.1%	3.7%
Stroke	16.1%	8.9%	6.6%	2.5%
Asthma	84.2%	82.5%	65.3%	64.2%
Diabetes	33.3%	13.4%	16.3%	9.4%
High Cholesterol	59.7%	29.1%	34.3%	37.6%
Asthma, Child	41.7%	14.0%	17.1%	8.6%
Depression	39.0%	18.8%	26.0%	15.7%

Source: Tower Health Community Survey, Professional Research Consultants, 2018

## HOW EDUCATION IMPACTS BEHAVIORAL HEALTH

**Figure 39** illustrates the community survey respondents by education for how they rated their own personal mental health status. Those with some college or technical school (22.8%) were significantly more likely to rate their mental health as fair or poor compared to other respondents.

**Figure 39: Personal Mental Health Status**

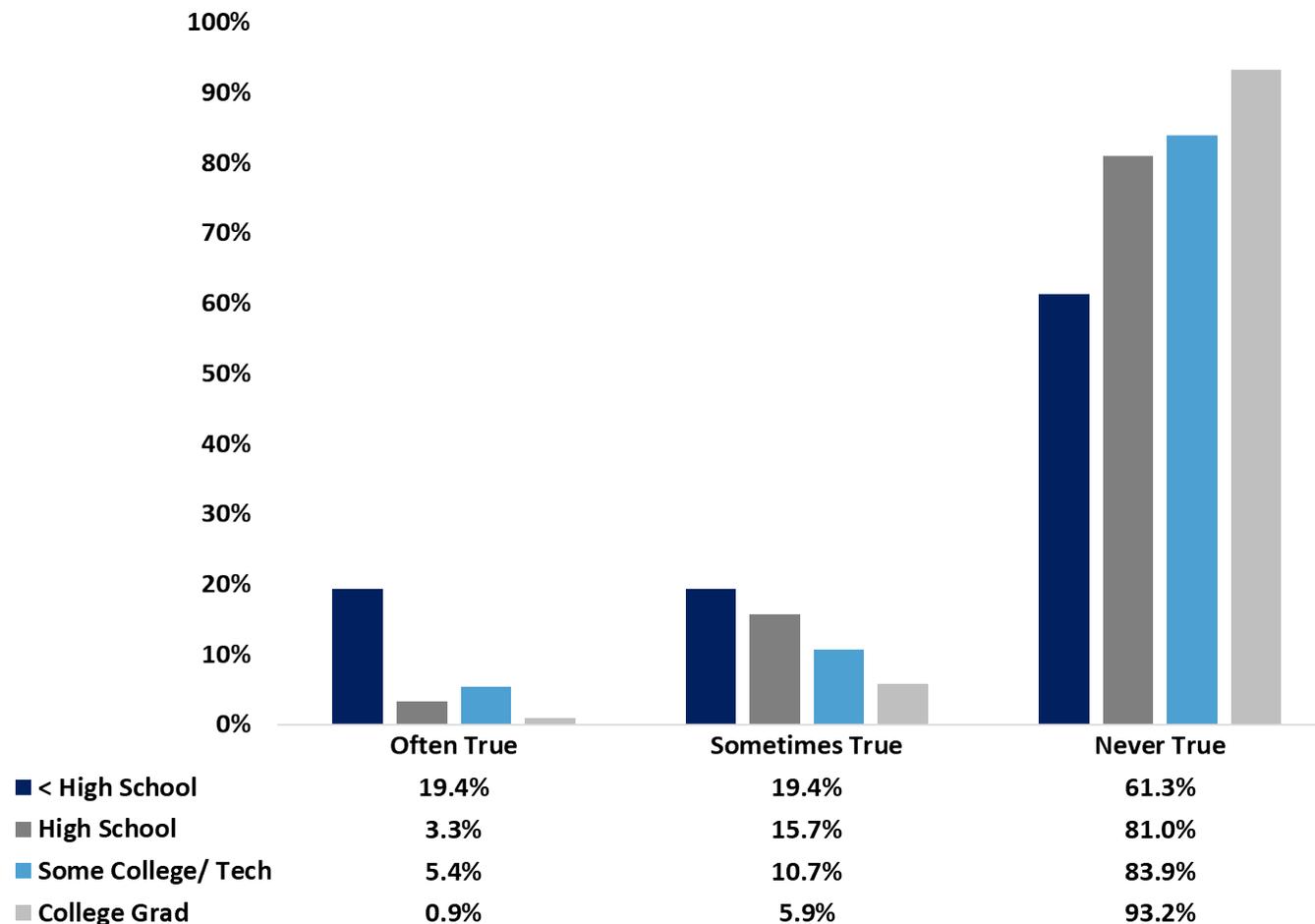


Source: Tower Health Community Survey, Professional Research Consultants, 2018

HOW EDUCATION IMPACTS FOOD AND NUTRITION

Figure 40 shows the percentage of community survey respondents who report that food did not last, and they did not have money to buy more by educational attainment. Those who did not complete high school were significantly more likely to have run out of food and been unable to purchase more than other respondents.

Figure 40: Food Did Not Last and No Money to Buy More

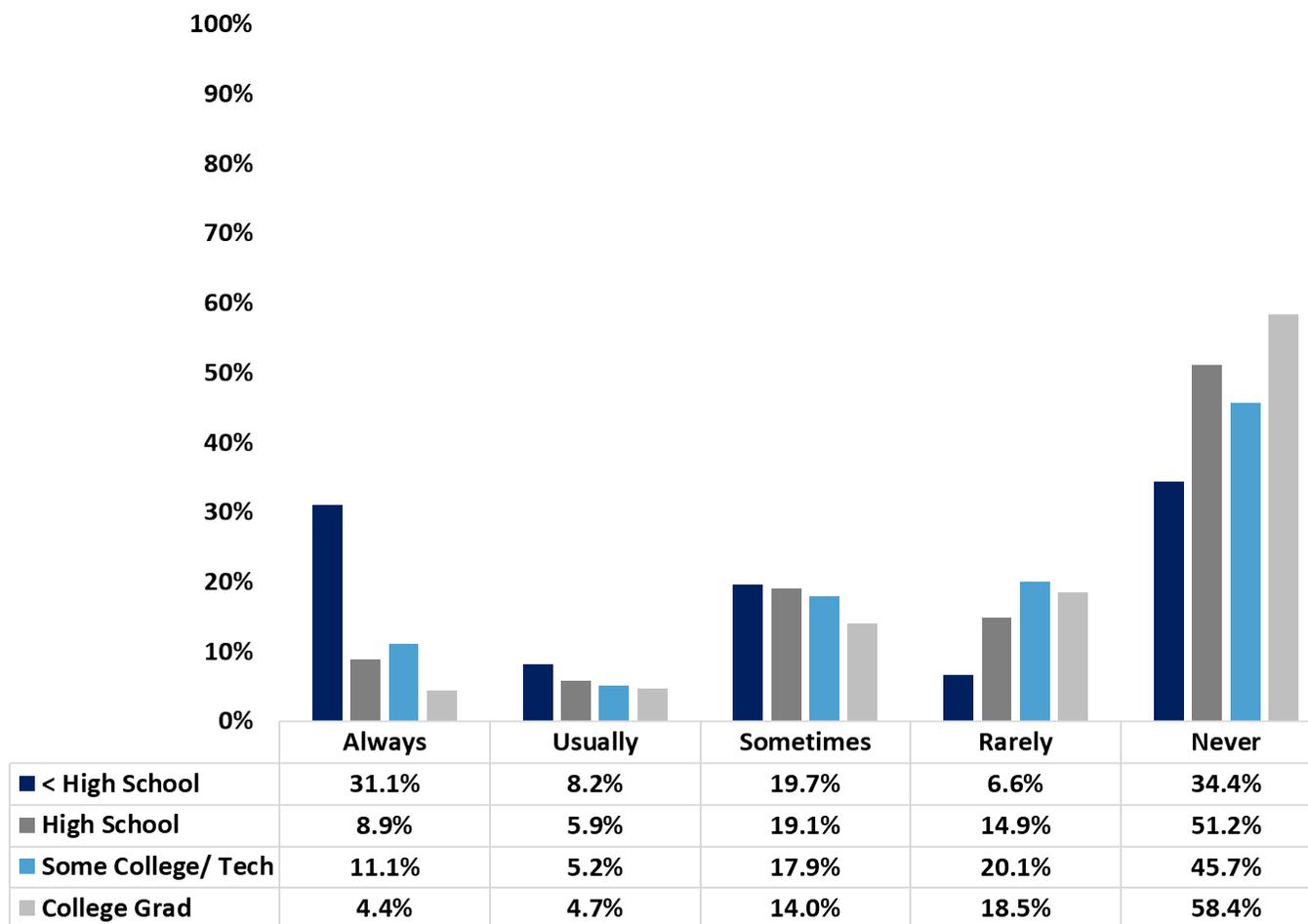


Source: Tower Health Community Survey, Professional Research Consultants, 2018

## HOW EDUCATION IMPACTS HOUSING

**Figure 41** illustrates the percentage of community survey respondents who report worrying about having enough money for housing. Those with less than a high school education were significantly more likely to worry about not having enough money for housing compared to respondents with higher levels of educational attainment.

**Figure 41: Worried About Having Enough Money for Housing**





## HOW EARLY CARE AND EDUCATION IMPACTS HEALTH

Early education is an important period in a child's life. Children need safe housing, food, medical care, proper educational stimulation and nurturing relationships for healthy development. The first years of life build the foundation for future cognitive, emotional and behavioral skill development. Strong relationships with caregivers and stable, safe environments play a pivotal role in building a strong foundation for later growth and learning.

### EARLY INTERVENTION

Early Intervention (EI) provides individualized services and supports to families of children birth to school age who have developmental delays or disabilities. Supports and services differ depending on the child's and family's needs and focus on enhancing the child's physical (including vision and hearing), cognitive, communication, social, emotional and adaptive development while providing parent education and support as needed.

**Table 20** shows that the number of children receiving early intervention services has fluctuated in the service area counties. Overall, the number has increased from 2010-2011 to 2016-2017 in Berks, Montgomery and Philadelphia counties, as well as the state. The number of children receiving EI services in Chester County has decreased.

**Table 20: Number Of Children Receiving Early Intervention Services**

Location	Data Type	2010 - 11	2011 - 12	2012 - 13	2013 - 14	2014 - 15	2015 - 16	2016 - 17
Pennsylvania	Number	82,914	88,015	89,810	89,654	89,166	90,690	94,306
Berks (Urban-Mix)	Number	3,670	3,760	3,824	3,702	3,771	3,810	3,891
Chester (Urban)	Number	4,200	4,435	4,385	4,054	3,797	3,789	3,963
Montgomery (Urban)	Number	4,417	4,988	5,254	5,166	5,271	5,541	5,845
Philadelphia (Urban)	Number	11,113	12,949	13,580	13,989	13,710	13,971	14,521

Source: PA Departments of Education and Human Services, Office of Child Development and Early Learning

## EARLY CHILDHOOD: EARLY CARE AND EDUCATION

**Keystone STARS** is Pennsylvania's Quality Rating and Improvement System (QRIS). A QRIS is a continuous quality improvement systemic approach to assess, improve, and communicate the level of quality in early and school-age care and education programs. Keystone STARS is a program of Pennsylvania's Office of Child Development and Early Learning (OCDEL).

Keystone STARS is a responsive system to improve, support, and recognize the continuous quality improvement efforts of early learning programs in Pennsylvania. The system is guided by three core principles:

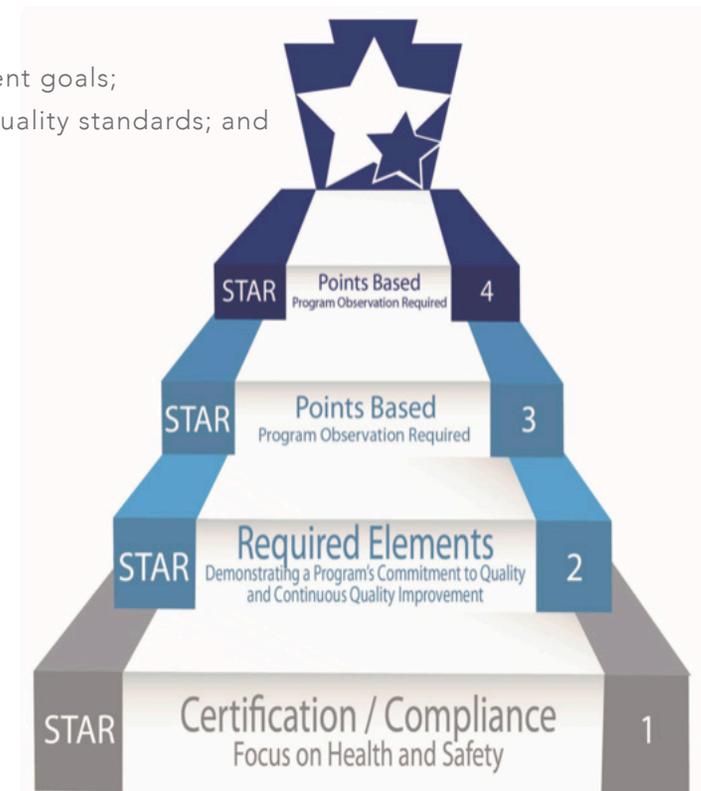
- A whole child approach to education is essential to meeting the holistic and individual needs of each and every child and family.
- Knowledgeable and responsive early care and education professionals are essential to the development of children and the support of families.
- Building and sustaining ongoing positive relationships among children, families, early care and education professionals and community stakeholders is essential for the growth and development of every child.

### Keystone STARS has four primary goals:

- To improve the quality of early care and education;
- To support early care and education providers in meeting their quality improvement goals;
- To recognize programs for continuous quality improvement and meeting higher quality standards; and
- To provide families a way to choose a quality early care and education program.

**Figure 42** illustrates the different star levels.

**Figure 42: Keystone Star Levels**



As outlined in **Table 21** below, the percentage of child care providers in the Keystone Stars program has increased in recent years. As of September 2018, only a small percentage of providers in Berks, Chester, Montgomery and Philadelphia counties and the state overall are not participating.

**Table 21: Regulated Child Care: Total Providers And Keystone Stars Participation**

Location	Program Type	Data Type	Jun - 12	Jun - 13	Jun - 14	Jun - 15	Jun - 16	Jun - 17	Sep - 18
Pennsylvania	Providers in STARS	Number	3,224	3,226	3,024	3,067	3,020	3,079	4,695
		Percent	68.0%	69.0%	65.0%	65.2%	63.8%	63.8%	95.0%
	Providers Not in STARS	Number	1,497	1,448	1,631	1,636	1,711	1,749	248
		Percent	32.0%	31.0%	35.0%	34.8%	36.2%	36.2%	5.0%
	Regulated Providers	Number	4,721	4,674	4,655	4,703	4,731	4,828	4,943
		Percent	NA						
Berks (Urban-Mix)	Providers in STARS	Number	91	92	89	94	93	97	116
		Percent	74.6%	76.7%	74.2%	75.8%	77.5%	81.5%	98.3%
	Providers Not in STARS	Number	31	28	31	30	27	22	2
		Percent	25.0%	23.3%	25.8%	24.2%	22.5%	18.5%	1.7%
	Regulated Providers	Number	122	120	120	124	120	119	118
		Percent	NA						
Chester (Urban)	Providers in STARS	Number	128	140	131	144	132	135	198
		Percent	62.1%	70.0%	66.2%	71.3%	65.0%	66.5%	95.7%
	Providers Not in STARS	Number	78	60	67	58	71	68	9
		Percent	38.0%	30.0%	33.8%	28.7%	35.0%	33.5%	4.3%
	Regulated Providers	Number	206	200	198	202	203	203	207
		Percent	NA						

Table 21 (Continued): Regulated Child Care: Total Providers And Keystone Stars Participation

Location	Program Type	Data Type	Jun - 12	Jun - 13	Jun - 14	Jun - 15	Jun - 16	Jun - 17	Sep - 18
Montgomery (Urban)	Providers in STARS	Number	267	277	251	248	256	252	382
		Percent	71.2%	74.1%	66.9%	65.4%	67.7%	66.3%	95.7%
	Providers Not in STARS	Number	108	97	124	131	122	128	17
		Percent	29.0%	25.9%	33.1%	34.6%	32.3%	33.7%	4.3%
	Regulated Providers	Number	375	374	375	379	378	380	399
		Percent	NA						
Philadelphia (Urban)	Providers in STARS	Number	608	556	542	542	555	564	1,028
		Percent	65.7%	58.2%	55.5%	54.3%	54.8%	53.0%	93.4%
	Providers Not in STARS	Number	317	399	434	457	458	501	73
		Percent	34.0%	41.8%	44.5%	45.7%	45.2%	47.0%	6.6%
	Regulated Providers	Number	925	955	976	999	1,013	1,065	1,101
		Percent	NA						

Source: Pennsylvania Departments of Education and Human Services, Office of Child Development and Early Learning

According to the Office of Child Development and Early Learning nearly 205,000 children under age 5 need subsidized child care so their parents, can reliably participate in the workforce and financially support their families. Child care provides not only peace of mind to working parents but an opportunity for young children to develop, grow and learn. Research indicates that access to high quality child care increases the likelihood that children enter school ready to succeed while their parents remain employed.

**Table 22** shows the number and percent of children under the age of 5 in Berks, Chester, Montgomery and Philadelphia counties and Pennsylvania who are eligible, enrolled and unserved by a child care subsidy. In Berks County there are over 6,000 children not being served by a child care subsidy who are eligible, which accounts for 80.9% of eligible children. The percentage in Berks County not being served is higher when compared to Pennsylvania. The percentage of children not being served in Montgomery (61.9%) and Philadelphia (55.2%) counties is lower than the state, while Chester County is comparable to the state.

**Table 22: Child Care Subsidy - Eligibility And Enrollment Of Children Under 5 Years**

Location	Under age 5	Data Type	Oct 2017
Pennsylvania	Eligible	Number	204,850
		Percent	NA
	Enrolled	Number	59,730
		Percent	29.2%
	Unserved	Number	145,120
		Percent	70.8%
Berks (Urban-Mix)	Eligible	Number	8,010
		Percent	NA
	Enrolled	Number	1,529
		Percent	19.1%
	Unserved	Number	6,481
		Percent	80.9%

Table 21 (Continued): Child Care Subsidy - Eligibility And Enrollment Of Children Under 5 Years

Location	Under age 5	Data Type	Oct 2017
Chester (Urban)	Eligible	Number	4,420
		Percent	NA
	Enrolled	Number	1,270
		Percent	28.7%
	Unserved	Number	3,150
		Percent	71.3%
Montgomery (Urban)	Eligible	Number	6,380
		Percent	NA
	Enrolled	Number	2,431
		Percent	38.1%
	Unserved	Number	3,949
		Percent	61.9%
Philadelphia (Urban)	Eligible	Number	45,650
		Percent	NA
	Enrolled	Number	20,447
		Percent	44.8%
	Unserved	Number	25,203
		Percent	55.2%

Source: Pennsylvania Departments of Education and Human Services, Office of Child Development and Early Learning

**Table 23** shows the percentage of children receiving subsidized childcare in Keystone STARS 3 or 4 facilities. The percentage has fluctuated in the service area counties, but overall compared to 2012 has increased. In 2017, fewer children were receiving subsidized childcare in a Keystone STARS 3 or 4 facility in Berks (31.8%) and Philadelphia (26.3%) counties when compared to the state.

**Table 23: Children Receiving Subsidized Child Care in Keystone STARS 3 or 4 Facilities**

Location	Data Type	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017
Pennsylvania	Percent	19.8%	23.5%	23.7%	22.9%	23.0%	32.2%
Berks (Urban-Mix)	Percent	14.7%	16.4%	15.7%	15.7%	18.3%	31.8%
Chester (Urban)	Percent	29.6%	25.4%	28.5%	30.1%	29.1%	38.6%
Montgomery (Urban)	Percent	32.2%	28.1%	28.4%	30.9%	32.1%	48.3%
Philadelphia (Urban)	Percent	14.2%	16.7%	17.6%	16.4%	16.9%	26.3%

Source: Pennsylvania Departments of Education and Human Services, Office of Child Development and Early Learning

According to the Office of Child Development and Early Learning in Table 23 below high-quality pre-k includes the distinct counts of PA Pre-K Counts, Head Start Supplemental Assistance Program and Keystone STARS 3 and 4 enrollments; Head Start; school district pre-k; accredited or PDE licensed nursery school; providers accredited by an accreditation recognized by the Pennsylvania Office of Child Development and Early Learning. Publicly funded, high-quality pre-k includes the distinct count of PA Pre-K Counts, Head Start Supplemental Assistance Program and Child Care Works enrollments in Keystone STARS 3 and 4; Head Start; and school district pre-k.

**Table 24**, on page 83, shows the number and percent of children (ages 3-4) with access to high-quality Pre-K programs. The percentage of children with access to high quality pre-k has increased in Berks, Chester and Philadelphia counties, although the percentage with access to publicly funded high-quality pre-k has decreased in the most recent year data is reported. In Montgomery County, the percentage of children with access to high-quality pre-k, as well as publicly funded high-quality pre-k, has been increasing.

Table 24: Children (Ages 3-4) With Access to High-Quality Pre-K

Location	Type	Data Type	2013	2014	2015	2017
Pennsylvania	High-quality pre-k	Number	87,966	92,471	94,043	106,707
		Percent of all children ages 3-4	29.6%	31.1%	31.7%	36.2%
	Publicly funded, high-quality pre-k	Number	52,933	56,206	55,242	68,972
		Percent of all children ages 3-4	17.8%	18.9%	18.6%	23.4%
Berks (Urban-Mix)	High-quality pre-k	Number	2,276	2,360	2,548	NA
		Percent of all children ages 3-4	21.8%	22.6%	24.4%	NA
	Publicly funded, high-quality pre-k	Number	1,386	1,570	1,509	1,859
		Percent of all children ages 3-4	13.3%	15.0%	14.4%	18.2%
Chester (Urban)	High-quality pre-k	Number	3,556	3,874	3,907	NA
		Percent of all children ages 3-4	27.0%	29.4%	29.7%	NA
	Publicly funded, high-quality pre-k	Number	666	944	901	1,031
		Percent of all children ages 3-4	5.1%	7.2%	6.8%	8.3%
Montgomery (Urban)	High-quality pre-k	Number	6,589	7,137	7,341	NA
		Percent of all children ages 3-4	34.1%	36.9%	38.0%	NA
	Publicly funded, high-quality pre-k	Number	1,041	1,121	1,129	1,825
		Percent of all children ages 3-4	5.4%	5.8%	5.8%	9.5%
Philadelphia (Urban)	High-quality pre-k	Number	13,133	13,521	14,859	NA
		Percent of all children ages 3-4	33.7%	34.7%	38.1%	NA
	Publicly funded, high-quality pre-k	Number	11,593	12,509	12,300	18,394
		Percent of all children ages 3-4	29.7%	32.1%	31.5%	42.2%

Source: Pennsylvania Departments of Education and Human Services, Office of Child Development and Early Learning

**Table 25** shows the number and percent of children ages 3-4 that were below 300% poverty with access to publicly funded, high-quality pre-k programs. The percentage of children in below 300% poverty with access to publicly funded high-quality pre-k has increased in all service area counties between 2013 and 2017. With the exception of Philadelphia County, all counties had a lower percentage of children ages 3-4 below 300% poverty with access when compared to the state.

**Table 25: Children (Ages 3-4) Below 300% Poverty With Access to Publicly Funded High-Quality Pre-K**

Location	Type	Data Type	2013	2014	2015	2017
Pennsylvania	Publicly funded, high-quality pre-k	Number	52,933	56,206	55,242	68,972
	Publicly funded, high-quality pre-k	Percent of children < 300% poverty	29.6%	31.1%	31.4%	39.4%
Berks (Urban-Mix)	Publicly funded, high-quality pre-k	Number	1,386	1,570	1,509	1,859
	Publicly funded, high-quality pre-k	Percent of children < 300% poverty	20.7%	23.4%	23.8%	28.3%
Chester (Urban)	Publicly funded, high-quality pre-k	Number	666	944	901	1,031
	Publicly funded, high-quality pre-k	Percent of children < 300% poverty	15.8%	20.9%	17.3%	23.2%
Montgomery (Urban)	Publicly funded, high-quality pre-k	Number	1,041	1,121	1,129	1,825
	Publicly funded, high-quality pre-k	Percent of children < 300% poverty	17.4%	17.9%	15.1%	27.7%
Philadelphia (Urban)	Publicly funded, high-quality pre-k	Number	11,593	12,509	12,300	18,394
	Publicly funded, high-quality pre-k	Percent of children < 300% poverty	38.9%	41.4%	41.1%	55.1%

Source: Pennsylvania Departments of Education and Human Services, Office of Child Development and Early Learning



## HEAD START

Head Start is the national commitment to give every low-income child, regardless of circumstances at birth, an opportunity to succeed in school and in life. In the 50 years since its inception, Head Start has improved the lives of more than 32 million children and their families. In addition to life and school preparedness, Head Start is also the nation's laboratory for early learning innovation. It offers a unique whole child/whole family program design coupled with a delivery system that includes local programs, national standards, monitoring, professional development, and family engagement. The commonwealth, through the Head Start Supplemental program, creates new slots to supplement the resources provided through this federal program and to further reduce the unmet need felt in rural, suburban, and urban communities.

As illustrated in **Table 26**, on page 87, the number of children enrolled in Head Start programs has fluctuated over the past few years in Berks, Chester, Montgomery and Philadelphia counties. Compared to 2011-12, Berks and Chester counties have a higher number of children enrolled in a Head Start program, while Montgomery and Philadelphia counties have fewer.



### WHAT THE COMMUNITY IS SAYING

Lack of child care was not considered to be a significant barrier impacting access to health care by key informants. Approximately half (54.5%) of intercept survey respondents identified education as having the highest impact on one's health, with 38.9% identifying the lack of childcare as having the greatest impact.

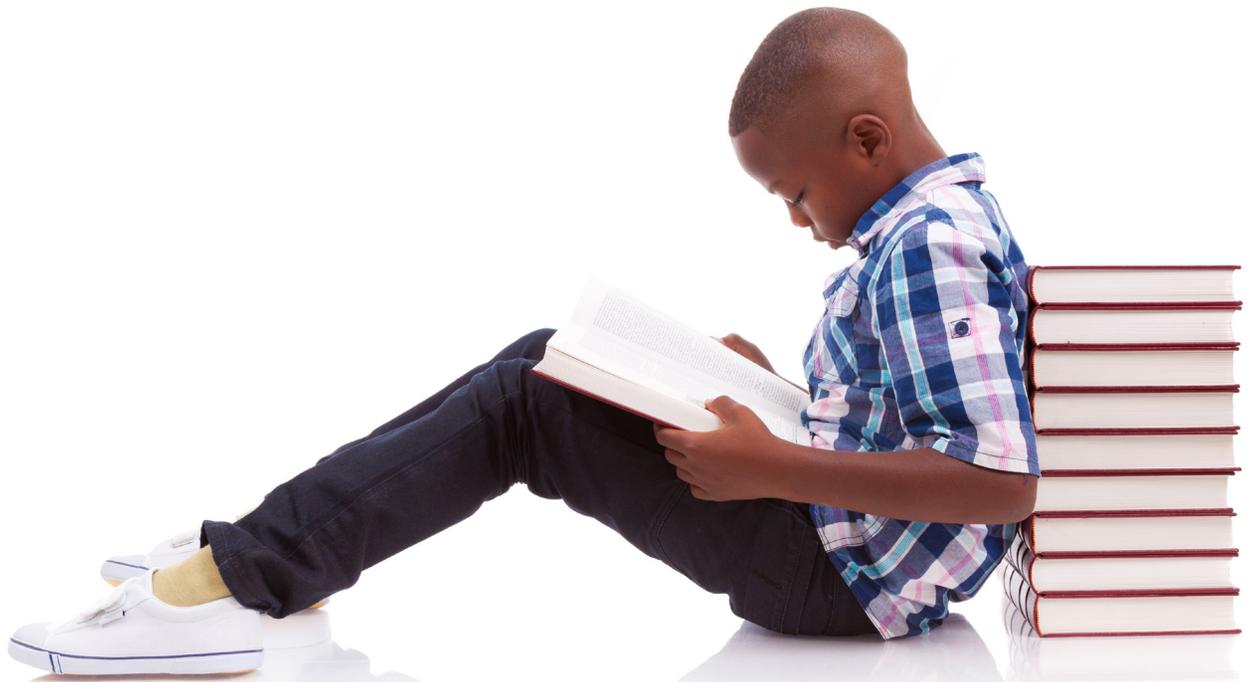


Table 26: Children Enrolled in Head Start Program, Berks, Chester, Montgomery and Philadelphia Counties

Location	Program	Data Type	2011 - 12	2012 - 13	2013 - 14	2014 - 15	2015 - 16	2016 - 17
Berks (Urban-Mix)	Total	Number	640	640	750	745	669	690
	Early Head Start	Number	0	0	0	0	29	32
	Head Start - Federal	Number	610	610	720	715	610	610
	Head Start - State	Number	30	30	30	30	30	48
Chester (Urban)	Total	Number	446	459	568	592	466	467
	Early Head Start	Number	0	0	0	0	123	124
	Head Start - Federal	Number	427	427	537	542	238	238
	Head Start - State	Number	19	32	31	50	105	105
Montgomery (Urban)	Total	Number	692	692	706	734	197	678
	Early Head Start	Number	180	180	228	244	197	228
	Head Start - Federal	Number	478	478	478	490	0	450
	Head Start - State	Number	34	34	0	0	0	0
Philadelphia (Urban)	Total	Number	8,123	8,011	8,361	8,572	7,433	7,945
	Early Head Start	Number	542	452	559	607	591	623
	Head Start - Federal	Number	6,153	6,188	6,516	6,679	5,216	5,696
	Head Start - State	Number	1,428	1,371	1,286	1,286	1,626	1,626

Source: Pennsylvania Departments of Education and Human Services, Office of Child Development and Early Learning



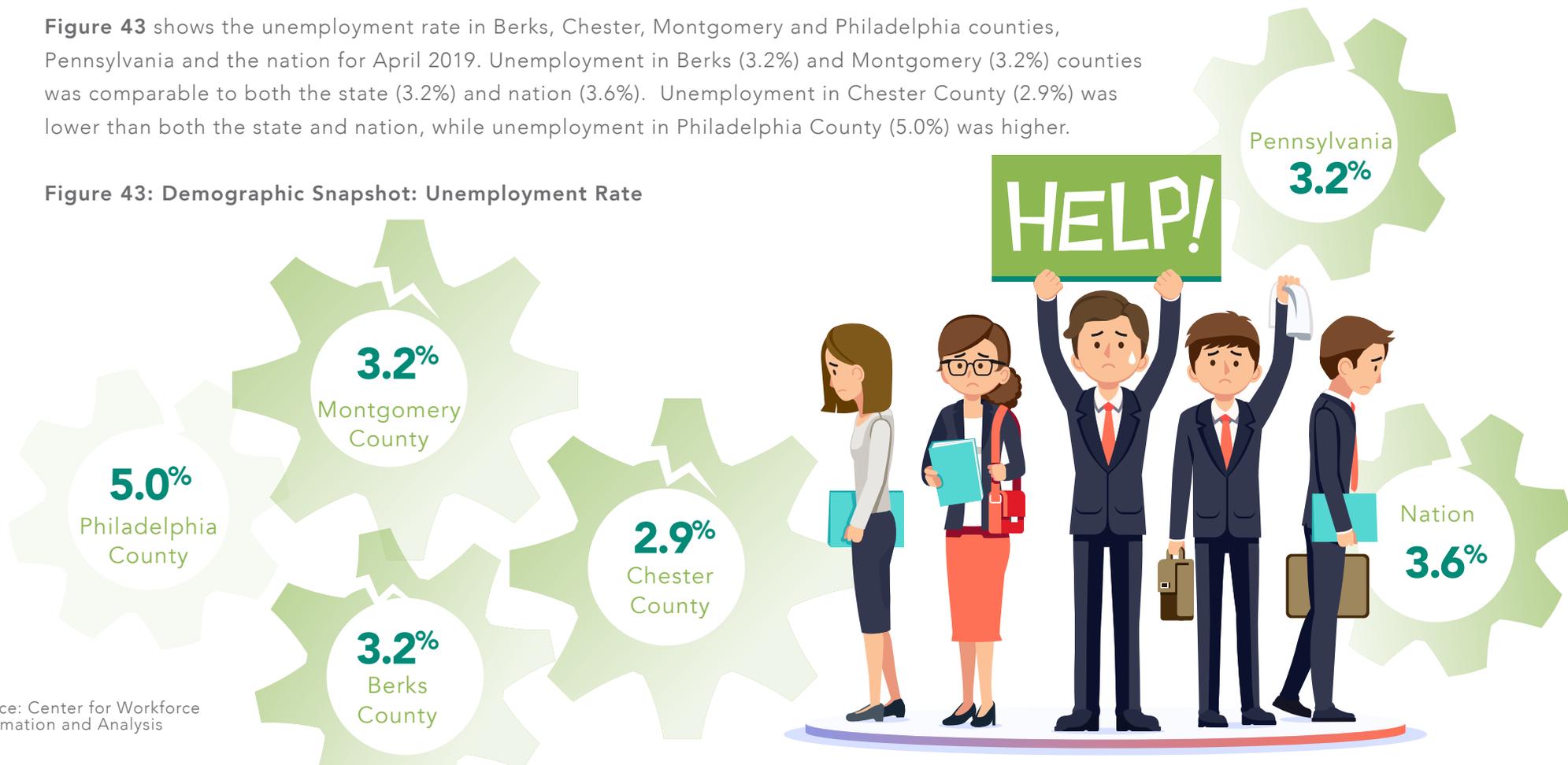
# HEALTH IS WHERE WE WORK

## HOW EMPLOYMENT IMPACTS HEALTH

A person who is unemployed or working a low wage or undesirable job is more at risk for health problems than those employees who are working full time. This may be partially a health selection effect, but it is also to a large extent cause and effect. There is strong evidence that unemployment is linked to early death, poorer general and mental health and psychological distress, higher use of medications and medical services as well as hospitalizations.

**Figure 43** shows the unemployment rate in Berks, Chester, Montgomery and Philadelphia counties, Pennsylvania and the nation for April 2019. Unemployment in Berks (3.2%) and Montgomery (3.2%) counties was comparable to both the state (3.2%) and nation (3.6%). Unemployment in Chester County (2.9%) was lower than both the state and nation, while unemployment in Philadelphia County (5.0%) was higher.

**Figure 43: Demographic Snapshot: Unemployment Rate**



**Table 27** shows employment for Berks, Chester, Montgomery and Philadelphia counties. Approximately one-third (33.1%) of residents age 16 and older are not in the labor force, while 62.0% are currently employed. Of those employed, almost two thirds (64.1%) are employed in a white collar occupation.

**Table 27: Demographic Snapshot: Employment**

Tower Health System	
Employment Status	
Civilian Employed	62.0%
Civilian Unemployed	4.9%
In Armed Forces	0.0%
Not in Labor Force	33.1%
Occupational Classification	
White Collar	64.1%
Blue Collar	19.1%
Service and Farming	16.8%

Source: Claritas - Pop-Facts Premier 2018, Environics Analytics





### WHAT THE COMMUNITY IS SAYING

Almost half of the intercept survey respondents (49.4%) identified underemployment/unemployment as having the highest impact on one's health.

### HOW INCOME IMPACTS HEALTH

As outlined in **Table 28**, the average and median household income levels for the Tower Health Primary Service Area is slightly higher than the state and nation. The number of families living in poverty for the Tower Health Primary Service Area (8.5%) are lower than the state (9.2%) and nation (11.0%).

**Table 28: Demographics Snapshot: Income**

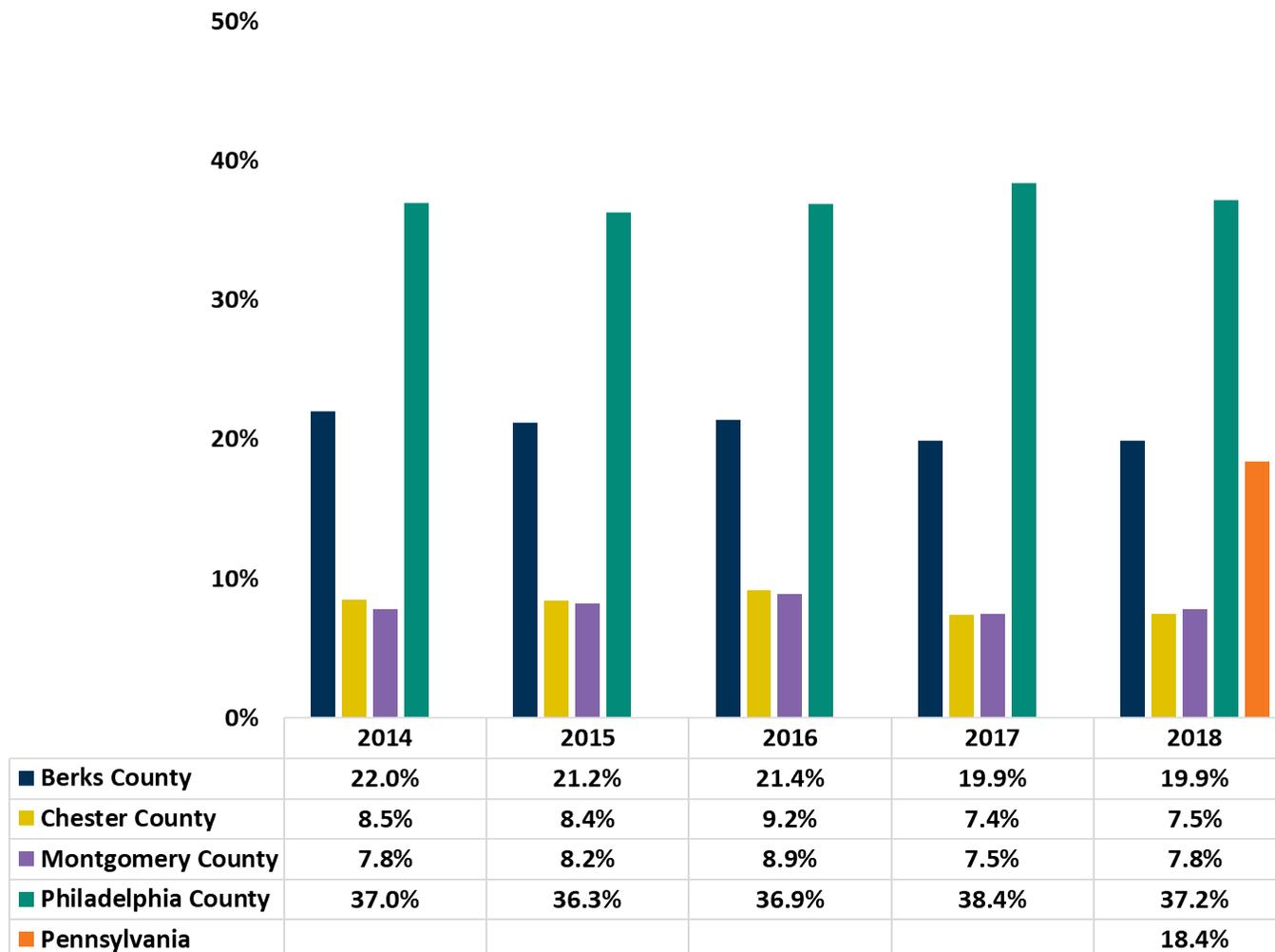
	Tower Health System	PA	US
Average household Income	\$97,235	\$83,779	\$86,278
Median Household Income	\$69,669	\$60,149	\$60,133
Families Living in Poverty	8.5%	9.2%	11.0%

Source: Claritas - Pop-Facts Premier 2018, Environics Analytics



**Figure 44** shows the percentage of children in Berks, Chester, Montgomery and Philadelphia counties living in poverty. While this percentage has fluctuated, in 2018 a higher percentage of children in Berks (19.9%) and Philadelphia (37.2%) counties were living in poverty when compared to the state (18.4%). The percentages in Chester (7.5%) and Montgomery (7.8%) counties was lower.

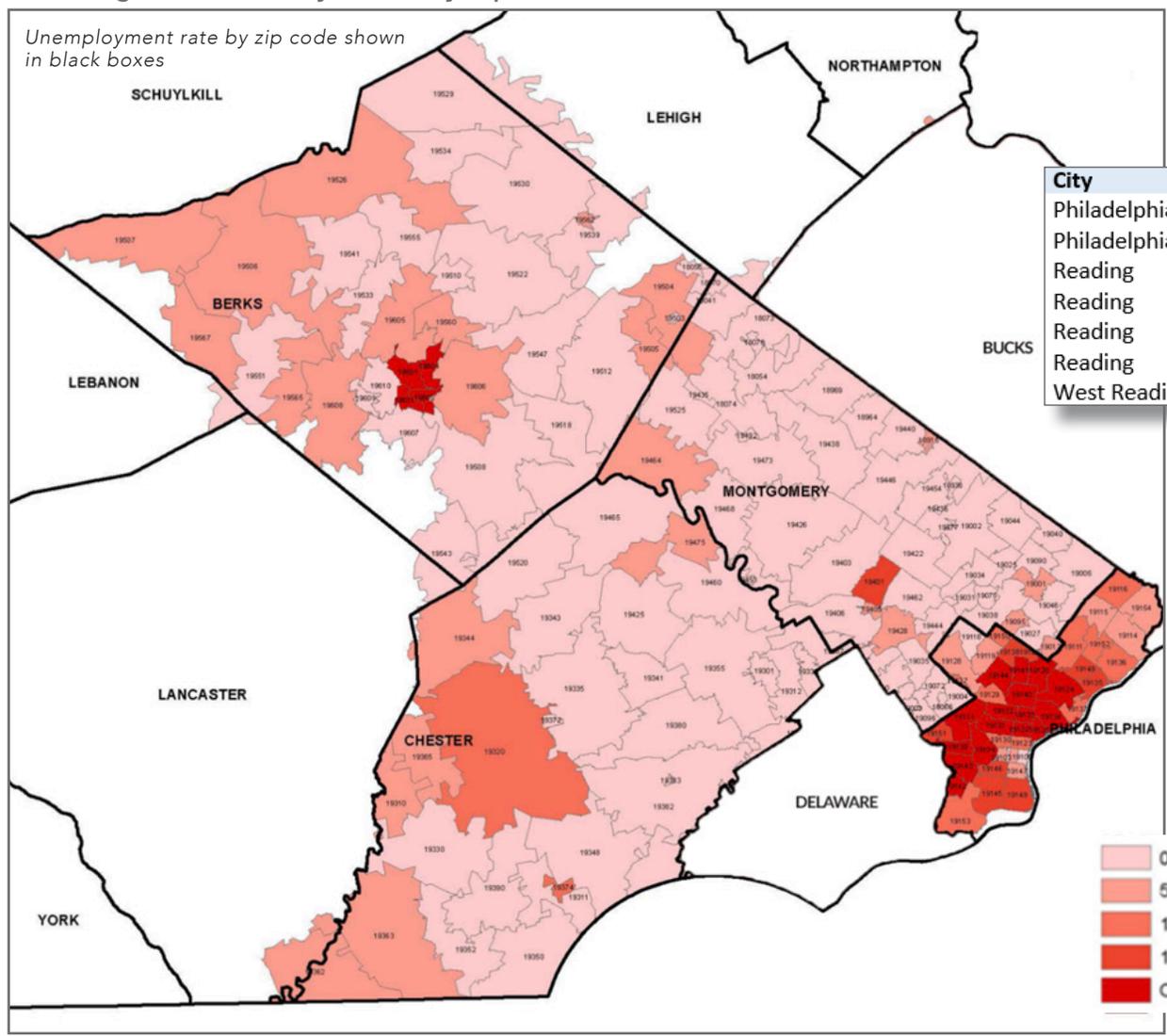
**Figure 44: Children Living in Poverty**



Source: County Health Rankings and Roadmaps for Berks, Chester, Montgomery and Philadelphia counties, 2018

Figure 45 illustrates poverty levels by zip code throughout the service area. The cities of Reading and Philadelphia have the highest levels of people living in poverty. Only zip codes in the Primary Service Area with poverty rates over 20% are noted in the table below.

Figure 45: Poverty Levels By Zip Code



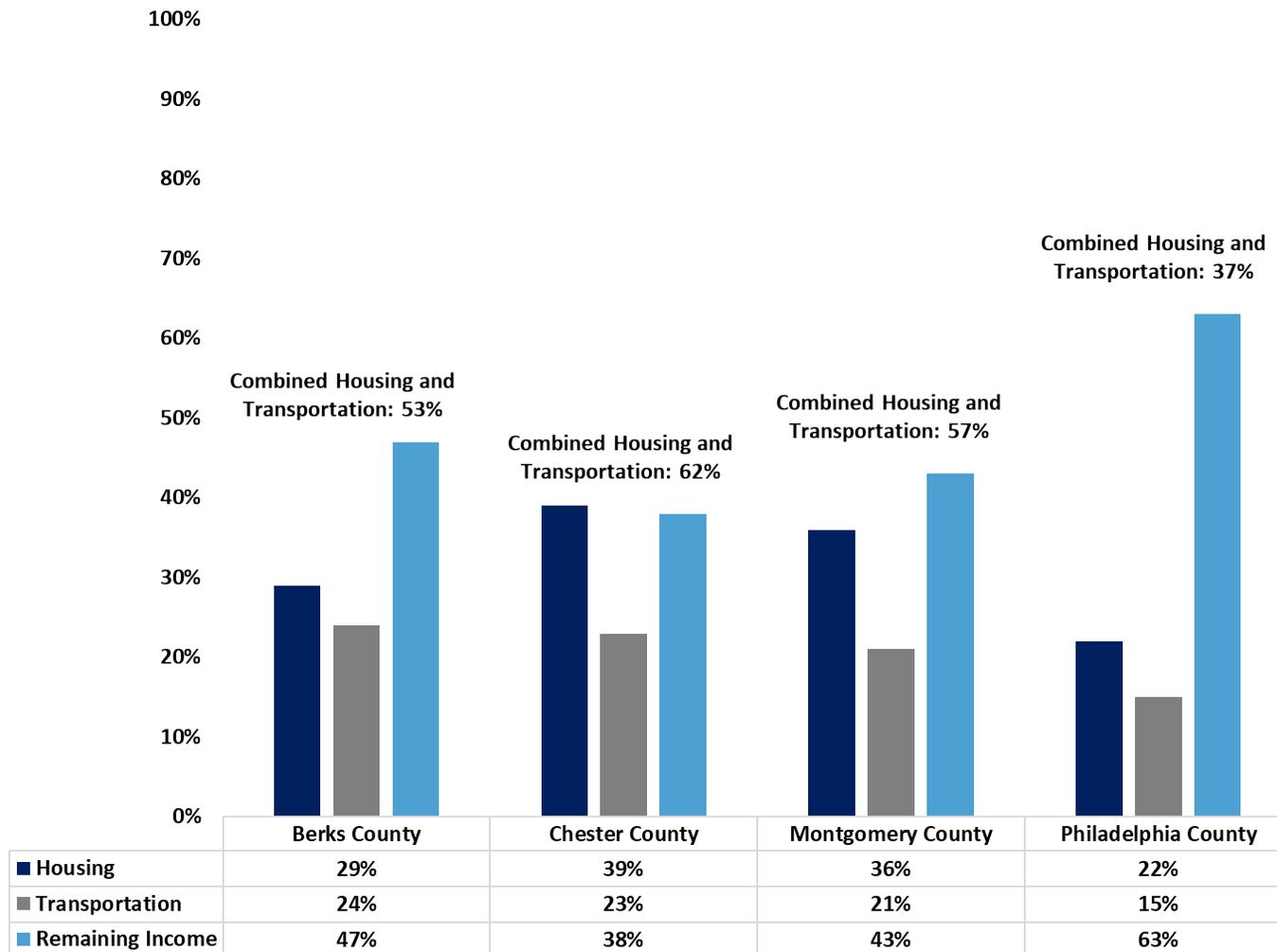
City	Zip Code	Poverty	Unemployment
Philadelphia	19144	Over 20.0%	12.8
Philadelphia	19138	Over 20.0%	15.4
Reading	19601	Over 20.0%	15.0
Reading	19602	Over 20.0%	18.4
Reading	19604	Over 20.0%	12.8
Reading	19603	Over 20.0%	12.8
West Reading	19611	Over 20.0%	9.4

Poverty Rate as of 11/15/18:  
 Source: 2012 - 2016 American Community Survey  
 Unemployment Rate as of 11/15/18:  
 Source: U.S. Census Bureau, Census 2010 Summary File 1



**Figure 46** illustrates the housing and transit burden for Berks, Chester, Montgomery and Philadelphia counties. Combined housing and transit is considered a burden when it is at 45% or greater of one’s household income. Berks (53%), Chester (62%) and Montgomery (57%) counties are at a level considered to be a burden.

**Figure 46: Housing and Transit Burden**

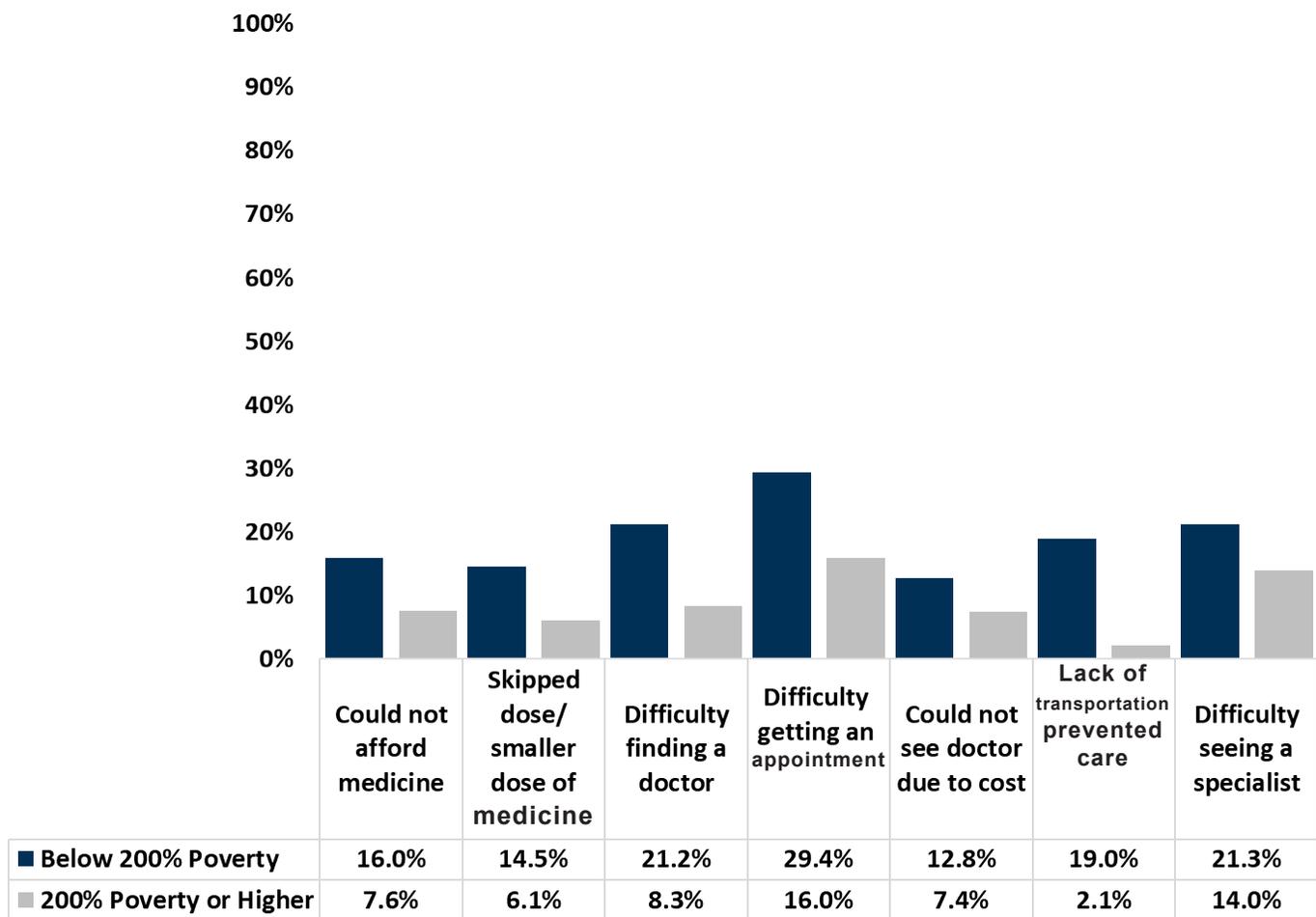


Source: The Center for Neighborhood Technology, Housing and Transportation (H&T®) Affordability Index

### HOW INCOME IMPACTS ACCESS TO CARE

**Figure 47** shows the responses from the community survey who reside in Tower Health’s service area where significant differences by poverty exist that impact access to care. Respondents living below 200% poverty were significantly more likely to have had difficulty finding a doctor, getting an appointment with a doctor or seeing a specialist, as well as to have cost and transportation be barriers to accessing needed care compared to other respondents. Those living below 200% poverty were also significantly more likely to have been unable to afford medication or skipped a dose due to the cost of prescriptions.

**Figure 47: Barriers to Care**



## HOW INCOME IMPACTS CHRONIC CONDITIONS

**Table 29** shows the responses from the community survey who reside in Tower Health's service area where significant differences by poverty exist for chronic conditions. Respondents living below 200% poverty were significantly more likely to have ever been told they have arthritis, COPD, osteoporosis, kidney disease, asthma, heart attack, heart disease, stroke or are obese compared to respondents not living below 200% poverty. Those living above 200% poverty were significantly more likely to have ever been told they have skin cancer.

**Table 29: Chronic Conditions**

	200% Poverty or Higher	Below 200% Poverty
Arthritis/ Rheumatism	30.7%	52.6%
COPD	6.1%	15.9%
Skin Cancer	8.5%	5.3%
Osteoporosis	5.2%	12.1%
Kidney Disease	3.3%	7.4%
Asthma	9.8%	18.2%
Heart Attack	3.5%	8.7%
Heart Disease	3.1%	8.0%
Stoke	3.5%	9.4%
Obese	29.1%	40.8%

Source: Tower Health Community Survey, Professional Research Consultants, 2018



## HOW INCOME IMPACTS BEHAVIORAL HEALTH

**Figure 48** shows the community survey respondents personal mental health rating by poverty level. Community survey respondents in the Tower Health service area that are living below 200% were significantly more likely to report their personal mental health as fair or poor (32.3%) compared to respondents not living in poverty (10.1%).

**Figure 48: Personal Mental Health Rating**

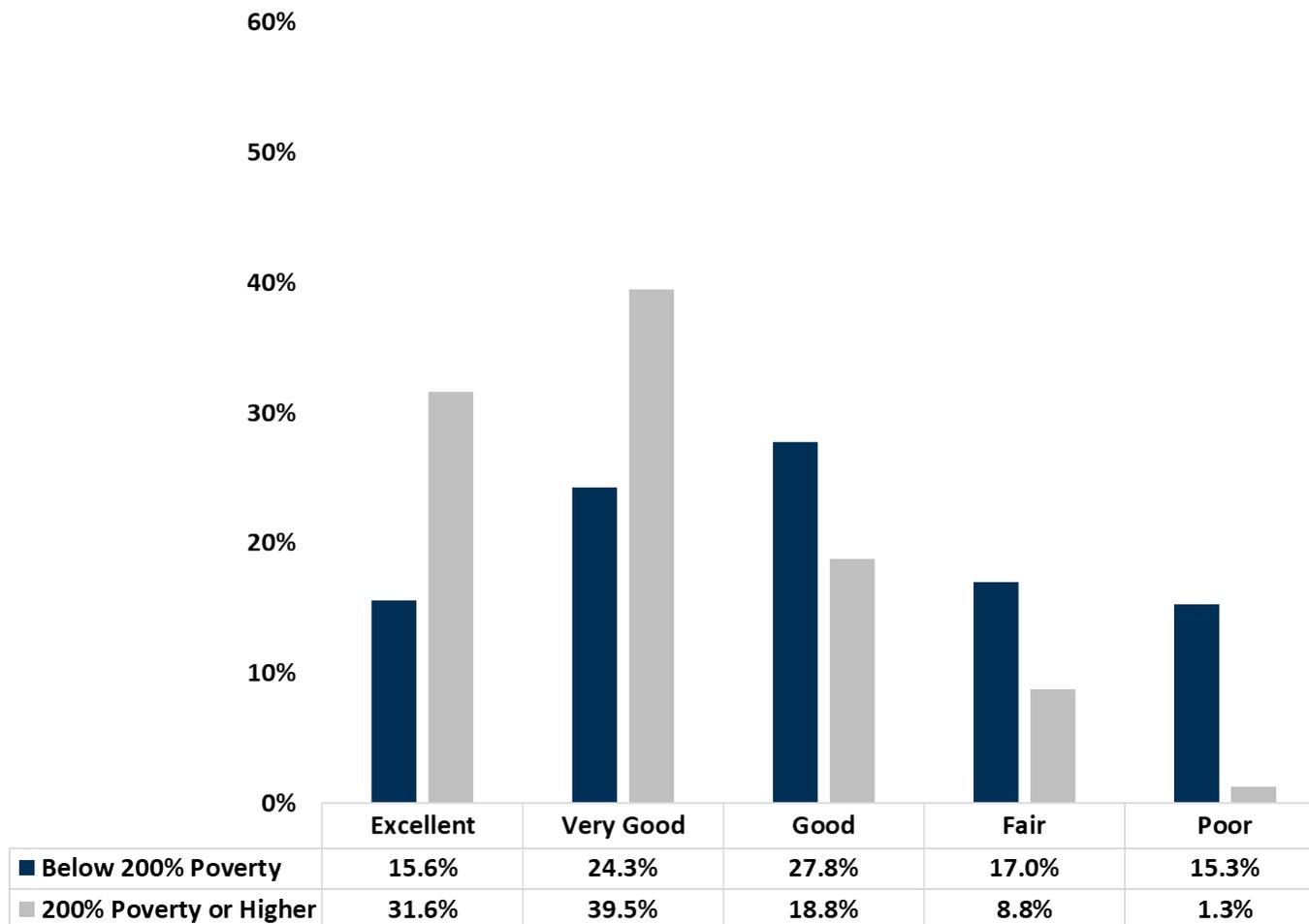
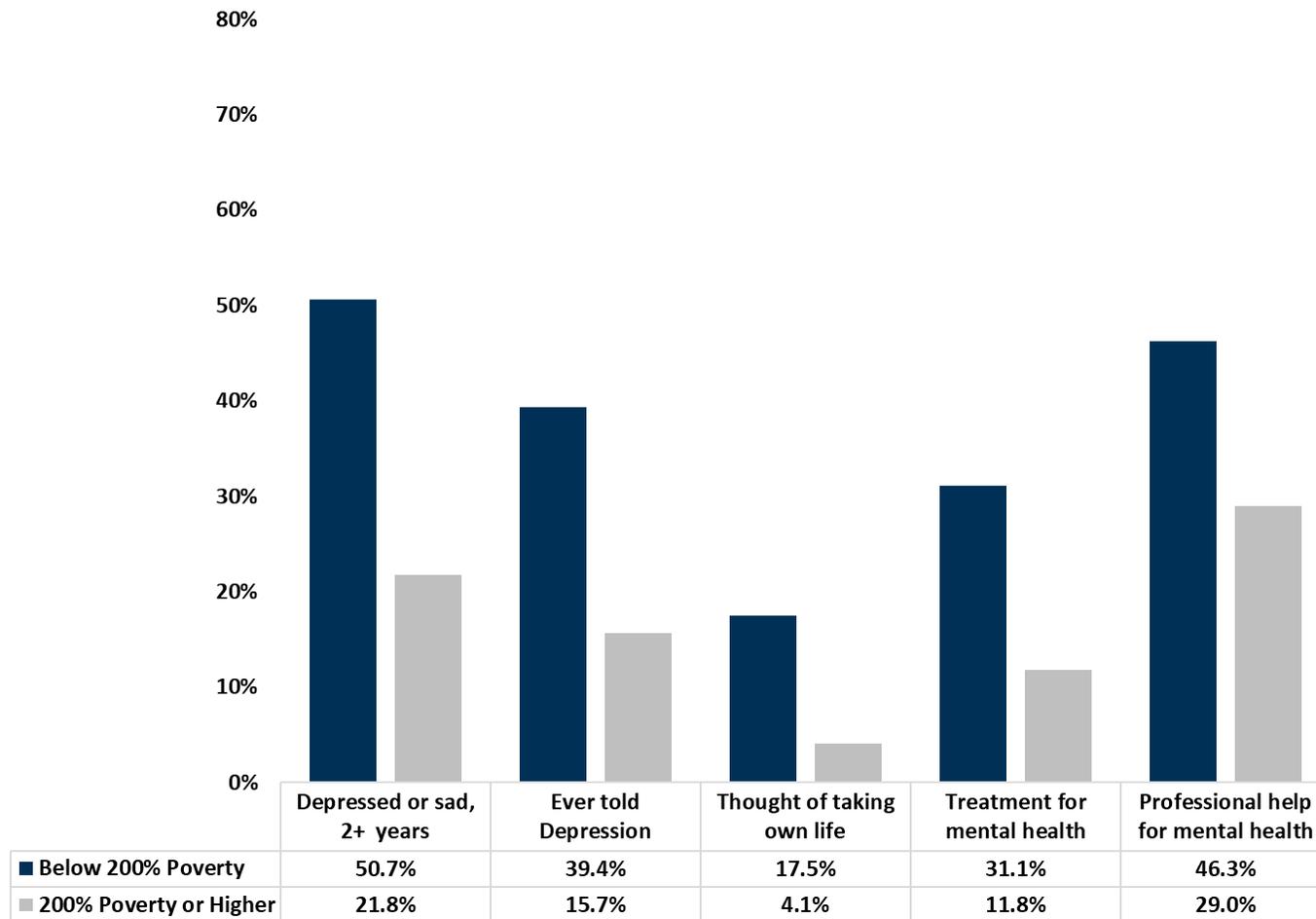


Figure 49 shows the community survey respondents responses to mental health questions where significant differences exist by poverty level. Those respondents living below 200% poverty were significantly more likely to have been depressed or sad two or more years, to have ever been told they have depression, thought of taking their own life or be receiving treatment compared to other respondents.

Figure 49: Mental Health Indicators

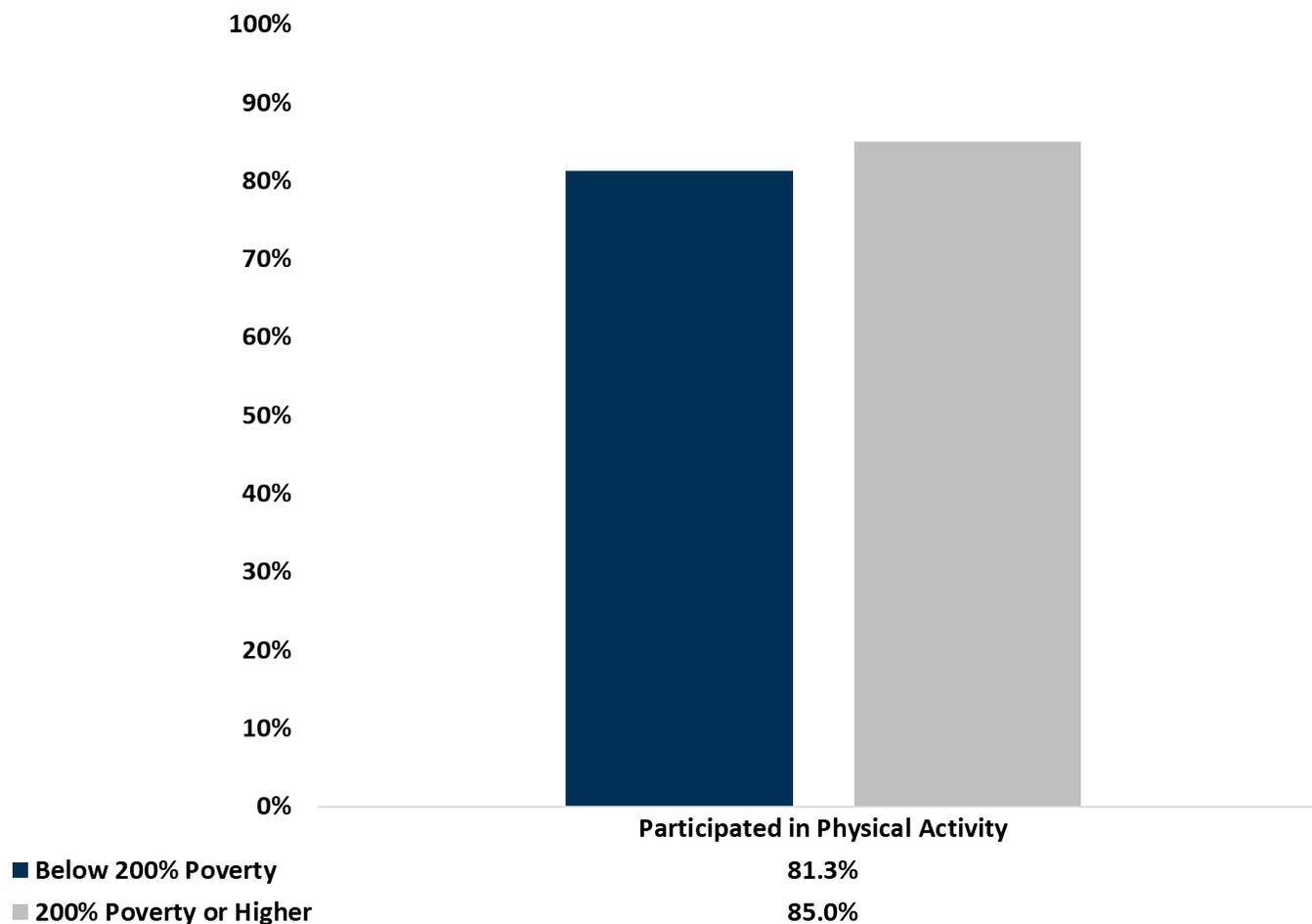


Source: Tower Health Community Survey, Professional Research Consultants, 2018

## HOW INCOME IMPACTS PHYSICAL ACTIVITY

**Figure 50** shows the community survey respondents who have participated in physical activity in the past month by poverty level. Community survey respondents in the Tower Health service area that are living below 200% were significantly less likely to participate in physical activity (81.3%) compared to those living above 200% poverty (85.0%).

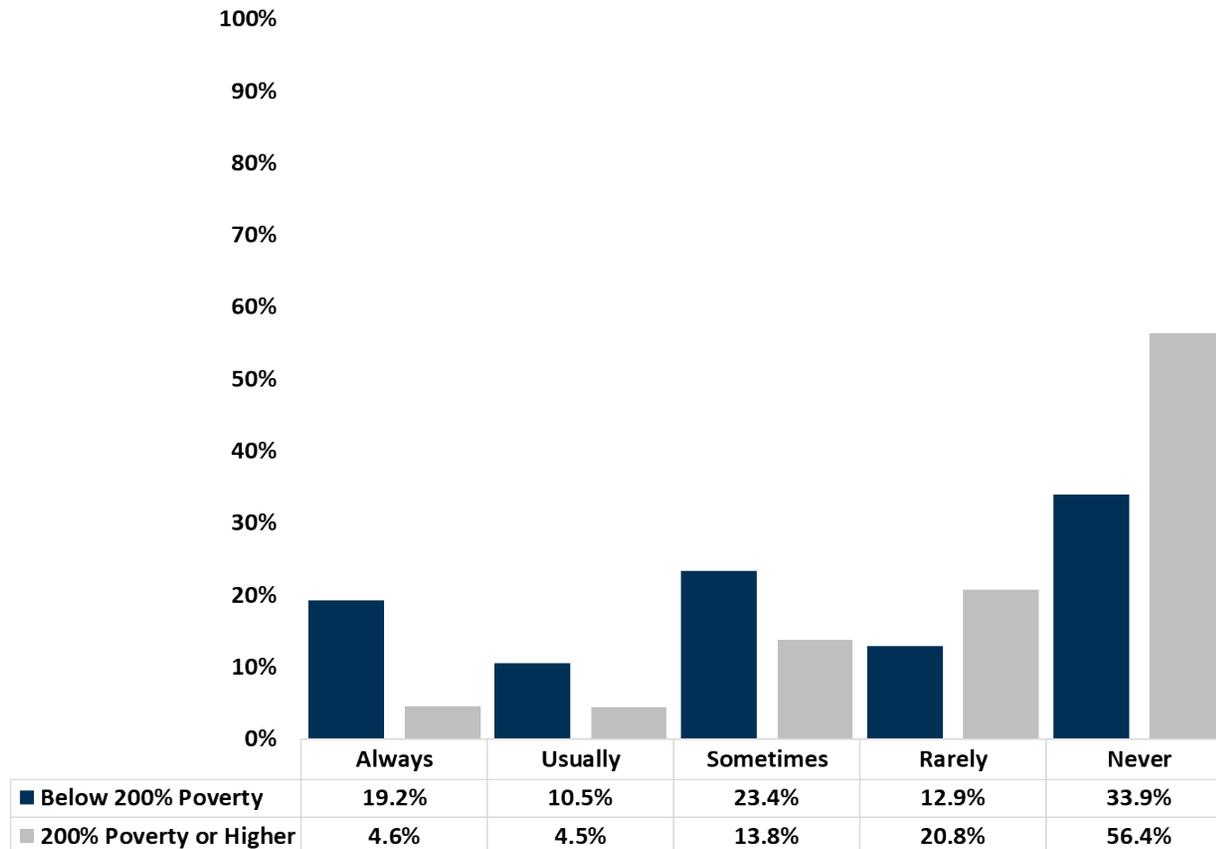
**Figure 50: Participated in Physical Activity, Past Month**



## HOW INCOME IMPACTS HOUSING

**Figure 51** shows the community survey respondents who have worried about having enough money for housing by poverty level. Community survey respondents in the Tower Health service area that are living below 200% were significantly more likely to worry about having enough money for housing (66.0%) compared to respondents not living in poverty (43.7%).

**Figure 51: Worried About Having Enough Money for Housing**



Source: Tower Health Community Survey, Professional Research Consultants, 2018



### WHAT THE COMMUNITY IS SAYING

Intercept survey respondents rated income as the second highest factor impacting one's health (65.5%). Key informant survey respondents identified low-income/poor residents (35.7%) among the top underserved populations.



# ACTIVITY MAKES FOR A HEALTHIER YOU

## HOW ACTIVITY IMPACTS HEALTH

Obesity can be greatly reduced through regular aerobic exercise and physical activity. Recreation activities, such as running, brisk walking, swimming and bicycling are excellent for elevating the heart rate and lowering the incidence of heart disease, obesity and type 2 diabetes, if done regularly.

Figure 52 shows that Berks County had a significantly higher percentage of overweight residents (74.0%) and a slightly higher percentage of obese residents (33.0%) when compared to the state (66.0% and 31.0%, respectively). Chester County had a significantly lower percentage of overweight (56.0%) or obese (19.0%) residents when compared to the state. Although not significantly lower, both Montgomery and Philadelphia counties had a lower percentage of residents considered overweight or obese when compared to the state.

Figure 52: Overweight/Obesity BRFSS Indicator, 2015-2017

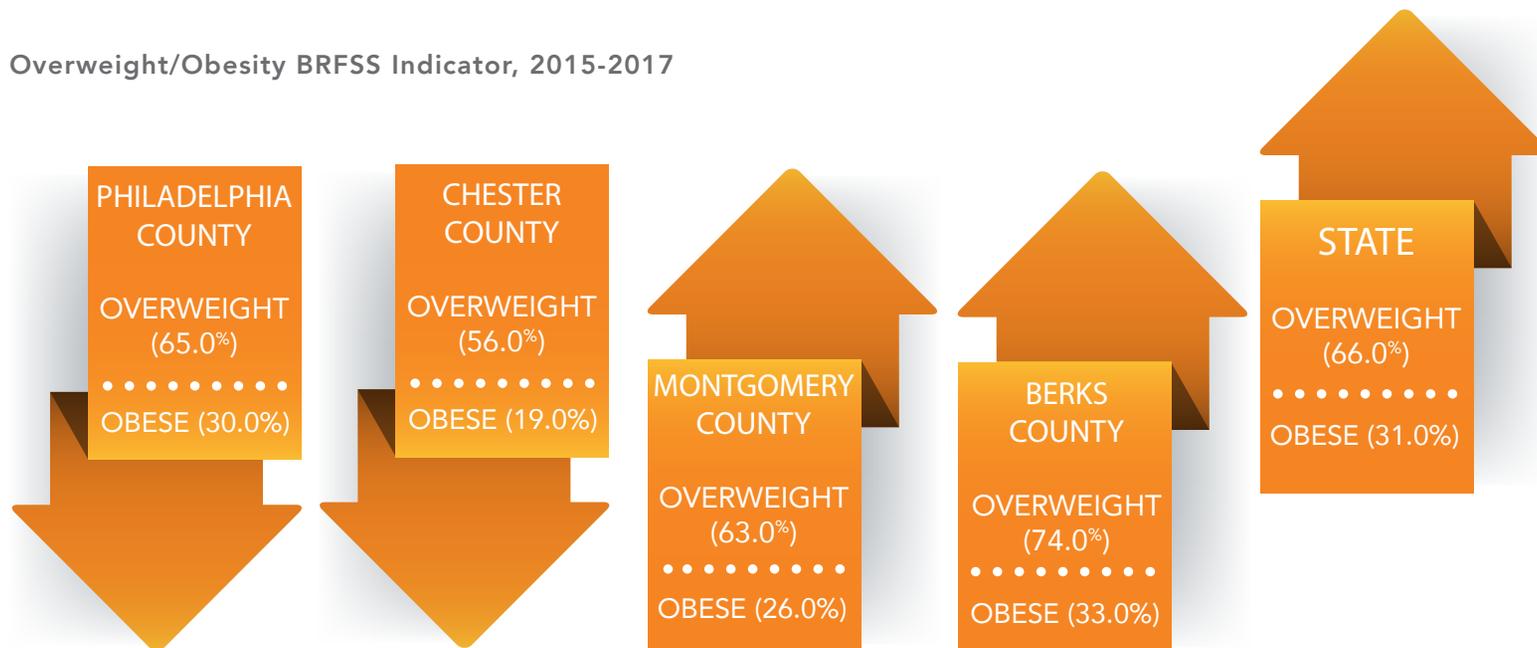


Figure 52 Source: Division of Health Informatics, Behavioral Risk Factor Surveillance System Data, Pennsylvania Department of Health for Berks, Chester, Montgomery and Philadelphia counties, 2015-2017

Figure 53 Source (Page 101): County Health Rankings and Roadmaps for Berks, Chester, Montgomery and Philadelphia counties, 2018



WHAT THE COMMUNITY IS SAYING

One in five community survey respondents (19.6%) had difficulty accessing safe and affordable places to exercise, and 17.8% report that they do not participate in physical activity or exercise. Approximately half of the intercept survey respondents identified obesity (57.1%) and poor nutrition (48.4%) as having the greatest impact on the health of an individual.

Focus group participants talked about the need for culturally appropriate wellness programs and access to physical activity. Stakeholders talked about the need for access to physical activity among residents.

**Figure 53** outlines the percentage of the residents of the Tower Health Primary Service Area who are physically inactive versus having access to exercise opportunities. Berks and Philadelphia counties have a higher percentage than the state of physical inactivity, while Chester and Montgomery counties are lower. Berks County has a comparable percentage of access to exercise opportunities as the state, while all other counties are higher than the state.

**Figure 53: Percent of Population Who Have Access To Exercise Opportunities Versus Those Physically Inactive**

RESIDENTS PHYSICALLY INACTIVE



BERKS COUNTY	CHESTER COUNTY	MONTGOMERY COUNTY
24.9%	17.8%	18.1%

PHILADELPHIA COUNTY	PENNSYLVANIA
26.1%	24.0%

BERKS COUNTY	CHESTER COUNTY	MONTGOMERY COUNTY
67.8%	74.2%	74.3%

PHILADELPHIA COUNTY	PENNSYLVANIA
96.8%	67.8%



ACCESS TO EXERCISE OPPORTUNITIES



## HOW ACCESS IMPACTS HEALTH

**A** ccording to Disparities in Access to Health Care<sup>4</sup> there are eight main reasons why there are differences in health access:

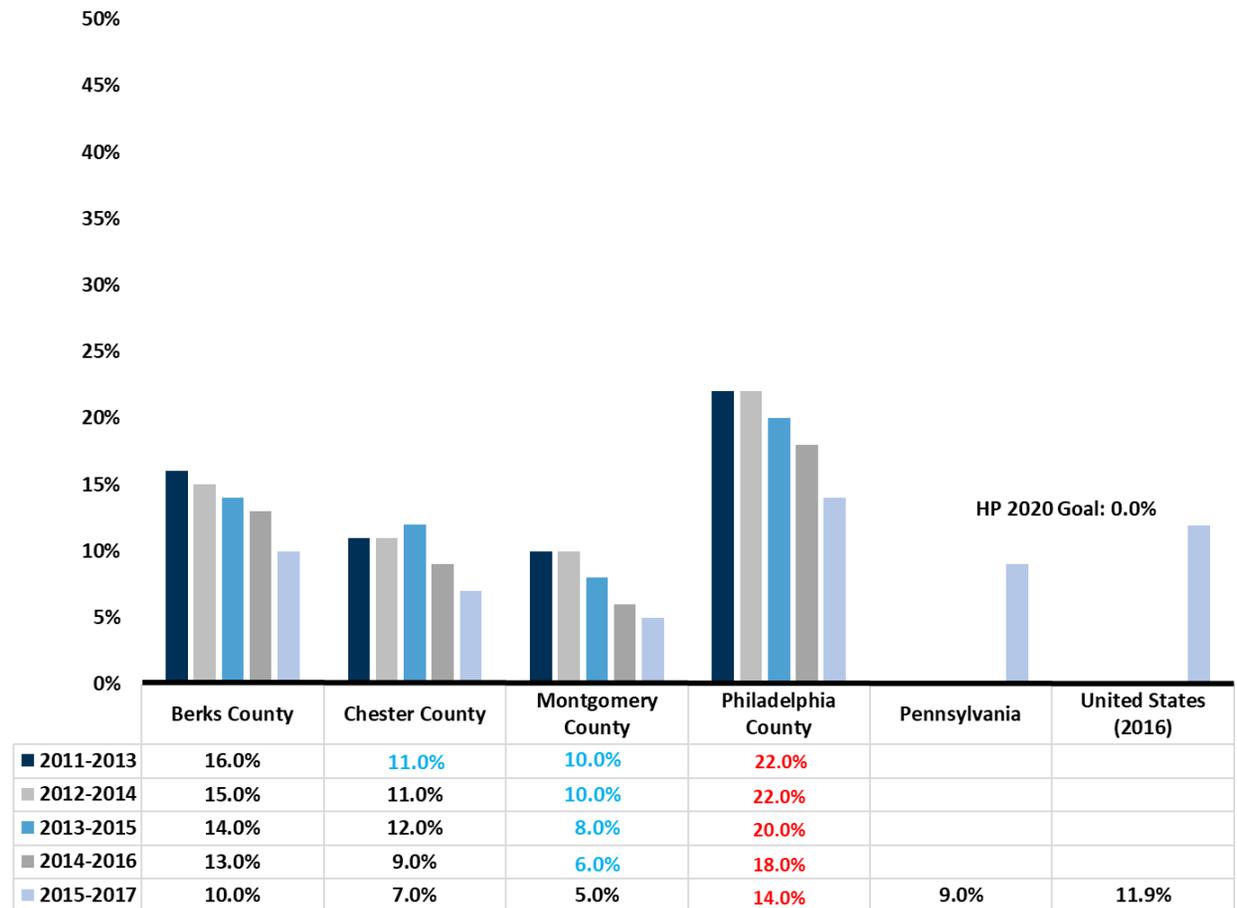
- 1. Lack of health insurance** – Several racial, ethnic, socioeconomic and other minority groups lack adequate health insurance compared with the majority population. These individuals are more likely to delay healthcare and to go without the necessary healthcare or medication they should have been prescribed.
- 2. Lack of financial resources** – Lack of available finance is a barrier to healthcare for many Americans but access to healthcare is reduced most among minority populations. Racial and ethnic minorities are often given a health insurance plan that limits the amount of services available to them as well as the number of providers they can use.
- 3. Irregular source of care** – Compared to white individuals, ethnic or racial minorities are less likely to be able to visit the same doctor on a regular basis and tend to rely more on clinics and emergency rooms. Without a regular healthcare source, people have more difficulty obtaining their prescriptions and attending necessary appointments.
- 4. Legal obstacles** – Low-income immigrant groups are more likely to experience legal barriers. For example, insurance coverage through Medicaid is not available to immigrants who have been resident in the U.S for less than five years.
- 5. Structural barriers** – Examples of structural barriers include lack of transport to healthcare providers, inability to obtain convenient appointment times and lengthy waiting room times. All of these factors reduce the likelihood of a person successfully making and keeping their healthcare appointment.
- 6. Lack of healthcare providers** – In areas where minority populations are concentrated such as inner cities and rural areas, the number of health practitioners and diagnostic facilities is often inadequate.
- 7. Language barriers** – Poor English language skills can make it difficult for people to understand basic information about health conditions or when they should visit their doctor.
- 8. Age** – Older patients are often living on a fixed income and cannot afford to pay for their healthcare. Older people are also more likely to experience transport problems or suffer from a lack of mobility, factors that can impact their access to healthcare. With 15% of the older adults in the U.S not having access to the internet, these individuals are also less likely to benefit from the valuable health information that can now be found on the internet.

<sup>4</sup> <https://www.news-medical.net/health/disparities-in-access-to-health-care.aspx>

## HEALTH INSURANCE

**Figure 54** shows the percentage of adults ages 18-64 who do not have health insurance in Berks, Chester, Montgomery and Philadelphia counties, the state of Pennsylvania and the United States. The percentage of adults without health insurance has been decreasing in all of the service area counties, but remains above the Healthy People 2020 Goal that all adults will have health insurance. Although decreasing since 2011-2013, the percentage of adults without health insurance in Philadelphia County has been significantly higher when compared to the state. In 2011-2013, Chester and Montgomery counties had a lower percentage of adults who did not have health insurance when compared to the state.

**Figure 54: No Health Insurance (Ages 18-64)**

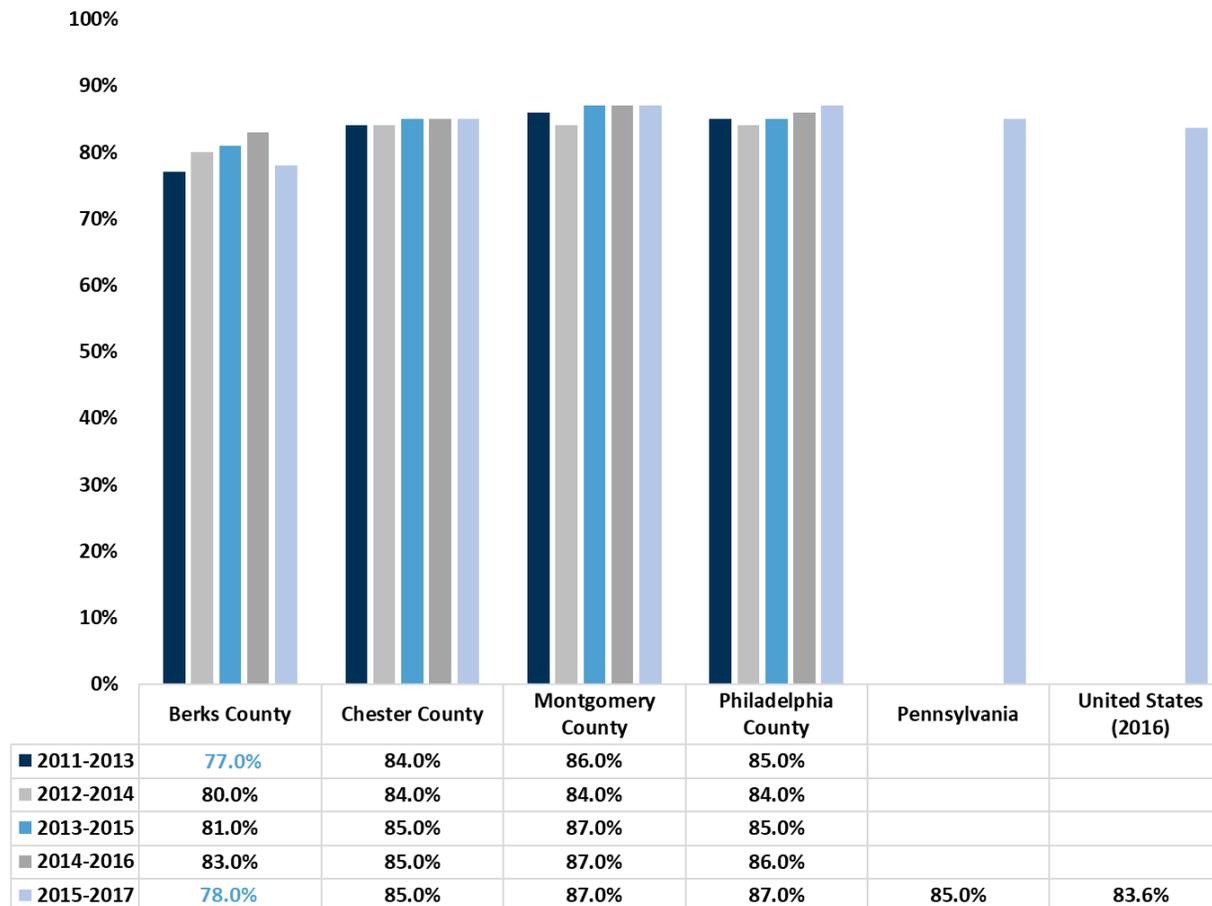


Source: Division of Health Informatics, Behavior Risk Factor Surveillance Survey, Pennsylvania Department of Health for Berks, Chester, Montgomery and Philadelphia counties, 2011-2017, Healthy People 2020, Center for Disease

ROUTINE CARE

Figure 55 shows the percentage of adults who have had a routine checkup in the past 2 years. While the rates have fluctuated slightly in Berks County, in 2015-2017 (78.0%) significantly fewer residents have had a routine check up in the past 2 years when compared to the state (85.0%). The percentage in the county is also lower when compared to the nation (83.6%). Chester County is comparable to the state and nation. Montgomery and Philadelphia counties are just above the state and nation.

Figure 55: Routine Check Up, Past 2 Years

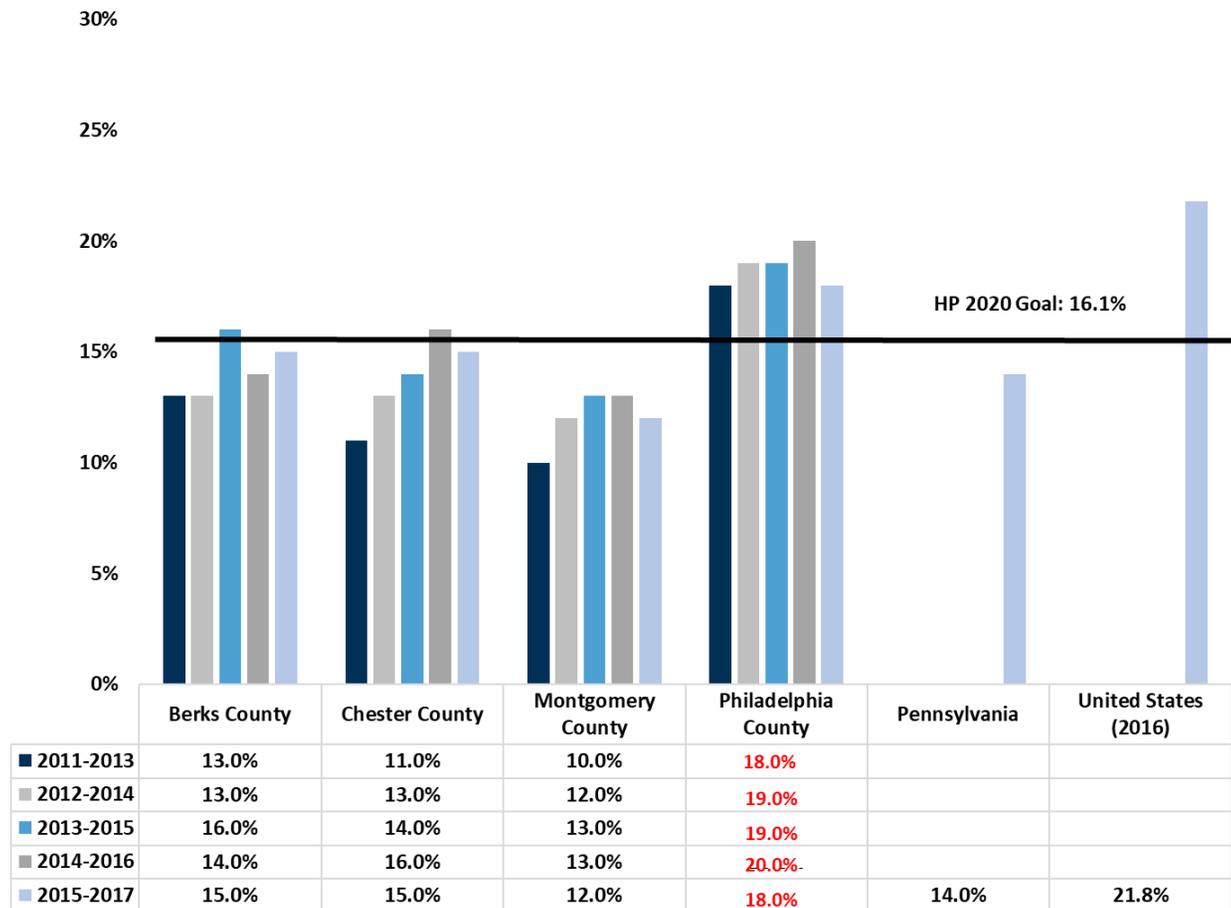


Source: Division of Health Informatics, Behavior Risk Factor Surveillance Survey, Pennsylvania Department of Health for Berks, Chester, Montgomery and Philadelphia counties, 2011-2017, Healthy People 2020, Center for Disease

PERSONAL CARE PROVIDER

Figure 56 shows the percentage of adults who report they do not have a personal care provider. The percentage of adults who report they do not have a personal care provider has fluctuated in all the service area counties. Overall the percentage of adults without a personal care provider has increased in Berks, Chester and Montgomery counties and all meet with Healthy People 2020 Goal. The percentage of adults without a personal care provider in Philadelphia County has been significantly higher when compared to the state from 2011-2017.

Figure 56: No Personal Care Provider

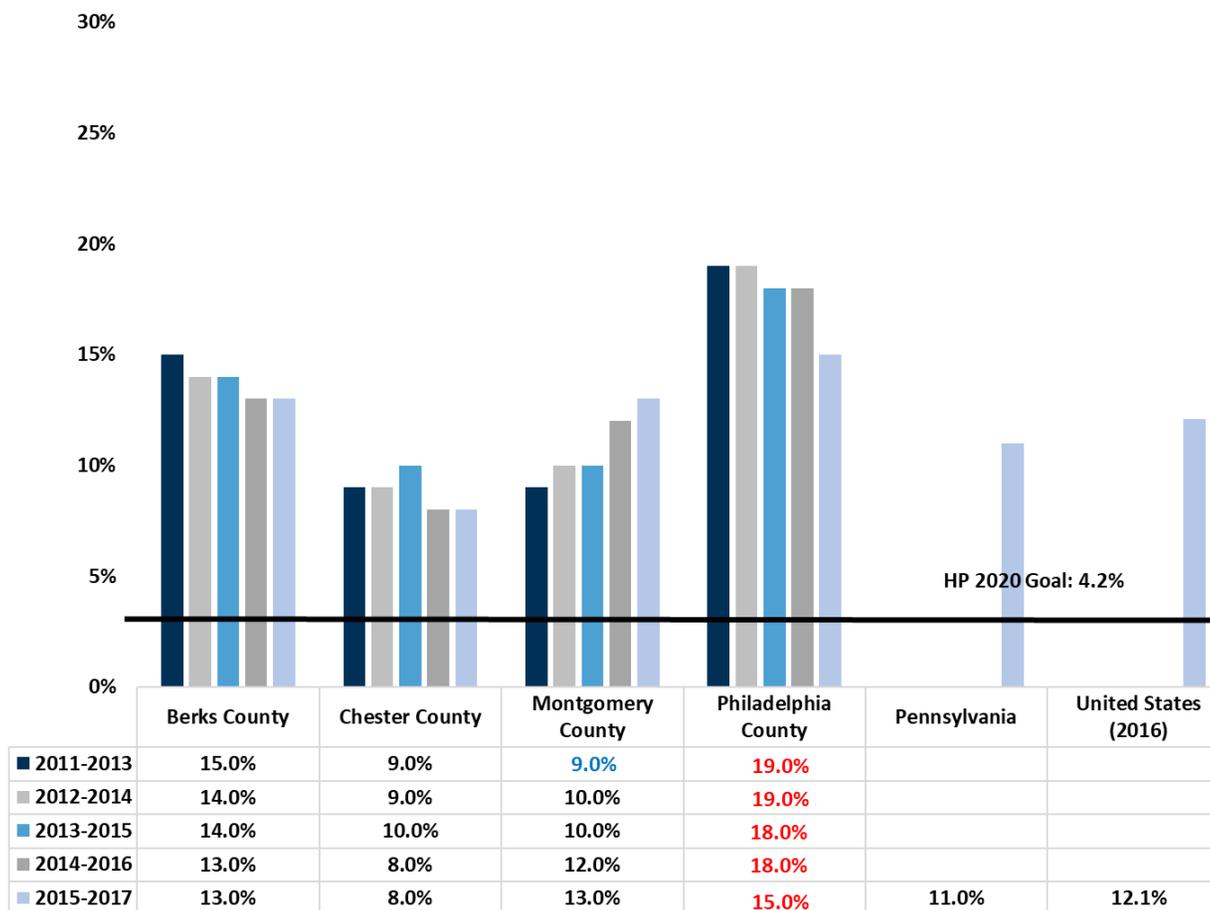


Source: Division of Health Informatics, Behavior Risk Factor Surveillance Survey, Pennsylvania Department of Health for Berks, Chester, Montgomery and Philadelphia counties, 2011-2017, Healthy People 2020, Center for Disease

### COULD NOT SEE A DOCTOR DUE TO COST

**Figure 57** shows the percentage of respondents who needed to see a doctor within the past year but could not due to cost. The percentage of residents in Berks, Chester and Philadelphia counties who needed to see a doctor but could not due to cost has decreased since 2011-2013. The percentage in Montgomery County has increased. In 2015-2017, Berks (13.0%), Montgomery (13.0%) and Philadelphia (15.0%) counties have a higher percentage of adults who could not see a doctor due to cost than both the state (11.0%) and nation (12.1%). Philadelphia County has been significantly higher when compared to the state from 2011 through 2017. The counties, state and nation are well above the Healthy People 2020 Goal of 4.2%.

**Figure 57: Needed to See a Doctor But Could Not Due to Cost, Past Year**



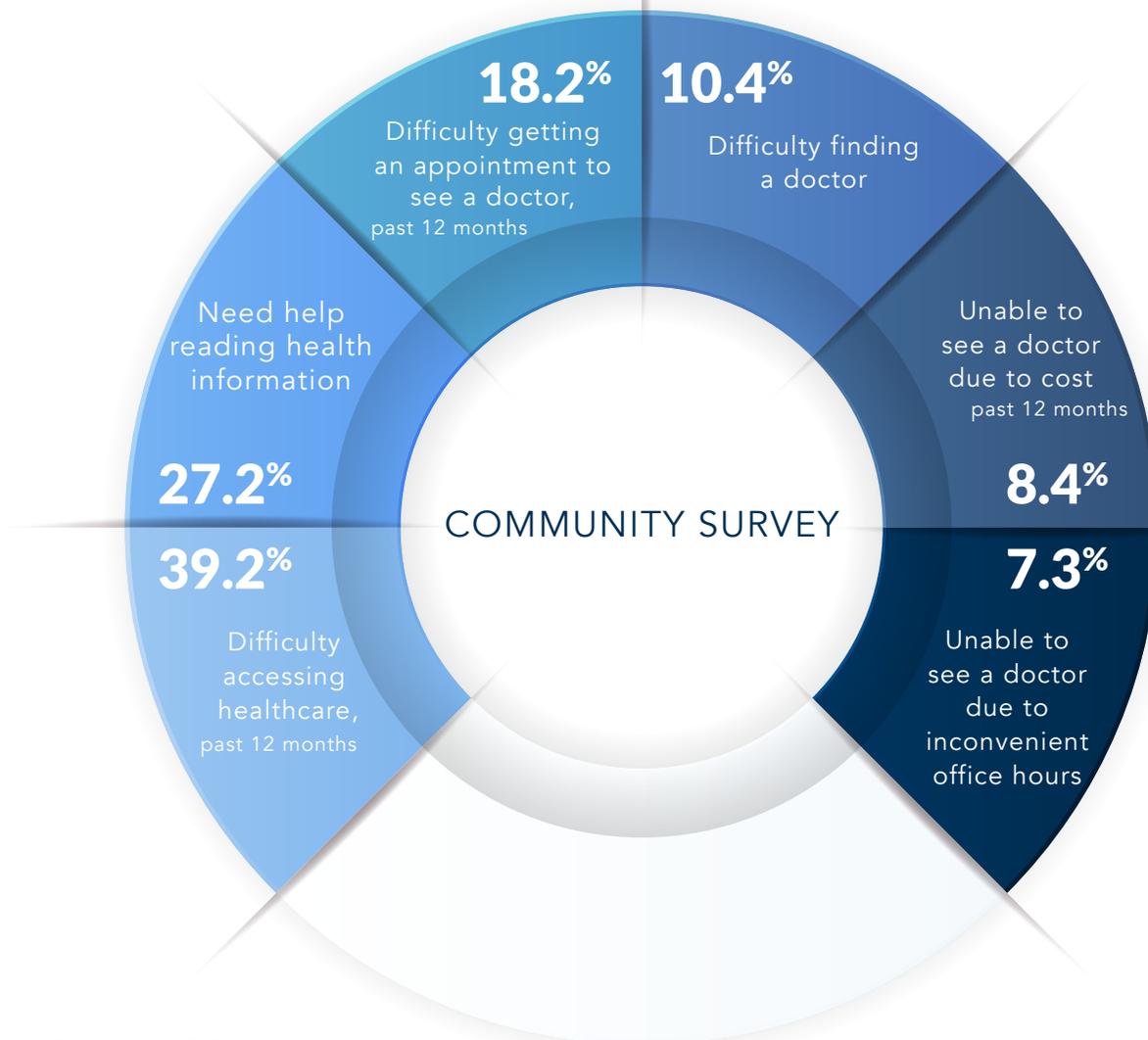
Source: Division of Health Informatics, Behavior Risk Factor Surveillance Survey, Pennsylvania Department of Health for Berks, Chester, Montgomery and Philadelphia counties, 2011-2017, Healthy People 2020, Center for Disease



## WHAT THE COMMUNITY IS SAYING

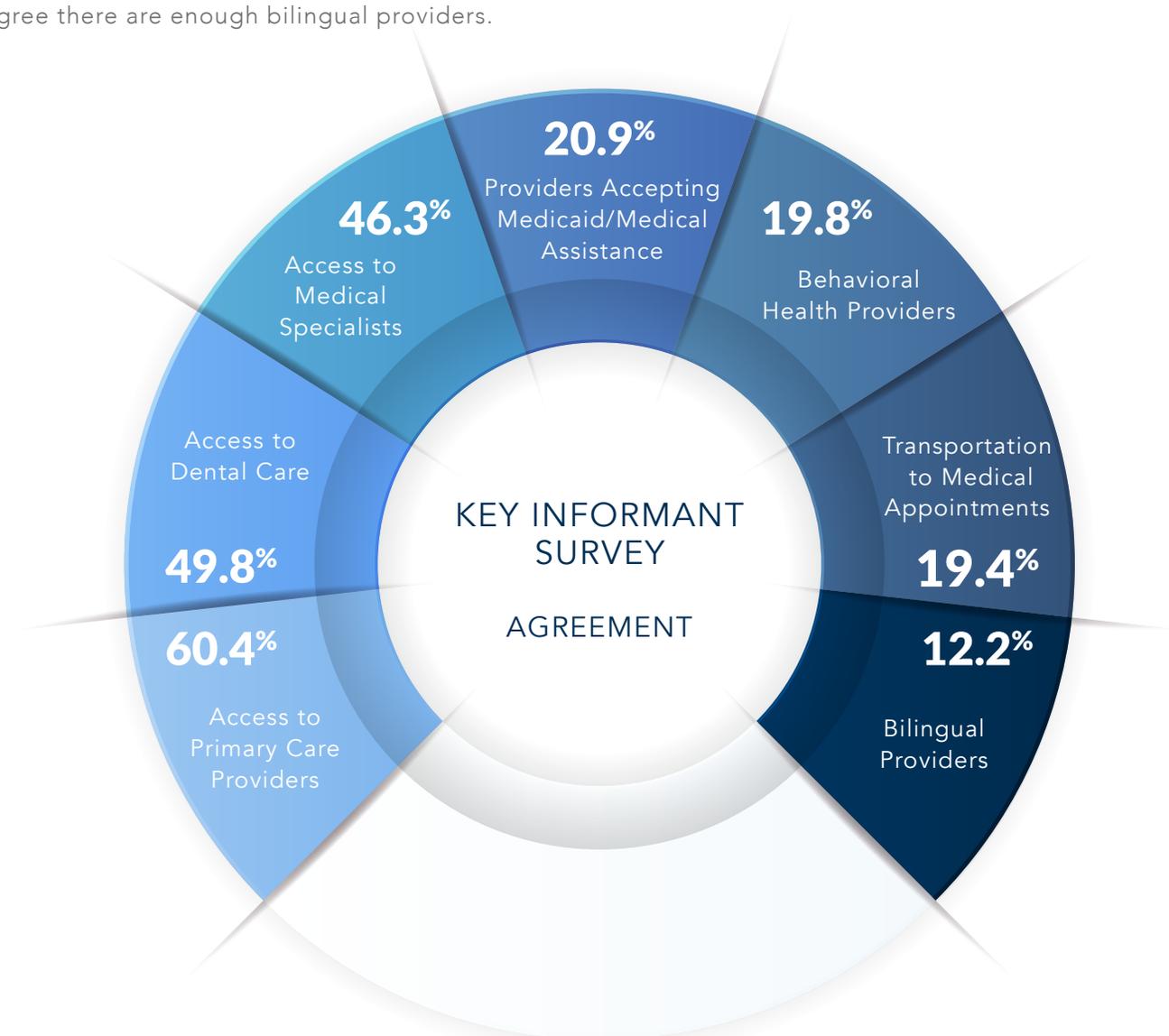
**Figure 58** illustrates access to care based on the community survey for respondents who live in Tower Health's Primary Service Area. Over one-third (39.3%) have had difficulty accessing healthcare in the past 12 months. Over one in four (27.2%) need help reading health information. Just under one in five (18.2%) respondents had difficulty getting an appointment to see a doctor, while 10.4% had difficulty finding a doctor. Just under one in ten respondents could not see a doctor due to cost (8.4%) or inconvenient office hours (7.3%).

**Figure 58: Access to Care**



**Figure 59** shows the percentage of key informant survey respondents who agree that access to various healthcare and related services are available in the community. Not quite two-thirds (60.4%) of the key informants agree there is access to primary care providers. Just under half agree there is access to dental care (49.8%) or specialists (46.3%). One in five key informants agree there are enough providers accepting Medicaid/Medical Assistance (20.9%), enough behavioral health providers (19.8%) or transportation to medical appointments (19.4%). One in eight key informants (12.2%) agree there are enough bilingual providers.

**Figure 59: Access to Care, Agreement**





## WHAT THE COMMUNITY IS SAYING

Stakeholder interview participants talked about the challenges residents experience accessing care due to cost, lack of transportation and cultural or language barriers. They also noted the need for more dental care.

Focus group participants also noted the cost of care and transportation as barriers to accessing needed care. They highlighted the difficulty navigating the health care system and challenges with insurance. A few noted that people are fearful of what the doctor is going to tell them.

## WHERE DO WE GO FROM HERE



ower Health, along with internal and external stakeholders, will begin to develop goals and strategies (known as the Implementation Strategy) to address the findings of the 2019 Community Health Needs Assessment.

The CHNA documented what and where the need is, along with who is most affected. The Implementation Strategy will address how to solve these needs.

Common themes and issues rose to the top as the assessment was being conducted. Key community health needs include: Access to Behavioral Health Services, Access to Health Services, Improving Socioeconomic Factors (Social Determinants of Health), and Chronic Disease (Management and Prevention).





**CONTACT//**

**Office:** 420 S. Fifth Avenue West Reading, PA 19612

**Phone:** 484-628-8000

**E-mail:** [communitywellness@towerhealth.org](mailto:communitywellness@towerhealth.org)

[www.towerhealth.org](http://www.towerhealth.org)



**TOWER HEALTH**

Advancing Health. Transforming Lives.