

# Community Health Needs Assessment for:

Spectrum Health United d/b/a  
Spectrum Health United Hospital

And

Spectrum Health Kelsey d/b/a  
Spectrum Health Kelsey Hospital

Spectrum Health is a not-for-profit health system, based in West Michigan, offering a full continuum of care through the Spectrum Health Hospital Group, which is comprised of 12 hospitals, including Helen DeVos Children’s Hospital; 180 ambulatory and service sites; 3,600 physicians and advanced practice providers, including 1,500 members of the Spectrum Health Medical Group; and Priority Health, a health plan with 779,000 members. Spectrum Health is West Michigan’s largest employer, with 26,000 employees. The organization provided \$372 million in community benefit during its 2017 fiscal year. Spectrum Health was named one of the nation’s 15 Top Health Systems—and in the top five among the largest health systems—in 2017 by Truven Health Analytics®, part of IBM Watson Health™. This is the sixth time the organization has received this recognition.

## **Community Health Needs Assessment – Exhibit A**

The focus of this Community Health Needs Assessment (CHNA) attached in Exhibit A is to identify the community needs as they exist during the assessment period (2017-2018), understanding fully that they will be continually changing in the months and years to come. For purposes of this assessment, “community” is defined as the county in which the hospital facility is located. This definition of community based upon county lines, is similar to the market definition of Primary Service Area (PSA). The target population of the assessment reflects an overall representation of the community served by this hospital facility. The information contained in this report is current as of the date of the CHNA, with updates to the assessment anticipated every three (3) years in accordance with the Patient Protection and Affordable Care Act and Internal Revenue Code 501(r). This

CHNA complies with the requirements of the Internal Revenue Code 501(r) regulations either implicitly or explicitly.

**Evaluation of Impact of Actions Taken to Address Health Needs in Previous CHNA – Exhibit B**

Attached in Exhibit B is an evaluation of the impact of any actions that were taken, since the hospital facility finished conducting its immediately preceding CHNA, to address the significant health needs identified in the hospital facility's prior CHNA.

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# SPECTRUM HEALTH UNITED KELSEY HOSPITAL




## Community Health Needs Assessment

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February 22, 2018



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# INTRODUCTION

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# Background and Objectives

VIP Research and Evaluation was contracted by the Community Health Needs Assessment (CHNA) team of Spectrum Health to conduct a Community Health Needs Assessment, including a Behavioral Risk Factor Survey (BRFS), for Spectrum Health United Kelsey Hospitals (SHUK) in 2017. For the purposes of this assessment, “community” is defined as the county in which the hospital facility is located. This definition of community is based upon county lines, is similar to the market definition of Primary Service Area (PSA). The target population of the assessment reflects the overall representation of the community served by this hospital facility.

The Patient Protection and Affordable Care Act (PPACA) of 2010 set forth additional requirements that hospitals must meet in order to maintain their status as a 501(c)(3) Charitable Hospital Organization. One of the main requirements states that a hospital must conduct a community health needs assessment and must adopt an implementation strategy to meet the community health needs identified through the assessment. The law further states that the assessment must take into account input from persons who represent the broad interests of the community, including those with special knowledge of, or expertise in, public health.

In response to the PPACA requirements, organizations serving both the health needs and broader needs of the SHUK communities began meeting to discuss how the community could collectively meet the requirement of a CHNA.

The overall objective of the CHNA is to obtain information and feedback from SHUK area residents, health care professionals, and key community leaders in various industries and capacities about a wide range of health and health care topics to gauge the overall health climate of the region covered by SHUK.

More specific objectives include measuring:

- The overall health climate, or landscape, of the regions served by SHUK, including, primarily, Montcalm County, but also portions of Ionia and Kent counties
- Social indicators, such as crime rates, education, poverty rates, and adverse childhood experiences
- Community characteristics, such as available resources, collaboration, and volunteerism
- Physical health status indicators, such as life expectancy, mortality, physical health, chronic conditions, chronic pain, and weight status
- Mental health status indicators, such as psychological distress and suicide
- Health risk behaviors, such as smoking and tobacco use, alcohol use, diet, and physical activity
- Clinical preventive practices, such as hypertension awareness, cholesterol awareness, and oral health
- Disparities in health
- Accessibility of health care
- Barriers to healthy living and health care access
- Positive and negative health indicators
- Gaps in health care services or programs



# Background and Objectives (Continued)

Information collected from this research will be utilized by the Community Health Needs Assessment team of SHUK to:

- Prioritize health issues and develop strategic plans
- Monitor the effectiveness of intervention measures
- Examine the achievement of prevention program goals
- Support appropriate public health policy
- Educate the public about disease prevention through dissemination of information



# Methodology

This research involved the collection of primary and secondary data. The table below shows the breakdown of primary data collected, including the target audience, method of data collection, and number of completes:

	Data Collection Methodology	Target Audience	Number Completed
Key Stakeholders	In-Depth Telephone Interviews	Hospital Directors, Clinic Executive Directors	4
Key Informants	Online Survey	Physicians, Nurses, Dentists, Pharmacists, Social Workers	34
Community Residents (Underserved)	Self-Administered (Paper) Survey	Vulnerable and underserved sub-populations	154
Community Residents	Telephone Survey (BRFS)	SHUK area adults (18+)	587

Secondary data was derived from various government and health sources such as the U.S. Census, Michigan Department of Health and Human Services, County Health Rankings, Youth Risk Behavior Survey, and Kids Count Database.

Of the 5 Key Stakeholders invited to participate, 4 completed an in-depth interview (80% response rate). Key Stakeholders are defined as executive-level community leaders who:

- Have extensive knowledge and expertise on public health and/or human service issues
- Can provide a “50,000-foot perspective” of the health and health care landscape of the region
- Are often involved in policy decision-making
- Examples include hospital administrators and clinic executive directors

The number of Key Informants participating in this iteration increased 25.9% from 27 in 2014 to 34 in 2017.

Key Informants are also community leaders who:

- Have extensive knowledge and expertise on public health issues, or
- Have experience with subpopulations impacted most by issues in health/health care
- Examples include health care professionals (e.g., physicians, nurses, dentists, pharmacists, social workers) or directors of non-profit organizations

There were 154 self-administered surveys completed by targeted sub-populations considered to be vulnerable and/or underserved, such as single mothers with children, senior adults, and those who are uninsured, underinsured, or have Medicaid as their health insurance. This number is up significantly from the 38 completed in 2014.



# Methodology (Continued)

A Behavioral Risk Factor Survey was conducted among 587 SHUK area adults (age 18+) via telephone. The response rate was 33%.

Disproportionate stratified random sampling (DSS) was used to ensure results could be generalized to the larger SHUK patient population. DSS utilizes both listed and unlisted landline sample, allowing everyone with a landline telephone the chance of being selected to participate.

In addition to landline telephone numbers, the design also targeted cell phone users. Of the 587 completed surveys:

- 221 are cell phone completes (37.6%), and 366 are landline phone completes (62.4%)
- 162 are cell-phone-only households (27.6%)
- 156 are landline-only households (26.6%)
- 269 have both cell and landline numbers (45.8%)

For landline numbers, households were selected to participate subsequent to determining that the number was that of a residence within the zip codes of the primary or secondary SHUK service areas (PSA/SSA). Vacation homes, group homes, institutions, and businesses were excluded. All respondents were screened to ensure they were at least 18 years of age and resided in the SHUK PSA/SSA zip codes.

In households with more than one adult, interviewers randomly selected one adult to participate based on which adult had the nearest birthday. In these cases, every attempt was made to speak with the randomly chosen adult; interviewers were instructed to not simply interview the person who answered the phone or wanted to complete the interview.

The margin of error for the entire sample of 587, at a 95% confidence level, is +/- 5.0% or better. This calculation is based on a population of roughly 48,435 Montcalm County residents alone who are 18 years or older, according to the 2016 U.S. Census estimate. The population of SHUK's service area is even larger when areas of Ionia and Kent counties were included.

Unless noted, consistent with the Michigan BRFs, respondents who refused to answer a question or did not know the answer to a specific question were excluded from analysis. Thus, the base sizes vary throughout the report.

Data weighting is an important statistical process that was used to remove bias from the BRFs sample. The formula consists of both design weighting and iterative proportional fitting, also known as "raking" weighting. The purposes of weighting the data are to:

- Correct for differences in the probability of selection due to non-response and non-coverage errors
- Adjust variables of age, gender, race/ethnicity, marital status, education, and home ownership to ensure the proportions in the sample match the proportions in the larger adult population of the county in which the respondent lived
- Allow the generalization of findings to the larger adult population of each county



# Methodology (Continued)

The formula used for the final weight is:

Design Weight X Raking Adjustment

Adverse Childhood Experiences (ACEs) data were collected using the CDC-Kaiser 10-item version. The 10 items measure the following adverse groups and subgroups:

- Abuse:
  - Emotional abuse
  - Physical abuse
  - Sexual abuse
- Household Challenges:
  - Intimate partner violence
  - Household substance abuse
  - Household mental illness
  - Parental separation or divorce
  - Incarcerated household member
- Neglect:
  - Emotional neglect
  - Physical neglect

All of the 10 questions have “yes” or “no” response categories. Respondents scored a “0” for each “no” and a “1” for each “yes.” Total ACEs scores were computed by adding the sum of the scores across the 10 items. The total ACEs scores were segmented into three groups according to the number of adverse childhood experiences respondents had: none, 1 to 3, and 4 or more.

It should be noted that if the respondent said “don’t know” or refused to answer any of the ACEs items then they were not included in the ACEs analyses by groups. This decision was made because the researchers believe that coding “don’t know” or “refused” answers as zero and then including them in one of the three groups could possibly create an inaccurate picture of the extent to which adverse childhood experiences exist in the population of SHUK area residents. As an example, if someone refused to answer all 10 ACEs questions, rather than coding them as a none (zero), it was determined best to exclude them from the analyses.

In the Executive Summary, VIP Research and Evaluation has identified several key findings, or significant health needs, which we have determined to be the most critical areas of need, derived from primary and secondary data. The process for making such determinations involved analyzing quantitative and qualitative feedback from Key Stakeholders, Key Informants, SHUK area adults, and SHUK area underserved residents to gain a better understanding of what they deem to be the most important health and health care issues in the community. Information needed to identify and determine the community’s significant health needs was obtained by conducting telephone surveys with adult residents, sending out additional community health (paper) surveys to underserved adult residents, and conducting telephone interviews and online surveys with community healthcare professionals and community leaders. This question was asked explicitly of three of these four respondent groups, and additional information was gleaned from all groups via their responses to various questions throughout the surveys or discussion guides. Secondary data was then used to complement the findings from the primary data analyses. The result is a robust process that we are confident depicts an accurate assessment of the most critical health or health care issues in the SHUK area.

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# EXECUTIVE SUMMARY & KEY FINDINGS

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# Executive Summary & Key Findings

In general, the findings from the 2017 Community Health Needs Assessment portray the SHUK area as a community faced with many economic, social, and health challenges. However, community members also see improvement in many areas over the past several years from the CHNAs that have been conducted and the strategic plans that have been implemented that focused on areas of need uncovered in the research.

The SHUK area is considered to be a caring, giving, and philanthropic community where community foundations provide resources that help alleviate some of the social issues. Although resources are more limited compared to other areas, the community connectedness and strong collaborative spirit among people and organizations have made up for many resource shortcomings.

The SHUK is a very safe community with low levels of violent crime and homicide. Poverty levels and the unemployment rate are higher compared to the state and the nation but the latter has decreased substantially over the past several years. The community could also benefit from a boost in the educational pursuits and achievement of its residents.

Environmentally, being a rural area there is an abundance of clean air and there is a plethora of outdoor spaces such as lakes, paths for walking/hiking, and biking trails that invite activity. Additionally, with many farms nearby and the farmer's markets throughout the warmer months, there is generous access to healthy food for those who can afford it. On the other hand, a negative consequence of the farming communities has been groundwater exposure to pesticides and chemicals and there have been instances of E. coli in local rivers. In sum, the SHUK area possesses some of the social and community characteristics that Key Stakeholders say distinguish a community as "healthy."

Most area residents have health insurance, have a personal health care provider, and are at least somewhat confident they can navigate the health care system and complete medical forms.

Area residents also report good health and relatively low levels of psychological distress. They have slightly shorter life expectancy and have lower age-adjusted and infant mortality rates (but higher child mortality), than residents across Michigan or the U.S.

The prevalence of chronic conditions is high relative to the state and the nation. Additionally, the prevalence of many of the chronic conditions measured, including diabetes, is up from the last CHNA iteration in 2014.

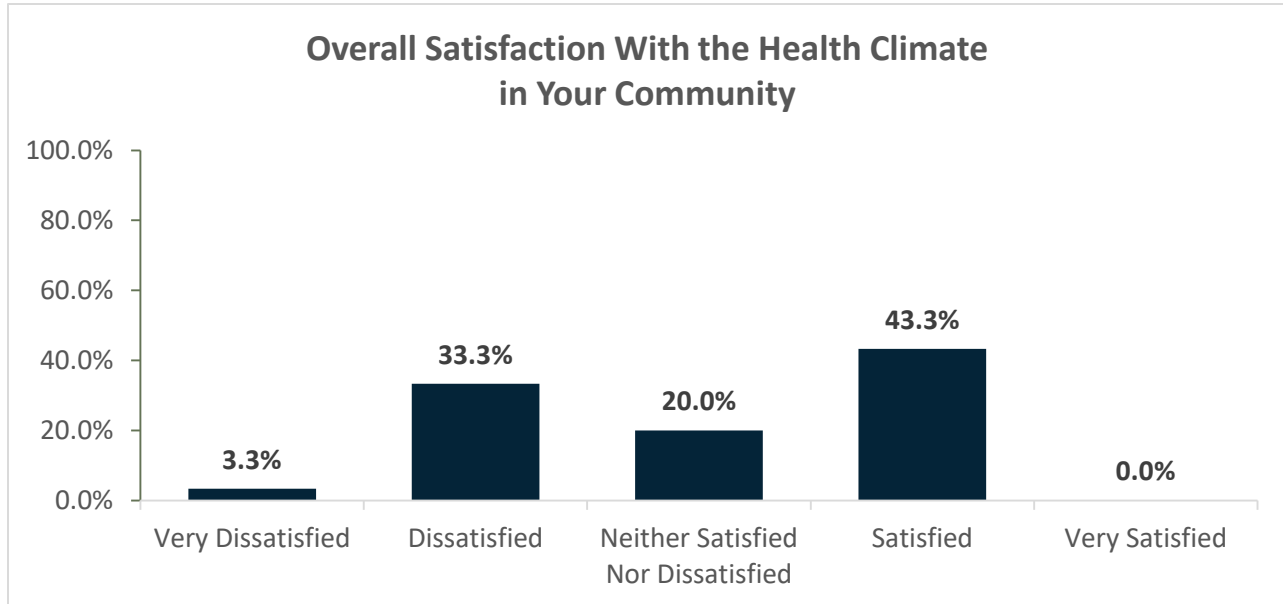
The prevalence of risk behaviors is mixed for both adults and youth. For example, cigarette smoking and lack of physical activity are more prevalent among adults in the SHUK area vs. the state or nation, but the prevalence of alcohol consumed in harmful ways, such as heavy drinking or binge drinking, is lower among SHUK area adults compared to adults across Michigan or the U.S.

With regard to SHUK area youth, smoking is on par with the state and the nation and the prevalence of binge drinking among area youth is higher compared to the rate across Michigan but lower than the U.S. rate. Rates for sexual activity are lower than the state or the nation but the teen birth rate is higher in the SHUK region compared to the rate for Michigan or the U.S.



# Executive Summary & Key Findings (Continued)

All of that said, only one in four (43.3%) Key Informants – the very people on the ground working in or around the field of health care – are satisfied with the overall health climate in the SHUK area. This demonstrates that there is substantial room for improvement, and their comments indicate concerns across several areas.



<b>Satisfied</b>	<p>We strive to have understanding about our entire population and what factors impact health in our communities. We are thinking of ways to reach out and work with other organizations and people, but we can do better.</p> <p>I believe that many services are available but patients aren't always aware of them and don't use them.</p>
<b>Neither satisfied nor dissatisfied</b>	<p>More focus on primary prevention programs. Increase focus on empowering community on health risk behaviors (e.g., diet, smoking, alcohol, activity, illicit drugs).</p> <p>Would like to see more collaboration and focus on prevention but I know that doesn't pay the bills for physicians and hospitals.</p>
<b>Dissatisfied</b>	<p>We continue to cut the very programs that will address every one of those issues mentioned. We need to be more strategic in our plan for delivering adequate healthcare to ALL.</p> <p>Not enough prevention education and recent cuts to effective programs.</p>

Source: SHUK Key Informant Survey, 2017, Q11: Taking everything into account, including health conditions, health behaviors, health care availability, and health care access, how satisfied are you overall with the health climate in your community? (n=30); Q11a: Why do you say that? Please be as detailed as possible.



# Executive Summary & Key Findings (Continued)



What follows are nine key findings and discussions on each:

- **KEY FINDING [Significant Health Need] #1:** Substance use and abuse – smoking continues to be a problem, and opioid addiction and the abuse of prescription drugs have become more problematic
- **KEY FINDING [Significant Health Need] #2:** Obesity and weight issues – a sizeable majority of area adults are either overweight or obese and this can lead to other major health problems
- **KEY FINDING [Significant Health Need] #3:** Mental health – especially access to treatment, continues to be a critical issue and hasn't improved from 2014 (the last CHNA)
- **KEY FINDING [Significant Health Need] #4:** Health care access – is an issue for everyone because of a lack of specialty care providers, primary care providers not accepting all insurances or all patients, and a lack of specific programs and services
- **KEY FINDING [Significant Health Need] #5:** Chronic conditions – area adults report more chronic conditions than adults across the state or nation
- **KEY FINDING [Significant Health Need] #6:** Maternal, child, and teen health – several indicators emerge that demonstrate area children and teenagers are at a disadvantage
- **KEY FINDING [Significant Health Need] #7:** Negative social indicators – addressing certain negative social indicators will improve the overall health and health care climate of the region
- **KEY FINDING [Significant Health Need] #8:** The most appropriate way to address health and health care issues is from an integrated, holistic, or biopsychosocial perspective
- **KEY FINDING [Significant Health Need] #9:** Health disparities exist across several demographics

# Executive Summary & Key Findings (Continued)



## Key Finding [Significant Health Need] #1: Substance use and abuse – smoking continues to be a problem, and opioid addiction and the abuse of prescription drugs have become more problematic since 2014.

- Substance abuse, which is often comorbid with mental illness, is identified as the most concerning issue among Key Informants and area adults, and a top concern of Key Stakeholders.
- Prevalence data demonstrates:
  - Q 25.6% of adults currently smoke cigarettes, a rate lower than what it was during the last CHNA in 2014 but higher than the state and national rates
  - Q 10.6% of youth in Montcalm County currently smoke cigarettes
  - Q 6.2% of adults are heavy drinkers and 12.2% are binge drinkers, rates that are lower than state and national rates, but heavy drinking has increased since 2014
  - Q 16.1% of youth in Montcalm County engage in binge drinking; higher than the state rate
  - Q 26.6% of adults know someone who has taken prescription drugs to get high
  - Q 30.0% of area adults lived in a household while growing up with someone who abused substances
- Key Stakeholders and Key Informants cite four major reasons for their concern about substance abuse:
  - Q Prevalence; Key Stakeholders and Key Informants believe smoking, alcohol abuse, illicit drug abuse, and prescription drug abuse exist on a large scale throughout the community
  - Q Availability, which ties in with prevalence; access to substances is easy and widely available
  - Q Lack of treatment options for substance abuse; Key Informants cite substance abuse treatment as the service most lacking in the community and are dissatisfied with the community's response to any substance abuse issue
  - Q Use among youth has increased; tobacco, alcohol, and marijuana use are prevalent among area youth, and heroin deaths among young people have increased; there is a clear pathway to addiction among area young people
- Further, 57.3% of area adults believe there is a prescription drug abuse problem in the community.
  - Q Of these, almost all (94.3%) believe prescription opiates are abused
  - Q Roughly two-thirds believe there is abuse of prescription depressants (68.5%) and stimulants/amphetamines (67.0%)
- Over half (52.1%) of area adults think that illicit methamphetamines are abused and more than four in ten think there is abuse of heroin (45.3%) and marijuana (42.0%).
- Exposure to second-hand smoke is an issue in the community:
  - Q More than one-fourth (28.5%) of area adults report smoking inside their home and this rises to 34.1% for households with children under age 18
  - Q 64.8% of smokers and 16.0% of non-smokers report smoking takes place in their home


# Executive Summary & Key Findings (Continued)

**Key Finding [Significant Health Need] #1: Substance use and abuse – smoking continues to be a problem, and opioid addiction and the abuse of prescription drugs have become more problematic since 2014. (Continued)**

*How would your community be different if the substance abuse issues went away?*

For smoking, we have a lot of chronic disease associated with it, and so certainly I think our residents would be much healthier. COPD and CHF are two of our big ones, and all of those diseases would be - I don't want to say eliminated - but much improved if we addressed smoking. – *Key Stakeholder*

I think we would definitely see lower chronic disease rates [by addressing smoking]. – *Key Stakeholder*



# Executive Summary & Key Findings (Continued)

## Key Finding [Significant Health Need] #2: Obesity and weight issues – a sizeable majority of adults are either overweight or obese and this proportion is higher than it was in 2014.

- Prevalence data demonstrates:
  - Q 70.1% of adults are either overweight (36.6%) or obese (33.5%) in the SHUK area
  - Q The prevalence of obesity is higher in the SHUK area than across Michigan or the U.S.
  - Q 16.3% of youth (grades 8-12) are obese in Montcalm County; this rate is also higher compared to Michigan or U.S. youth obesity rates
- Area adults and area health professionals consider obesity to be a top health issue in the community primarily because:
  - Q Prevalence is high and becoming worse over time, not better
  - Q Obesity is comorbid with other chronic conditions or negative outcomes such as diabetes, sleep apnea, joint problems, hypertension, heart disease, and stroke
  - Q It is a product of social and environmental factors that plague the area, such as poverty, lack of educational opportunities and better access to unhealthy food compared to healthy food
  - Q There is a lack of resources to address the issue, especially education on nutrition and ways to cook healthy food
- Key Informants perceive obesity to be the most concerning health issue in the area.
  - Q Further, they are dissatisfied with the community response to obesity
- Compounding the problem is the fact that many adults who are overweight or obese view themselves more favorably so there may be less urgency for them to attempt to lose weight.
  - Q Only 38.3% of obese adults view themselves as “very overweight” and 51.1% of overweight adults view themselves as “about the right weight”
  - Q 37.5% and 66.5% of obese and overweight adults, respectively, are currently **not** attempting to lose weight
- Area residents could use more guidance on ways to address their weight since area health care professionals seem to be failing in this area.
  - Q 84.7% of overweight adults and 55.0% of obese adults report that health professionals have **not** given them advice about their weight
- Almost half (46.7%) of Key Informants say that programs targeting obesity reduction are lacking in the community.

# Executive Summary & Key Findings (Continued)



## Key Finding [Significant Health Need] #3: Mental health – especially access to treatment, continues to be a critical issue and hasn't improved from since 2014.

- Prevalence data demonstrates:
  - Q 21.6% of area adults are considered to have mild to severe psychological distress per the Kessler 6 Mental Health Scale, and this is up from 18.5% in 2014
  - Q 6.2% of adults report poor mental health – meaning they experienced 14 or more days, out of the previous 30, in which their mental health was not good due to stress, depression, and problems with emotions
  - Q 37.3% of youth in Montcalm County report depression; a rate higher than the state or national rates
  - Q 22.8% of adults say that growing up they lived with someone who was depressed, mentally ill, or suicidal, a rate higher than the U.S. rate
- Key Stakeholders and Key Informants consider issues surrounding mental health to be pressing or concerning in the SHUK area and cite three major reasons for their concern:
  - Q Lack of programs, services, and resources to address all mental health issues, from mild to severe, including lack of trained clinical staff with expertise in mental health, specifically psychiatrists
  - Q Health professionals view mental illness as prevalent among both adults and teens, and the actual prevalence may be even greater since many residents go undiagnosed
  - Q Continued stigma attached to mental illness, which may prevent many people from seeking, and receiving, needed care
- Key Informants perceive anxiety and depression to be prevalent in the community, and they are dissatisfied with the community response to these issues.
  - Q Key Informants' perceived prevalence of both anxiety and depression is actually greater in 2017 than it was in 2014 and their dissatisfaction with the community response has remained consistent over time
- It is concerning that sizeable proportions of people who currently suffer from some form of mental illness are not undergoing treatment or taking medication for their condition.
  - Q For example, 56.1% of adults who report poor mental health and 61.6% of those who are considered to be in mild to moderate psychological distress are **not** currently taking medication or receiving treatment for these conditions
- If the vast majority of adults believe that treatment can help people with mental illness lead normal lives, it begs the question: Why do so many people fail to seek treatment that would benefit them?
  - Q The answer may partly lie in the continued stigma mentioned above: just half (50.6%) of adults think people are caring and sympathetic toward people with mental illness

# Executive Summary & Key Findings (Continued)



## Key Finding [Significant Health Need] #3: Mental health – especially access to treatment, continues to be a critical issue and hasn't improved from since 2014. (Continued)

- The proportions of youth who both think about suicide and attempt suicide, are higher than the rates for youth across Michigan of the U.S.
  - 🔍 Although the proportion of adults in the SHUK area who thought about taking their own life in the past year is small (8.0%), the proportion of those who then go on to attempt suicide is 26.1%

*How would your community be different if the mental health issues went away?*

You would hope that more people would be employed, that health would be improved, so then you would have a more productive community. – *Key Stakeholder*

The health and wellbeing of the citizenry would be improved, and I think if you really want to do a bit and extend it out, I think the economy would be improved. – *Key Stakeholder*

# Executive Summary & Key Findings (Continued)



## Key Finding [Significant Health Need] #4: Health care access – is an issue for everyone because of a lack of providers (both primary care and specialty care) and lack of specific programs and services.

- Those with insurance and the ability to afford out-of-pocket expenses such as co-pays and deductibles have an easier time accessing care, but there are still gaps in services which forces many residents to travel out of the area for treatment. Those without insurance, or with insurance but unable to afford copays/deductibles/spend-downs, have trouble accessing needed services and this is most problematic for certain vulnerable or underserved subpopulations.
- Prevalence data demonstrates:
  - Q There are far fewer MDs and DOs per capita in Montcalm County (42.9) compared to Michigan (80.6)
  - Q 7.8% of all adults have no health care provider (no medical home) and this proportion rises to 9.5% for underserved adults
  - Q 7.6% of all area adults aged 18-64 have no health insurance and this proportion rises to 28.7% for adults without a high school diploma
  - Q 23.9% of all adults have Medicaid for their health insurance, compared to 73.2% for underserved adults
  - Q 46.2% of children under age 18 in Montcalm County are insured under Medicaid
  - Q 6.9% of area adults had to skip or stretch their medication in the past year in order to save on costs
  - Q 18.8% of area adults had to delay needed medical care over the past year due to myriad reasons, but cost was at the top of the list
  - Q Three in ten (29.9%) underserved adults had trouble meeting their own, or their family's, health care needs in the past two years
  - Q More than three-fourths (77.9%) underserved adults report that they, or a family member, has visited the ER/ED at least once in the past year; 58.4% two or more times
- Underserved adults face more challenges when it comes to being health literate; for example:
  - Q They are less confident than other adults regarding completing medical forms
  - Q They are more likely than other adults to experience problems learning about their health condition because of difficulty understanding written information
  - Q 13.8% are not confident in navigating the health care system and 40.5% are only somewhat confident
  - Q 14.5% “often” or “always” have someone else help them read medical materials

# Executive Summary & Key Findings (Continued)



## Key Finding [Significant Health Need] #4: Health care access – is an issue for everyone because of a lack of providers (both primary care and specialty care) and lack of specific programs and services. (Continued)

- Key Stakeholders and Key Informants recognize that certain subpopulations are underserved when it comes to accessing health care, especially those who are uninsured, underinsured, undocumented immigrants and/or non-English speaking (ESL), for four primary reasons:
  - Q Even if they have insurance, it may not be accepted by some providers (e.g., Medicaid/Medicare), or they may not utilize it because they can't afford co-pays, deductibles, or spend-downs
  - Q These groups often have too many barriers to overcome (e.g., cost, transportation, hours of operation, cultural, system distrust, language)
  - Q Lack of treatment options for the underserved, such as primary care, mental health, substance abuse, and dental care
  - Q Poverty is a social factor that contributes to poor health and lack of access to care
  
- In addition to the lack of services for mental health, substance abuse, and obesity reduction touched on previously, Key Informants report the programs and services most lacking include:
  - Q Primary care, mental health treatment, and dental care for the uninsured/underinsured and low-income groups
  - Q Programs/services for people with insurance, but who don't utilize coverage because they cannot afford out-of-pocket expenses
  - Q Specialty programs such as dermatology, endocrinology, geriatrics, neurology, orthopedics, pain management, pediatric specialty services, psychiatry, and urology
  
- Underserved residents report that the programs and services most lacking include:
  - Q Mental health services, especially psychiatry, and classes/education about mental health issues and mental health awareness
  - Q Parenting support or parenting classes, including a focus on teenage sexual activity and teen pregnancy, child birth/Lamaze, birth control, and breastfeeding
  - Q Nutrition classes or programs that teach low income families how to stretch their resources to obtain healthy food, and teach ways to prepare and cook healthy food, as well as alternative diets (e.g., vegetarian, vegan)
  - Q Walk-in clinics or programs that assist in paying medical bills for low income households
  - Q Better health care access via more primary care providers and mobile mammograms



# Executive Summary & Key Findings (Continued)



## Key Finding [Significant Health Need] #5: Chronic conditions – area adults report more chronic conditions than adults across the state or the nation.


- The prevalence for 8 of the 10 chronic conditions measured this CHNA iteration are higher compared to state or national prevalence rates.
  - Q Further, the prevalence is higher for 6 of the 10 chronic conditions this time compared to CHNA results from 2014
- Prevalence data demonstrates:
  - Q 30.2% of area adults have arthritis
  - Q 16.8% currently have asthma, a rate much higher than MI or the U.S.
  - Q 10.9% of area adults have diabetes and an additional 27.9% have pre-diabetes
  - Q 9.5% have, or have had, some type of cardiovascular disease (heart attack, angina/CHD, stroke)
  - Q 14.6% have COPD, a rate **twice** the state or national rates
  - Q 5.4% of area adults have, or have had, skin cancer and 7.9% report other (non-skin) cancer
- The cancer death rate is lower in Montcalm County than the state or national rates, but the death rate from heart disease, chronic lower respiratory disease, and stroke is higher in Montcalm County compared to state and national rate.
- According to area adults, cancer is the second most important health problem in their community today (behind substance abuse).
- On a positive note, large majorities of adults who have the chronic conditions listed above are “very” or “extremely” confident that they can do all things necessary to manage their chronic condition.
- 33.4% of area adults suffer from chronic pain, and of these, half (54.1%) report barriers to treating their pain, such as having too many chronic issues to manage, immobility, inadequate or lack of area programs and services to help them manage their pain well, and cost.
  - Q Interestingly, 19.4% reported that they don’t ask for treatment of their pain and this was the most common response given

# Executive Summary & Key Findings (Continued)



## Key Finding [Significant Health Need] #6: Maternal, child, and teen health – several indicators emerge that demonstrate area children and teenagers are at a disadvantage.

- Prevalence data demonstrates:
  - Q The child mortality rate is higher in Montcalm County compared to the state rate
  - Q The rate for confirmed victims of child abuse/neglect is much higher in Montcalm County compared to the rates for Michigan or the U.S.
  - Q The proportion of children living in poverty, receiving WIC, or being eligible for free or reduced priced school lunches are higher in Montcalm County compared to Michigan or the U.S.
  - Q Over half (57.3%) of single-female families with children under five years old from Montcalm County live in poverty
  - Q 26.1% of area adults experienced emotional abuse growing up, a rate twice as high as the U.S. rate
  - Q Additionally, 23.3% experienced physical abuse and 12.8% experienced sexual abuse while growing up
  - Q The proportion of children age 19-35 months who are fully immunized is far lower in Montcalm County compared to state or national proportions
- As mentioned earlier, youth depression, thoughts of suicide, and attempts of suicide, are all higher for Montcalm County compared to state and national rates.
- Montcalm County women are more likely to receive late or no prenatal care, or are less likely to receive prenatal care in the first trimester, compared to women across Michigan or the U.S.
- Youth smoking rates are on par with the state and national rates, and the youth rate for binge drinking is higher than the state rate.
- More than one third (34.5%) of Montcalm County youth have had sexual intercourse and roughly one-fourth have had intercourse in the past three months.
- The rate for teen births (age 15-19) in Montcalm County is higher than the rates in Michigan or the U.S.



# Executive Summary & Key Findings (Continued)

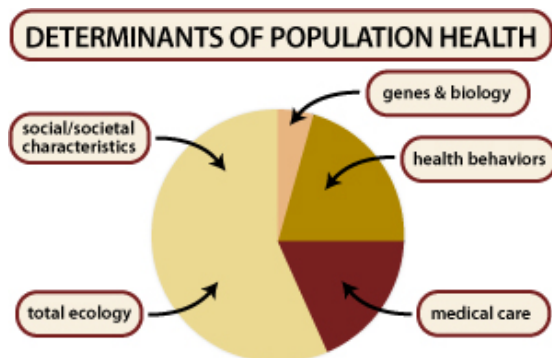
## Key Finding [Significant Health Need] #7: Negative Social Indicators – addressing certain negative social indicators will improve the overall health and health care climate of the region.

- Negative social indicators, such as lack of affordable housing, lack of affordable healthy food, and adverse childhood experiences can cultivate negative health outcomes.
- As touched on in the previous section on maternal, child, and teen health, poverty levels in the area are high and they negatively impact the health of residents experiencing it.
- That said, poverty is a macro socioeconomic problem that, in and of itself, is very difficult to ameliorate and beyond the scope of any CHNA implementation plan. However, some of the issues that are connected to poverty can be addressed such as:
  - Q Finding ways to provide more affordable housing
  - Q Providing more healthy food options to residents at lower costs in order to improve the nutrition of those who would not otherwise be able to afford healthy food
  - Q Strengthening social service programs to offset the negative outcomes that can accompany poverty (e.g., broken homes, abusive relationships, household challenges) and help disrupt/break negative family cycles that perpetuate generations of suffering
  - Q Addressing the economic disparity by ensuring that underserved and vulnerable groups have access to services that will move them closer to participating on a level playing field, such as education
- This research has shown the adverse effects of negative social conditions: people who experience four or more adverse childhood experiences have a far greater chance of experiencing negative outcomes – such as poor physical health, poor mental health, obesity, and engaging in risk behaviors – compared to those who experience fewer adverse childhood experiences.
- Further, of the ten adverse childhood experiences tested in this research, SHUK area adults were higher on seven (meaning they experienced more of them) compared to adults across the nation.

# Executive Summary & Key Findings (Continued)

## Key Finding [Significant Health Need] #8: The most appropriate and effective way to address health and health care issues is from an integrated, holistic, or biopsychosocial perspective.

- We recommend adopting the tenants of the World Health Organization:
  - ❑ Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity
  - ❑ The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition
  - ❑ The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest co-operation of individuals and States
  - ❑ The achievement of any State in the promotion and protection of health is of value to all
  - ❑ Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger
  - ❑ Healthy development of the child is of basic importance; the ability to live harmoniously in a changing total environment is essential to such development
  - ❑ The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health
  - ❑ Informed opinion and active co-operation on the part of the public are of the utmost importance in the improvement of the health of the people
  - ❑ Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures
  
- Further, the determinants of health that contribute to each person's well-being are biological, socioeconomic, psychosocial, behavioral, and social. The determinants of health include\*:
  - ❑ Biological (genes) (e.g., sex and age)
  - ❑ Health behaviors (e.g., drug use, alcohol use, diet, exercise)
  - ❑ Social/environmental characteristics (e.g., discrimination, income)
  - ❑ Physical environment/total ecology (e.g., where a person lives, crowding conditions)
  - ❑ Health services/medical care (e.g., access to quality care)
  
- The chart below estimates how each of the five major determinants influence population health:



\*Source – World Health Organization; U.S. Department of Health and Human Services, Healthy People 2020; CDC.

# Executive Summary & Key Findings (Continued)



## Key Finding [Significant Health Need] #9: Health disparities exist across several demographic groups.

- There is also a direct relationship between health outcomes and both education and income. Positive outcomes are more prevalent among adults with higher levels of education and adults from households with higher income levels, while negative outcomes are more prevalent among those with less education and lower incomes. Examples of this disparity include:
  - Q General health status
  - Q Physical health
  - Q Having high blood pressure
  - Q Mental health and/or psychological distress
  - Q Being part of a spiritual or religious community
  - Q Experiencing barriers to care (e.g., transportation, cost)
  - Q Chronic diseases such as arthritis, any cardiovascular disease, COPD, chronic pain
  - Q Health risk behaviors such as fruit and vegetable consumption, smoking, physical activity
  - Q Preventive practices such as visiting a dentist and having cholesterol checked
  - Q Health care access such as having a primary care provider, having health care coverage, forgoing health care due to costs
  
- The link between both education and income and positive health outcomes goes beyond the direct relationship. Those occupying the very bottom groups, for example having no high school diploma and/or household income less than \$20K (or living below the poverty line), are most likely to experience the worst health outcomes. Conversely, residents with a college degree and/or household incomes of \$75K or more are most likely to experience the best health outcomes.
  
- There is also a direct relationship between health outcomes and age. In many cases, negative outcomes are more often associated with younger adult age groups, for example:
  - Q Having psychological distress
  - Q Engaging in risk behaviors such as smoking cigarettes
  - Q Lacking a personal health care provider (medical home)
  - Q Not having blood cholesterol checked or taking medication if blood cholesterol is high
  - Q Not taking medication if blood pressure is high
  
- In other cases, negative outcomes are more associated with older adult groups, such as having:
  - Q Fair or poor general health status
  - Q Poor physical health
  - Q Chronic diseases like diabetes, arthritis, cancer, and cardiovascular disease
  - Q High blood pressure and high cholesterol

# Executive Summary & Key Findings (Continued)



## Key Finding [Significant Health Need] #9: Health disparities exist across several demographic groups. (Continued)

- There are links between health outcomes and gender. For example:
  - Q Men are more likely than women to:
    - Report fair/poor general health
    - Have limited activity
    - Be obese
    - Have high blood pressure
    - Suffer from chronic pain
    - Engage in risk behaviors such as eating fewer fruits and vegetables, binge drinking
    - Engage in leisure time physical activity
    - Have chronic diseases such as diabetes and heart disease, cancer (non-skin)
    - Resist preventive practices such as visiting a dentist
    - Forego health care due to costs
  - Q Women are more likely than men to:
    - Be at a healthy weight
    - Take medication for their HBP
    - Be part of a spiritual or religious community
    - Have a health care provider (medical home) and have health insurance
    - Have chronic conditions such as asthma and arthritis
- There are also links between race and outcomes.
  - Q Compared to non-White adults, White adults are more likely to:
    - Have their blood cholesterol checked, have high cholesterol, and take medication for it
    - Have high blood pressure and take medication for it
    - Visit a dentist
    - Be part of a spiritual or religious community
    - Have chronic conditions such as diabetes, heart disease, COPD, arthritis
    - Have a health care provider (medical home)
  - Q Conversely, compared to White adults, Non-White adults are more likely to:
    - Engage in risk behaviors such as smoking, heavy drinking, and binge drinking
    - Experience transportation as a barrier to care
    - Have pre-diabetes, asthma, cancer (non-skin)
    - Suffer from chronic pain
    - Report fair/poor health
    - Have limited activity
    - Be obese
    - Have poor mental health or experience psychological distress

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# DETAILED FINDINGS

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# SOCIAL INDICATORS

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# Demographics of Montcalm County

Q When observing the racial and ethnic population distributions within Montcalm County, it is evident that the vast majority of residents are White (92.0%) and 3.3% are Hispanic/Latino.

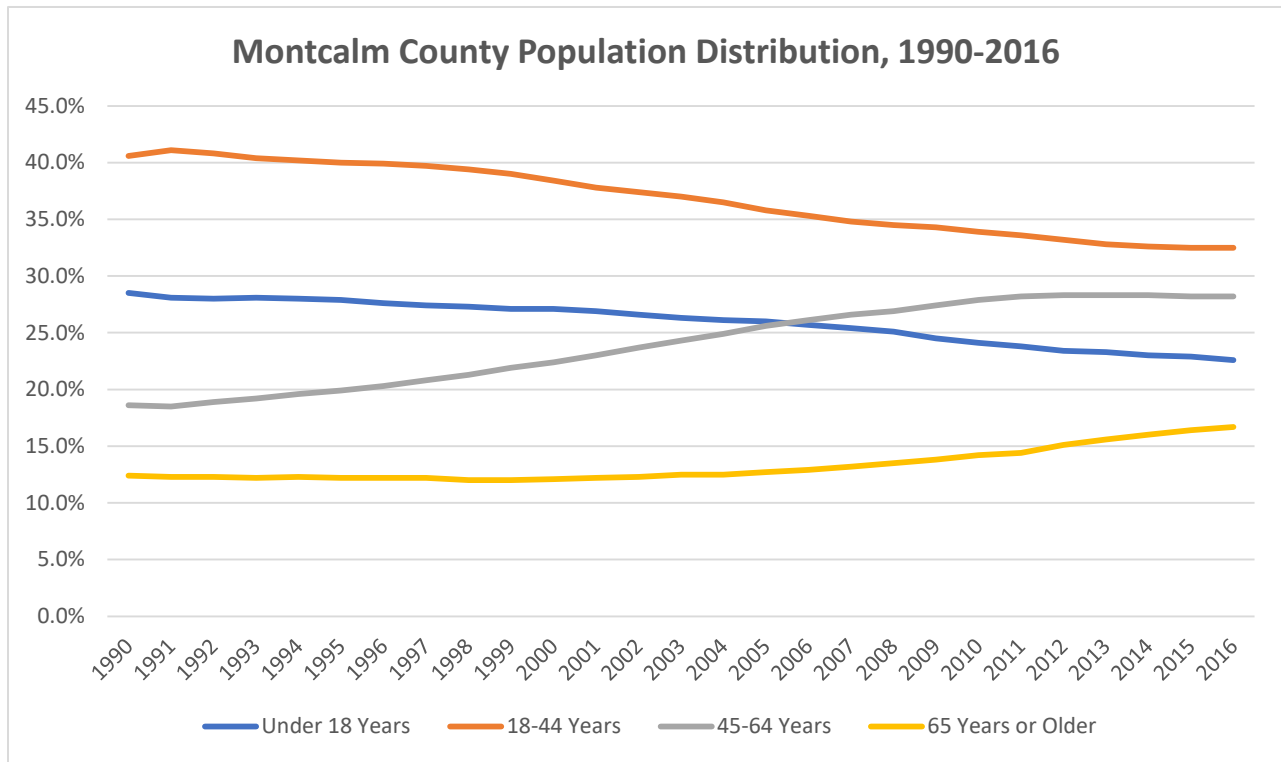
<b>Montcalm County Demographic Characteristics: Gender and Race</b>		
	<b>N</b>	<b>%</b>
<b><u>Gender</u></b>		
<b>Male</b>	<b>32,440</b>	<b>51.6%</b>
<b>Female</b>	<b>30,482</b>	<b>48.4%</b>
<b><u>Race/Ethnicity</u></b>		
<b>White/Caucasian</b>	<b>57,898</b>	<b>92.0%</b>
<b>Hispanic/Latino</b>	<b>2,095</b>	<b>3.3%</b>
<b>Black/African American</b>	<b>1,228</b>	<b>2.0%</b>
<b>American Indian/Alaskan Native</b>	<b>302</b>	<b>0.5%</b>
<b>Asian</b>	<b>247</b>	<b>0.4%</b>
<b>Some other race</b>	<b>41</b>	<b>&lt;0.1%</b>
<b>Two or More Races</b>	<b>1,111</b>	<b>1.8%</b>

Source: U.S. Census Bureau, American Community Survey, 2012-2016.



# Demographics of Montcalm County (Continued)

- Q The age distribution of Montcalm County has shifted toward an older population over time. In 1990, residents aged 45-64 comprised 18.6% of the population compared to 28.2% in 2016.
- Q Moreover, the proportion of adults aged 18-44 has declined over time: this group comprised 40.6% of the population of Mecosta County in 1990 compared to 32.5% in 2016.

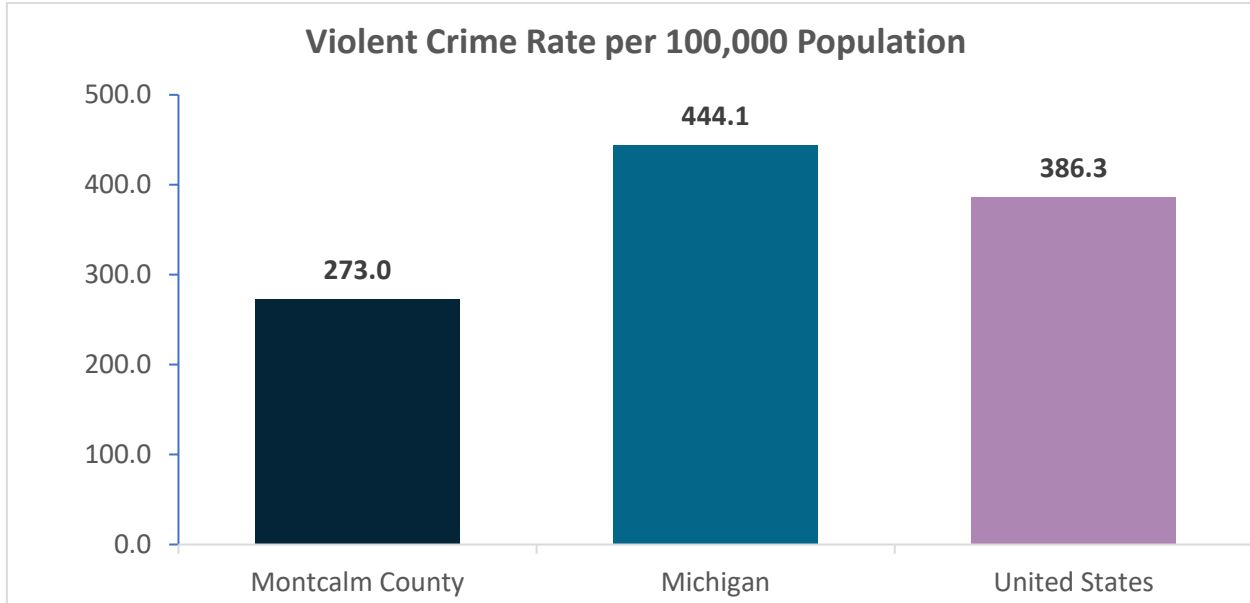


Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

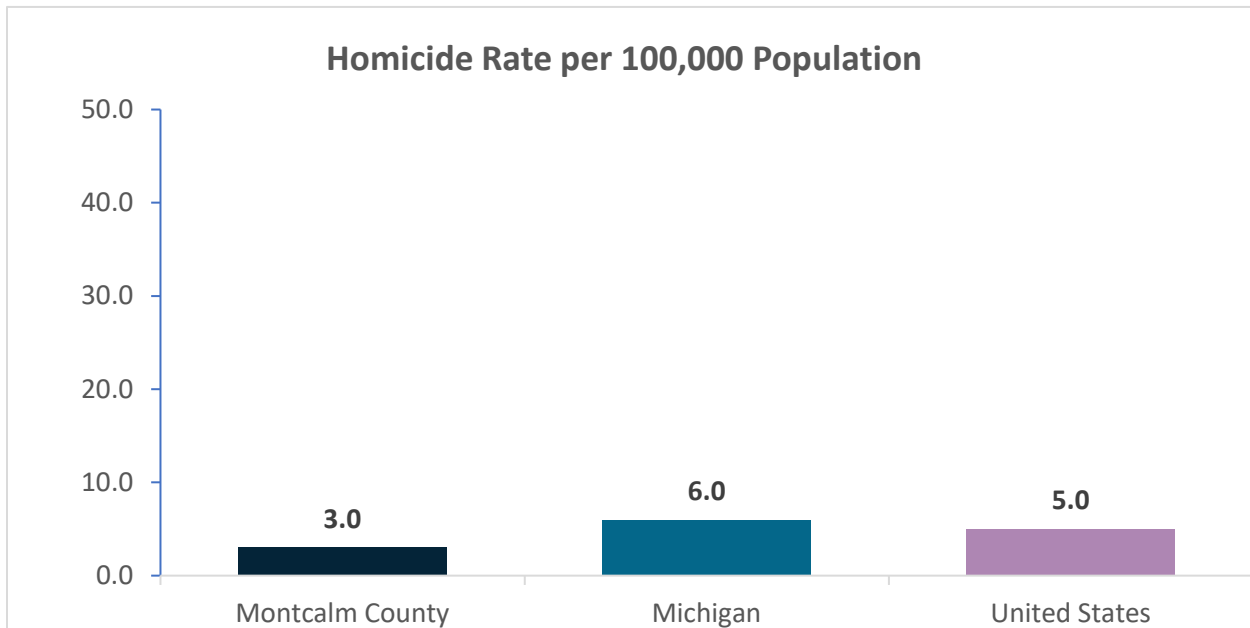


# Crime Rates

Q The rates for both violent crime and homicide are far lower in Montcalm County compared to Michigan or the United States. Still, an average of almost 300 violent crimes take place, per 100,000 people.



Source: County Health Rankings, 2012-2014.

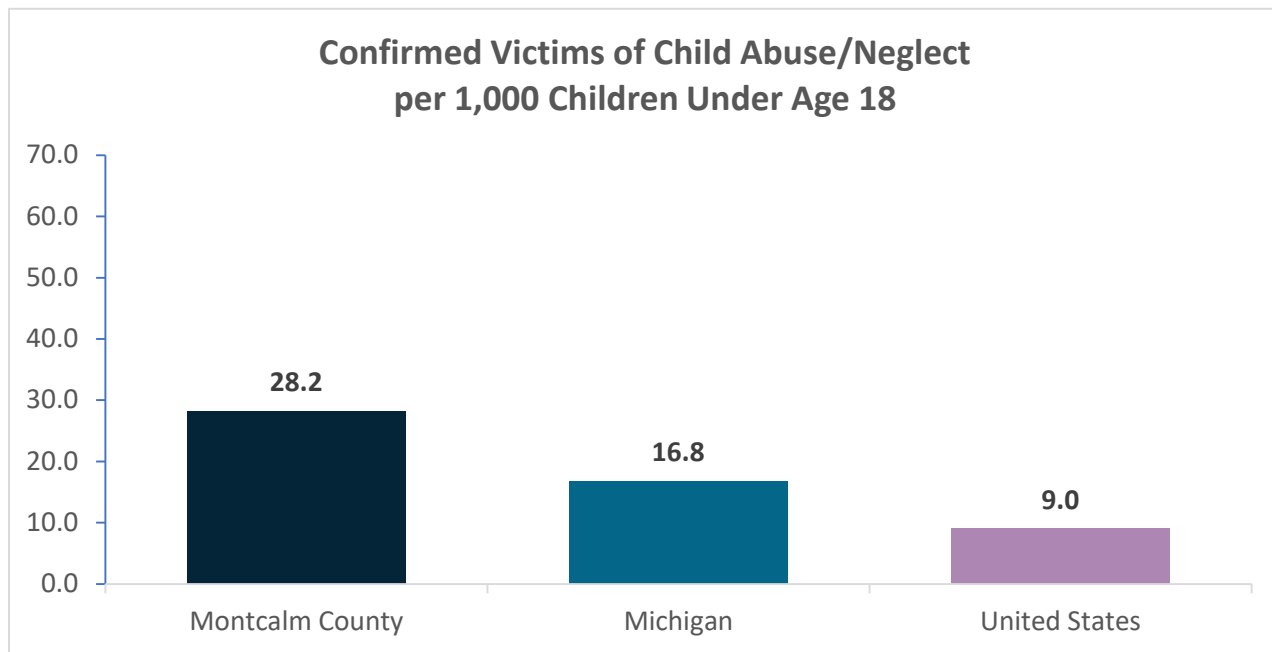


Source: County Health Rankings, 2012-2014.



# Crime Rates (Continued)

- Q Confirmed child abuse and neglect rates are much higher in Montcalm County compared to the rates in Michigan or across the U.S. In fact, the rate for confirmed child abuse/neglect in Montcalm County is three times higher than the U.S. rate



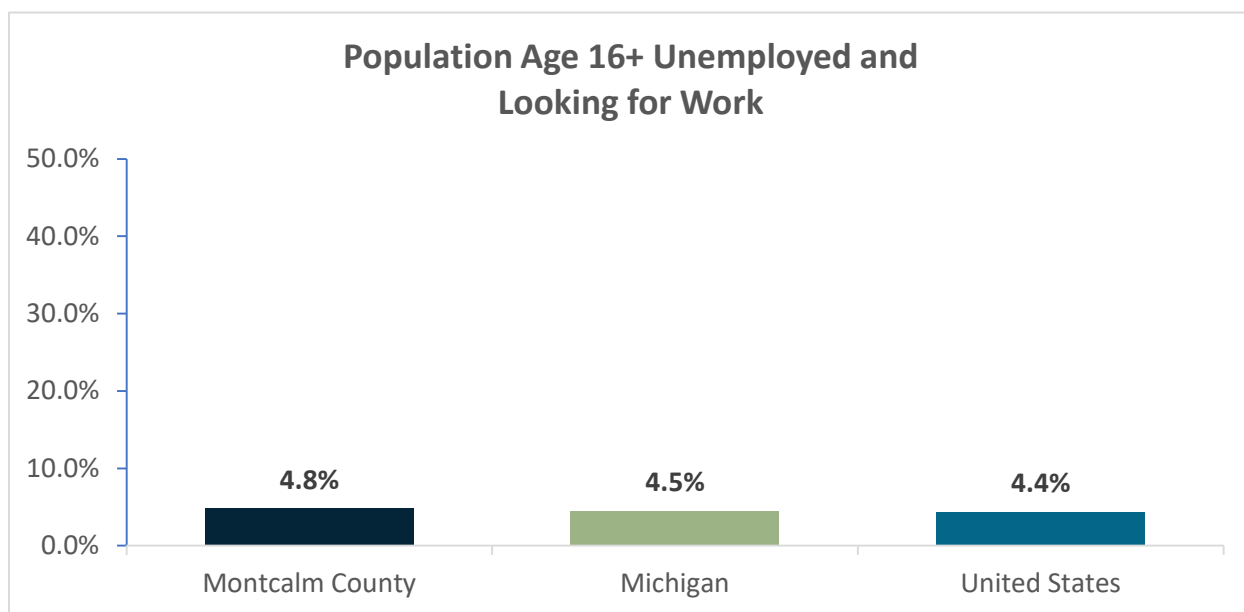
Source: County Health Rankings, 2012-2014.

- Q Of the 29 Key Informants who rated the prevalence of child abuse and neglect in the community in the Key Informant Online Survey, 72.4% believe child abuse and neglect is “somewhat” or “very” prevalent. However, only 30.4% of Key Informants are “somewhat” or “very” satisfied with the community response to child abuse and neglect.

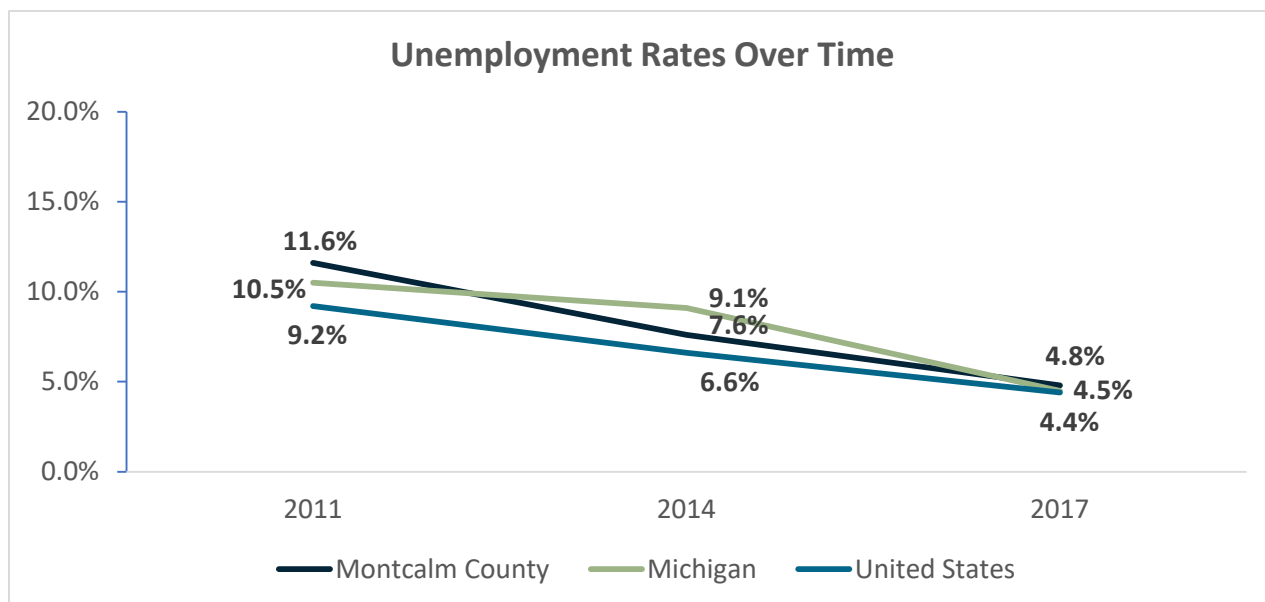


# Unemployment

- Q The most recent unemployment rate for Montcalm County is slightly higher than the rates for Michigan and the U.S. The unemployment rate for all three has dropped significantly since 2011.
- Q The current unemployment rate is not considered to be a societal issue in Montcalm County or to have a negative impact on the health of area residents as it was perceived in years past.



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics 2017



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics 2011, 2014, 2017



# Poverty

Q Poverty is a critical social problem in the Spectrum Health United Kelsey area because it is not only prevalent, but its impact on other domains of life is enormous. Key Informants reported on the impact of poverty:

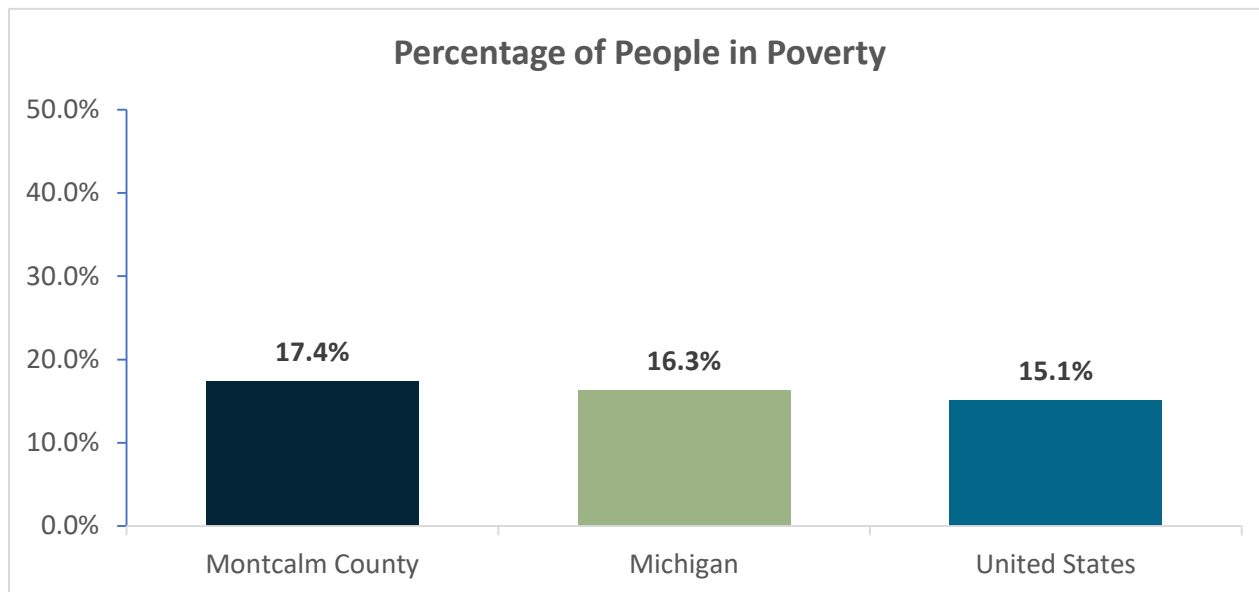
This is a layered issue, but I think there are two stand out points. The first is our economic status. This is a **very poor county. Poverty contributes to these issues because drug use is a band-aid on the lives of people who live in trauma.** The second is a lack of education about the dangers of opioid use evolving into a health concern. Drug use is not just a poor person problem, but I think that **bad health leads to pain management and that can lead to more serious drug abuse.** – Key Informant

Again, I think it comes down to **poverty** and a **lack of education.** If you are in a **third generation of poverty, your world is going to consist of filling immediate needs.** It is cheaper and easier to go to McDonalds for fries than it is to buy a bag of potatoes, salt and butter to make something healthier. – Key Informant

**Poverty,** which **affects the culture of getting,** and the ability to pay, for **health care and prescriptions,** as well as **being compliant with doctor’s orders.** – Key Informant

We need additional clean, sustainable industries with good, well-paying jobs. **Most of our problems are related to poverty.** – Key Informant

Q The proportion of people living in poverty in Montcalm County is greater than the proportions for the state or the nation.

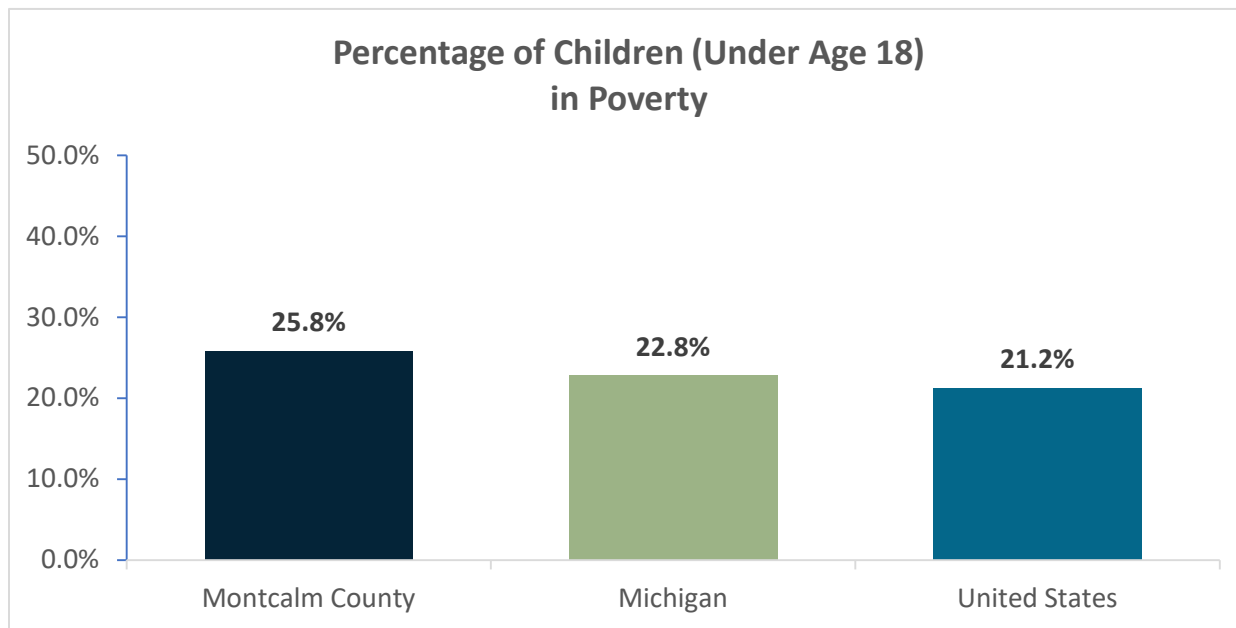


Source: U.S. Census Bureau, 2012-2016, 5-Year American Community Survey.

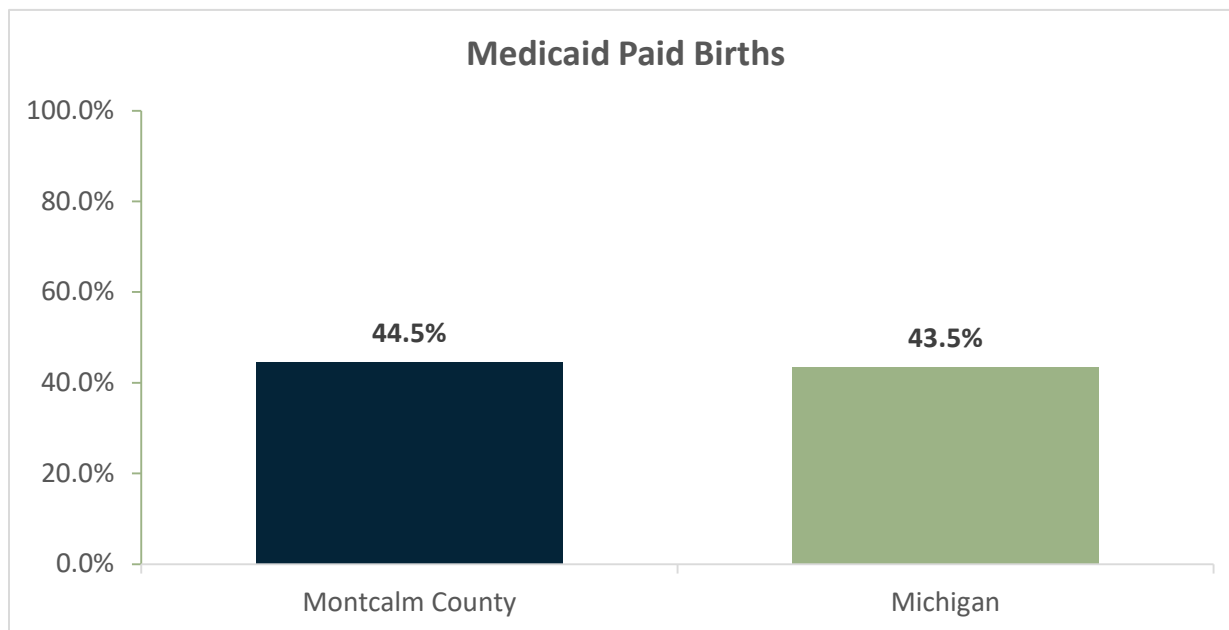


# Poverty (Continued)

- Q One in four (25.8%) children in Montcalm County live in poverty; a rate higher than the state or nation.
- Q More than four in ten (44.5%) births in Montcalm County are covered by Medicaid.



Source: U.S. Census Bureau, 2012-2016, 5-Year American Community Survey.

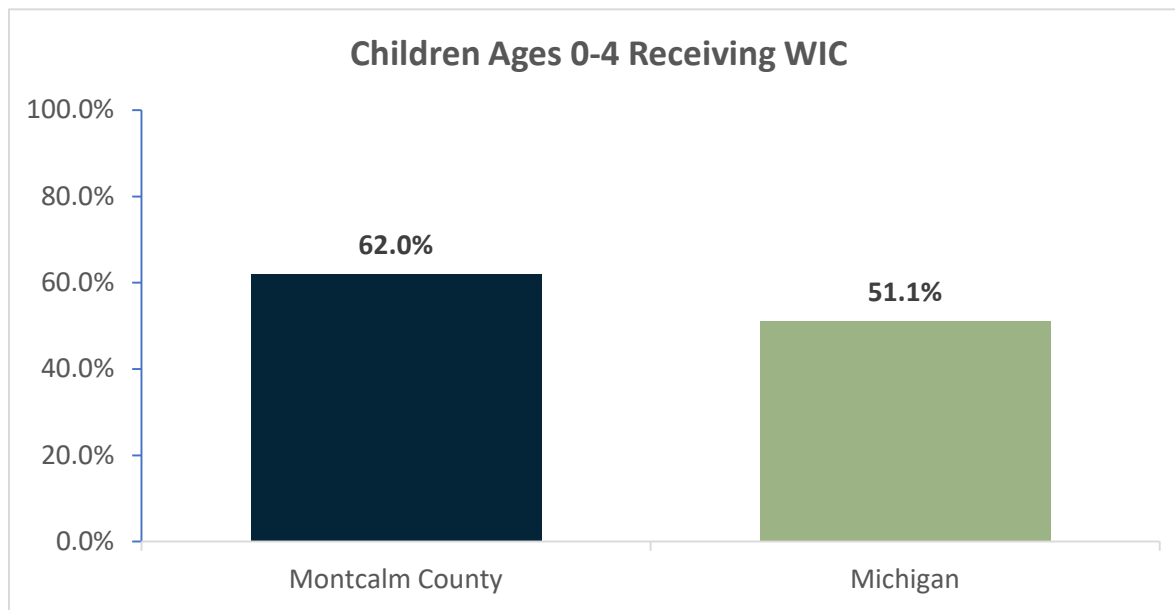


Source: Kid's Count Data Book, 2015.

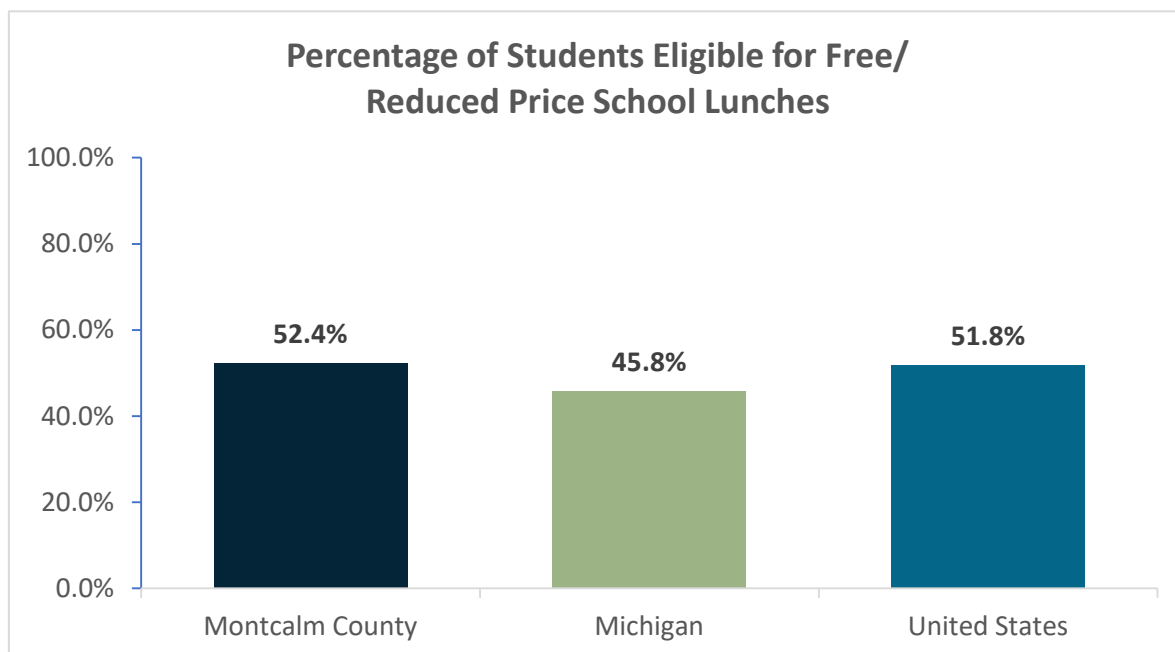


# Poverty (Continued)

- Q More than six in ten (62.0%) Montcalm County children four years old or younger receive WIC assistance; a rate higher than the state rate.
- Q Further, more than half (52.4%) of Montcalm County students are eligible for free or reduced priced school lunches; a rate higher than the state or national rates.



Source: Kid's Count Data Book, 2015.



Source: Kid's Count Data Book for MI and counties, 2016; Digest of Education Statistics for U.S., 2016.





# Poverty (Continued)

- Q The proportion of families from Montcalm County living in poverty is higher than the proportion in the state or nation.
- Q Married couple families are less likely to be living in poverty compared to single-female households.
- Q Over half (57.3%) of single-female families with children under five years old living in Montcalm County lives in poverty.

Poverty Levels			
	Montcalm County	Michigan	U.S.
<b>All Families</b>			
With children under age 18	23.0%	19.4%	17.4%
With children under age 5	26.3%	25.2%	21.8%
Total	12.6%	11.5%	11.0%
<b>Married Couple Families</b>			
With children under age 18	12.6%	8.1%	7.9%
With children under age 5	15.8%	11.1%	10.3%
Total	6.8%	5.2%	5.5%
<b>Single Female Families</b>			
With children under age 18	51.9%	44.3%	39.7%
With children under age 5	57.3%	57.3%	51.7%
Total	40.9%	32.9%	29.9%

Source: U.S. Census Bureau, 2012-2016, 5-Year American Community Survey.

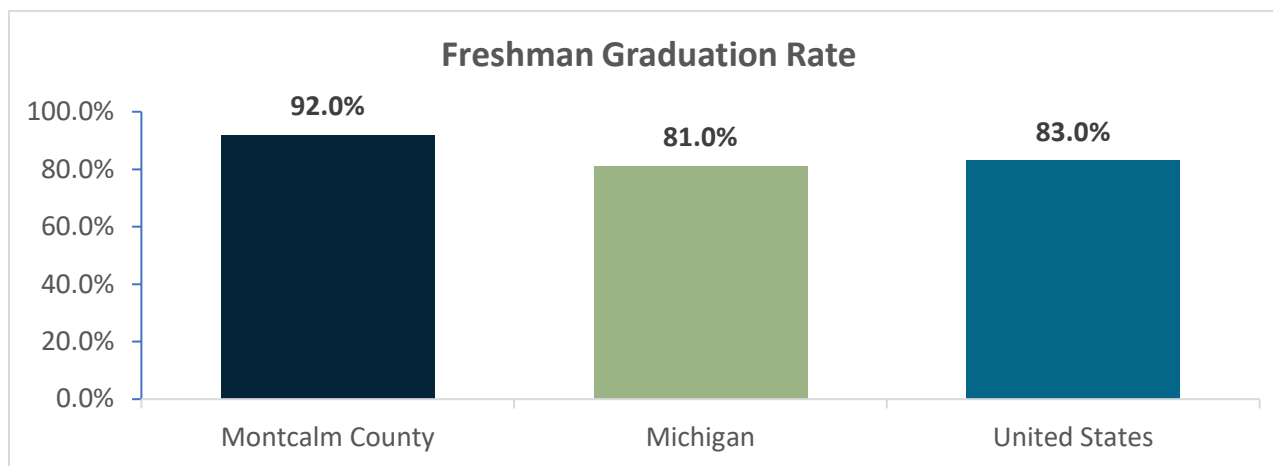


# Education

- Q Greater proportions of men and women in Montcalm County have failed to graduate from high school in comparison to Michigan or the U.S.
- Q Moreover, fewer Montcalm County men and women graduate college; only 11.8% and 13.4% of area men and women, respectively, have a Bachelor’s degree or higher.
- Q On the other hand, the freshman graduation rate is higher in Montcalm County vs. Michigan or the U.S.

Educational Level (Among Adults Age 25+)						
	Men			Women		
	Montcalm County	Michigan	U.S.	Montcalm County	Michigan	U.S.
Did Not Graduate High School	15.8%	10.5%	13.5%	11.5%	9.2%	12.1%
High School Graduate, GED, or Alternative	40.0%	30.1%	28.4%	37.6%	28.7%	26.8%
Some College, No Degree	25.2%	23.6%	20.5%	26.9%	23.7%	21.0%
Associate’s Degree	8.8%	8.0%	7.3%	11.6%	10.4%	9.1%
Bachelor’s Degree	8.3%	16.9%	18.8%	9.3%	17.1%	19.2%
Master’s Degree	2.5%	7.2%	7.5%	3.4%	8.6%	8.9%
Professional School Degree	0.8%	2.1%	2.4%	0.5%	1.2%	1.6%
Doctorate Degree	0.2%	1.5%	1.7%	0.2%	0.9%	1.1%

Source: U.S. Census Bureau, 2012-2016, 5-Year American Community Survey.



Source: County Health Rankings, 2015.



# Environmental Factors

Q Environmental factors that positively impact health include a wealth of natural resources that make it easier to be active, farmer’s markets offering healthy food, for those who can afford it, and because it is largely a rural community, plenty of green space and fresh air.

## Natural resources are conducive to recreation and outdoor activities

A **long trail to walk**, and **plenty of parks** to take kids to play. Lots of **places to walk** and **exercise outside**. – *Underserved Resident*

Montcalm County has a **lot of lakes**; we’re lucky in that sense. We’re also lucky with the **Meijer Heartland Trail system**, but it’s kind of limited to the Greenville area which is in the southeast corner of the county. If it was the middle of the county, we’d probably be better off because people would go out to it, everybody can get to that. They offer the most recreational opportunities. Like, they have a **disc golf course** and things like that. Outside of Greenville, recreation is much more limited. – *Key Stakeholder*

We have **lots of trails and bike paths** and **lakes**, so those that choose to can be active and **involved in the outdoors**. It’s a **wonderful place**. – *Key Stakeholder*

Montcalm County has **trails, lakes**, recreation programs for youth, health clubs (primarily in Greenville) that **encourage healthier choices**. – *Key Informant*

## Farmer’s markets

**Fresh food sold at farmer’s markets**, and **fresh vegetable and fruit stands** all over. – *Underserved Resident*

There are a **lot of fruits and veggies**, lot of **farmer’s markets**. – *Underserved Resident*

## Green space

Being rural, we **don’t have a lot of air pollution**, things of that nature. I think **access to nature**, being **outside is something that is a good thing** for us to have – **green space**. – *Key Stakeholder*

I'm not in the city so I'm able to get outside and work in the **fresh air and sun**. – *Underserved Resident*

Source: SHUK Key Stakeholder In-Depth Interviews, 2017, Q11b: Are there any environmental factors in your community that could/do positively impact the health of area residents (adults and children)?; Q11a: What are they? (n=4); SHUK Key Informant Online Survey, 2017, Q1b: What are the resources available in the community to address/resolve this [most pressing] issue? (n=34); SHUK Underserved Resident Survey, 2017, Q15: What are the primary characteristics in your community that make it easy to be healthy? (n=122)



# Environmental Factors (Continued)

- Q On the other hand, there appears to be a great need to focus on environmental factors when conducting a Community Health Needs Assessment in the SHUK area. Because much of the area is rural and there is abundant farming, Key Stakeholders report side-effects such as local water and land being exposed to toxins, chemicals, and pesticides. Further, local rivers have been discovered to have traces of E. coli. Lack of affordable housing and substandard housing (e.g., lead paint issues) are also environmental factors that negatively impact area residents' health.

The unspoken **pesticides, lead** left over. The unspoken - the thing that we all know is that there is farming, and we use a **lot of pesticides on our potato crops** here.

Some of our **rivers aren't clean** - which people tube on - go tubing in the summer. Last year there was an **article in the paper about high levels of E. coli in it**.

I think any time you have a rural community, there's always a **risk of chemicals** and things of that nature. [**Lack of affordable housing**] that's a **huge issue in our community** - a huge issue in our community.

I would say the three main areas are **groundwater, surface water, and toxins**. So, our rural infrastructure for keeping **human pathogens** out of the groundwater is getting old, and we're seeing an **increase in** that, and it's getting into our rivers and streams, so the most recent study of the **Flat River** showed that **large stretches of it are impaired with E. coli**. We've got a **lot of nitrates** because we're an agricultural community and **won't use available alternative methods; nitrates are building up in the groundwater**; it just gets worse and worse every year, and more and more **homes have to use reverse osmosis systems**; where they used to have clean, safe well water, now they don't. And then, because Montcalm did have a lot of these very small factories that provided a lot of good jobs back in the day, they also **have now a lot of toxins in the ground: plumes of stuff like mercury and lead** and then **volatile organics** in the urban areas, so we're starting to **see more and more vapor intrusion being detected** where volatile organics are **coming into homes and businesses and threatening people**, so there's a **huge need to really focus on environmental health in Montcalm County**, and the resources are not there to do that presently. I also think there are **homes in Greenville**, a lot of them, that **are not lead-safe**. So, this isn't lead in the drinking water; this is **lead in the paint or in the soil outside the home**. We **see a disproportionately high number of positive lead screens for kids coming out of Greenville**.

Source: SHUK Key Stakeholder In-Depth Interviews, 2017, Q11: Are there any environmental factors in your community that could/do negatively impact the health of area residents (adults and children)?; Q11a: What are they? (n=4)



# Adverse Childhood Experiences

Q Area adults were more likely to have experienced emotional abuse and emotional neglect, as well as all five of the household challenges measured (interpersonal violence, household substance abuse and mental illness, parental separation/divorce, incarcerated family members) growing up compared to adults across the U.S., but less likely to have experienced physical or sexual abuse.

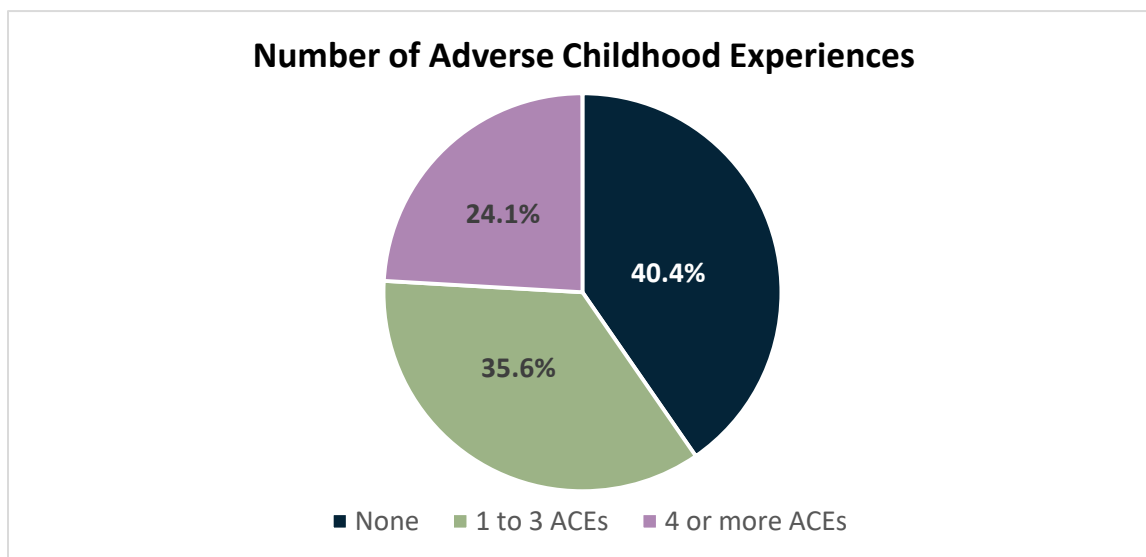
ACE Questions	Percent of People with Each ACE					
	SHUK Area			United States		
	Total	Women	Men	Total	Women	Men
Did a parent or other adult in the household often swear at you, insult you, put you down, or humiliate you, <b>OR</b> , act in a way that made you afraid that you might be physically hurt? (n=553)	26.1%	18.6%	34.2%	10.6%	13.1%	7.6%
Did a parent or other adult in the household often push, grab, slap, or throw something at you, <b>OR</b> , ever hit you so hard that you had marks or were injured? (n=551)	23.3%	17.1%	29.9%	28.3%	27.0%	29.9%
Did an adult or person at least 5 years older than you ever touch or fondle you or have you touch their body in a sexual way, <b>OR</b> , try to or actually have oral, anal, or vaginal sex with you? (n=550)	12.8%	14.5%	11.0%	20.7%	24.7%	16.0%
Did you often feel that no one in your family loved you or thought you were important or special, <b>OR</b> , your family didn't look out for each other, feel close to each other, or support each other? (n=545)	16.8%	17.6%	16.0%	14.8%	16.7%	12.4%
Did you often feel that you didn't have enough to eat, had to wear dirty clothes, and had no one to protect you, <b>OR</b> , your parents were too drunk or high to take care of you or take you to the doctor if you needed it? (n=550)	9.0%	8.1%	9.9%	9.9%	9.2%	10.7%
Were your parents ever separated or divorced? (n=537)	35.6%	34.8%	36.5%	23.3%	24.5%	21.8%
Was your mother or stepmother often pushed, grabbed, slapped, or had something thrown at her, <b>OR</b> , Sometimes or often kicked, bitten, hit with a fist, or hit with something hard, <b>OR</b> , ever repeatedly hit over at least a few minutes or threatened with a gun or knife? (n=548)	17.1%	15.6%	18.7%	12.7%	13.7%	11.5%
Did you live with anyone who was a problem drinker or alcoholic or who used street drugs? (n=545)	30.0%	28.0%	32.0%	26.9%	29.5%	23.8%
Was a household member depressed or mentally ill or did a household member attempt suicide? (n=546)	22.8%	24.3%	21.2%	19.4%	23.3%	14.8%
Did a household member go to prison? (n=547)	8.7%	6.0%	11.5%	4.7%	5.2%	4.1%

Source: SHUK Behavioral Risk Factor Survey, 2017; Centers for Disease Control and Prevention, Kaiser Permanente. The ACE Study Survey Data, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2016.



# Adverse Childhood Experiences (Continued)

- Q Almost six in ten (59.7%) SHUK area residents have experienced at least one adverse childhood experience and 24.1% have experienced four or more.
- Q It's clear that those who have had adverse childhood experiences are more likely to suffer negative outcomes as adults.



Source: BRFSS Survey for SHUK respondents, 2017. (n=528)

	Number of ACEs		
	None	1-3	4 or More
General health is fair/poor	13.4%	18.5%	38.4%
Poor mental health	1.6%	5.8%	15.2%
Activity limitation	5.1%	13.3%	20.0%
Have pre-diabetes	25.3%	29.5%	36.2%
Have COPD	9.6%	11.6%	25.5%
Have chronic pain	19.9%	35.9%	51.3%
Current cigarette smoker	13.5%	29.3%	41.3%
Obesity	33.0%	23.0%	48.8%
No leisure time physical activity	26.1%	35.8%	43.3%
Heavy drinker	4.2%	4.4%	13.8%
Mild to severe psychological distress	9.7%	16.9%	49.1%
Thought about committing suicide	3.0%	2.7%	25.8%
Attempted suicide	0.0%	33.0%	31.3%

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# COMMUNITY CHARACTERISTICS

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# Characteristics of a Healthy Community

Q When asked to describe what a healthy community looks like, Key Stakeholders moved beyond common physical metrics (e.g., lifestyle choices, chronic conditions), although these are certainly important. Their responses, focused more on the social determinants of health, such as education, family dysfunction that can be cyclical, engaged residents and organizations, and residents who care about one another, support one another, and who want to give back to their community. This demonstrates that they view health and health care from a holistic or biopsychosocial lens.

- ✓ Behaviorally healthy
- ✓ Community members reach out to help one another
- ✓ Community members want to be there for support/to support one another
- ✓ Engaged community
- ✓ Fewer dysfunctional families
- ✓ Low prevalence of obesity
- ✓ Low prevalence of smoking
- ✓ More interest in taking advantage of education
- ✓ More interest in wellness opportunities
- ✓ Opportunities for people to engage in activities, work, live, and play in the community
- ✓ People are aware of how healthy the community is
- ✓ People are aware of their health status
- ✓ People are engaged around the topic of health
- ✓ People are outside more
- ✓ People care about one another
- ✓ People exert some control over choices and the opportunities to be healthy
- ✓ People give back

Q Three out of four Key Stakeholders believe the SHUK service area is an unhealthy community but certainly there are ongoing attempts to improve the health and health care landscape.

For the most part, **no**. We look at different data through our Healthy Montcalm group and look at how Montcalm tends to be **higher on all the indicators of health, as far as smoking, drinking, obesity, heart disease, and diabetes**. We **don't have a lot of recreation opportunities for kids or adults** to engage in low-cost/free activities that they can go do that are nearby, and again, **poverty and transportation** play into that. **People stay stuck in their cycle of being unhealthy**. And we continue to wonder if there's a **continuing culture in our community** that "This is how my parents lived, so therefore this is how I will live, and I don't expect anything different," and they just kind of stay stuck in it.

I think **we're on the cusp**. It's just taking that next step to really be able to start to address the issues that we kind of talked about, and like I said - and having those conversations with one another. We certainly aren't there, but **we definitely look out for one another, and we definitely care about each other, and we care about where we live, too**, so I think there's opportunity there as well.

I **don't think so**. When I started working here, by driving around, I **got the feeling that something's just not right in this community**. I was disturbed. I was working in East Lansing, and the **differences in the physical quality of the environment and people was obvious to the eye**, and as a public health guy, I got really excited about that, and I've been having a great time trying to dig into what's going on and work with partners to do something about

Source: SHUK Key Stakeholder In-Depth Interviews: Q2: In your opinion, what is a healthy community? In other words, what does a healthy community look like? (n=4); Q2a: Is the SHUK service area made up of healthy communities? (n=4)





# Characteristics That Make the SHUK Area Healthy

Q Characteristics that make the SHUK service areas healthy communities are: (1) a collaborative spirit manifested by agencies and organizations coordinating programs and services, (2) committed and caring residents who act as role models for living healthier lifestyles (3) programs and services in place that address many resident needs.

## Collaboration

I think the **collaboration of the organizations**. We have a **strong collaborative group** that gets together on a monthly basis. We try to **partner and work together to find solutions that will work for our community**. I think the local boots-on-the-ground try to help and **find new ways to do things or thinking of different ways of doing things**. I know different groups meet throughout the year and look at poverty or look at access to services and try to **find ways where we can do better**.

I think what makes the community healthy are the **relationships** with each other in the community. I think what's making us healthy is we are **seeing growth**, and we are seeing some industry come back, which is helping.

## Great role models

What makes it healthy is **the population that takes care of themselves: the farmers, the Amish** (which make up 10% of the county). They are **sturdy and robust**. **They are healthy and they reach out to the community and care for unfortunate people in their own unique ways**. People will not walk away from those in need. **It's a very uplifting society in this rural area**.

## Programs and services in place

There's a lot of opportunity, given that **we do have components of a good basic rural health care system in place**, we do have programs like the **Great Start Collaborative**, we have a **Community Mental Health** agency, and then we have things in our **physical environment**. One of the projects that we're working on right now is the concept of a **food hub**; trying to combine what would be an economic development activity to spur the produce sector of the agriculture community and then encourage people to eat healthier and make healthier food.

Source: SHUK Key Stakeholder In-Depth Interviews: Q2b: What makes the SHUK service areas healthy communities? (n=4)



# Community Strengths

Q Key Stakeholders believe the community foundations are the greatest strength or resources upon which to build programs or initiatives to address health needs or issues. Additional resources include the strong collaborative spirit or community connectedness among people and organizations to address problems and leaders who have a vision for alternative approaches to addressing problems.

## Community Foundations/Non-Profit Organizations

The **Greenville Area Community Foundation** is excellent - does **make a big difference in the community**. Again, I think our **health care systems** - I've already described the weaknesses and challenges they face, but they are very **significant players** in the community.

We do have **good community foundations**, and **United Way** is strong in our community.

We **have community foundations in Greenville and Lakeview**. The **Greenville Community Foundation** is very well established and gives quite a few grants. The challenge though, is they could give out grants for essentially the same program; there's a lot of duplication of services. So, instead of pooling together to tackle one problem, we've got people kind of competing with each other.

I think another strength in our community is some of the **agencies** like our **Community Mental Health**; they're working very, very hard, and while mental health is a huge issue in our county, they're really kind of coming on strong and kind of finding their stride, which is great, so I think that those are some bright spots that we've got here.

## Collaboration/connectedness

I think one of the assets of late has been a **concerted effort for economic development**. The county, about two and a half years ago, went into collaboration with the Grand Rapids economic development organization, **The Right Place**, so I think that's a positive and has been showing some results. I think your **health care system**, albeit not used the way it should be - **we've got strong providers here**. The people we work with - I have the pleasure of **working with good people**, so I would say that we are **good salt-of-the-earth people** around here that are available to contribute, so there are our assets. **School systems are good for what they are**. They're limited in resources, but I think they're **well led**.

The **community connectedness**. The leaders are **willing to interact with each other**, so I think that's definitely a strength. There are **individual leaders** within the community that **have a vision** for doing something different.

## Community Values

I've already talked about the **community values, community spirit**. **I don't think we leverage the identity in the community the way we could** in terms of building up people's care for the community they live in and valuing it and wanting to do more to help it.

Source: Key Stakeholder In-Depth Interviews: Q8: In order to improve the health of your community, please talk about some of the strengths/resources that your community has to build upon. (n=4)



# Characteristics That Make the SHUK Area Unhealthy

- Q Conversely, many characteristics that make the SHUK area unhealthy stem from the fact that it is a rural area and the by-product of that, such as poverty/cycle of poverty, socioeconomic conditions, services, and family dysfunction.
- Q Additionally, poor lifestyle choices such as smoking, diet, and lack of exercise, coupled with mental illness, contributes to poor physical health and disease.

<b>Key metrics are not good</b>	The <b>health of the citizenry is not very good</b> , not only <b>physical</b> but <b>behavioral</b> . We estimate that <b>30% of our primary care patients aren't suffering physical illnesses; they're suffering behavioral</b> . It <b>manifests itself physically</b> , so I think you have people that are - the <b>headaches, the stomachaches, not being able to sleep - behavioral</b> .
<b>Family dysfunction</b>	I think <b>the family structure in our county is not very good</b> . It's heartbreaking to see some of the children and the <b>dysfunctional families</b> , and for me, I read it as a reminder of just how much work needs to be done and just how good some of us have it. When you have children seven/eight years old, you look at them and say, " <b>They just don't have a chance.</b> " Their <b>family unit is a mess</b> , so <b>that's why we're unhealthy</b> . It's educational - <b>lack of education</b> - we're <b>rural poverty</b> and all the things that go with that – <b>lack of education, dysfunctional family units, unhealthy behavior</b> .
<b>Socioeconomic</b>	If you want to dig a little deeper, a lot of it is <b>socioeconomic</b> . We were <b>once a factory community</b> and then lost that. It's been at least ten years, but <b>people still talk about it like it was yesterday</b> . Now there's <b>not a lot of industry here</b> , and I think that really <b>contributes to some of the poor outcomes and the poor behaviors</b> .
<b>Lifestyle choices</b>	What makes us unhealthy is those <b>poor habits of diet, exercise, smoking</b> - the big three there. It's what <b>contributes to a lot of our diseases</b> .

Source: Key Stakeholder In-Depth Interviews: Q2c: What makes the SHUK area unhealthy? (n=4)



# Resource Limitations

- Q Despite the fact that community foundations and their available funds are a resource strength, there are not enough funds to go around to address all of the issues facing SHUK area residents. Additionally, the lack of funding prevents organizations and agencies from spending or expanding; in essence, prevents them providing services.
- Q Further, there are infrastructure issues when it comes to some of the area institutions.
- Q Like similar rural areas, the SHUK area has trouble keeping the best and brightest people who grow up there from leaving.

## Funding and funding issues

**Funding.** I think with what’s going on at the federal level right now, everyone’s wondering what’s going to happen with spending. I know from our perspective, **we’re hesitant to expand or do anything extra right now.** They **talk about these huge Medicaid cuts** and what **impact that would have on our county and our services.** I think **we always lack resources when it comes to helping people with basic needs and emergency funding** for things like housing, in the winter, heating bills and things like that. From the collaborative meetings, I hear, “We’ve run out of funding; we’re trying to get some more funding together for that.”

**Funding, money.** Also, the **weaknesses of institutions.** So, the **financial woes of Montcalm County government** are a really good example. There’s not a single person in involved who wasn’t trying to do a good job, and yet you had a **catastrophic system failure** that’s going to haunt the community for years to come. So, weaknesses of institutions are a challenge in this area.

## Lack of people

**Money, people.** I think **the best and the brightest leave.** We don’t work real hard to keep the best and the brightest here, so I think - **economically** and **brain drain.** I think our greatest opportunity in the near future is to be a bedroom community to Grand Rapids. Grand Rapids is within 50 minutes, and people can live on a lake in a nice area and go to work in Grand Rapids. It is going to happen.

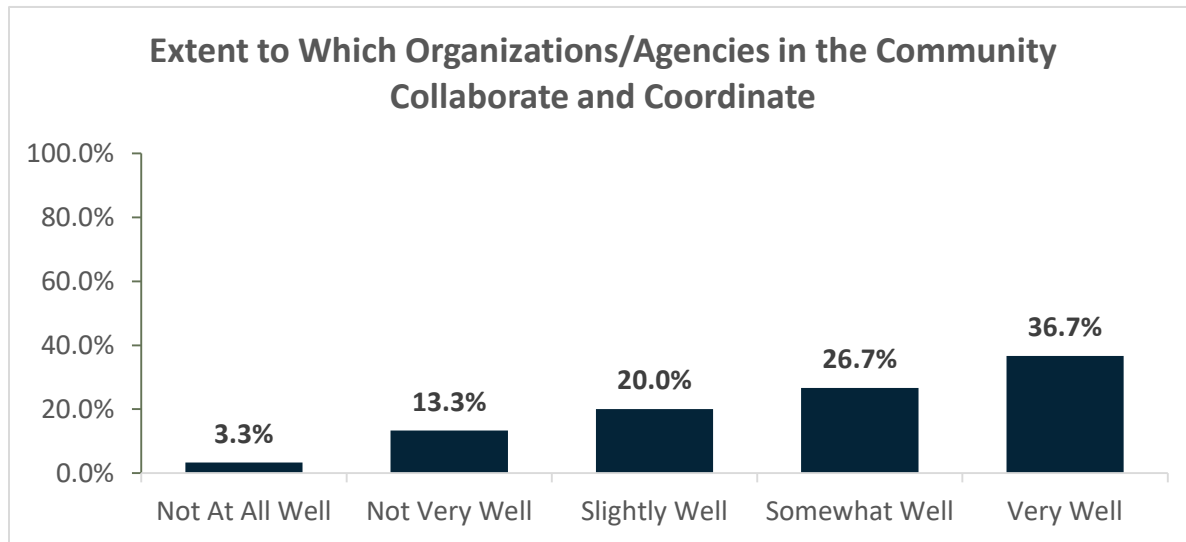
**People who have education and want to earn income go outside the county.** They don’t necessarily want to live here because they don’t want to drive all the way.

Source: SHUK Key Stakeholder In-Depth Interviews: Q8a: What are any resource limitations, if any? (n=4)



# Collaboration and Coordination

- Q Six in ten (63.4%) Key Informants, and two of the four Key Stakeholders, report that area organizations and agencies collaborate and coordinate “somewhat well” or “very well” together in order to make programs and services more accessible to area residents.
- Q Limited resources have forced community organizations and leaders to collaborate and coordinate well.



Source: SHUK Key Informant Online Survey, Q9/Q9a; Key Stakeholder Interviews, Q5/Q5a: How well do organizations and agencies in your community collaborate and coordinate together in order to make programs and services more accessible to area residents? Why do you say that? (n=30/n=4)

## Somewhat Well/Very Well

We **put together a shared service site** (services collaborative) in Howard City. **Hospitals, health department, Community Mental Health, they all work together.** There are different work groups like Health Montcalm, I know they have **representation from all the hospitals** with the **Health Department** on theirs. I can't say that for collaborative meetings. I don't know that Sheridan and Sparrow are always there. Sparrow's probably the least connected, Spectrum being the most connected. – *Key Stakeholder*

The **culture** in our community is such that **people love working together to find solutions for needs. Volunteerism is prevalent** and there are **many willing workers**; someone just has to make the needs known. – *Key Informant*

## Not At All Well/Not Very Well

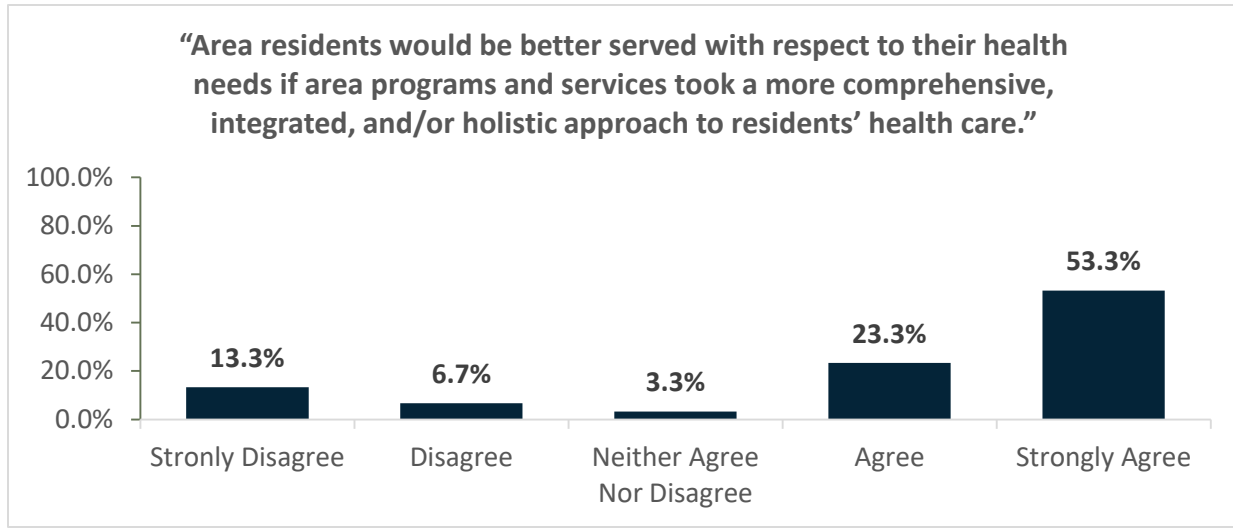
It isn't for lack of trying; I just think that **we aren't very good at coordinating things. We like to duplicate services.** – *Key Stakeholder*

I **do not see Cherry Street Health communicating with Spectrum, and no collaborative work going on. Seems to be a competition between health care systems** but I get it, we have to do good business too. – *Key Informant*



# Holistic/Biopsychosocial Approach

- Q Three of four Key Stakeholders report that area programs and services aspire to take a comprehensive, integrated, and/or holistic approach to serving the health and health care needs of area residents but fall a little short. More than three-fourths (76.6%) of Key Informants believe area residents would be better served if local programs and services took this approach.
- Q These community leaders see the benefit in serving area residents' health and health care needs in a comprehensive, integrated, and/or holistic manner; a biopsychosocial approach. They understand that health, or illness, depends on physical, mental, spiritual, and social well-being.



Source: SHUK Key Stakeholder Interviews, Q5b/Q5c: In your opinion, do area programs and services take a comprehensive, integrated, and/or holistic approach to serving the health and health care needs of area residents? Why do you say that? (n=4); Key Informant Online Survey, Q10/Q10a: Please indicate your level of agreement with the following statement. Why do you say that? (n=30)

**Health is more than just physical and I would argue being healthy is directly linked to your emotional/mental health. Working together just makes sense.** – Key Informant

Knowing the community that you are in, and **looking at all of the options in supporting wellness**, should guide all of our efforts. **Wellness is key in building a healthier community.** – Key Informant

Although treating an issue has its place, **when we serve human beings, the more we serve in a holistic manner, the more we can expect better outcomes for people.** It also **builds a sense of caring** from the agency and loyalty to the agency that cares enough to engage fully - not just in isolated episodes. – Key Informant

I strongly agree because I **see our community health issues as band aids for bigger issues. Poverty and trauma affects human behavior. A holistic approach is a brilliant idea.** – Key Informant

I think we either look at it **either from very much a medical model-focus: “Oh, if I take care of the problem that’s in front of me right now,” or we’re very holistic and really don’t necessarily think about the medical side of things, but we’re putting it together.** We’re just not good at that as a community right now. I think the challenge for us is we’re starting to really think about it and so we have social workers and care managers now in our practices, but to be honest we really aren’t quite sure what to do with them yet. – Key Stakeholder



# Barriers to Care Coordination

- Q Three of four Key Stakeholders believe there are barriers to care coordination, such as corporate policies, regulations, or bureaucratic red-tape. Lack of integrated technology, where information could be shared is also a barrier to care coordination. With four hospitals in Montcalm County, the process for serving area residents would definitely operate more seamlessly if there was better coordination and information sharing.

Yeah, **corporate barriers**. That's real. I keep using Greenville because over the course of my time here I've had the good fortune and pleasure of working with my counterpart, the CEO there. I could get [the CEO at Spectrum] and I can get all excited about something, and Spectrum's got to approve it for them. So, there are some corporate barriers. I **don't think there are people barriers**. Probably **corporate philosophies are different**, so at the end of the day, if I wanted to do something with [the CEO at Spectrum], and she wanted to do it with me, **she'd still have to get the corporate office to approve it**. We're independent, so my reference to corporate is sort of different - through a different prism.

We've been working with Sheridan Hospital to get them on our ADT feed - discharge information, so that we have that connection point. I know we work closely with Spectrum, more so than Sparrow when we're looking at ER high utilizers. So, for the most part, we have willing partners, at least in Spectrum. So far, they've been open and cooperative and caring and willing to work. I think **Spectrum stands out as being more participatory in our community**.

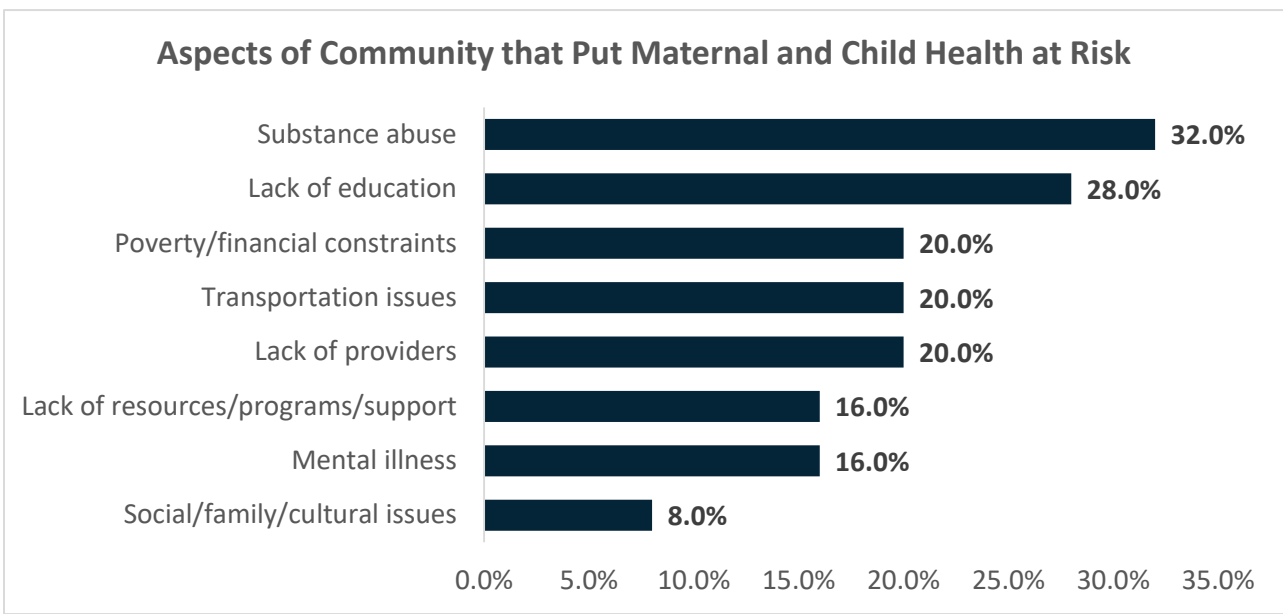
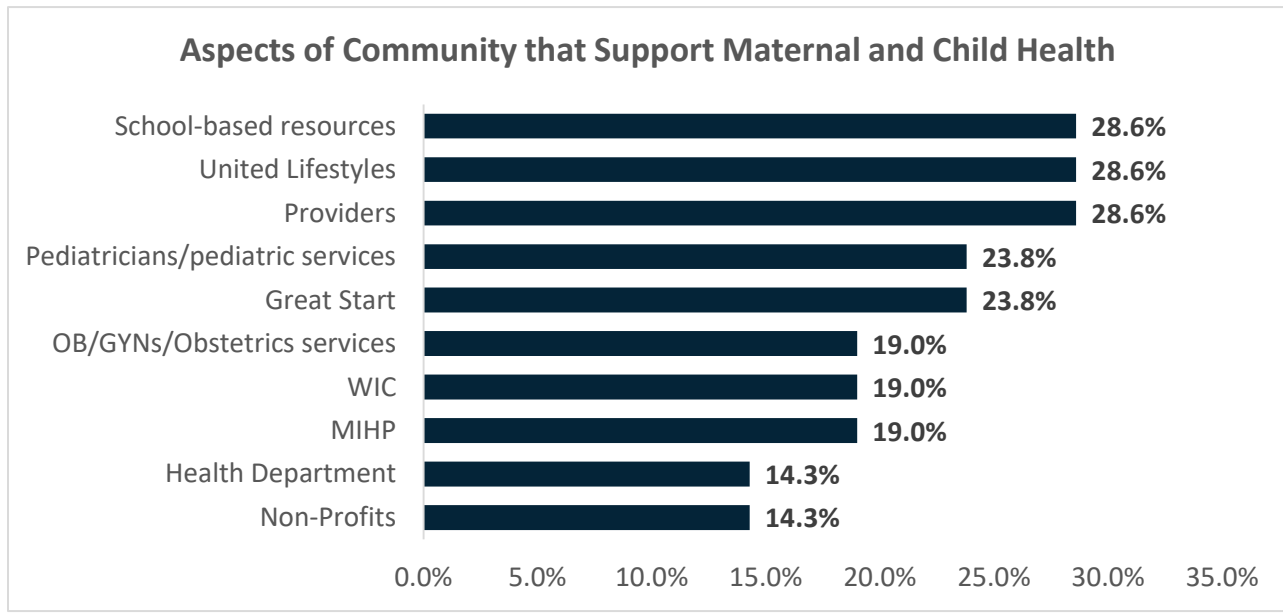
**Financial**. The **different health care systems** - you get them all in a room and they all want to play well together, but they **don't necessarily have a free hand in doing that because headquarters** says, "No, you've got to coordinate with the other campuses of our network first, and then if there's anything left over, you can talk to rival organizations," so that's definitely a barrier.

Source: SHUK Key Stakeholder Interviews, Q5d: Are there any barriers to care coordination? (n=4)



# Maternal and Child Health

- Q Key Informants name school-based resources, United Lifestyles, and area providers as the top aspects of the community that supports maternal and child health, followed by pediatric services and Great Start.
- Q Conversely, aspects that put maternal and child health at risk include substance abuse and the lack of treatment options, lack of education, poverty and financial constraints, and transportation barriers.



Source: SHUK Key Informant Online Survey, 2017, Q13: What about this community supports maternal and child (age birth-18) health? Please be as detailed as possible. (n=21); Q14: What about this community puts maternal and child (age birth-18) health at risk? Please be as detailed as possible. (n=25)



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# HEALTH STATUS INDICATORS

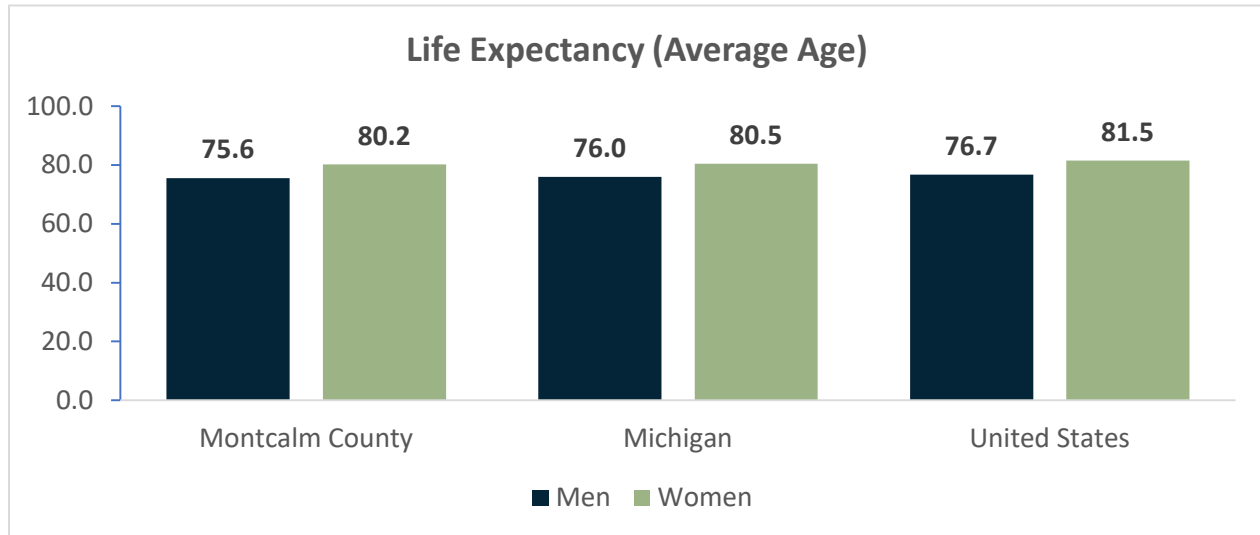
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# Life Expectancy and Years of Potential Life Lost

- Q Both women and men in Montcalm County have lower life expectancy rates (when adjusted for age) compared to women and men across Michigan or the U.S.
- Q Compared to residents across Michigan, residents of Montcalm County are more likely to lose years of potential life due to malignant neoplasms, accidents, or chronic lower respiratory diseases.



Source: Institute for Health Metrics and Evaluation at the University of Washington, 2014.

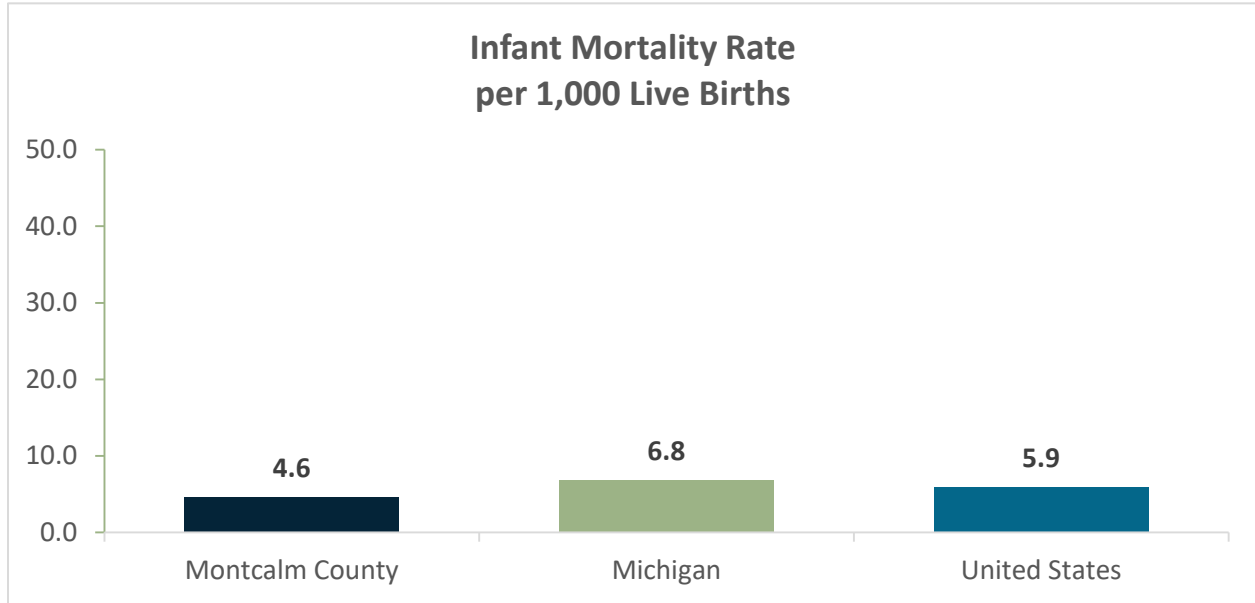
Rates of Years of Potential Life Lost (YPLL) (Below Age 75)				
	Michigan		Montcalm County	
	Rank	Rate	Rank	Rate
All Causes		7697.6		7599.4
Malignant neoplasms (All)	1	1620.8	1	1646.1
Diseases of the heart	2	1276.0	3	1194.1
Accidents	3	1136.4	2	1291.3
Drug induced deaths	4	791.0		**
Intentional self-harm (Suicide)	5	428.4		**
Chronic lower respiratory diseases	6	255.4	4	290.0

Source: Michigan DHHS, Division of Vital Records and Health Statistics, Geocoded Michigan Death Certificate Registry, 2015.  
 Note: \*\* = data do not meet standards of reliability and precision OR have a zero value.

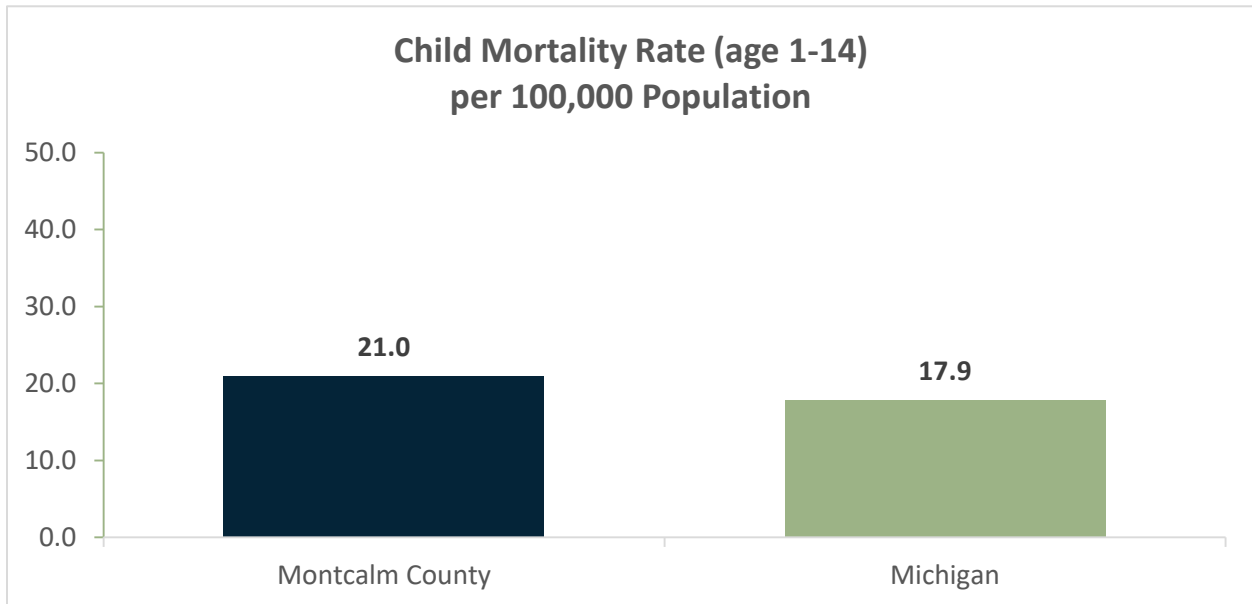


# Mortality Rates

Q Montcalm County's infant mortality rate is lower than the state or the national rates, but its child mortality rate is higher than the state rate.



Source: Michigan DHHS, Division of Vital Records and Health Statistics, 2015.

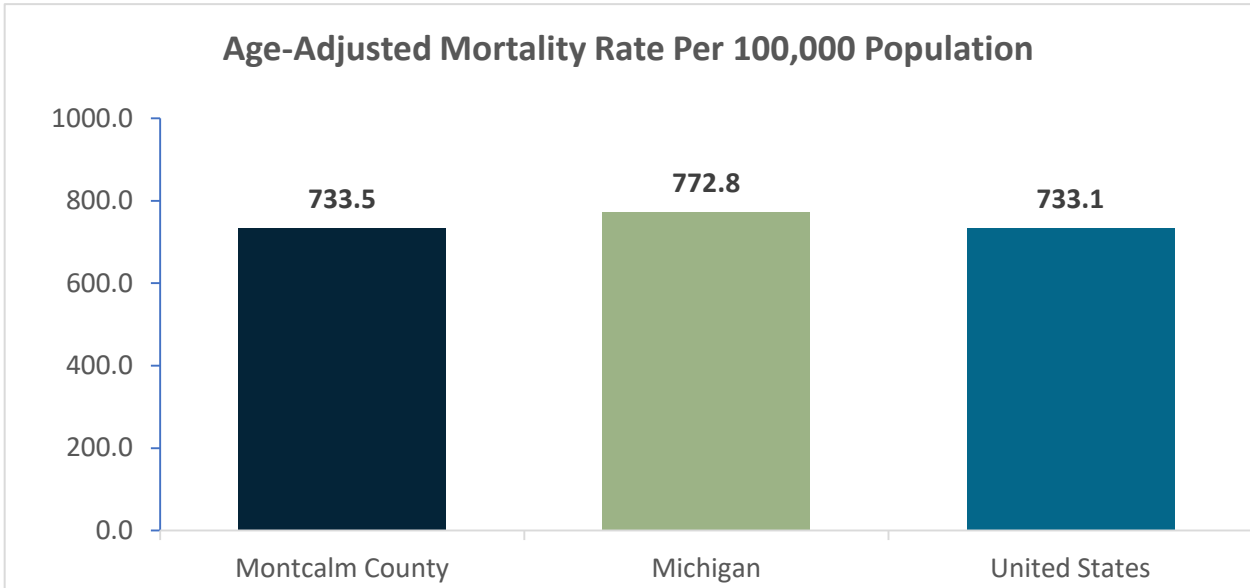


Source: Michigan DHHS, Division of Vital Records and Health Statistics, MI and US, 2015, Montcalm County, 2014.



# Mortality Rates (Continued)

Q The age-adjusted mortality rate for Montcalm County is lower than the state rate and on par with the national rate.



Source: Michigan Resident Death File, Vital Records & Health Statistics Section, Michigan Department of Health and Human Services, 2015.



# Leading Causes of Death

- Q Heart disease and cancer are the leading causes of death in Montcalm County, the state, and the nation.
- Q Compared to the state or the nation, the death rate for heart disease is higher in Montcalm County, and the death rate for cancer is lower in Montcalm County compared to state and national rates.
- Q The death rates for chronic lower respiratory diseases, unintentional injuries, and stroke are higher in Montcalm County compared to the state or national rates, while the death rate from Alzheimer’s disease is lower in Montcalm County vs. state or national rates.
- Q The death rates for heart disease, cancer, and chronic lower respiratory diseases in Montcalm County decreased from the last CHNA iteration in 2014.

	Michigan		United States		Montcalm County	
	Rank	Rate	Rank	Rate	Rank	Rate
Heart Disease	1	195.5	1	168.5	1	199.8
Cancer	2	164.9	2	158.5	2	157.7
Chronic Lower Respiratory Diseases	3	46.7	4	41.6	4	47.9
Unintentional Injuries	4	42.9	3	43.2	3	49.2
Stroke	5	36.8	5	37.6	5	41.0
Alzheimer’s Disease	6	29.7	6	29.4	6	26.2
Diabetes Mellitus	7	22.2	7	21.3		**
Kidney Disease	8	15.4	9	13.4		**
Pneumonia/Influenza	9	15.0	8	15.2		**
Intentional Self-Harm (Suicide)	10	13.6	10	13.3		**
All Other Causes		190.1		191.1		154.9

Source: Michigan Department of Health and Human Services, 2015.

Note: \*\* = data do not meet standards of reliability and precision OR have a zero value.



# Leading Causes of Preventable Hospitalization

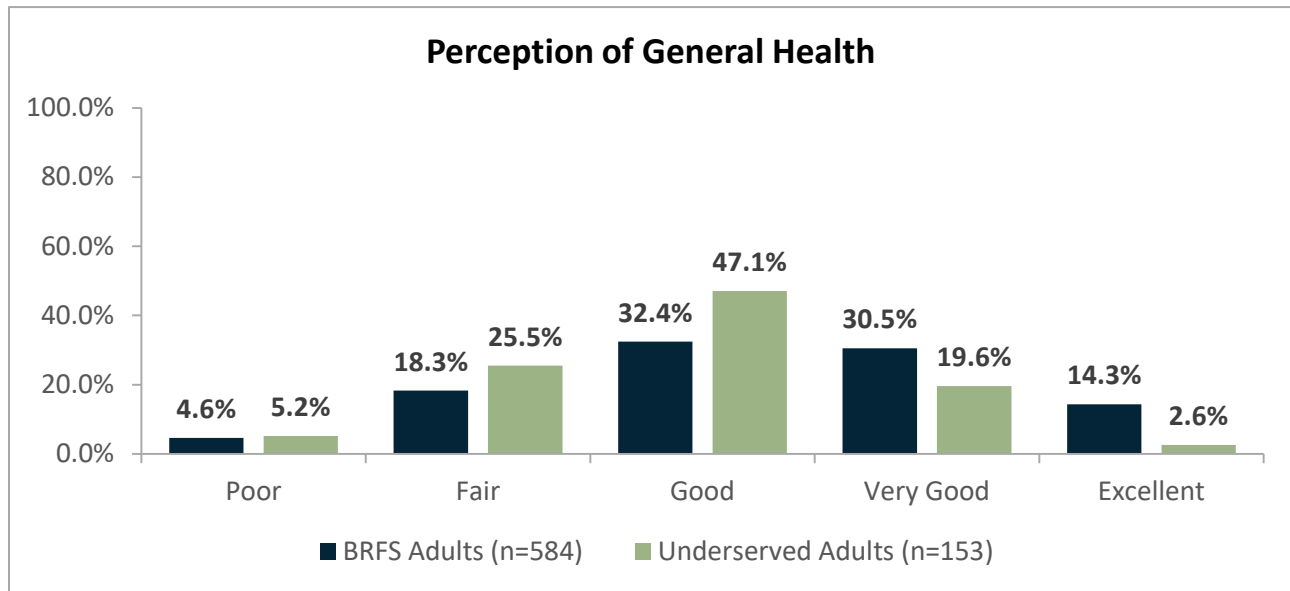
- Q Preventable hospitalizations as a proportion of all hospitalizations in Montcalm County is on par with the state proportion.
- Q Congestive heart failure, bacterial pneumonia, and chronic obstructive pulmonary disease are the leading causes of preventable hospitalization in both Montcalm County and across Michigan, but the proportion for all three conditions are higher in Montcalm County compared to the state.
- Q Residents of Montcalm County are more likely to be hospitalized for chronic obstructive pulmonary disease than residents across Michigan.
- Q On the other hand, residents across Michigan are more likely to be hospitalized for kidney/urinary infections, diabetes, and asthma compared to residents in Montcalm County.

	Michigan		Montcalm County	
	Rank	% of All Preventable Hospitalizations	Rank	% of All Preventable Hospitalizations
<b>Congestive Heart Failure</b>	<b>1</b>	<b>14.0%</b>	<b>1</b>	<b>16.1%</b>
<b>Bacterial Pneumonia</b>	<b>2</b>	<b>9.7%</b>	<b>2</b>	<b>15.7%</b>
<b>Chronic Obstructive Pulmonary Disease</b>	<b>3</b>	<b>9.1%</b>	<b>3</b>	<b>12.4%</b>
<b>Kidney/Urinary Infections</b>	<b>4</b>	<b>6.8%</b>	<b>5</b>	<b>5.0%</b>
<b>Cellulitis</b>	<b>5</b>	<b>6.5%</b>	<b>4</b>	<b>6.8%</b>
<b>Diabetes</b>	<b>6</b>	<b>5.9%</b>	<b>6</b>	<b>4.7%</b>
<b>Asthma</b>	<b>7</b>	<b>5.3%</b>	<b>7</b>	<b>4.1%</b>
<b>Grand Mal and Other Epileptic Conditions</b>	<b>8</b>	<b>3.3%</b>	<b>8</b>	<b>3.2%</b>
<b>Dehydration</b>	<b>9</b>	<b>1.8%</b>	<b>10</b>	<b>1.4%</b>
<b>Gastroenteritis</b>	<b>10</b>	<b>1.7%</b>		<b>**</b>
<b>Convulsions</b>			<b>9</b>	<b>1.9%</b>
<b>All Other Ambulatory Care Sensitive Conditions</b>		<b>36.1%</b>		<b>28.8%</b>
<b>Preventable Hospitalizations as a % of All Hospitalizations</b>		<b><u>19.9%</u></b>		<b><u>20.1%</u></b>

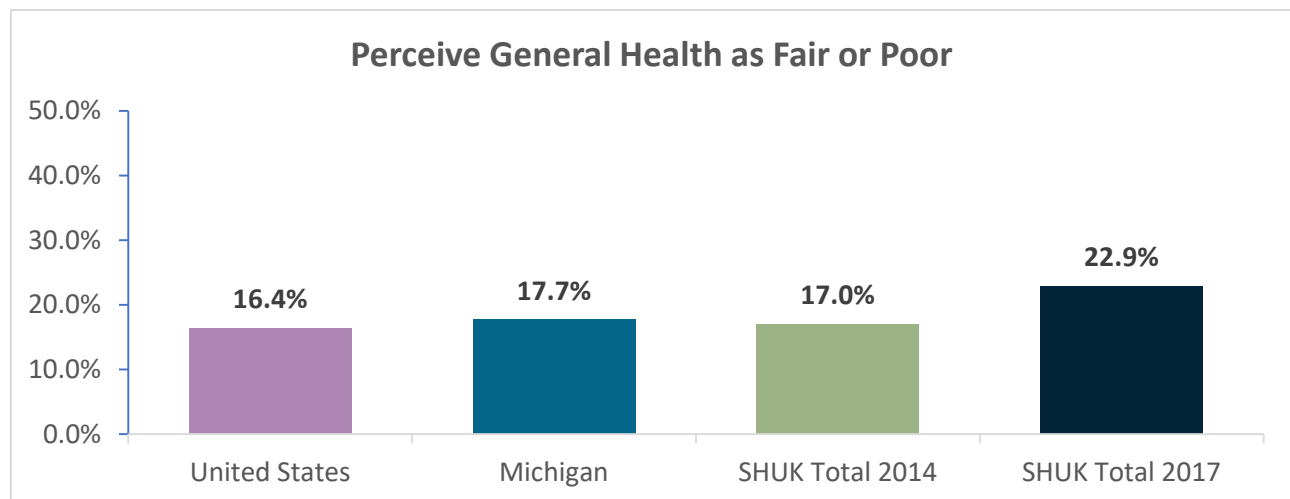
Source: MDHHS Resident Inpatient Files, Division of Vital Records. Montcalm County and MI, 2014.  
 Note: \*\* = data do not meet standards of reliability and precision OR have a zero value.

# General Health Status

- Q More than one in five (22.9%) SHUK area adults reports fair or poor general health; this proportion increases to 30.7% for underserved adults.
- Q The proportion of area adults reporting fair or poor health has risen since the last CHNA and is higher than the state or national proportion.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q1.2/SHUK Underserved Resident Survey, 2017, Q1: Would you say your general health is excellent, very good, good, fair, or poor?

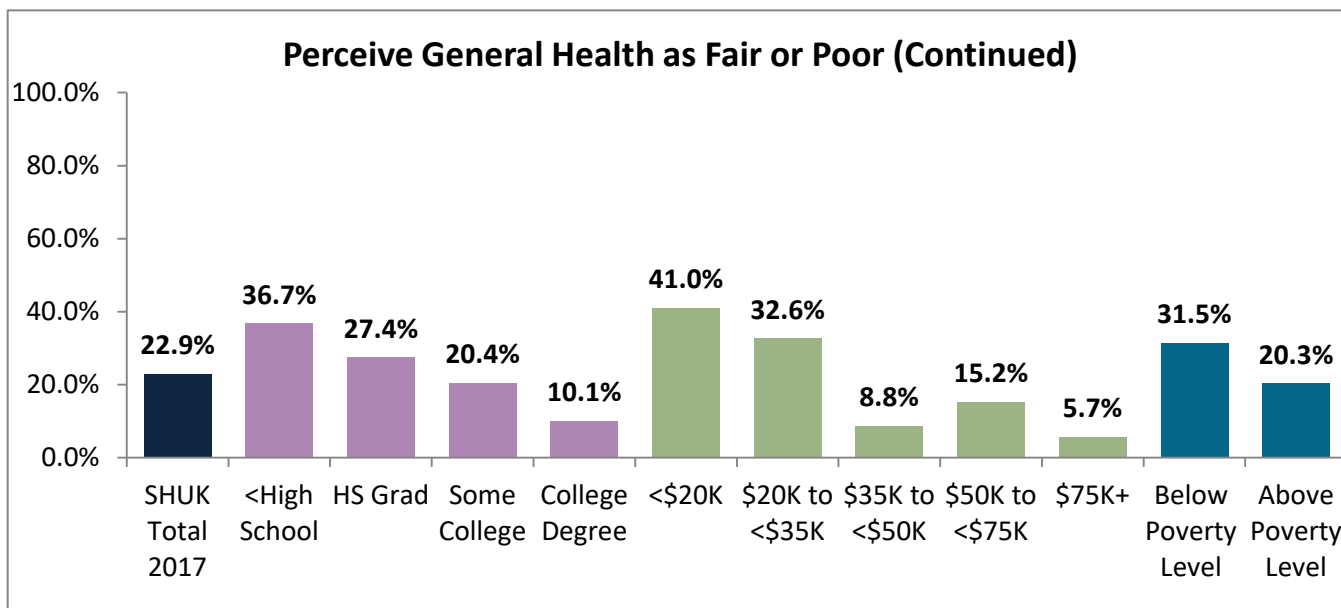
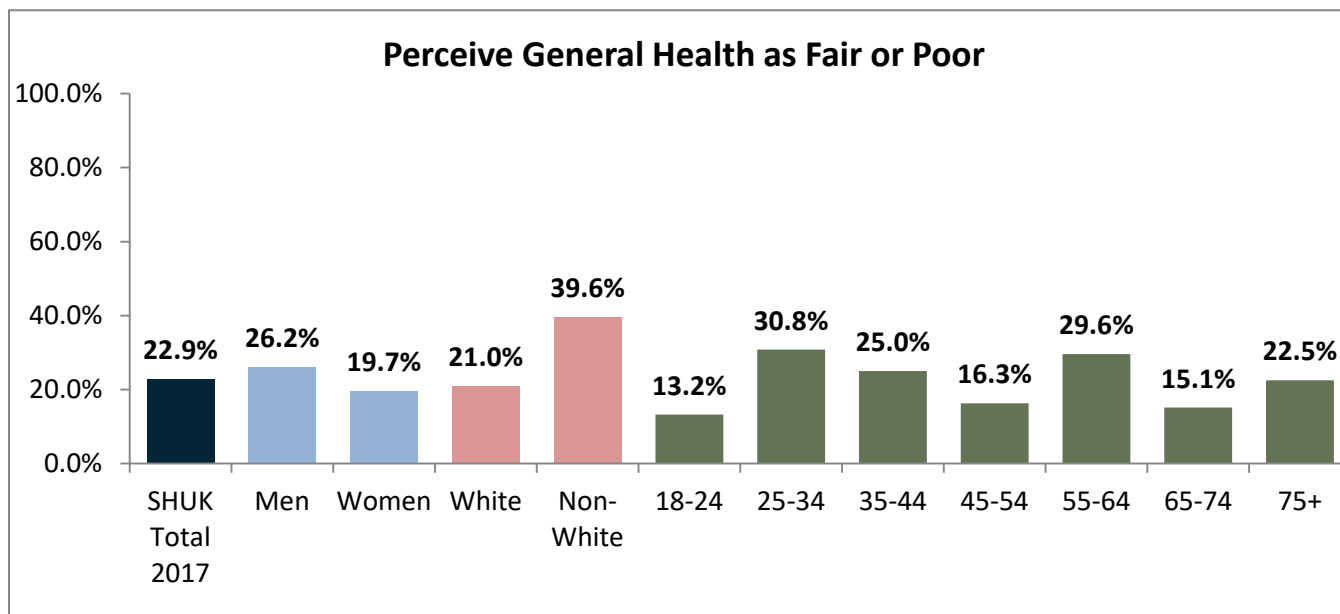


Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016; Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFs, 2015; SHUK Behavioral Risk Factor Survey, 2014, 2017, Q1.2. Note: the proportion of adults who reported that their health, in general, was either fair or poor.



# General Health Status (Continued)

- Q The proportion of adults who perceive their health as fair or poor is inversely related to level of education and household income.
- Q Men and non-White adults are more likely to report their general health as fair or poor compared to women and White adults, respectively.



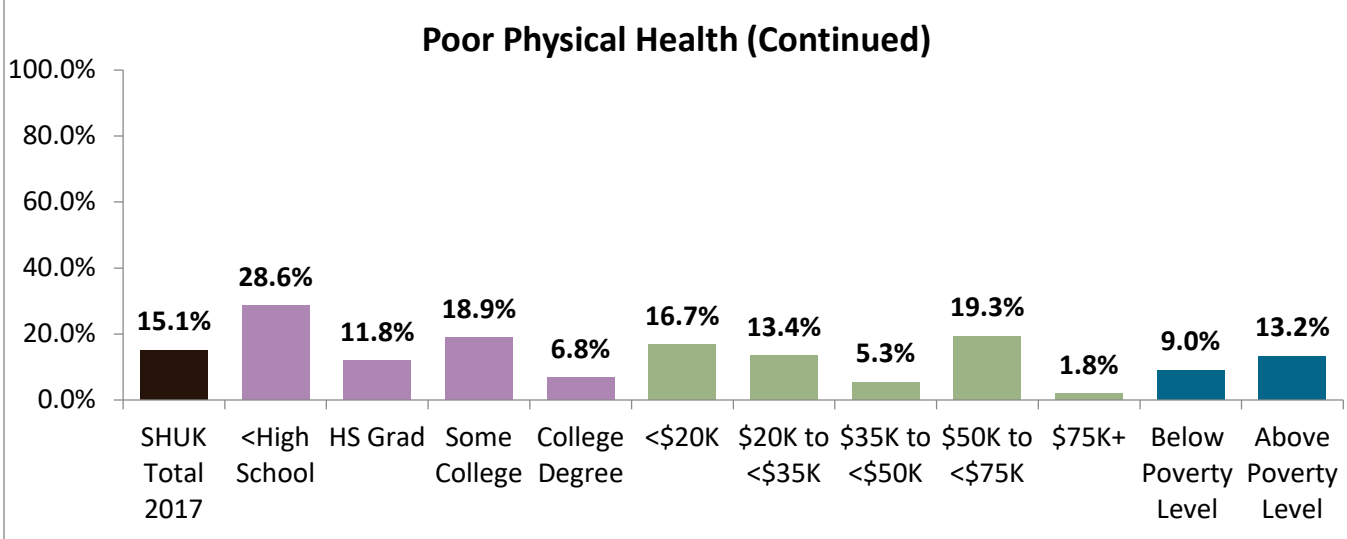
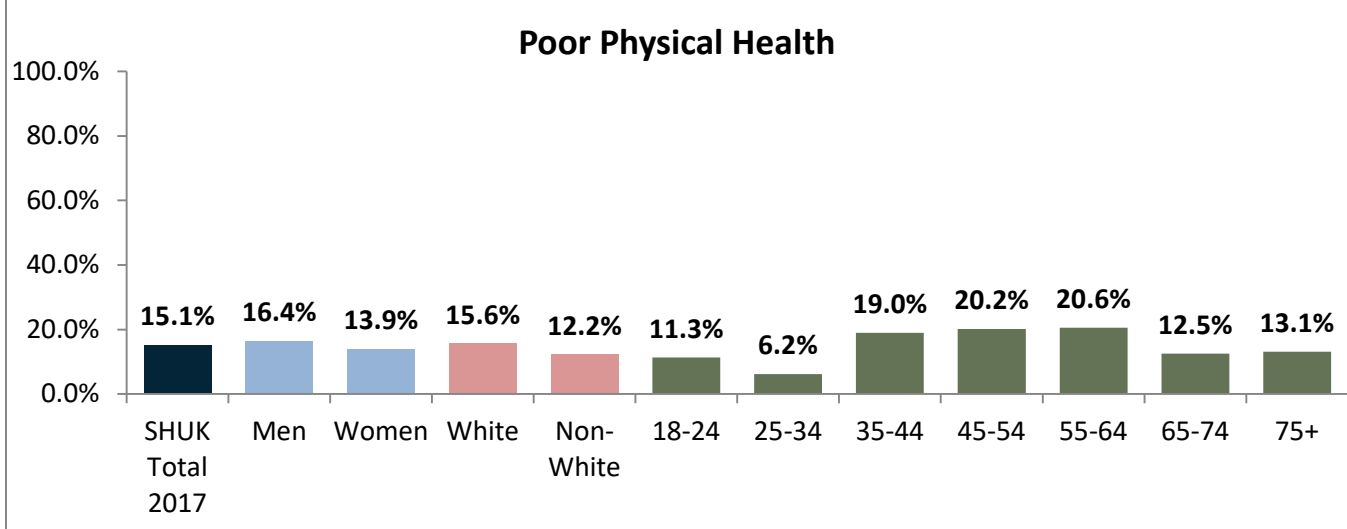
Source: SHUK Behavioral Risk Factor Survey, 2017, Q1.2.





# Physical Health Status

- Q Among SHUK area adults, 15.1% have poor physical health, which means they experienced fourteen or more days of poor physical health, which includes physical illness and injury, during the past 30 days.
- Q The prevalence of poor physical health is lowest among adults age 18-34, those with a college degree, and/or those with household incomes of \$75K or more.

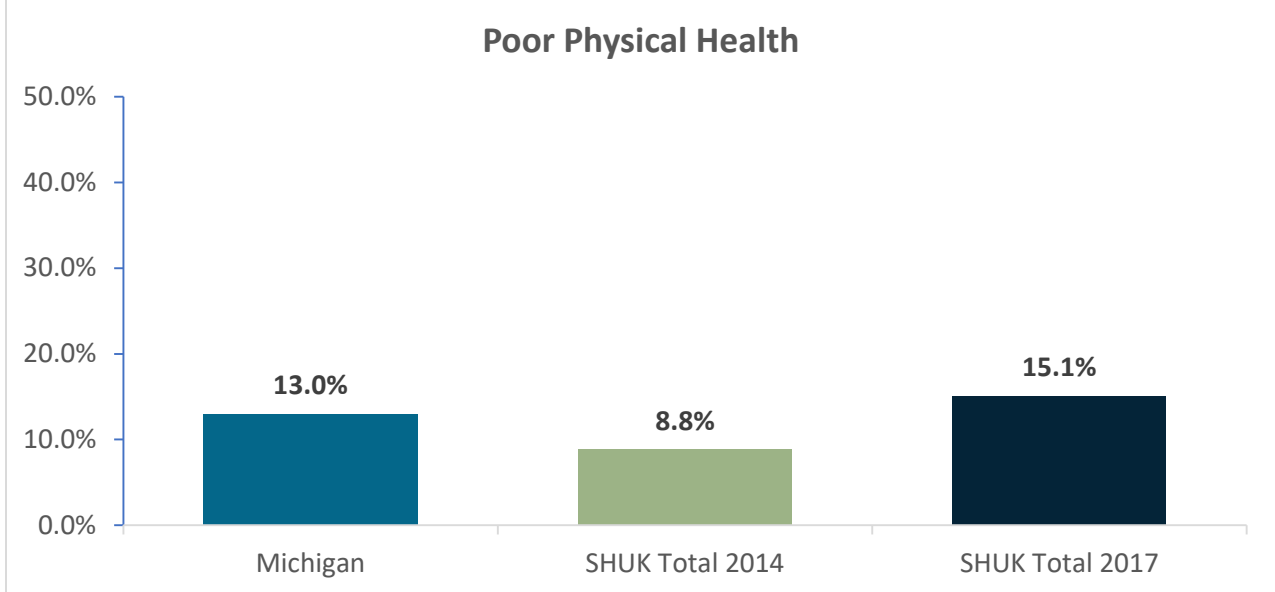


Source: SHUK Behavioral Risk Factor Survey, 2017, Q2.1: Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good? (n=586). Note: The proportion of adults who reported 14 or more days, out of the previous 30, on which their physical health was not good, which includes physical illness and injury.



# Physical Health Status (Continued)

Q The proportion of area adults who have poor physical health is much higher now compared to the last CHNA conducted in 2014 and also higher than the state proportion.

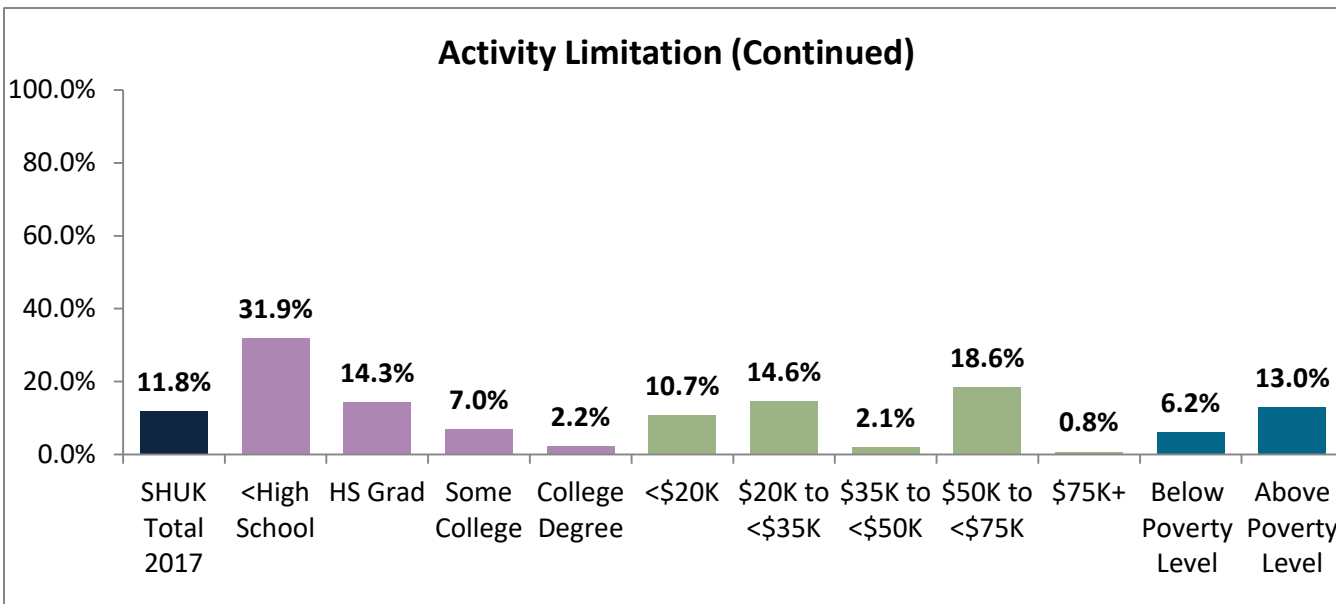
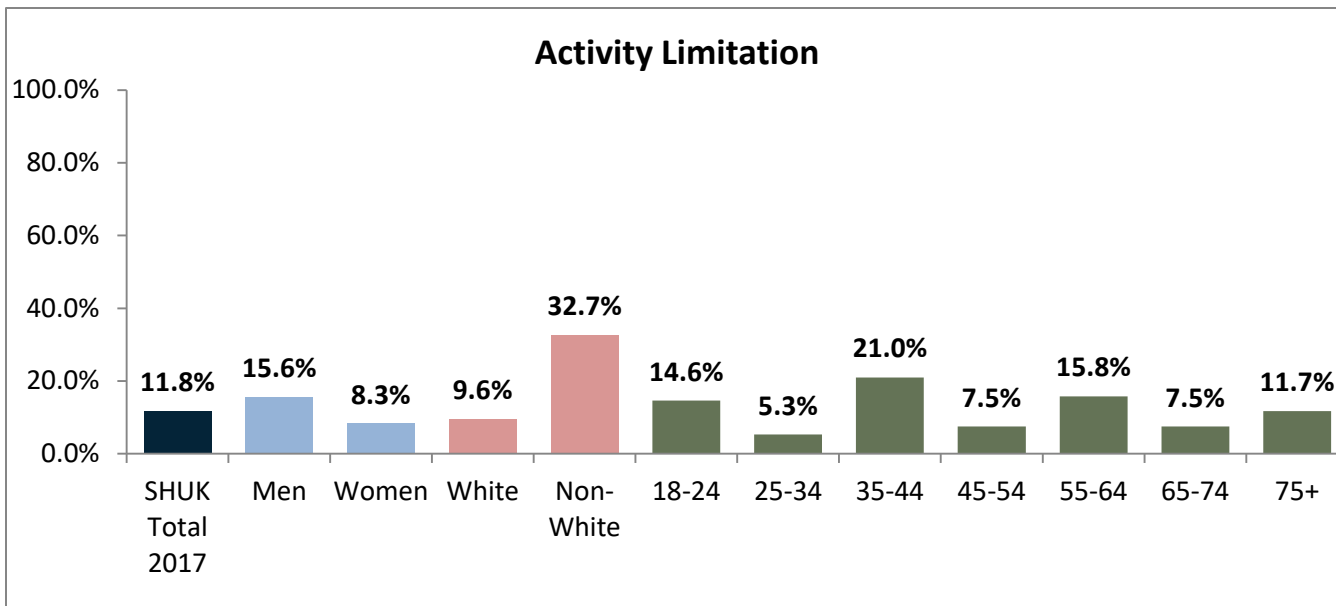


Source: Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFS, 2015; SHUK Behavioral Risk Factor Survey, 2014, 2017, Q2.1.  
Note: The proportion of adults who reported 14 or more days, out of the previous 30, on which their physical health was not good, which includes physical illness and injury.



# Activity Limitation

- Q Overall, 11.8% of area adults are prevented from doing their usual activities (e.g., self-care, work, recreation) fourteen or more days per month due to poor physical or mental health.
- Q The largest proportions of adults who experience activity limitation are found among non-White adults and/or those with less than a high school diploma.



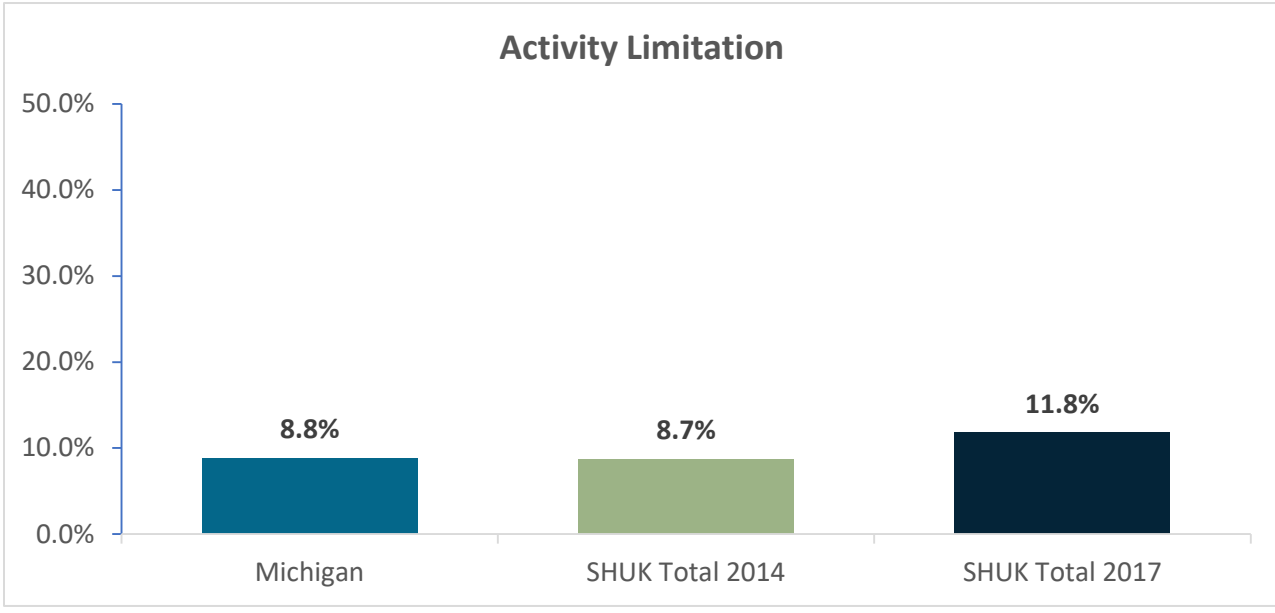
Source: SHUK Behavioral Risk Factor Survey, 2017, Q2.3: During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation? (n=585)

Note: The proportion of adults who reported 14 or more days, out of the previous 30, on which either poor physical health or poor mental health kept them from doing their usual activities, such as self-care, work, and recreation.



# Activity Limitation (Continued)

Q The proportion of area adults whose activity is limited has increased since the last CHNA and is higher than the state proportion.



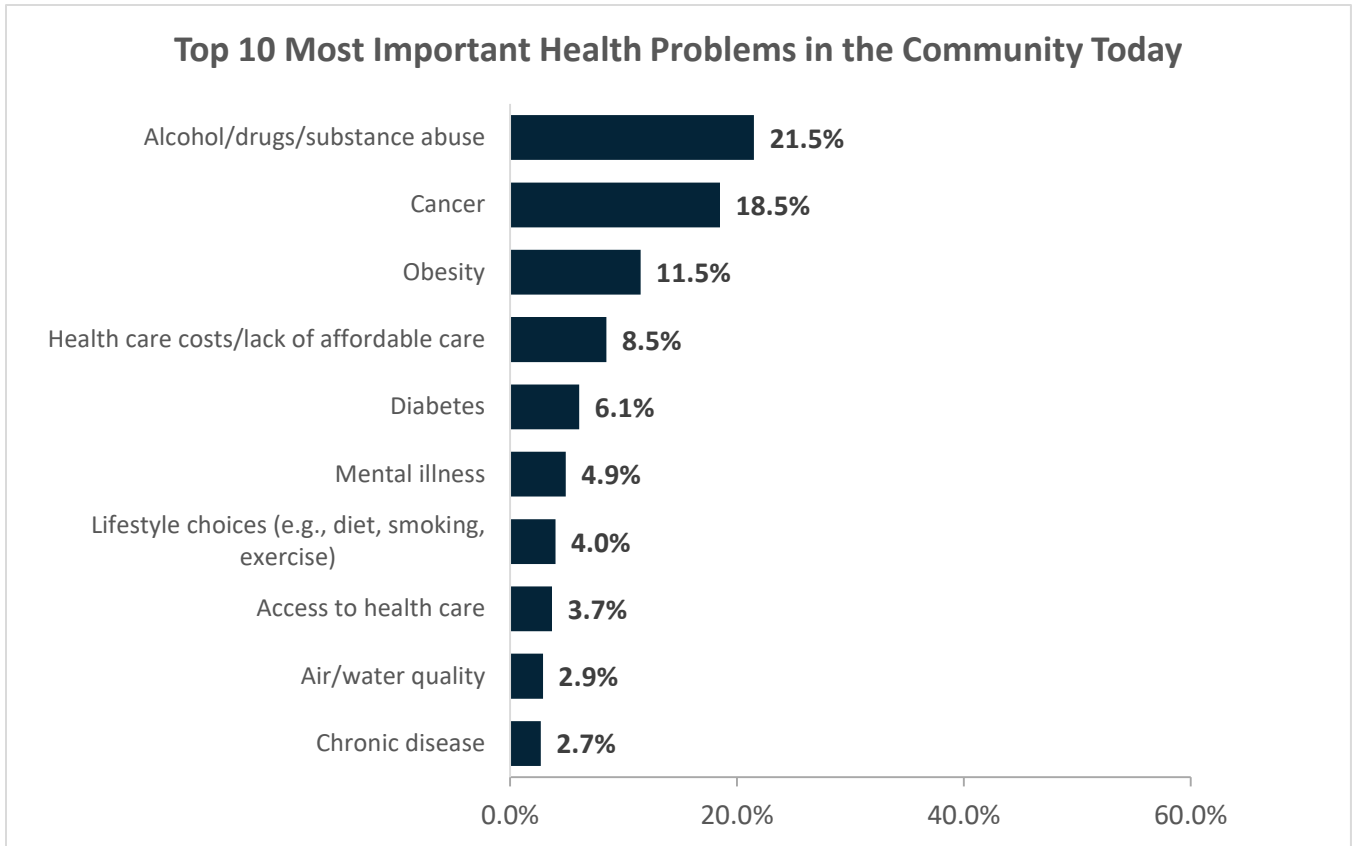
Source: Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFs, 2015; SHUK Behavioral Risk Factor Survey, 2014, 2017, Q2.3.

Note: The proportion of adults who reported 14 or more days, out of the previous 30, on which either poor physical health or poor mental health kept them from doing their usual activities, such as self-care, work, and recreation.



# Most Important Health Problems in the Community

Q Area adults consider substance abuse to be the top health problem in the SHUK area, followed by cancer, obesity, the cost of health care, and diabetes.

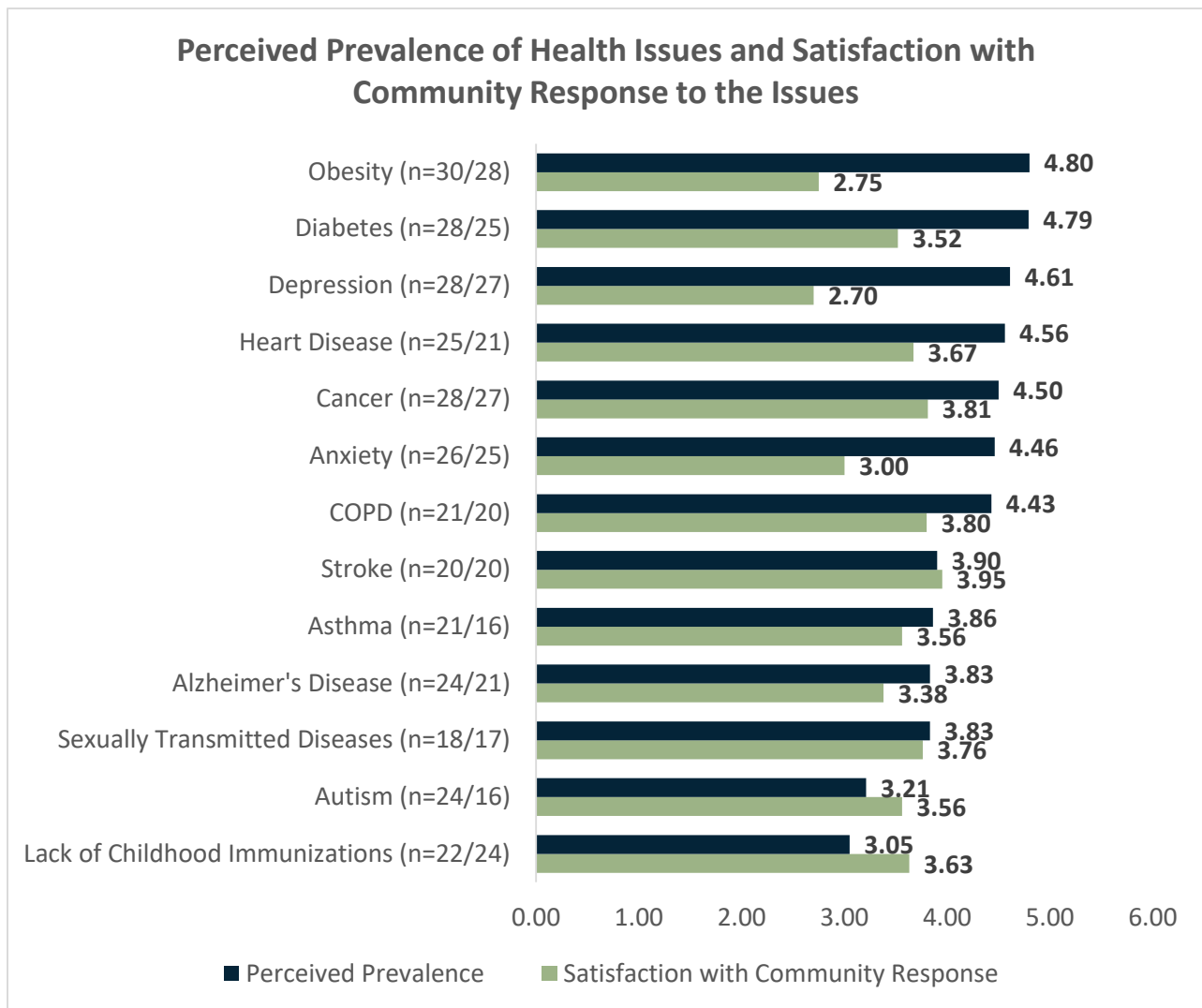


Source: SHUK Behavioral Risk Factor Survey, 2017, Q1.1: What do you feel is the most important health problem in your community today? (n=539)



# Most Prevalent Health Issues in the Community

- Q Like 2014, Key Informants view obesity and diabetes as the top two health issues in terms of prevalence in the SHUK area.
- Q Depression, heart disease, cancer, anxiety, and COPD are also perceived to be prevalent.
- Q More concerning is that Key Informants are least satisfied with the community's response to several of the issues perceived to be most prevalent, most notably obesity, depression, and anxiety.



Source: SHUK Key Informant Online Survey, 2017, Q2: Please tell us how prevalent the following health issues are in your community. Q2a: How satisfied are you with the community's response to these issues?

Note: Prevalence scale: 1=not at all prevalent, 2=not very prevalent, 3=slightly prevalent, 4=somewhat prevalent, 5=very prevalent; Satisfaction scale: 1=not at all satisfied, 2=not very satisfied, 3=slightly satisfied, 4=somewhat satisfied, 5=very satisfied.



# Most Prevalent Health Issues in the Community (Continued)

Q When asked to comment on any additional health issues that they deem prevalent in the community, Key Informants mentioned several areas related to mental illness (e.g., treatment, stigma, having meaning and purpose in life), child issues (vaccinations, head lice, child development screening criteria), and poverty (as well as access to food), among others:

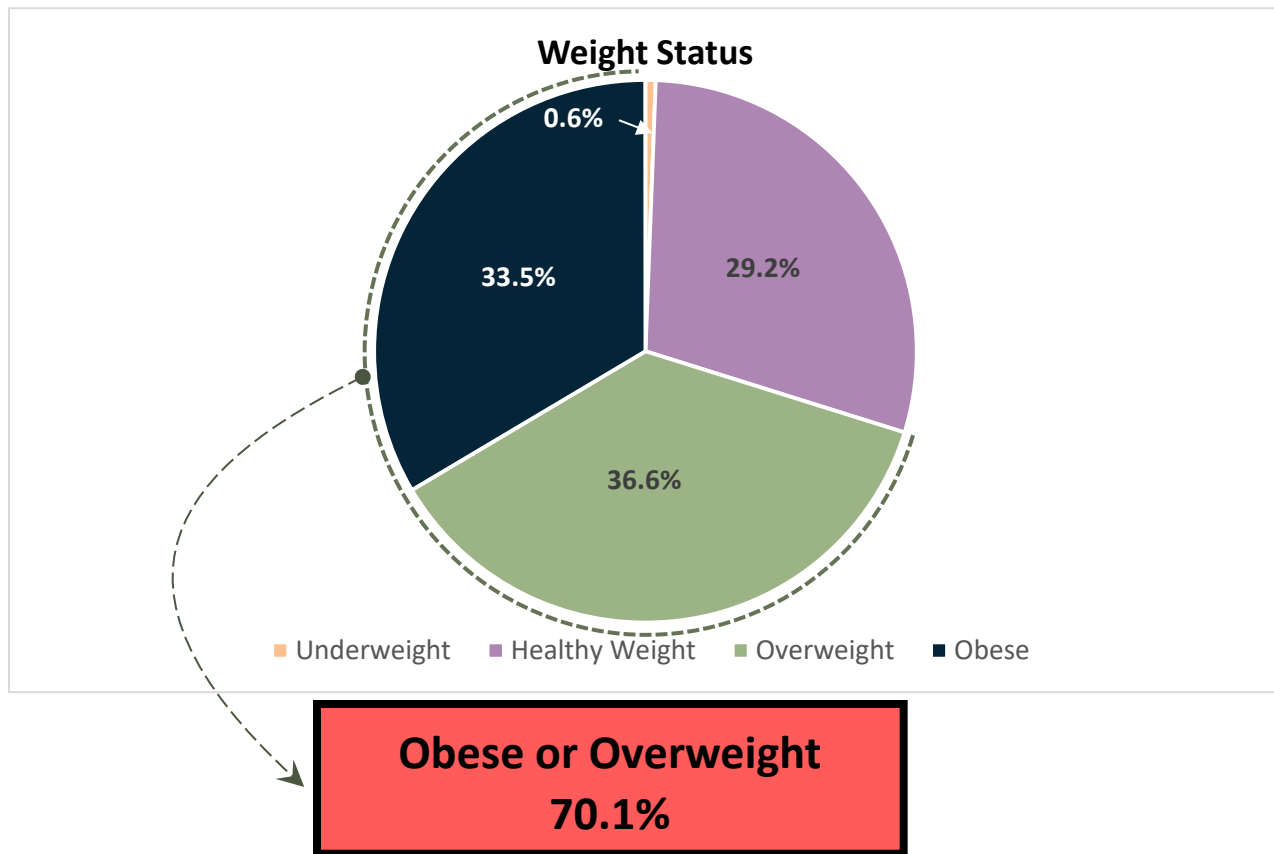
- ✓ Poverty (2)
- ✓ Access to food
- ✓ Alzheimer's/dementia
- ✓ Child Development (e.g., access to information regarding typical development and what to look for)
- ✓ Chronic pain
- ✓ Forced vaccination
- ✓ Head lice
- ✓ Lack of access to health care
- ✓ Mental health services
- ✓ Mental health stigma with the working poor and middle class
- ✓ Other Mental health issues
- ✓ Related to health is Meaning and Purpose that individuals identify for their lives. Without a sense of purpose, high risk behaviors are more of an option. With a sense of meaning and purpose, choices are more likely to reinforce these values to realize success in one's life.
- ✓ Sleep apnea/sleep disorder

Source: SHUK Key Informant Online Survey, 2017, Q2b: What additional health issues are prevalent in your community, if any? (n=17)



# Weight Status

Q One-third (33.5%) of area adults are obese per their BMI score, while an additional 36.6% are overweight; all told, 70.1% area adults are either overweight or obese.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q12.9: About how much do you weigh without shoes? Q12.10: About how tall are you without shoes? (n=559)

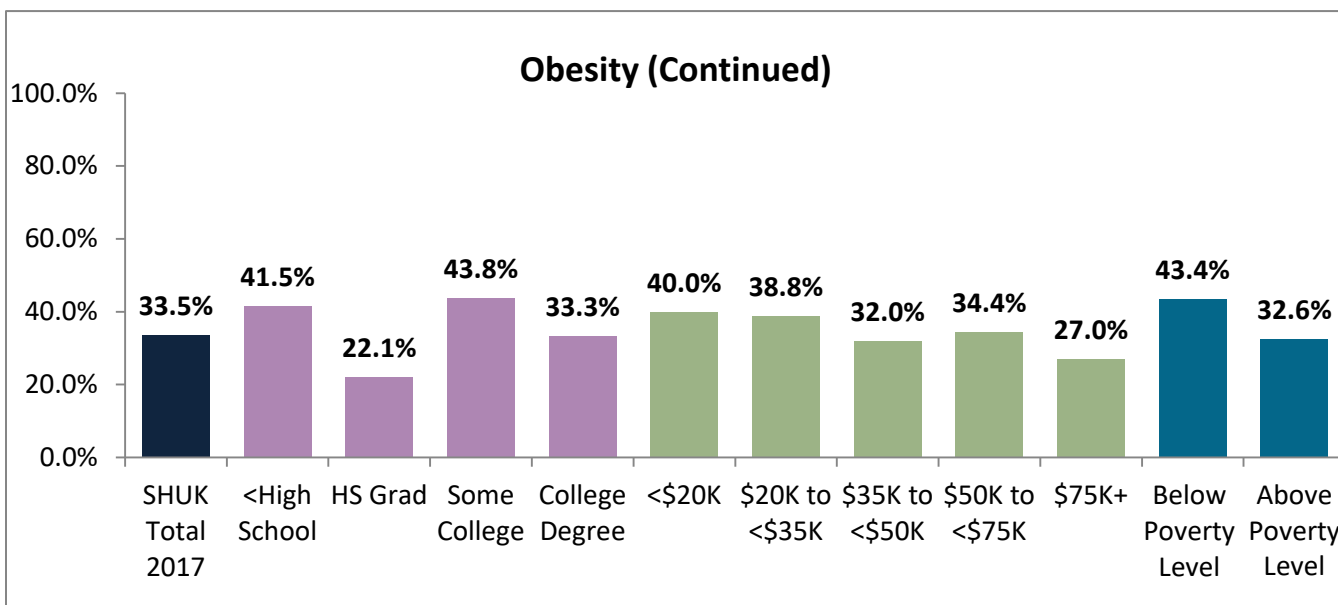
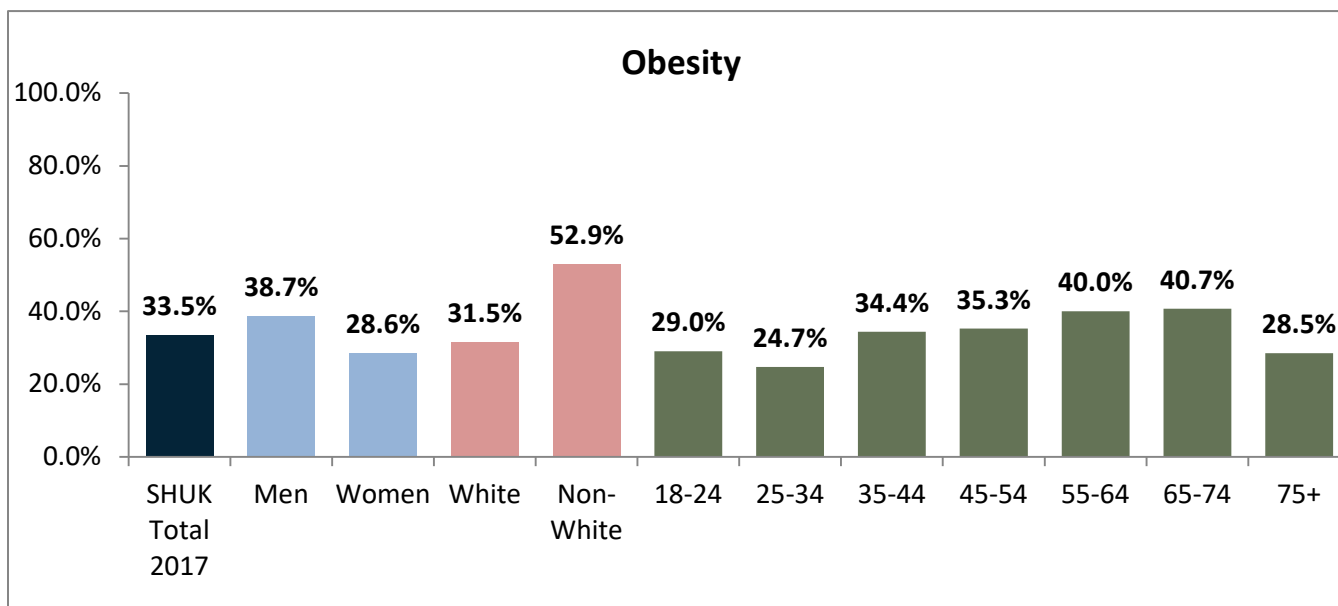
Note: BMI, body mass index, is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)<sup>2</sup>]. Weight and height were self-reported. Pregnant women were excluded. Obese = the proportion of adults whose BMI was greater than or equal to 30.0; overweight = the proportion of adults whose BMI was greater than or equal to 25.0, but less than 30.0; healthy weight = the proportion of adults whose BMI was greater than or equal to 18.5, but less than 25.0; underweight = the proportion of adults whose BMI was less than 18.5.





# Weight Status (Continued)

- Q Obesity is more common in adults in lower socioeconomic groups and more common among adults between the ages of 35-74.
- Q Obesity is more common in men than women, and more common in non-White adults compared to White adults.

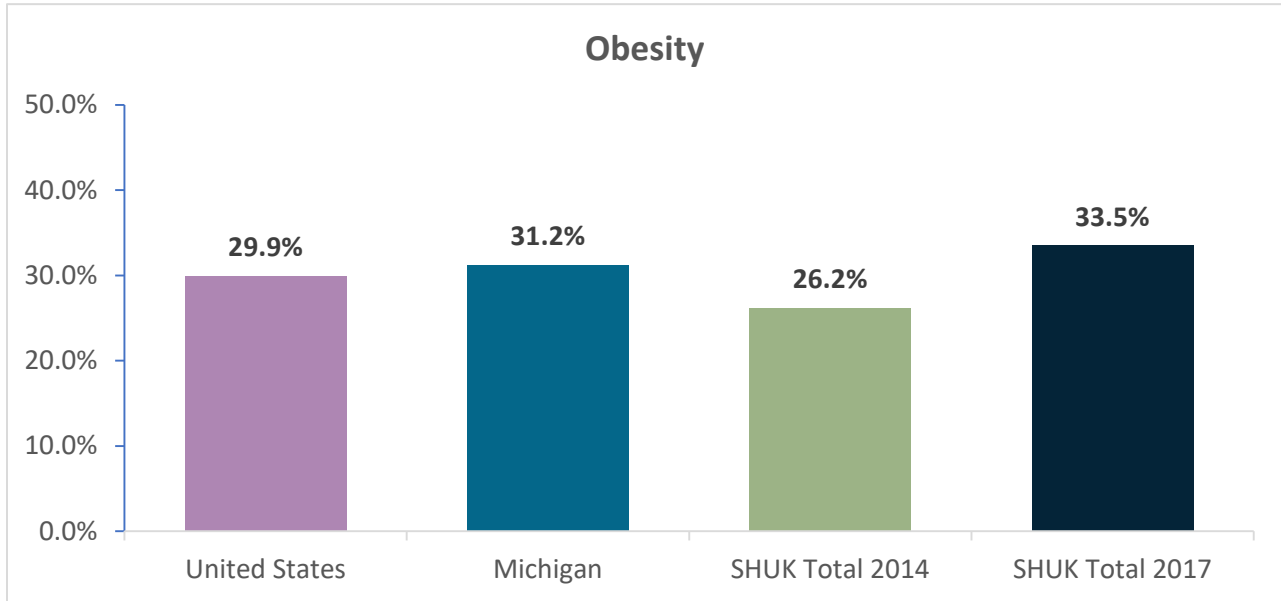


Source: SHUK Behavioral Risk Factor Survey, 2017. (n=559)  
 Note: the proportion of adults whose BMI was greater than or equal to 30.0.



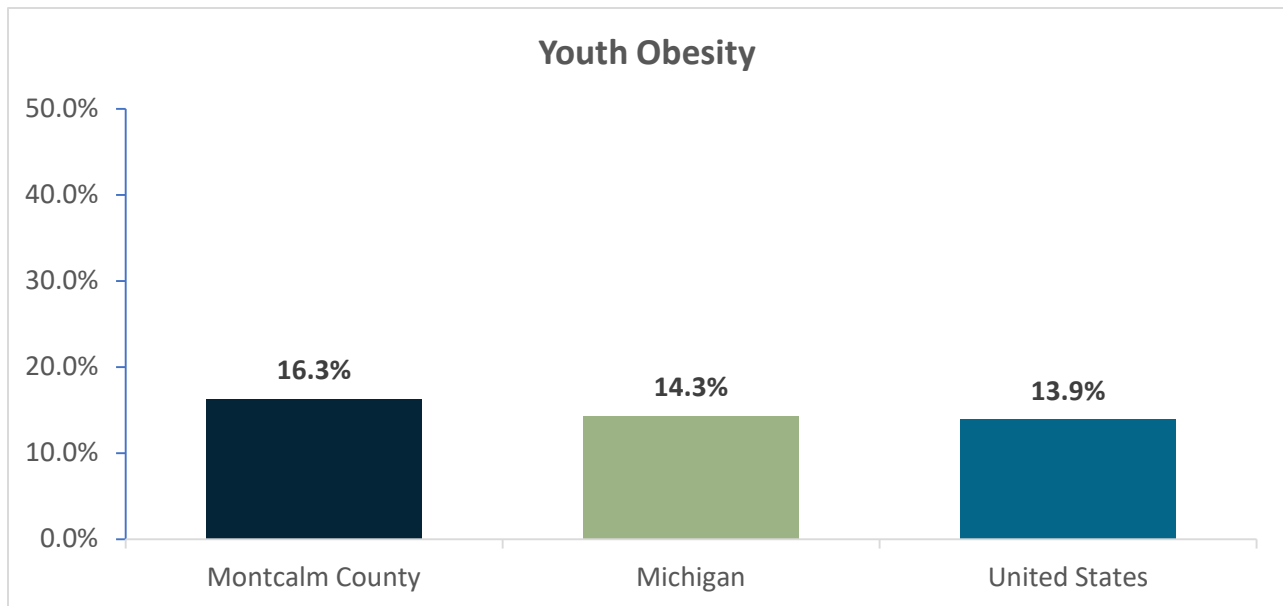
# Weight Status (Continued)

- Q The proportion of obese adults and youth in the SHUK area is greater than the proportions across Michigan or the U.S.
- Q The proportion of obese adults has increased since the last CHNA.



Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016; Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFSS, 2015; SHUK Behavioral Risk Factor Survey, 2014, 2017.

Note: the proportion of adults whose BMI was greater than or equal to 30.0.

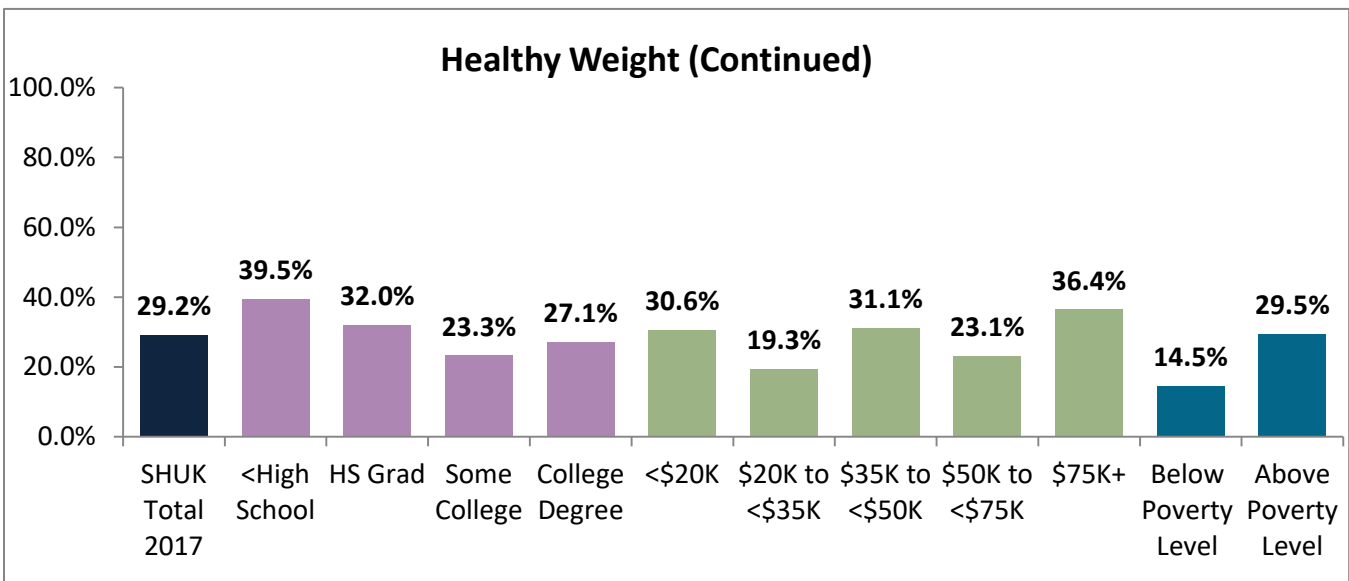
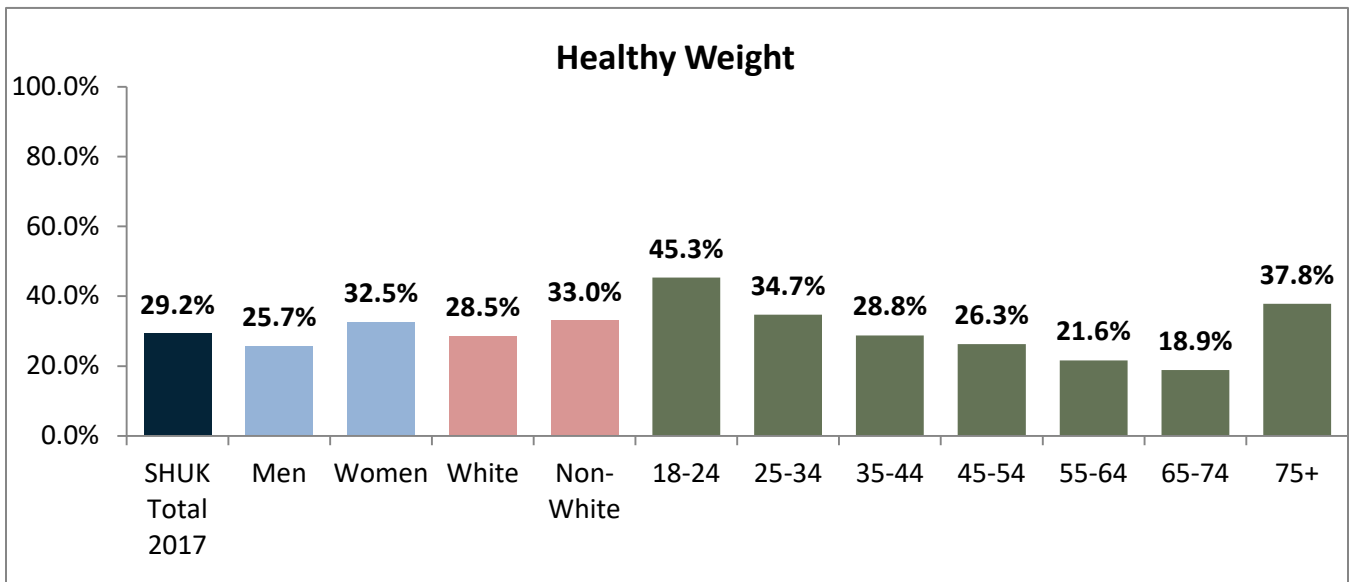


Source: For Montcalm County: Michigan Profile for Healthy Youth (MiPhy), 2015; For MI and US: Youth Behavior Risk Survey (YRBS), 2015.



# Weight Status (Continued)

- Q Almost three in ten (29.2%) area adults are at a healthy weight per their BMI.
- Q More women are at a healthy weight compared to men, and the youngest (18-34) and oldest (75+) adults are more often at a healthy weight compared to adults aged 35-74.



Source: SHUK Behavioral Risk Factor Survey, 2017, (n=559).  
 Note: the proportion of adults whose BMI was greater than or equal to 18.5, but less than 25.0.



# Weight Status (Continued)

Q Key Stakeholders and Key Informants consider obesity to be one of the most pressing or concerning health issues in the SHUK area, not only because it's highly prevalent, but more importantly: (1) it is partly a by-product of an environment because of lack of affordable healthy food and devastating poverty, (2) it's highly comorbid with other conditions, or negative outcomes, such as diabetes, heart disease and high blood pressure, and (3) there is a lack of resources, especially education on nutrition and how to cook healthy meals that taste good.

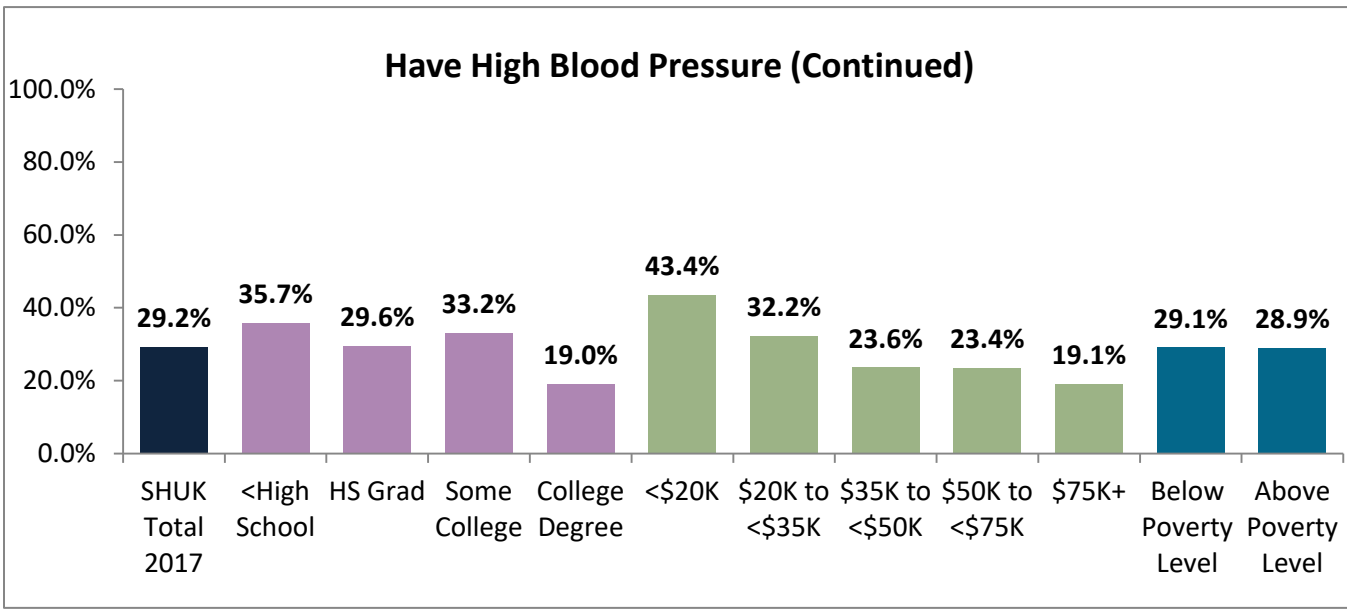
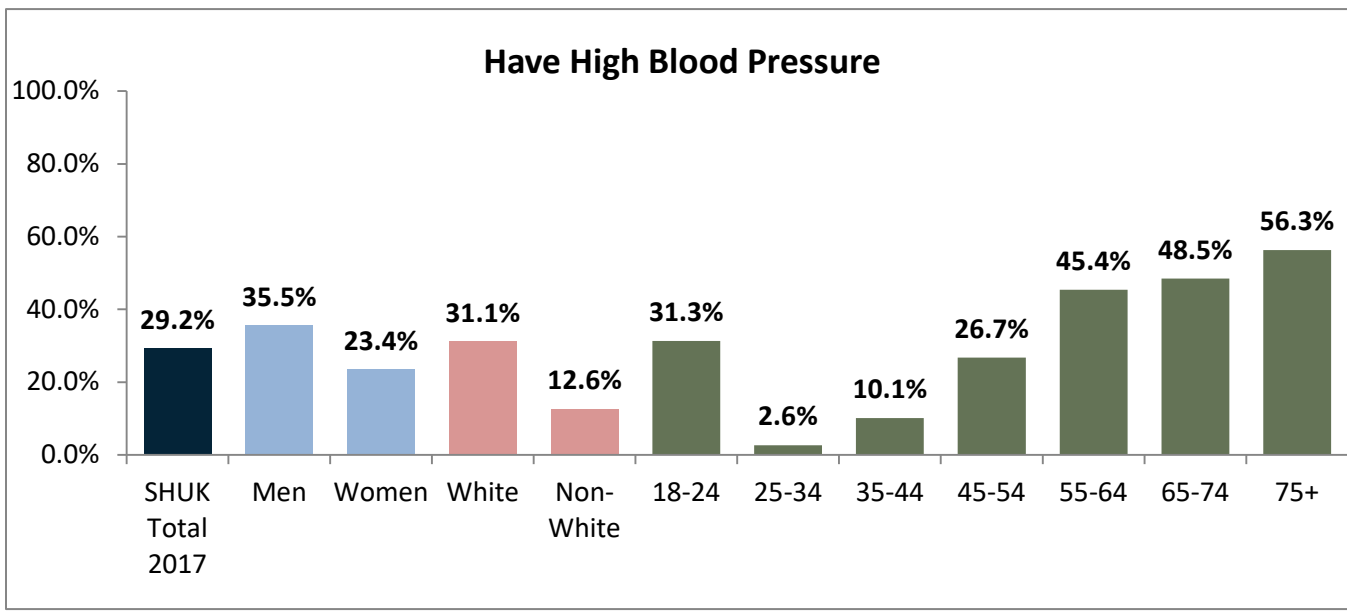
<p><b>Product of environment</b></p>	<p><b>Poverty, not enough educational opportunities</b> for people to learn how to eat or cook. – <i>Key Informant</i></p> <p>I think it comes down to <b>poverty</b> and a <b>lack of education</b>. If you are in a third generation of poverty, your world is going to consist of filling immediate needs. It is <b>cheaper and easier to go to McDonalds for fries than it is to buy a bag of potatoes, salt and butter to make something healthier</b>. – <i>Key Informant</i></p> <p>I think probably the biggest health issues that I see that really lead to a lot of health issues down the road are <b>obesity</b> and smoking. <b>Our population tends to be quite overweight with little access to good, healthy foods</b>, and we have one large town in the county, and the rest of it is very rural, and so the <b>access to just getting to even a grocery store is sometimes a challenge</b>. – <i>Key Stakeholder</i></p>
<p><b>Co-morbidity</b></p>	<p>Number of overweight and obese adults <b>leading to increased chronic diseases</b>. – <i>Key Informant</i></p> <p><b>Hypertension, diabetes, hyperlipidemia, heart disease, sleep apnea, atrial fibrillation</b>. – <i>Key Informant</i></p>
<p><b>Lack of services/resources</b></p>	<p><b>Lack of education regarding nutrition and calorie intake</b>. – <i>Key Stakeholder</i></p> <p>Lack of awareness, <b>lack of resources</b>. – <i>Key Informant</i></p>

Source: SHUK Key Stakeholder Interviews, 2017, Q1: What do you feel are the two or three most pressing or concerning health issues facing residents in your community? (n=4); SHUK Key Informant Online Survey, 2107, Q1/Q1a: To begin, what are one or two most pressing health issues or concerns in your community? Why do you think it is a problem in the community? Please be as detailed as possible. (n=34).



# Hypertension

- Q Three in ten (29.2%) area adults have high blood pressure, and not surprisingly, it is more prevalent with age, and less prevalent with income; 43.4% of adults with incomes less than \$20K have high blood pressure compared to 19.1% for adults with incomes of \$75K or more.
- Q It is also more common in men than women, and more common in White adults than non-White adults.

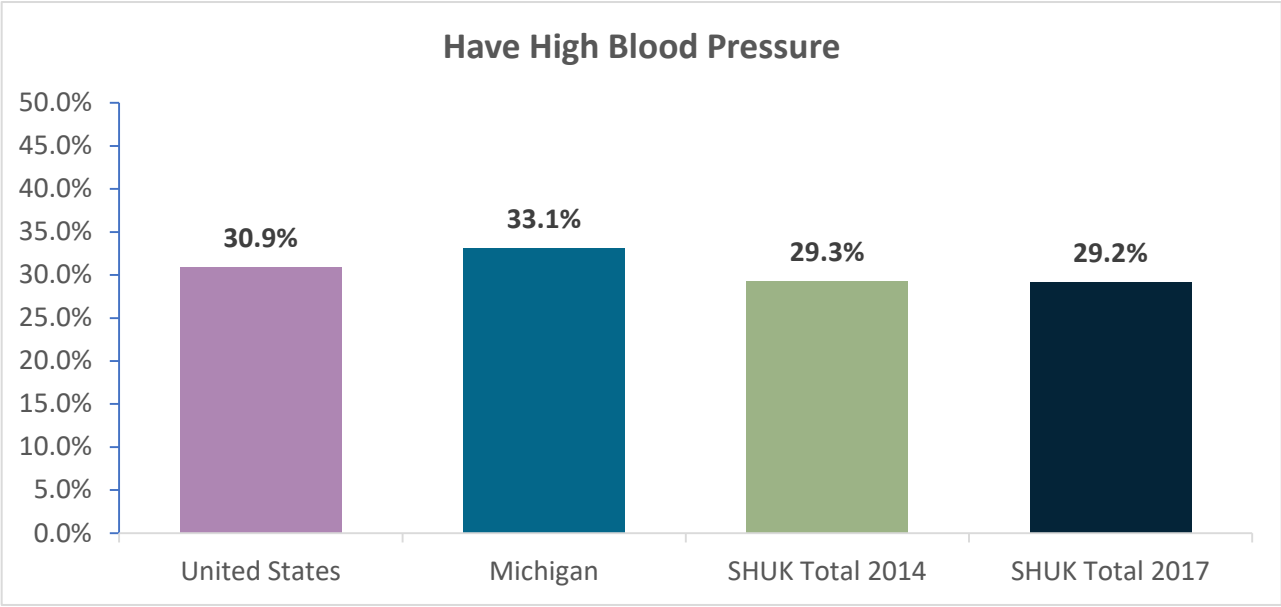


Source: SHUK Behavioral Risk Factor Survey, 2017, Q6.1: Have you EVER been told by a doctor, nurse, or other health professional that you have high blood pressure? (n=587).  
 Note: adults who reported they were told by a health care professional that they had high blood pressure. Does not include women who were told they had high blood pressure only during pregnancy.



# Hypertension (Continued)

Q The proportion of adults with high blood pressure in the SHUK area has remained steady since the last CHNA and is lower than state or national proportions.

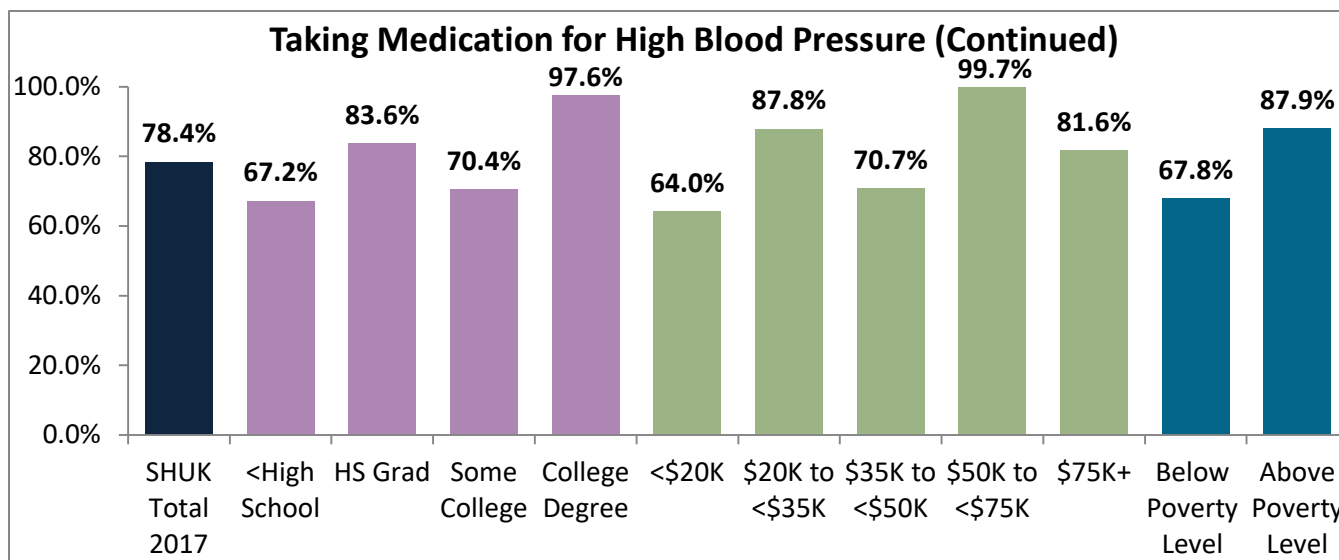
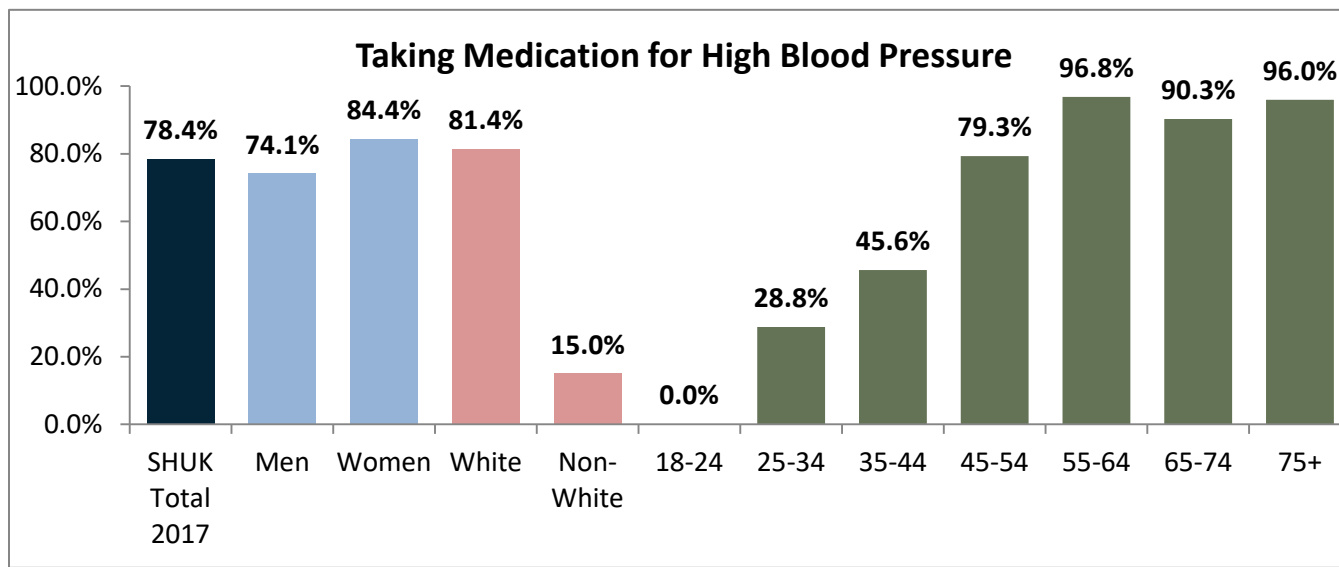


Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016; Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFSS, 2015; SHUK Behavioral Risk Factor Survey, 2014, 2017.



# Hypertension (Continued)

- Q Among area adults who have high blood pressure, almost eight in ten (78.4%) are taking medication for their condition but is down from the last CHNA (84.2%).
- Q Those adults least likely to take medication for the HBP comes from groups that are men, non-White, under age 45, have no high school diploma, and have incomes below \$20K.

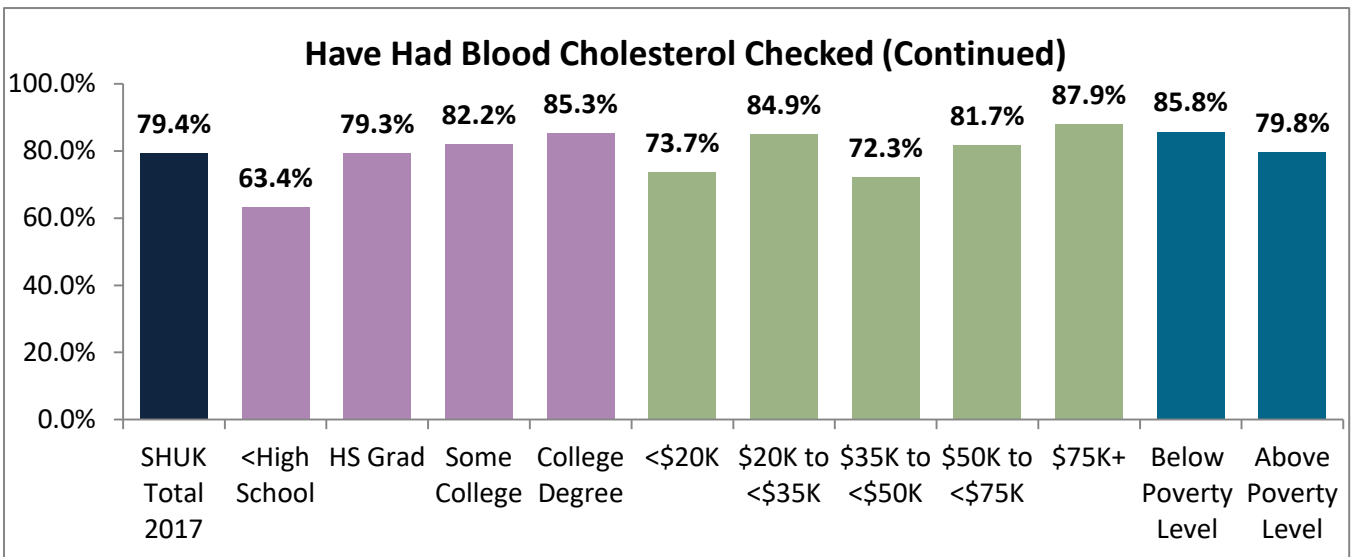
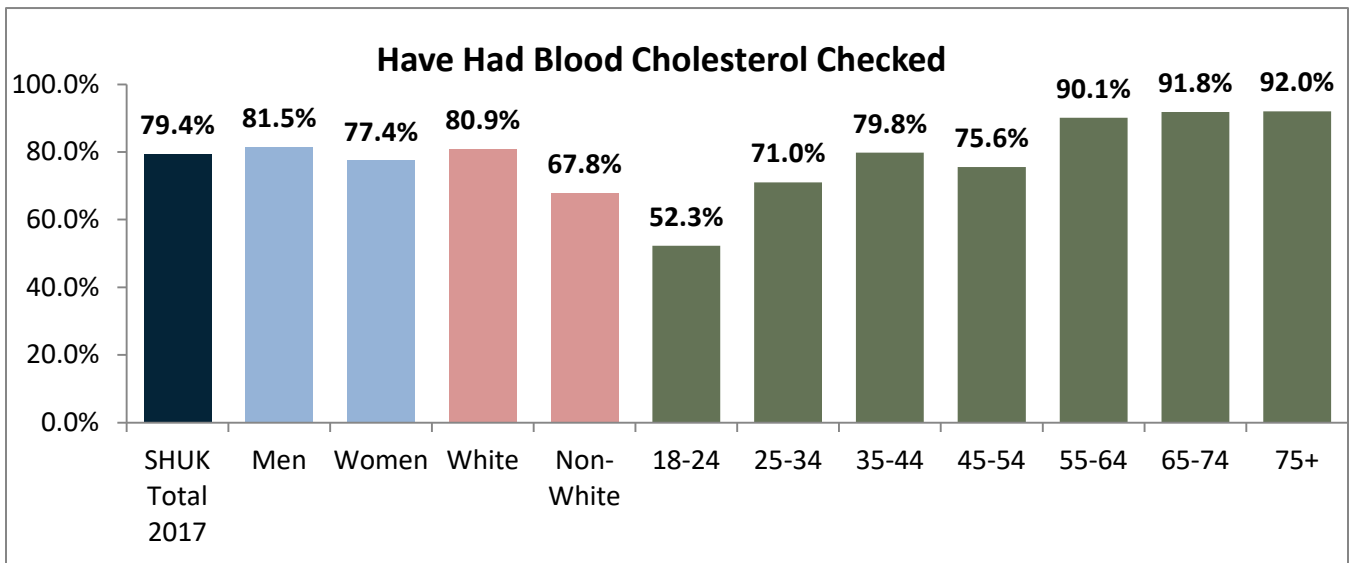


Source: SHUK Behavioral Risk Factor Survey, 2017, Q6.2: Are you currently taking medicine for your high blood pressure? (n=250).  
 Note: adults who reported they were told by a health care professional that they had high blood pressure.



# Cholesterol

- Q Eight in ten (79.4%) SHUK area adults have had their cholesterol checked and the likelihood of this preventive practice occurring is directly related to education and age.
- Q White adults are more likely to have had their cholesterol checked than non-White adults.



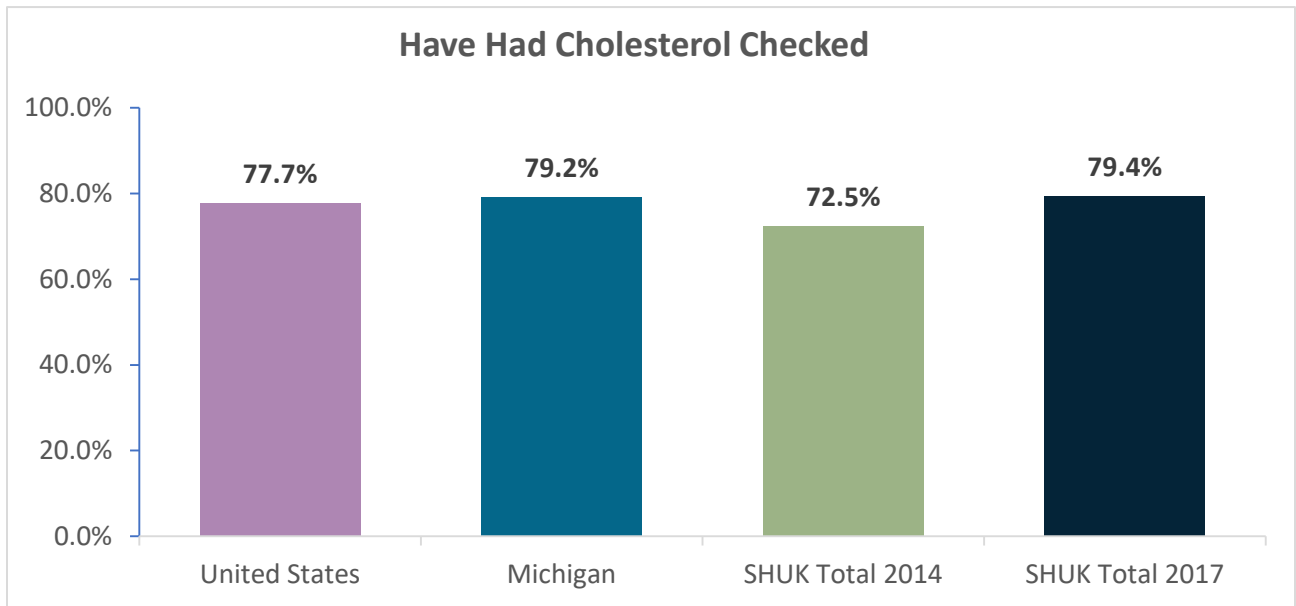
Source: SHUK Behavioral Risk Factor Survey, 2017, Q7.1: Blood cholesterol is a fatty substance found in the blood. Have you EVER had your blood cholesterol checked? (n=583).





# Cholesterol (Continued)

- Q More SHUK area adults have had their cholesterol checked compared to adults across the state or the nation.
- Q The proportion of adults who have their cholesterol checked has increased since the last CHNA.

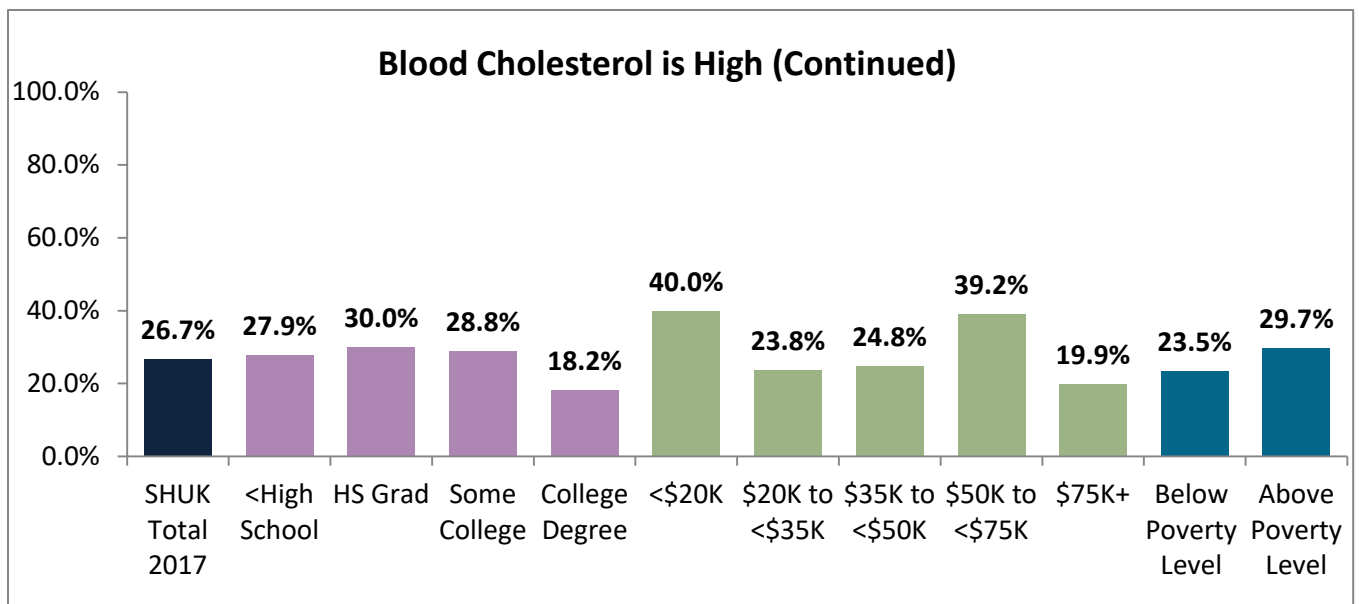
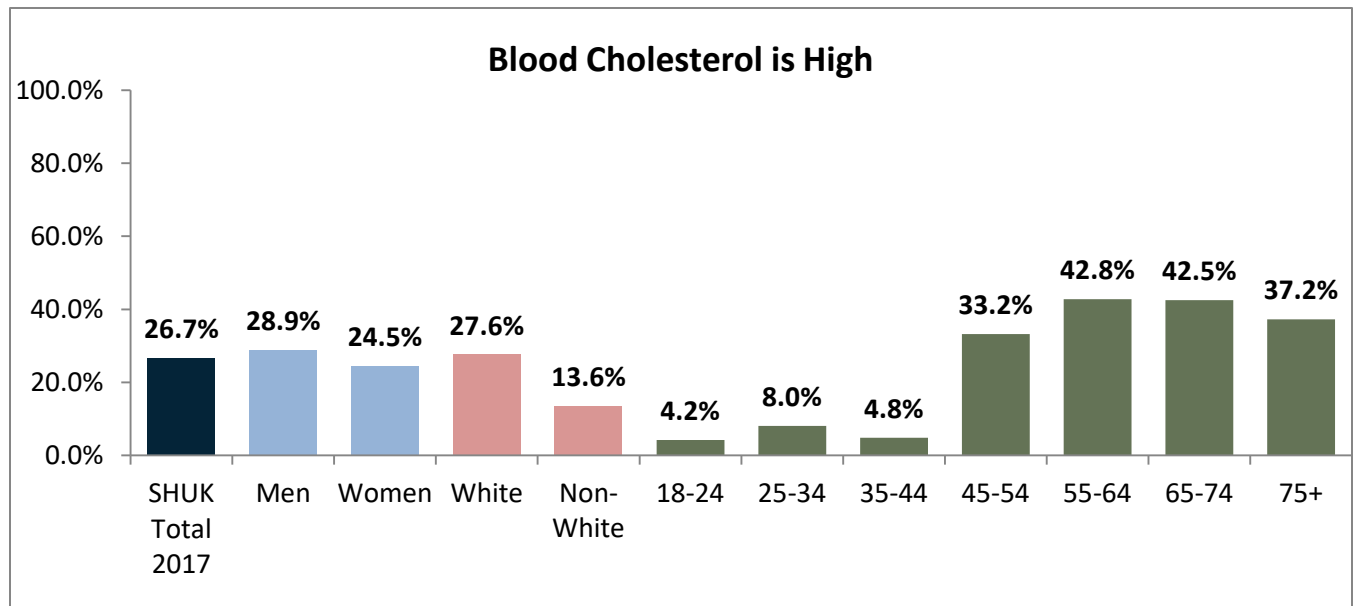


Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016; Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFS, 2015; SHUK Behavioral Risk Factor Survey, 2014, 2017.



# Cholesterol (Continued)

- Q More than one-fourth (26.7%) of SHUK area adults who have had their cholesterol checked have been told their blood cholesterol is high.
- Q Non-White adults are less likely to have high blood cholesterol than White adults, and adults under age 45 are less likely to have high cholesterol than older adults.



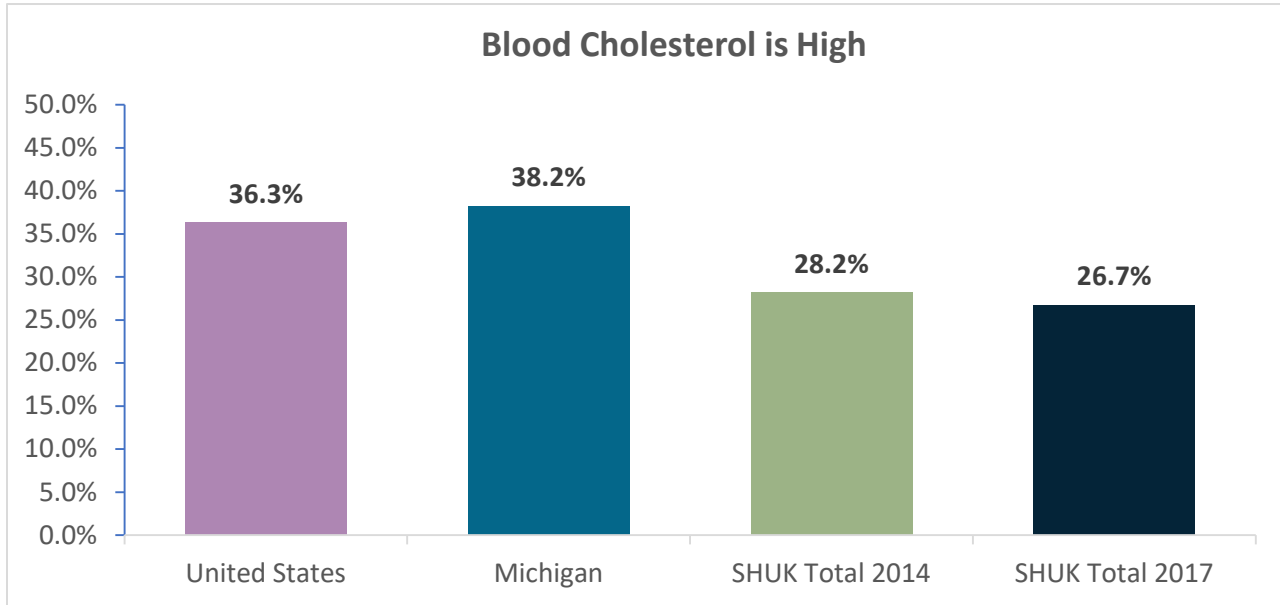
Source: SHUK Behavioral Risk Factor Survey, 2017, Q7.2: Have you EVER been told by a doctor, nurse or other health professional that your blood cholesterol is high? (n=494).

Note: adults who reported they have had their blood cholesterol checked.



# Cholesterol (Continued)

Q Fewer SHUK area adults have high cholesterol compared to adults across the state or the nation, and the proportion of adults who have high cholesterol has decreased since the last CHNA.

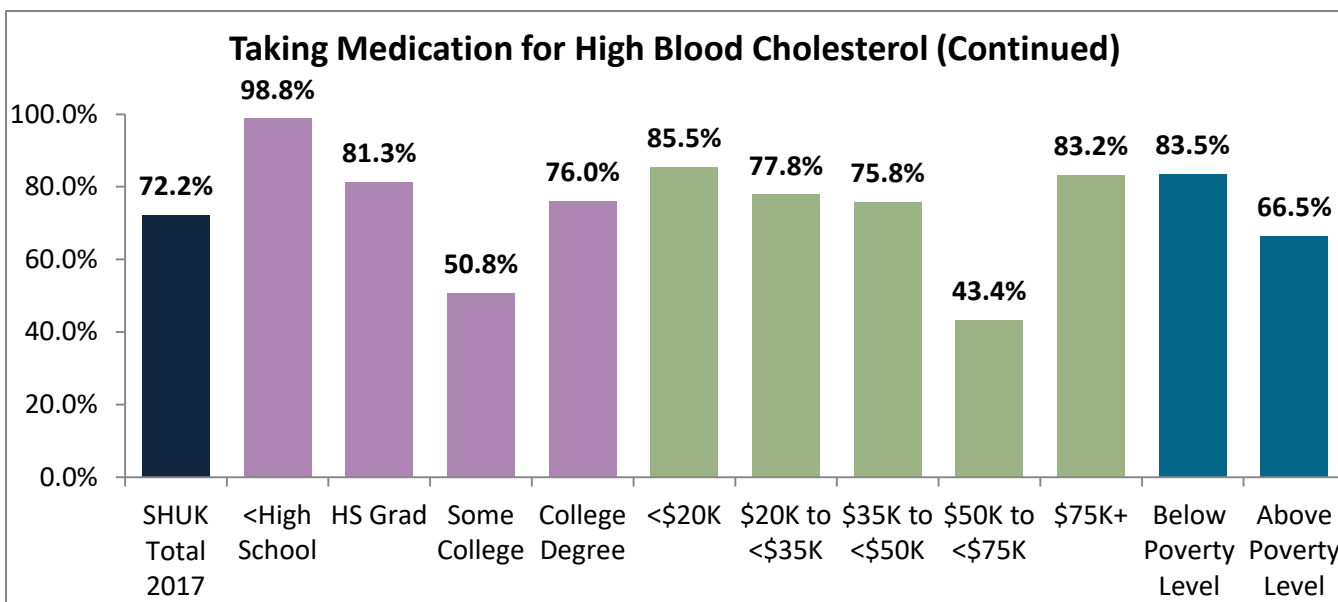
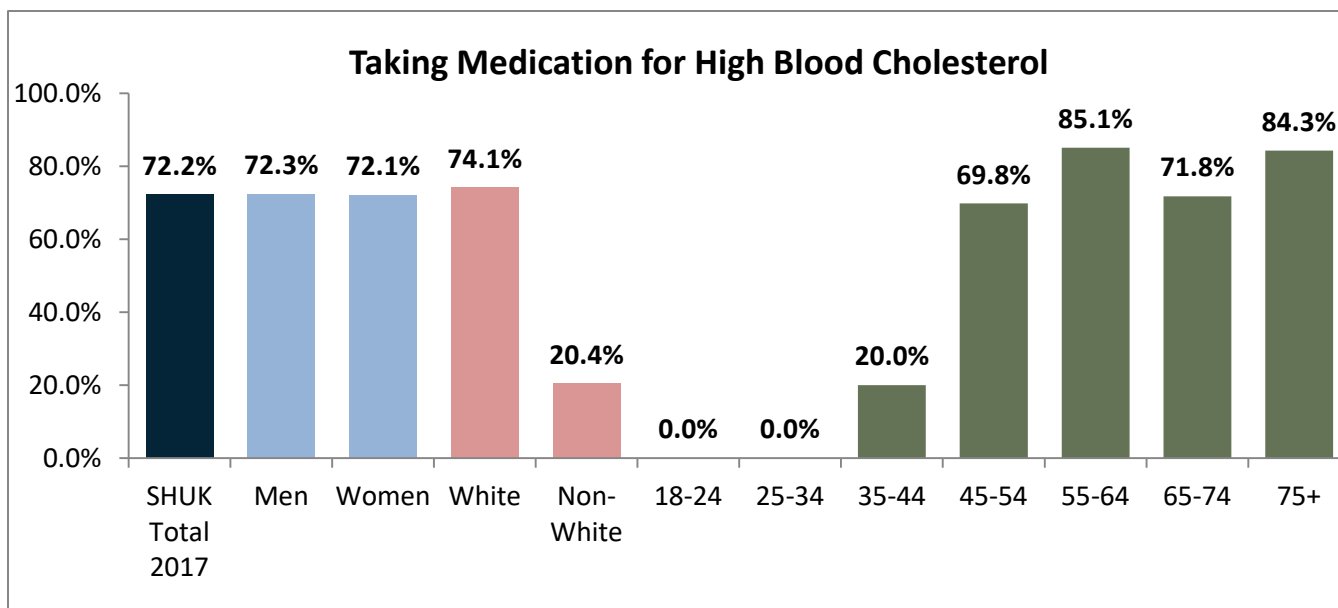


Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016; Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFS, 2015; SHUK Behavioral Risk Factor Survey, 2014, 2017.



# Cholesterol (Continued)

- Q Seven in ten (72.2%) area adults who have high cholesterol currently take medication for it.
- Q Non-White adults are far less likely to take cholesterol medication compared to White adults.
- Q The chances of adults taking medication for high cholesterol increases for those age 45 or older.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q7.3: Are you currently taking medicine for your high cholesterol? (n=196).  
 Note: adults who reported they have high blood cholesterol.



# Mental Health

Q Key Stakeholders and Key Informants offer numerous reasons why mental/behavioral health is one of their top concerns, but three main themes rise to the top. First, there is a lack of resources to deal with the problem. Second, mental illness is prevalent in many forms and may actually be underdiagnosed. Third, the reason it may be underdiagnosed may be due to the stigma attached to having mental illness which would prevent many from seeking needed care.

## Lack of resources

**Lack of adequate resources** to address the issues. – *Key Informant*

**Poverty and lack of resources** in the area. – *Key Informant*

**Lack of adequate mental health services (chronic).** – *Key Stakeholder*

Mental health and behavioral health are some of the **most difficult patients to provide resources for** in the community. While we have CMH, there is a **lack of specific services within the hospital system to provide mental health treatment.** There is **no psychiatrist** in the area near Mecosta. – *Key Informant*

**Inadequate access to care, lack of awareness** of [the existence of] mental health, **stigma, poor community support, disintegrated medical system.** – *Key Informant*

## Prevalence

**More and more staff and clients are disclosing anxiety and depression issues. More anger issues with clients and staff.** – *Key Informant*

**Underdiagnosed, stigma, poor access to care.** – *Key Informant*

## Stigma

**Behavioral health** is minimal and certainly no one accesses it. It's a **stigma.** For behavioral health, we've got to overcome the **stigma.** It's still **mental health.** We've got to integrate it into our primary care clinic so that the referrals are part of the annual physical. You get a psych evaluation or whatever. **If the resources were here, we'd still be missing some of the population because there's a stigma to mental health.** – *Key Stakeholder*

Source: SHUK Key Stakeholder Interviews, 2017, Q1: What do you feel are the two or three most pressing or concerning health issues facing residents in your community, especially the underserved? (n=4); SHUK Key Informant Online Survey, 2017, Q1: To begin, what are one or two most pressing health issues or concerns in your community? (n=72); Key Informant Online Survey, 2017, Q1a: Why do you think it's a problem in your community? Please be as detailed as possible. (n=34)



# Mental Health (Continued)

- Q More than three-fourths (78.4%) of area adults are considered to be mentally healthy, or psychologically well, according to the Kessler 6 Psychological Distress Questionnaire.\*
- Q Conversely, 13.8% experience mild to moderate psychological distress and 7.8% are severely distressed.

	<i>During the Past 30 Days, About How Often Did You....</i>					
<i>Frequency of Feeling</i>	Feel Nervous (n=582)	Feel Hopeless (n=583)	Feel Restless or Fidgety (n=582)	Feel So Depressed That Nothing Could Cheer You Up (n=582)	Feel That Everything Is an Effort (n=579)	Feel Worthless (n=579)
None of the time	47.2%	76.5%	50.1%	80.6%	59.2%	80.0%
A Little	31.7%	11.7%	24.2%	14.3%	16.3%	11.1%
Some of the time	11.6%	9.3%	10.3%	2.9%	11.3%	6.6%
Most of the time	3.4%	0.8%	5.3%	1.4%	7.5%	1.3%
All of the time	6.1%	1.8%	10.1%	0.8%	5.7%	1.1%

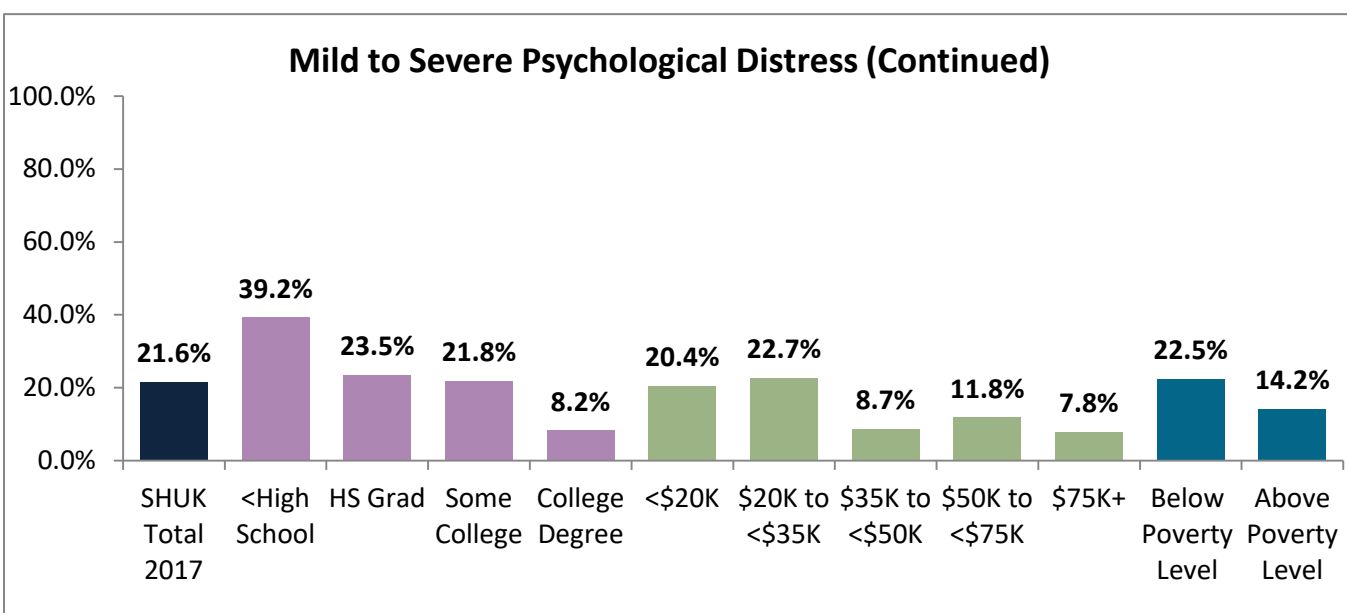
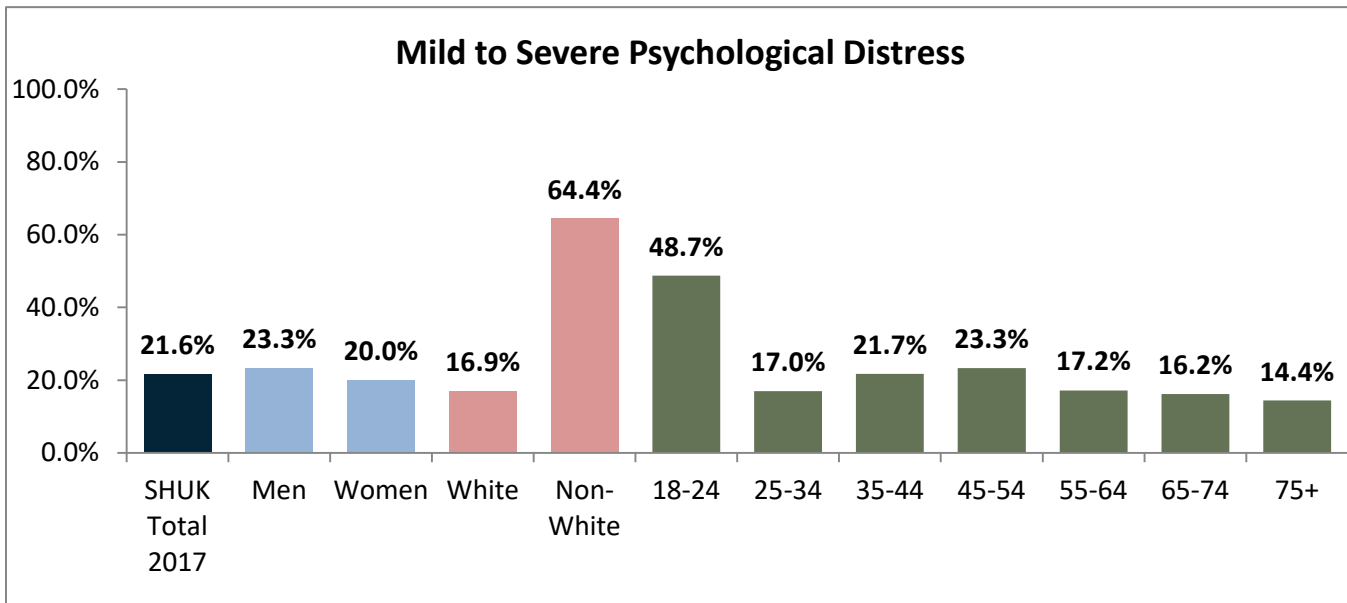
**Mentally Healthy/Psychologically Well = 78.4%**  
**Mild to Moderate Psychological Distress = 13.8%**  
**Severe Psychological Distress = 7.8%**

Source: SHUK Behavioral Risk Factor Survey, 2017, Q18.1-Q18.6: During the past 30 days, about how often did you feel....? (n=573).  
 Note: \*Calculated from responses to Q. 18.1- 18.6, where none of the time = 1, a little = 2, some of the time = 3, most of the time = 4, and all of the time = 5. Responses were summed across all six questions with total scores representing the above categories: mentally well (6-11), mild to moderate psychological distress (12-19), and severe psychological distress (20+).



# Mental Health (Continued)

Q Among SHUK area adults, the groups most likely to have mild to severe psychological distress include those who: are youngest (< age 25), are non-White, have less than a high school diploma, and have household incomes less than \$35K. With regard to the educational disparity, 39.2% of those with no high school diploma have mild to severe psychological distress compared to 8.2% for those with a college degree.

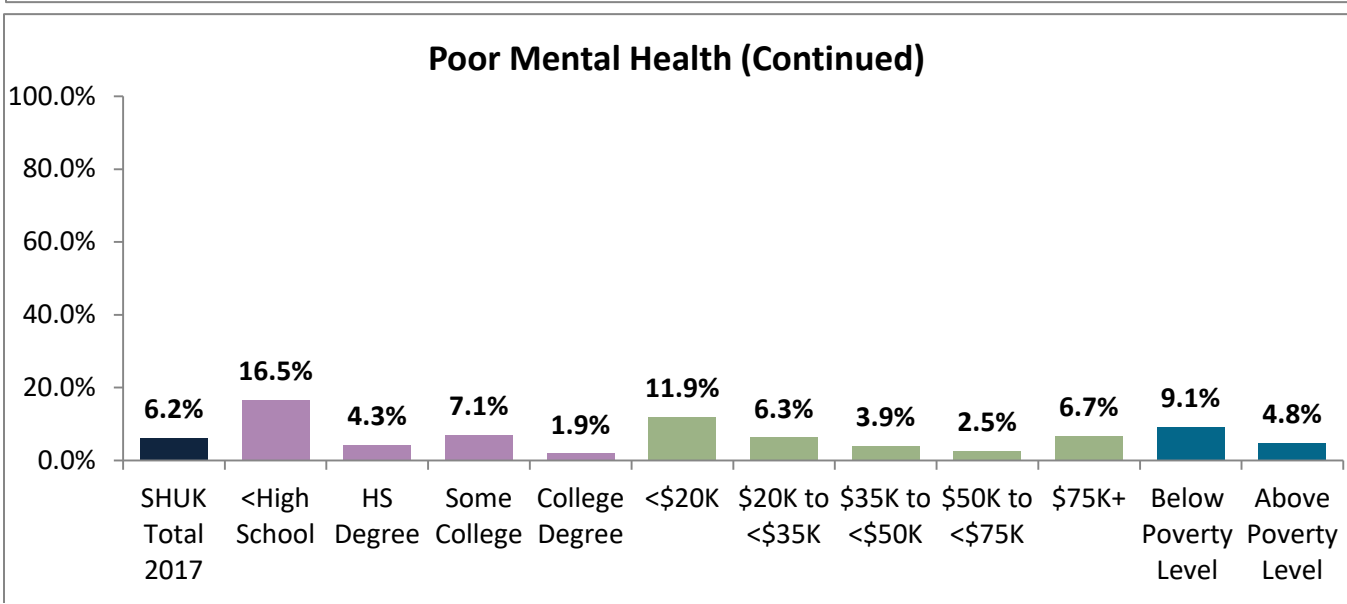
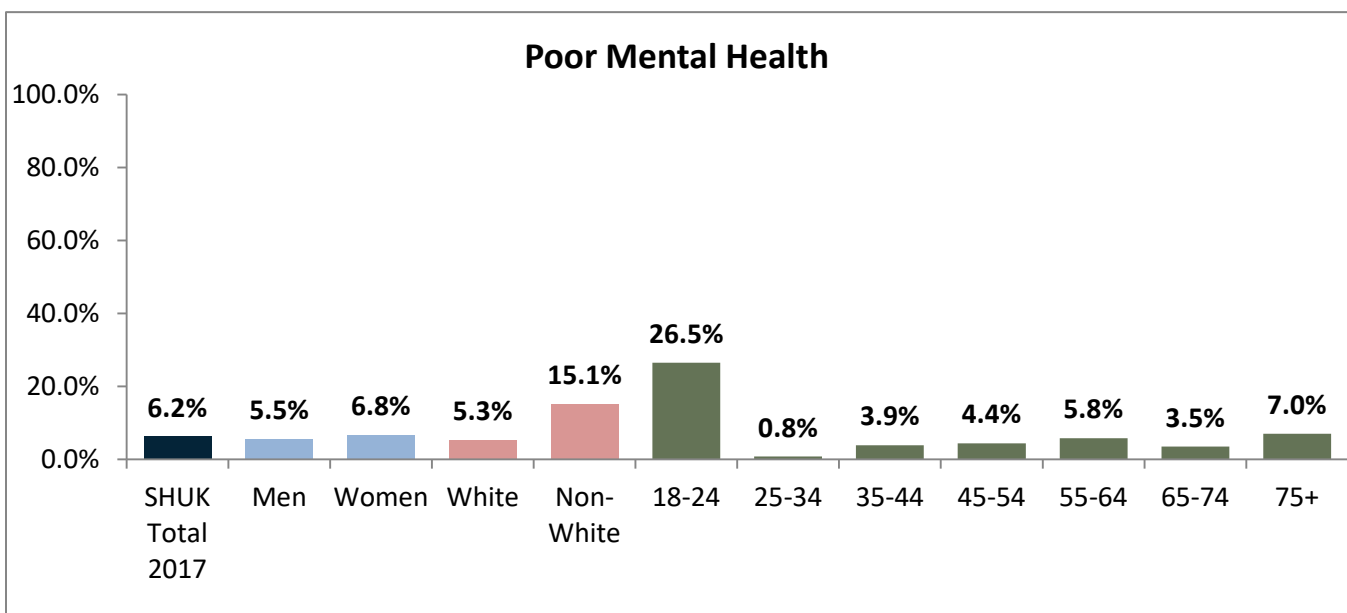


Source: SHUK Behavioral Risk Factor Survey, 2017, Q18.1-Q18.6: During the past 30 days, about how often did you feel....?  
 Note: those adults who scored 12 or higher on the Kessler 6 instrument.



# Mental Health (Continued)

- Q Among SHUK area adults, 6.2% have poor mental health, which means they experienced fourteen or more days in which their mental health was not good, which includes stress, depression, and problems with emotions, during the past 30 days.
- Q The prevalence of poor mental health is highest among adults aged 18-24 and those with less than a high school diploma.
- Q It is also more prevalent among non-White adults compared to White adults.



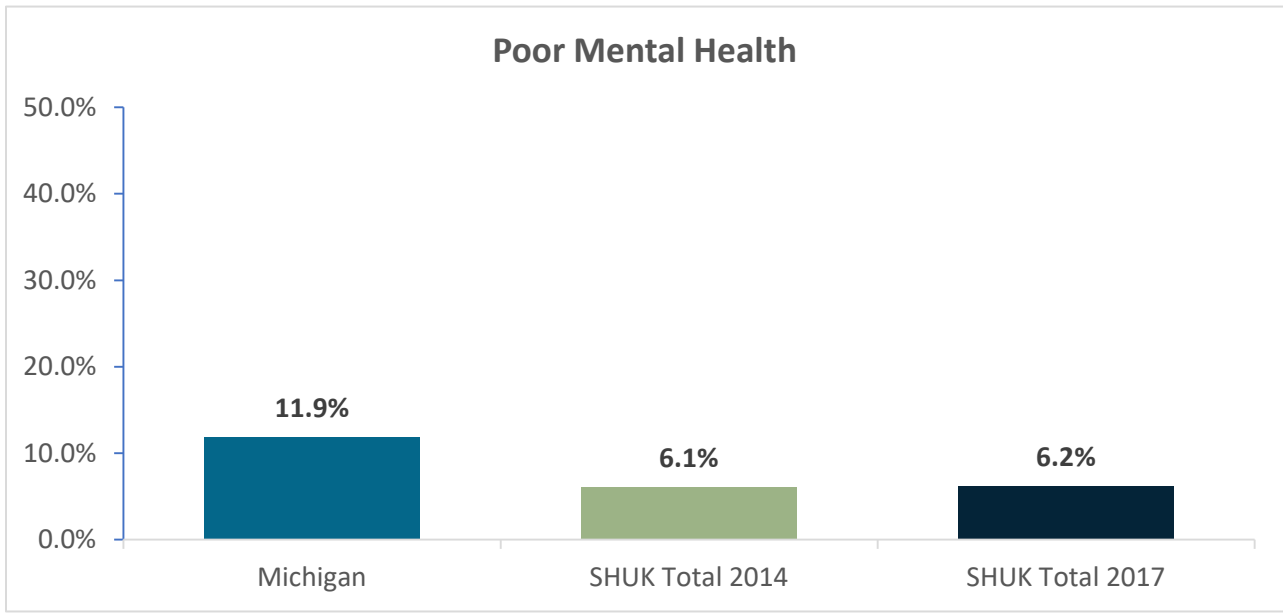
Source: SHUK Behavioral Risk Factor Survey, 2017, Q2.2: Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good? (n=586).  
 Note: The proportion of adults who reported 14 or more days, out of the previous 30, on which their mental health was not good, which includes stress, depression, and problems with emotions.





# Mental Health (Continued)

Q The prevalence of poor mental health among SHUK area adults has remained flat since the last CHNA and also is much lower than the state's prevalence rate.

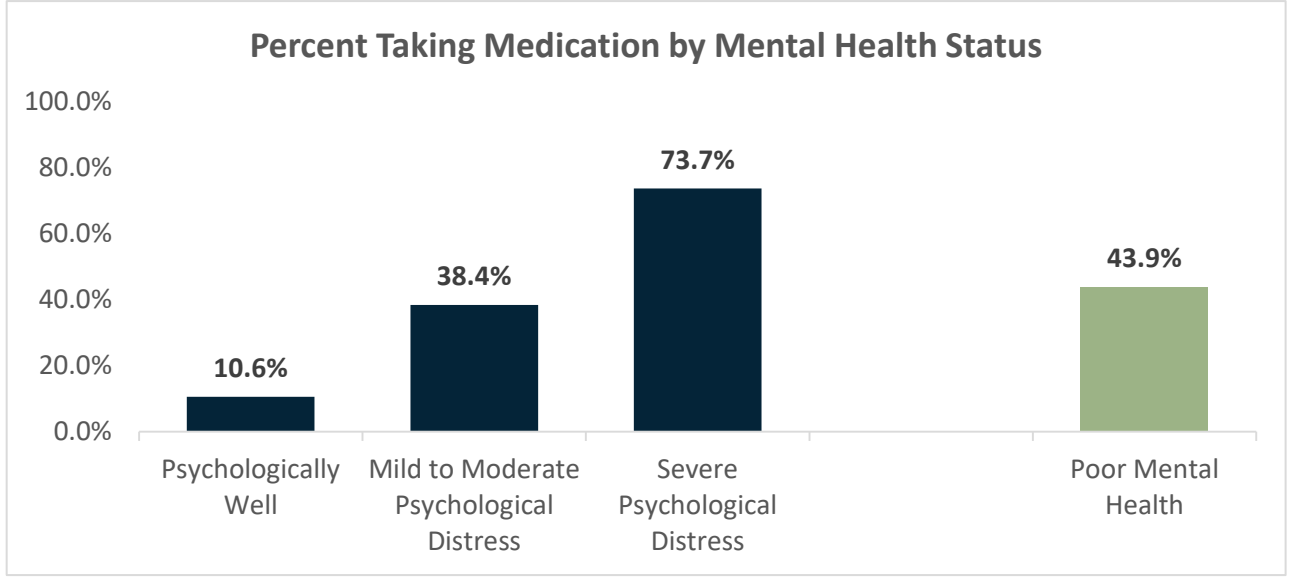
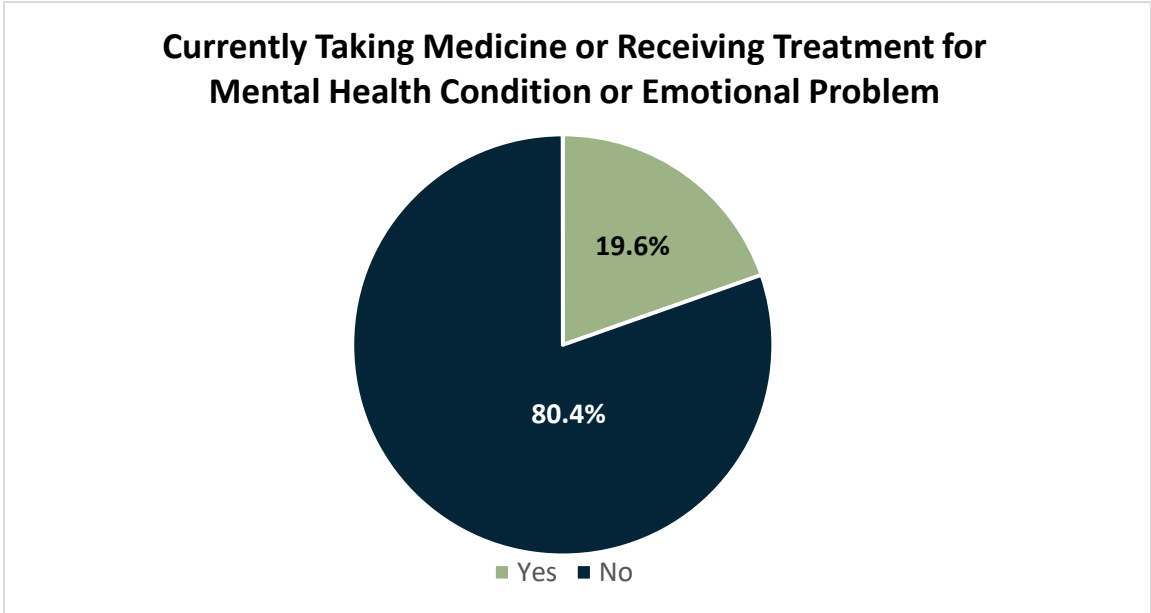


Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016; Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFSS, 2015; SHUK Behavioral Risk Factor Survey, 2014, 2017.



# Mental Health (Continued)

- Q Of all SHUK area adults, 19.6% currently take medication or receive treatment for a mental health condition or emotional problem.
- Q However, many of those who could benefit the most from medication/treatment are not getting it: roughly four in ten of those classified as having “mild to moderate psychological distress” (38.4%) or reporting poor mental health (43.9%), as well as 73.7% of those classified as having “severe psychological distress” currently take medication and/or receive treatment for their mental health issues.

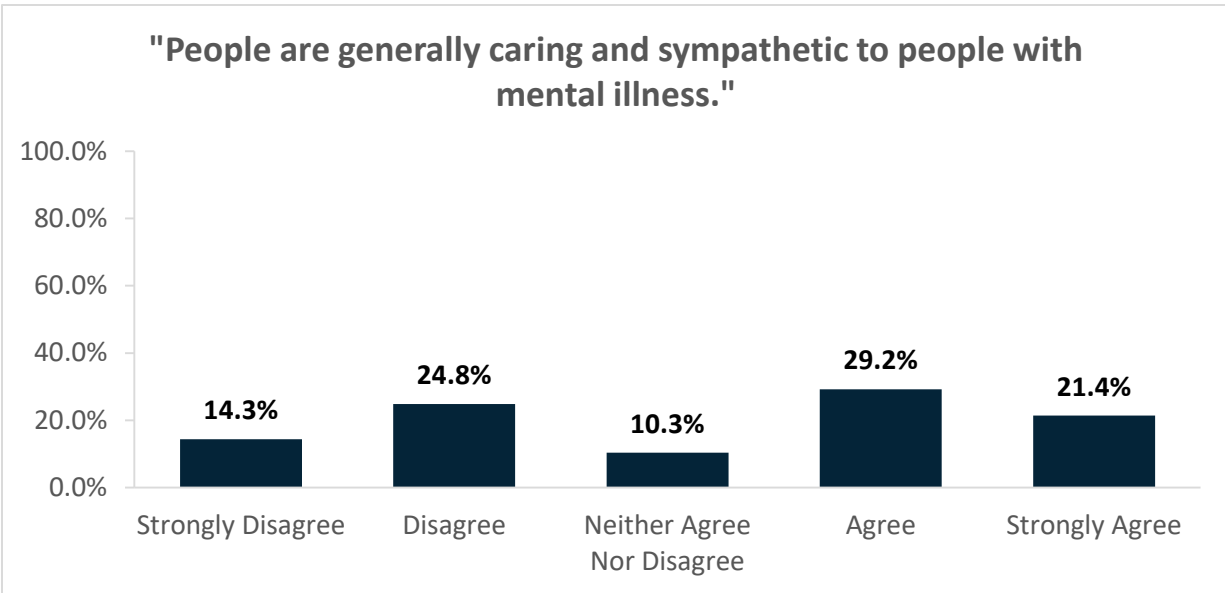
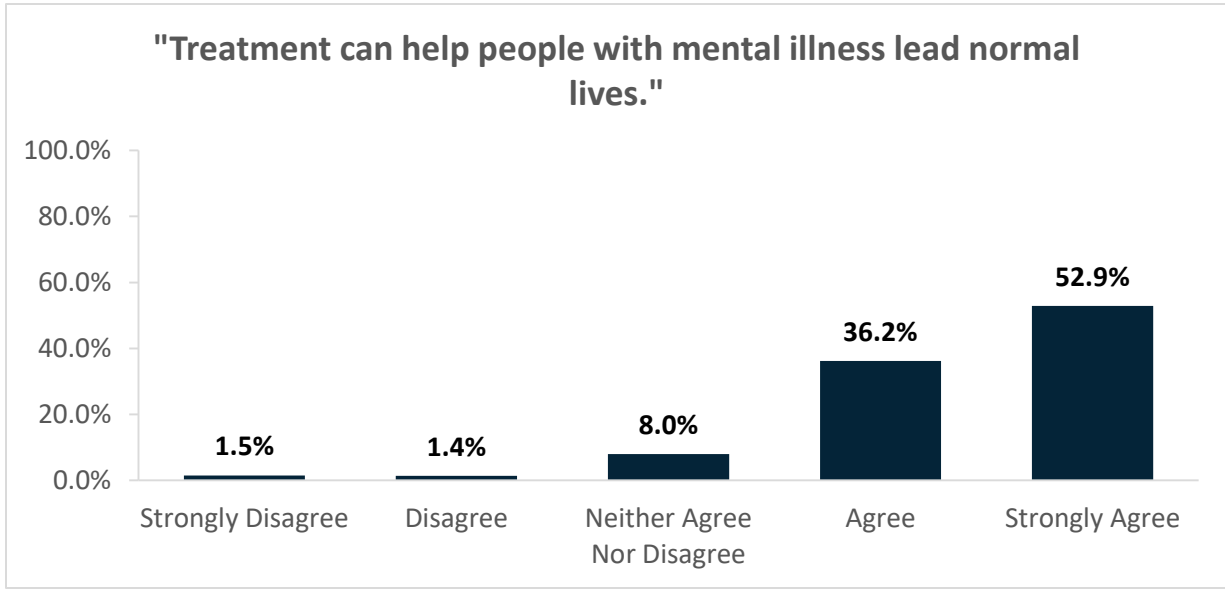


Source: SHUK Behavioral Risk Factor Survey, 2017, Q18.7: Are you now taking medicine or receiving treatment from a doctor or other health professional for any type of mental health condition or emotional problem? (n=581).



# Mental Health (Continued)

- Q Even though nine in ten (89.1%) area adults believe treatment can help people with mental illness lead normal lives, just half (50.6%) think people are generally caring and sympathetic to people with mental illness.
- Q This continued stigma could be the reason more people don't seek treatment even though they could benefit from it.

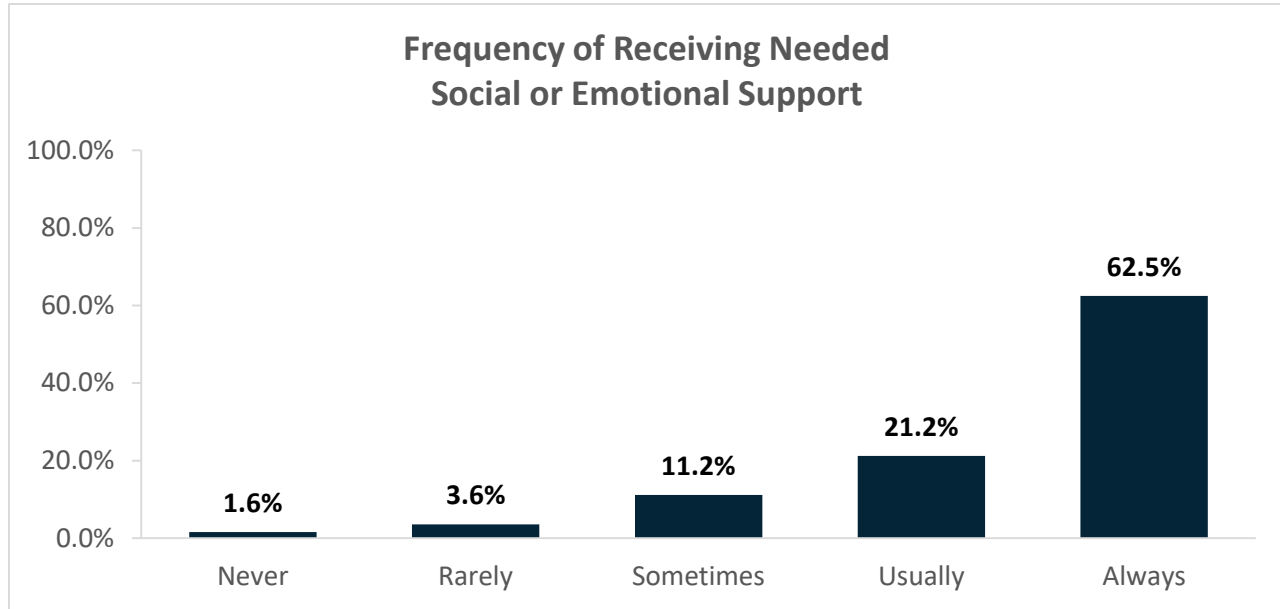


Source: SHUK Behavioral Risk Factor Survey, 2017, Q18.8: What is your level of agreement with the following statement? "Treatment can help people with mental illness lead normal lives." Do you – agree slightly or strongly, or disagree slightly or strongly? (n=571); Q18.9: What is your level of agreement with the following statement? "People are generally caring and sympathetic to people with mental illness." Do you – agree slightly or strongly, or disagree slightly or strongly? (n=571)



# Mental Health (Continued)

Q The vast majority (83.7%) of area adults “usually” or “always” receive the social or emotional support that they need.

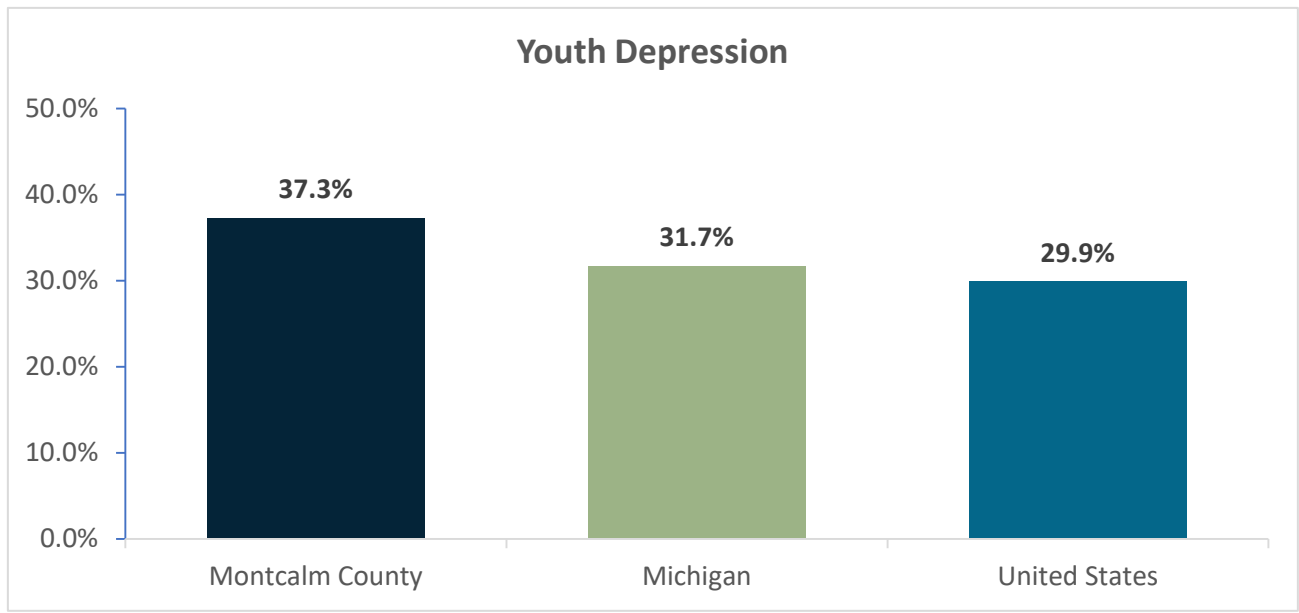


Source: SHUK Behavioral Risk Factor Survey, 2017, Q18.10: How often do you get the social and emotional support you need? (n=585).



# Mental Health (Continued)

Q More than one-third (37.3%) of Montcalm County youth report depression during the past year, a rate higher than state or national rates.

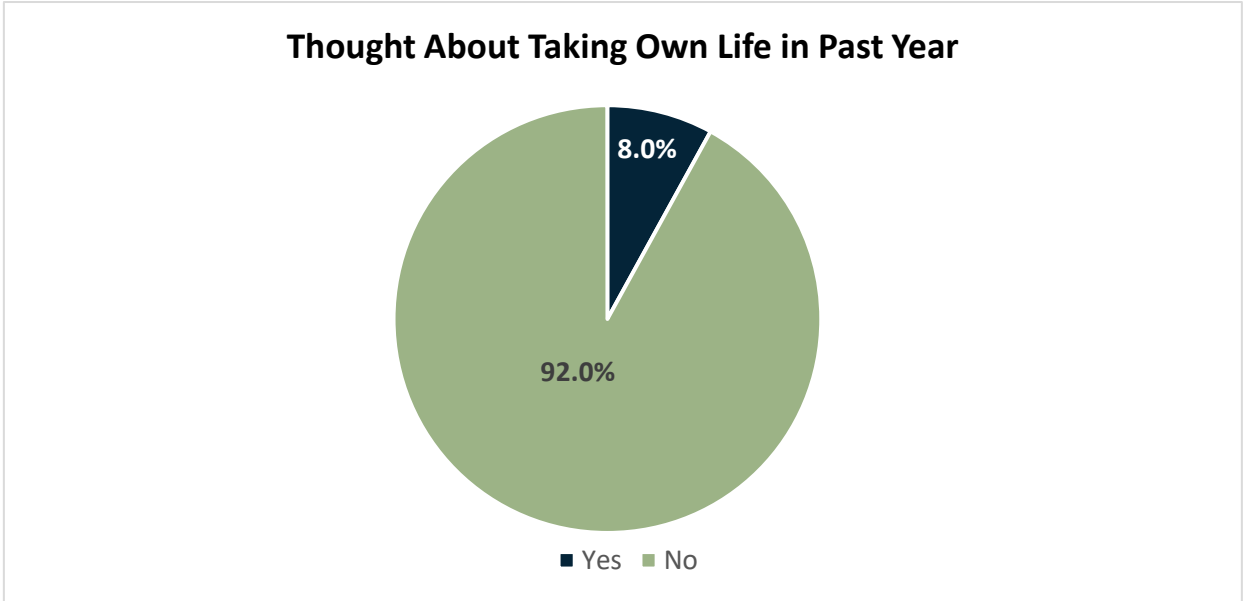


Source: For Montcalm County: Michigan Profile for Healthy Youth (MiPhy), 2015; For MI and US: Youth Behavior Risk Survey (YRBS), 2015.

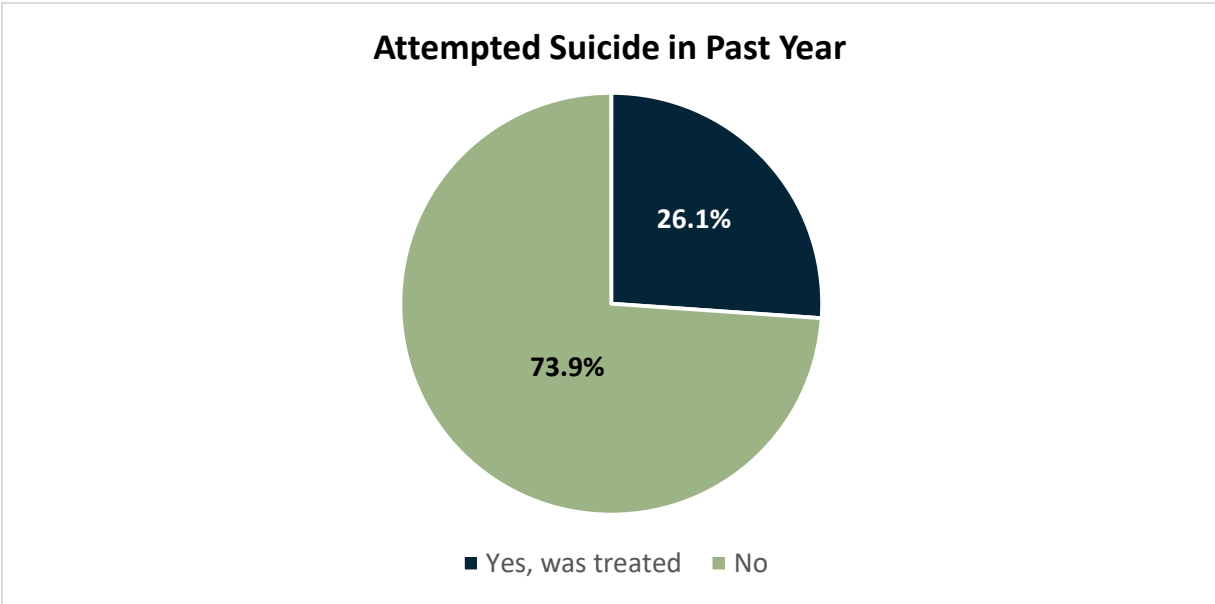


# Suicide

Q Nearly one in twelve (8.0%) SHUK area adults have thought taking their own life in the past year, and of those 26.1% actually attempted suicide in the past year.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q20.1: Has there been a time in the past 12 months when you thought of taking your own life? (n=568).

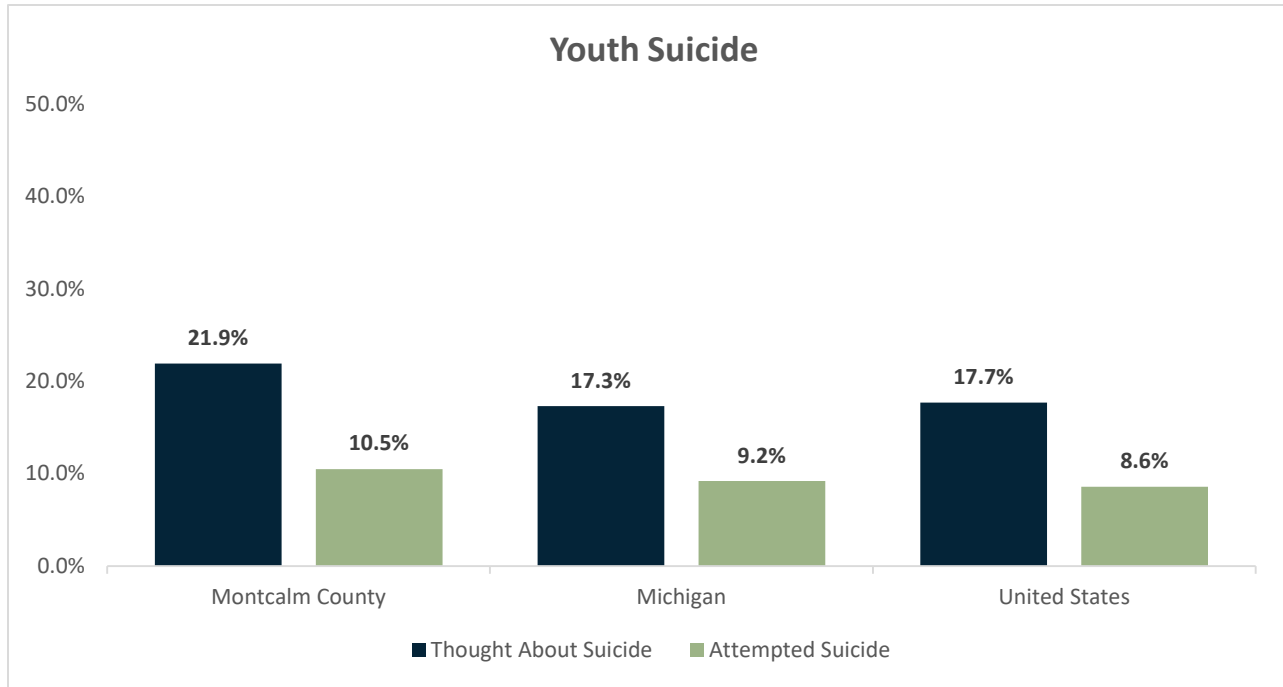


Source: SHUK Behavioral Risk Factor Survey, 2017, Q20.2: During the past 12 months, did you attempt to commit suicide (take your own life)? Would you say... (n=26).  
Note: among those who said they thought about taking their own life in the past year.



# Suicide (Continued)

- Q One in five (21.9%) Montcalm County youth have thought about committing suicide in the past year, a rate higher than the state or national rates.
- Q One in ten (10.5%) Montcalm County youth have actually attempted suicide, a rate also higher than the state or national rates.

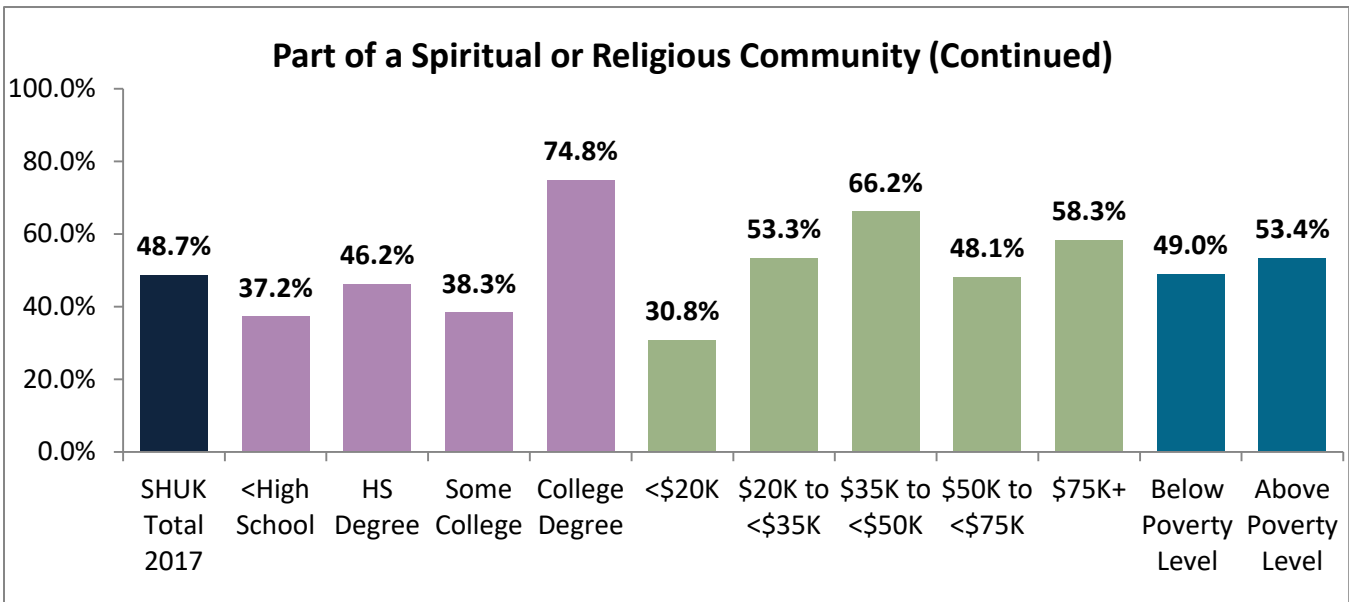
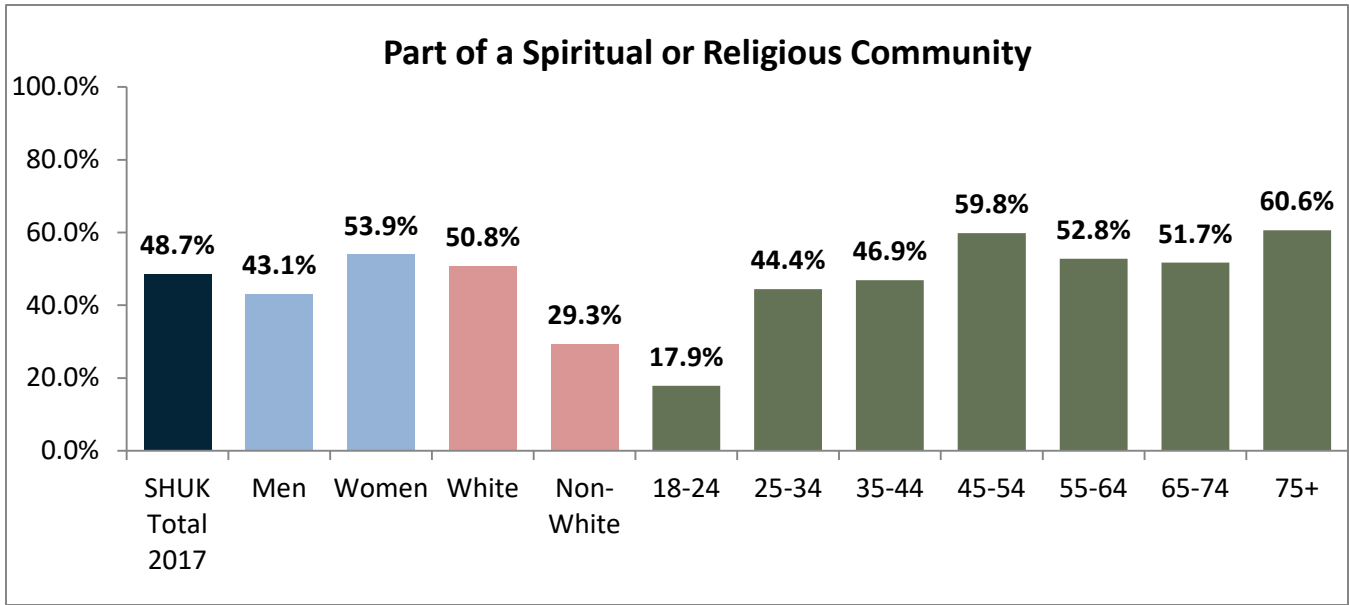


Source: For Montcalm County: Michigan Profile for Healthy Youth (MiPhy), 2015; For MI and US: Youth Behavior Risk Survey (YRBS), 2015.



# Spirituality

- Q Nearly half (48.7%) of area adults are part of a spiritual or religious community.
- Q Those most likely to be part of a spiritual or religious community are: women, White, older (age 45+), have college degrees, and have incomes of \$20K or more.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q18.11: Are you part of a spiritual or religious community? (n=577).





# Spirituality (Continued)

Q Area adults who are part of spiritual or religious communities fare better on a number of health outcomes vs. those adults who are not part of a spiritual or religious community.

	Part of Spiritual or Religious Community	
	Yes	No
General health is fair/poor	16.8%	28.7%
Poor physical health	10.8%	19.6%
Poor mental health	4.4%	8.0%
Activity limitations	6.7%	17.0%
Current smoker	14.5%	36.0%
Obese	28.6%	38.6%
Heavy drinker	1.9%	10.5%
Binge drinker	8.9%	15.5%
Mild to moderate psychological distress	9.1%	18.3%
Severe psychological distress	2.2%	13.1%

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# CHRONIC CONDITIONS

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# Prevalence of Chronic Health Conditions

- Q The prevalence of eight of the ten chronic conditions measured in 2017 is higher among SHUK area adults compared to the prevalence among adults across the state or nation.
- Q Further, the prevalence of six of the conditions measured is higher this CHNA iteration compared to 2014.

Prevalence of Chronic Conditions				
	SHUK Area 2014	SHUK Area 2017	Michigan	U.S.
Arthritis	25.7%	● 30.2%	30.0%	25.8%
Pre-diabetes	--	27.9%	--	--
Lifetime asthma	15.3%	● 22.9%	15.7%	14.0%
Current asthma	13.3%	● 16.8%	10.2%	9.3%
COPD	9.1%	● 14.6%	7.7%	6.3%
Diabetes	10.0%	● 10.9%	10.7%	10.8%
Other (non-skin) cancer	8.5%	● 7.9%	7.0%	6.7%
Skin cancer	3.9%	● 5.4%	6.1%	5.9%
Heart attack	5.4%	● 4.8%	4.7%	4.4%
Stroke	5.8%	● 4.2%	3.3%	3.1%
Angina/coronary heart disease	3.7%	● 3.5%	4.6%	4.1%

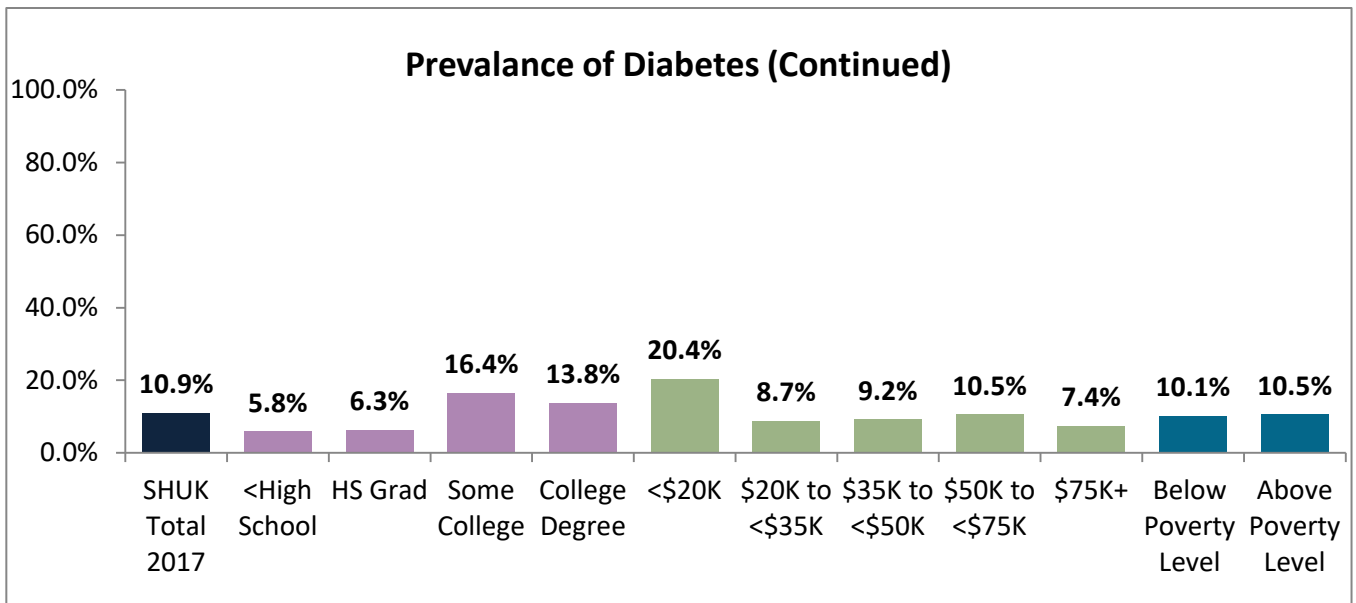
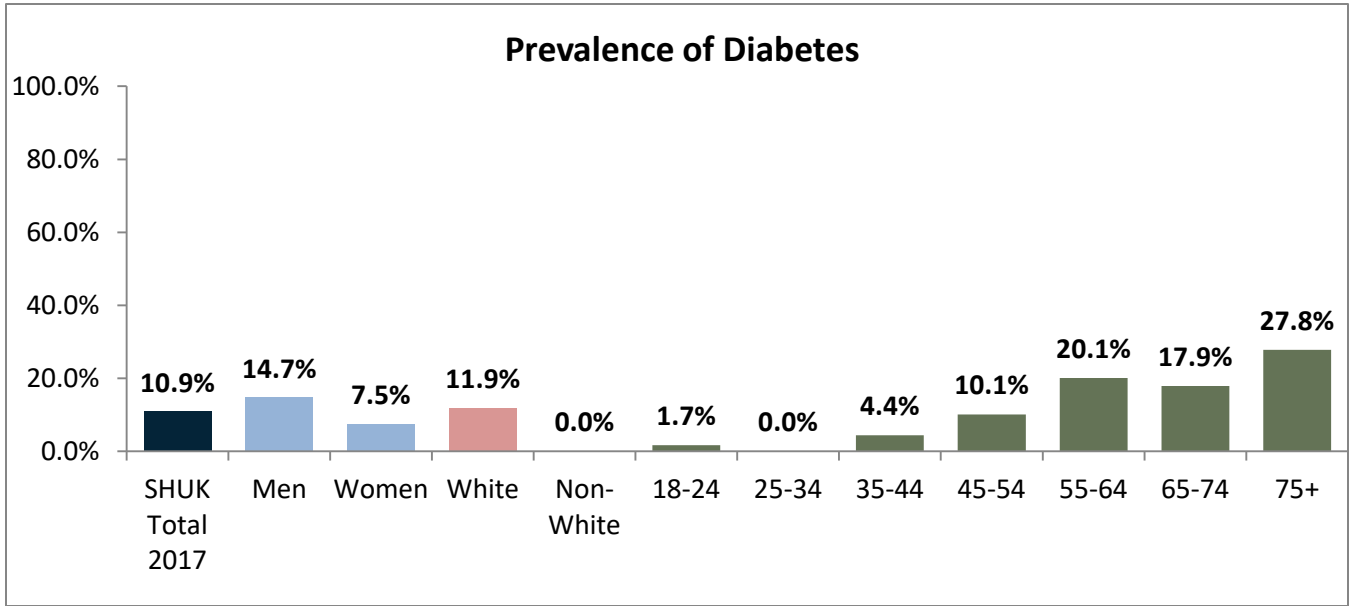
- = SHUK area is best compared to MI and U.S.
- = SHUK area is worst compared to MI and U.S.

Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016; Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFS, 2015; SHUK Behavioral Risk Factor Survey, 2014, 2017.



# Diabetes

- Q Roughly one in ten (10.9%) area adults have been told by a health care professional that they have diabetes.
- Q The prevalence of diabetes is greater for older adults (55+), men, those with college education, and those with incomes less than \$20K.

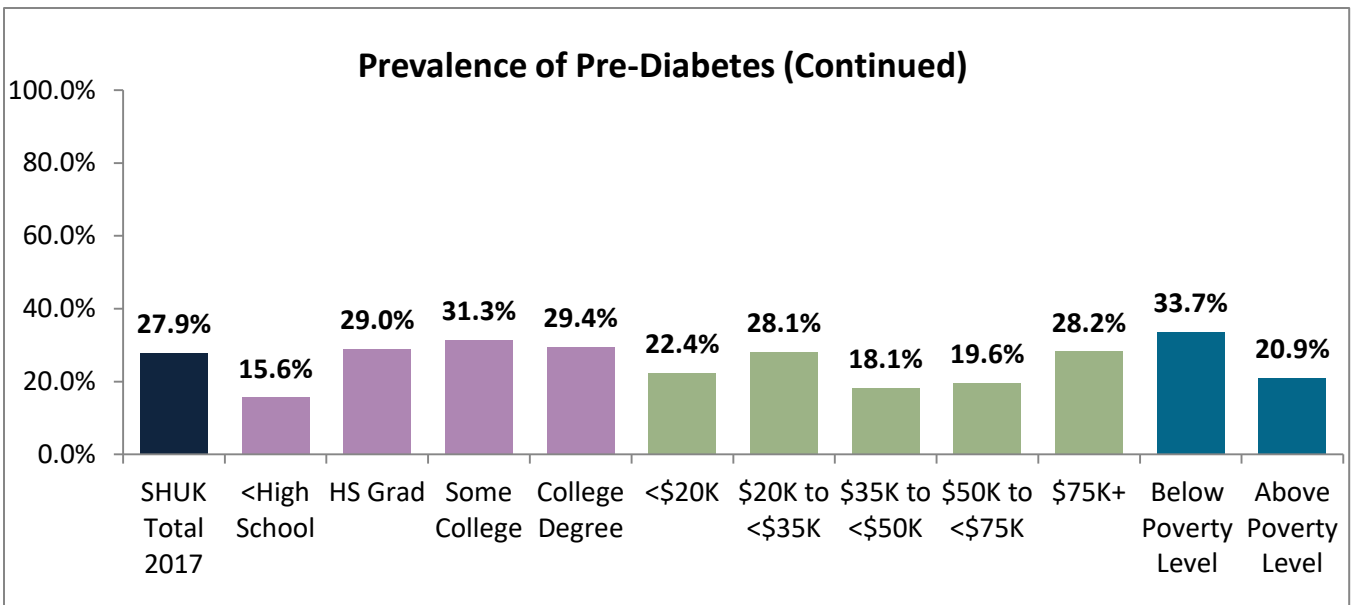
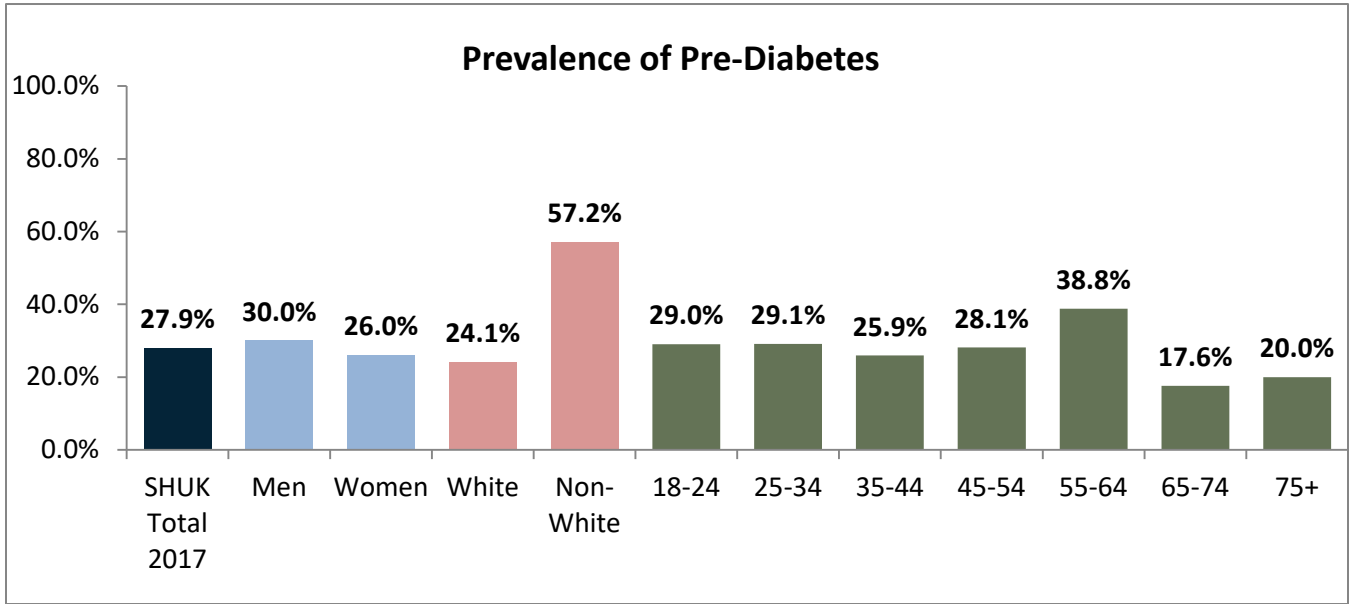


Source: SHUK Behavioral Risk Factor Survey, 2017, Q4.3: Has a doctor, nurse, or other health professional EVER told you that you had diabetes? (n=587).  
 Note: excludes women who had diabetes only during pregnancy.



# Pre-Diabetes

- Q Additionally, more than one-fourth (27.9%) of SHUK area adults has been told by a health care professional that they have pre-, or borderline, diabetes.
- Q The prevalence of pre-diabetes is greater among non-White adults compared to White adults, and greater among those living below the poverty level vs. those living above the poverty level.



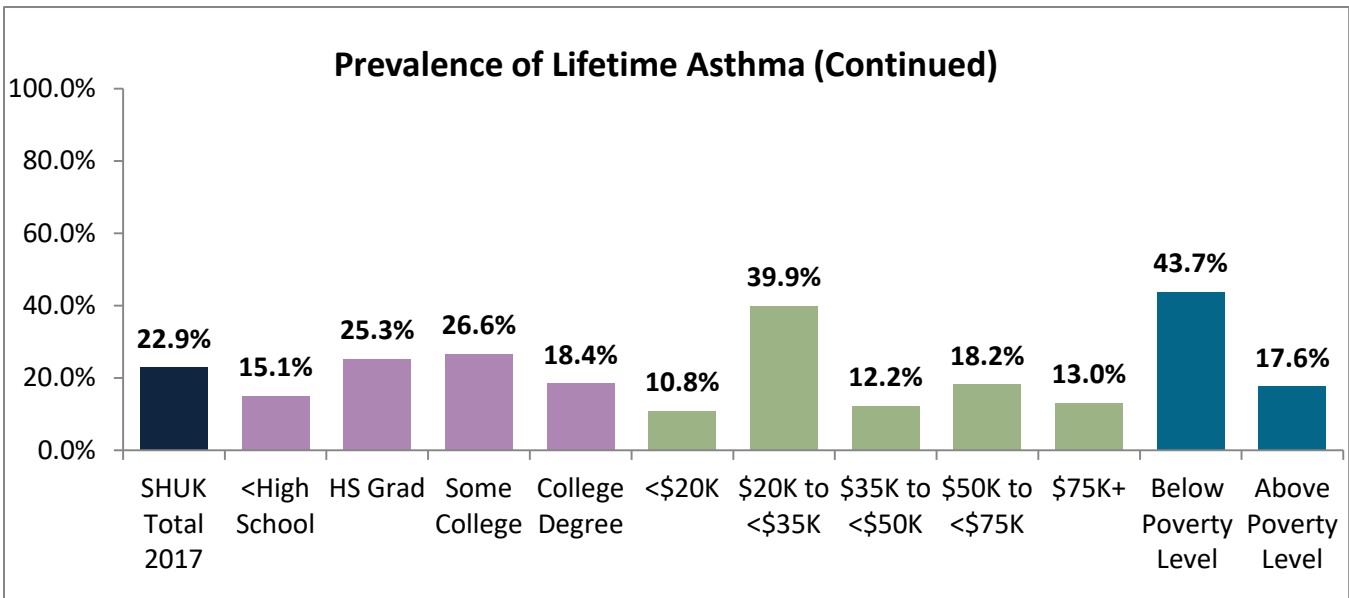
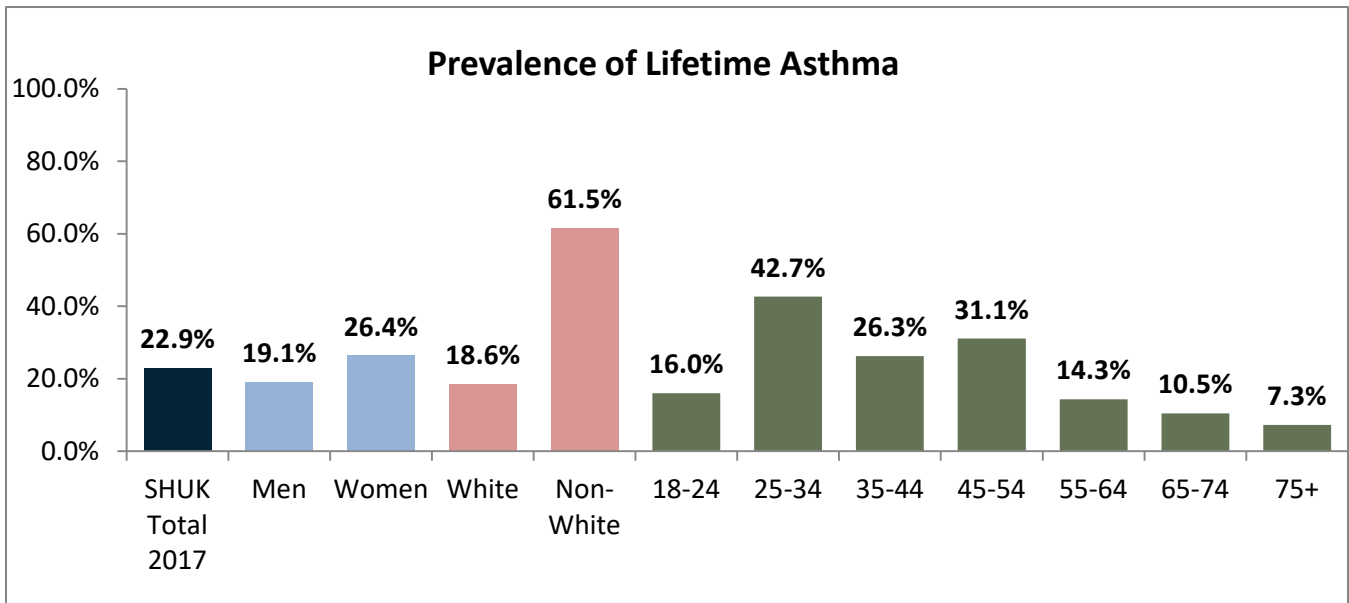
Source: SHUK Behavioral Risk Factor Survey, 2017, Q4.3: Has a doctor, nurse, or other health professional EVER told you that you had pre-diabetes or borderline diabetes? (n=484).

Note: excludes those who currently have diabetes.



# Asthma

- Q More than one in five (22.9%) area adults have been told by a health care professional at some point in their life that they had asthma.
- Q The prevalence of lifetime asthma is greater for women than men, and greater for non-White adults compared to White adults, and highly prevalent in the lowest socioeconomic groups.

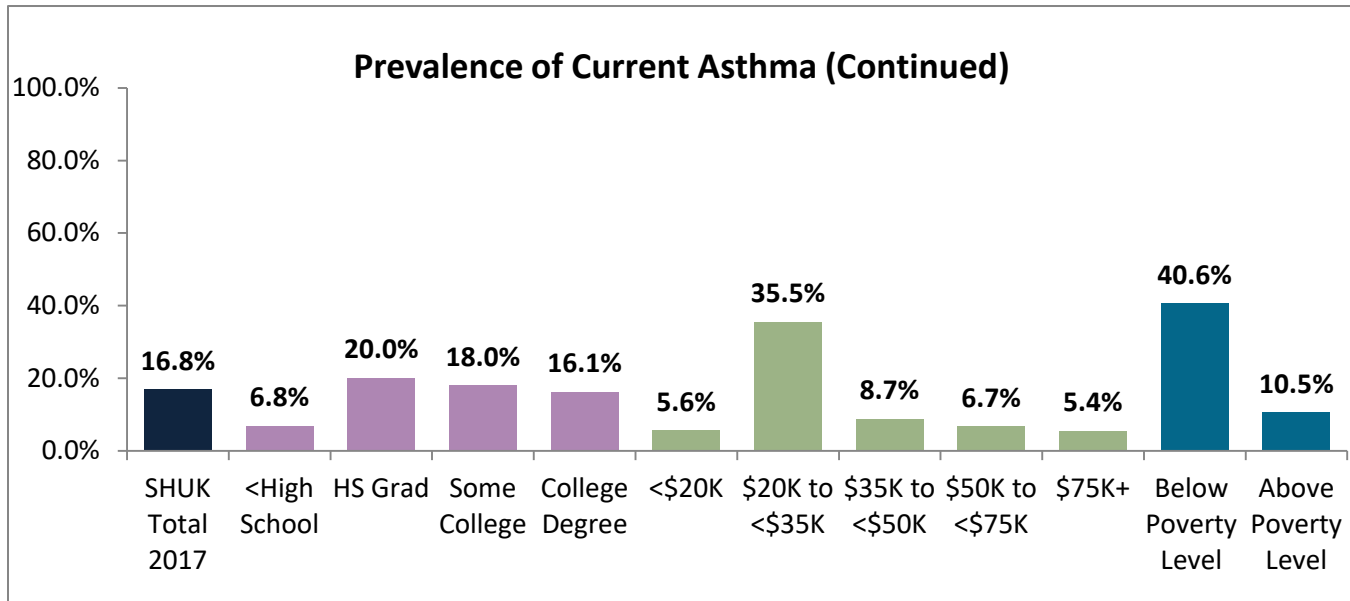
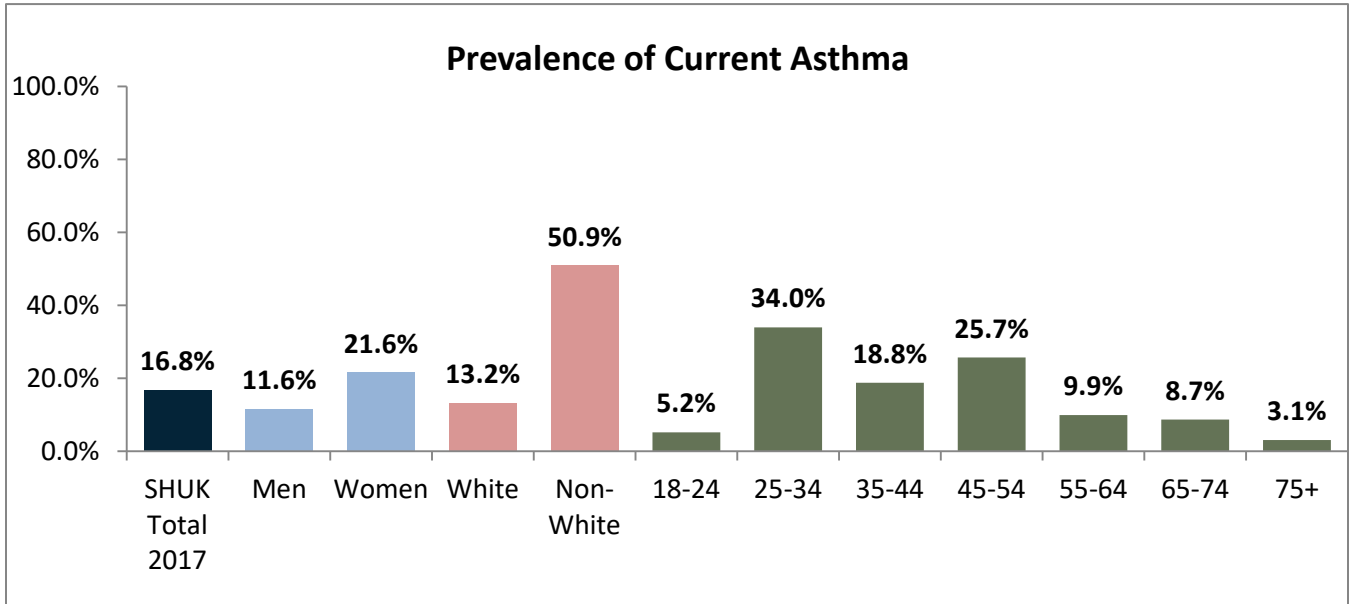


Source: SHUK Behavioral Risk Factor Survey, 2017, Q4.1: Has a doctor, nurse, or other health professional EVER told you that you had asthma? (n=587).



# Asthma (Continued)

- Q Roughly one in six (16.8%) area adults currently have asthma.
- Q Like lifetime asthma, the prevalence of those who currently have asthma is greater for women, non-White adults, and those from the lowest socioeconomic groups.

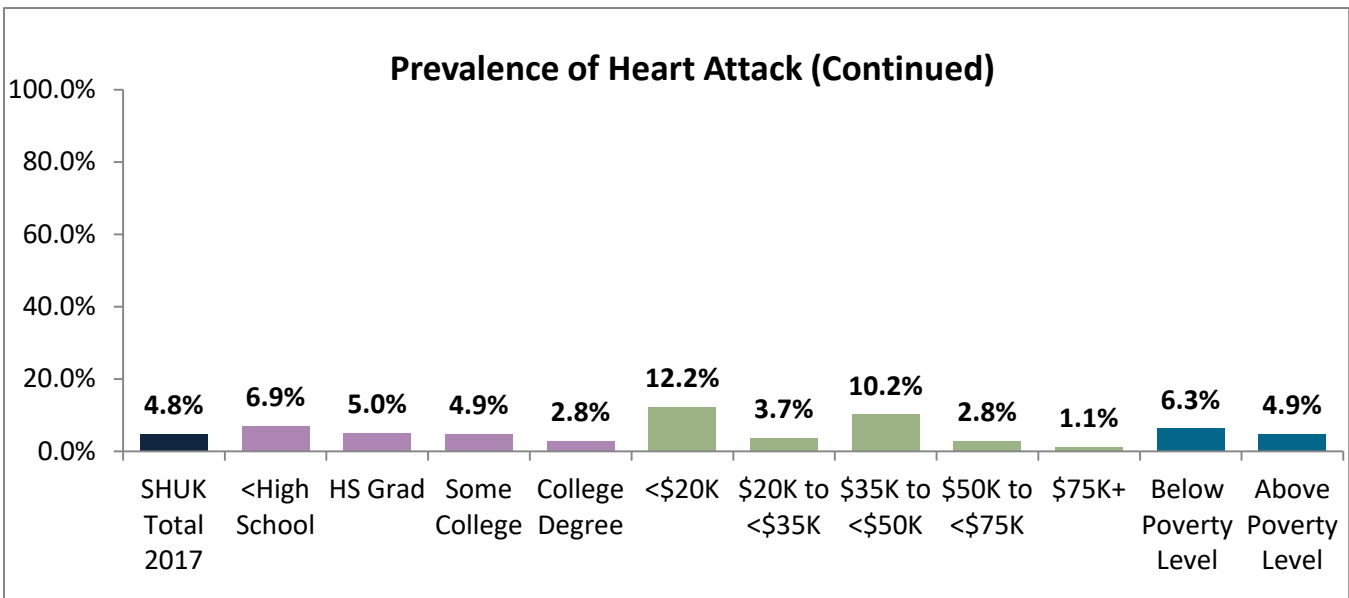
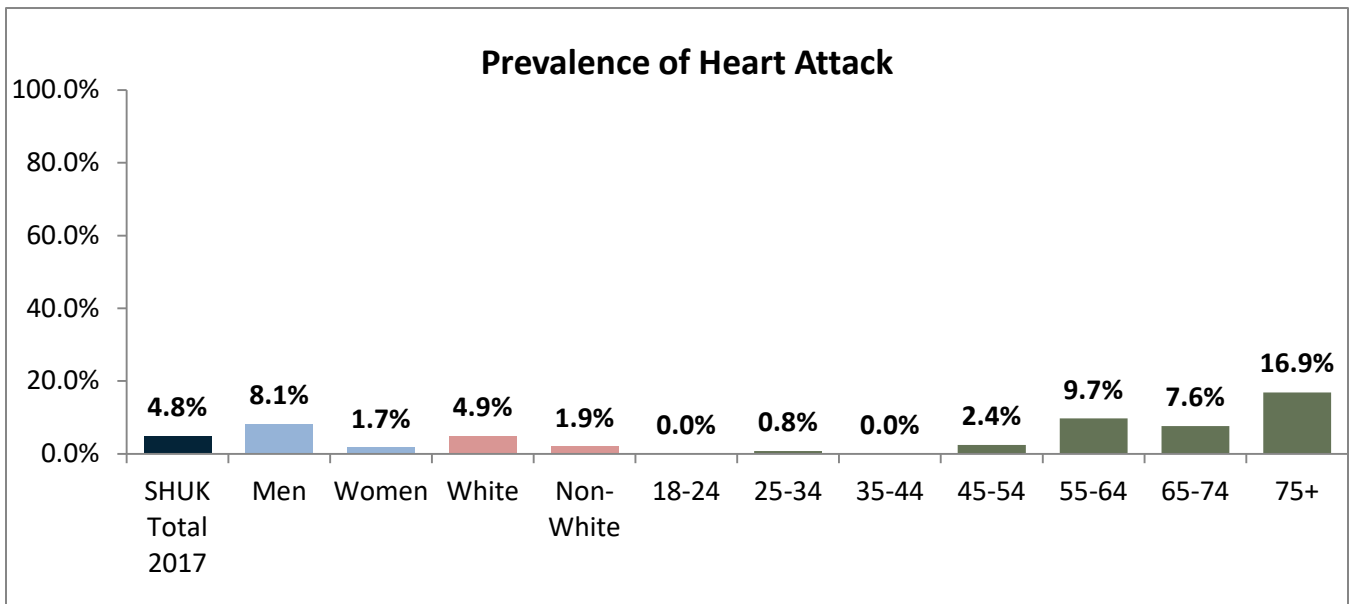


Source: SHUK Behavioral Risk Factor Survey, 2017, Q4.2: Do you still have asthma? (n=94).  
 Note: based on all adults, (n=587).



# Cardiovascular Disease and Stroke

- Q The prevalence of having a heart attack is low (4.8%) but most likely to be reported by the oldest adults (55+).
- Q Prevalence is higher in: men compared to women, those with less than a high school diploma compared to those with a college degree, and those with incomes less than \$20K compared to those with incomes of \$50K or more.



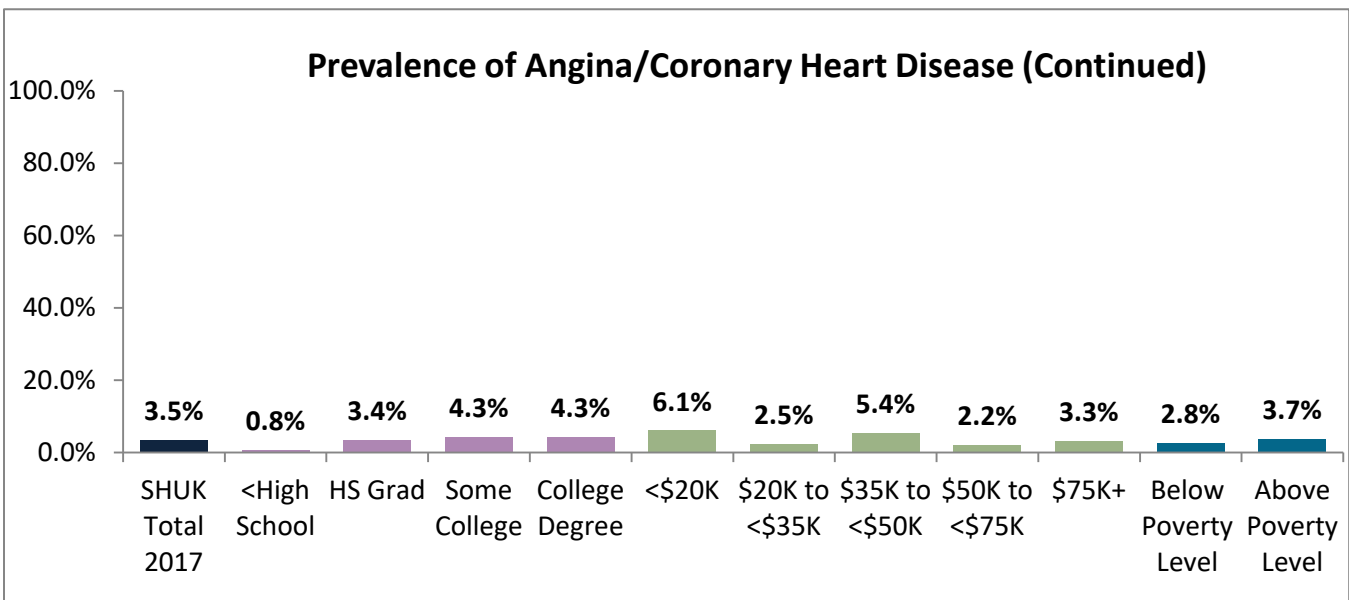
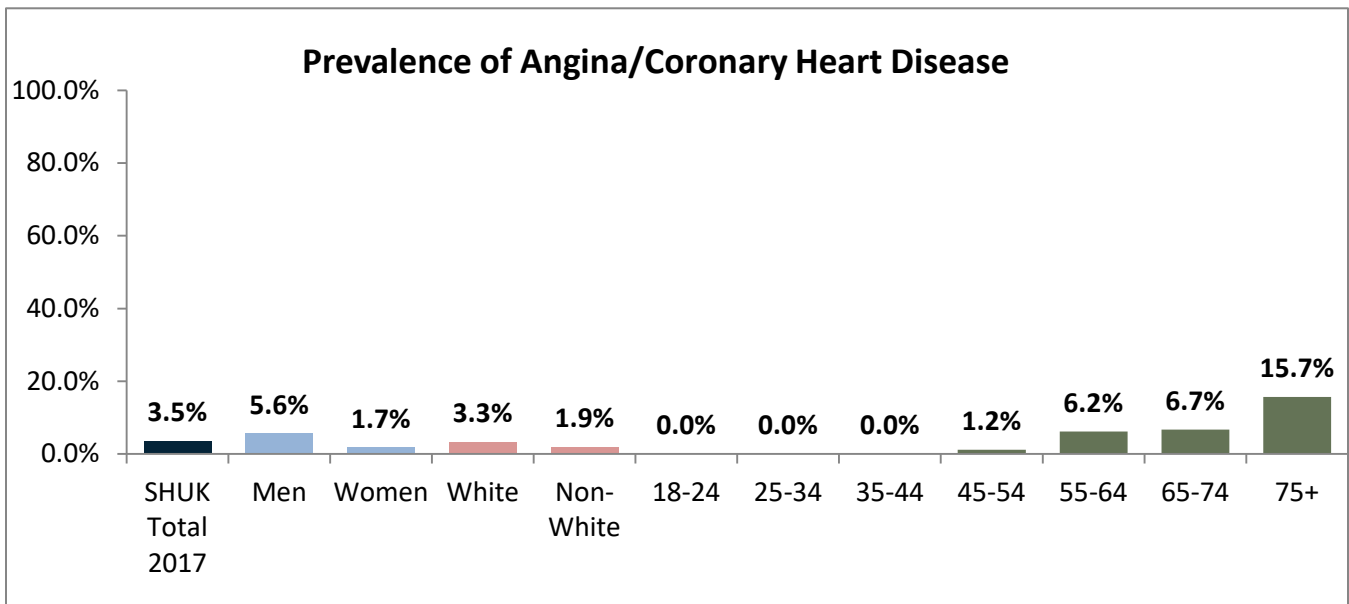
Source: SHUK Behavioral Risk Factor Survey, 2017, Q4.5: Has a doctor, nurse, or other health professional EVER told you that you had a heart attack also called a myocardial infarction? (n=587).





# Cardiovascular Disease and Stroke (Continued)

Q The prevalence of angina/coronary heart disease is low but is highest among those aged 55 or older.

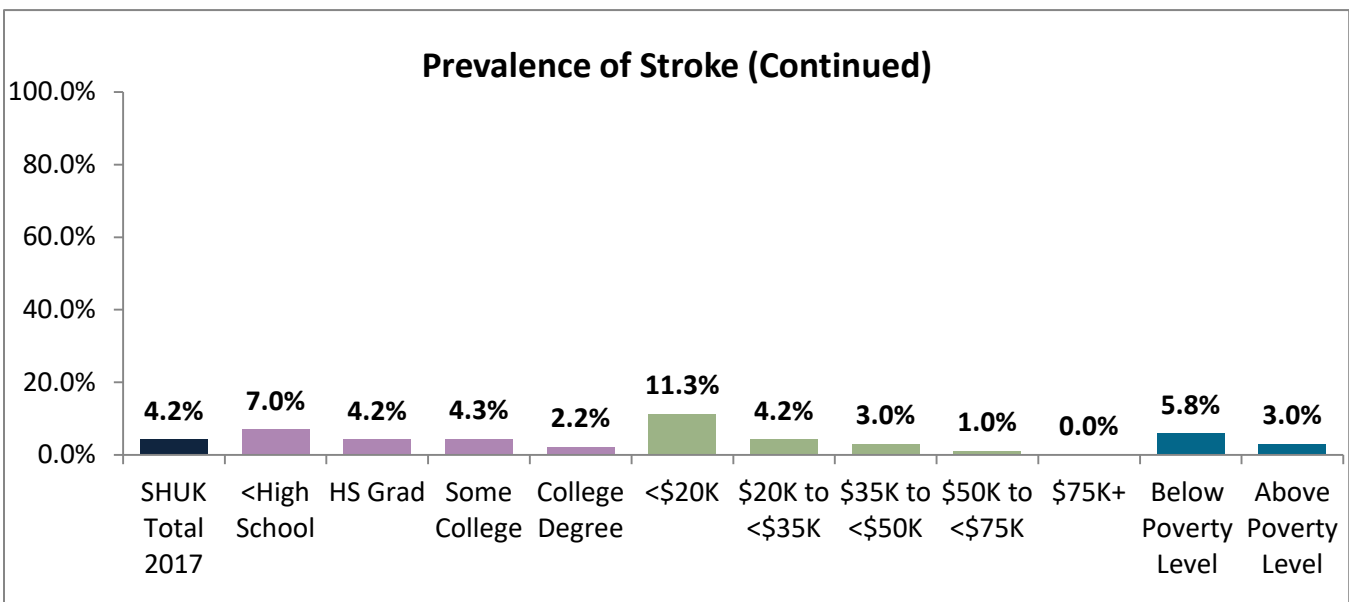
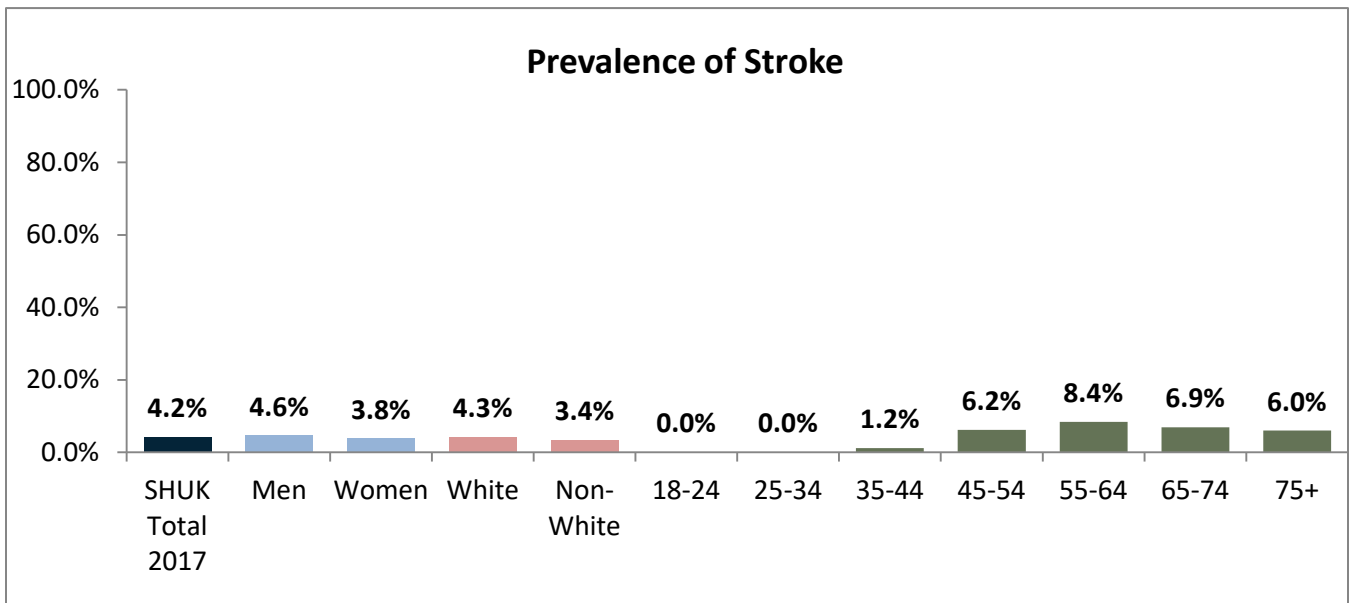


Source: SHUK Behavioral Risk Factor Survey, 2017, Q4.6: Has a doctor, nurse, or other health professional EVER told you that you had angina or coronary heart disease? (n=584).



# Cardiovascular Disease and Stroke (Continued)

- Q In 2017, 4.2% of SHUK area adults reported they had been told by a health professional that they had a stroke at some point in their life.
- Q The prevalence of stroke is higher for those aged 45+ compared to those younger, and highest in the lowest income and lowest education groups.

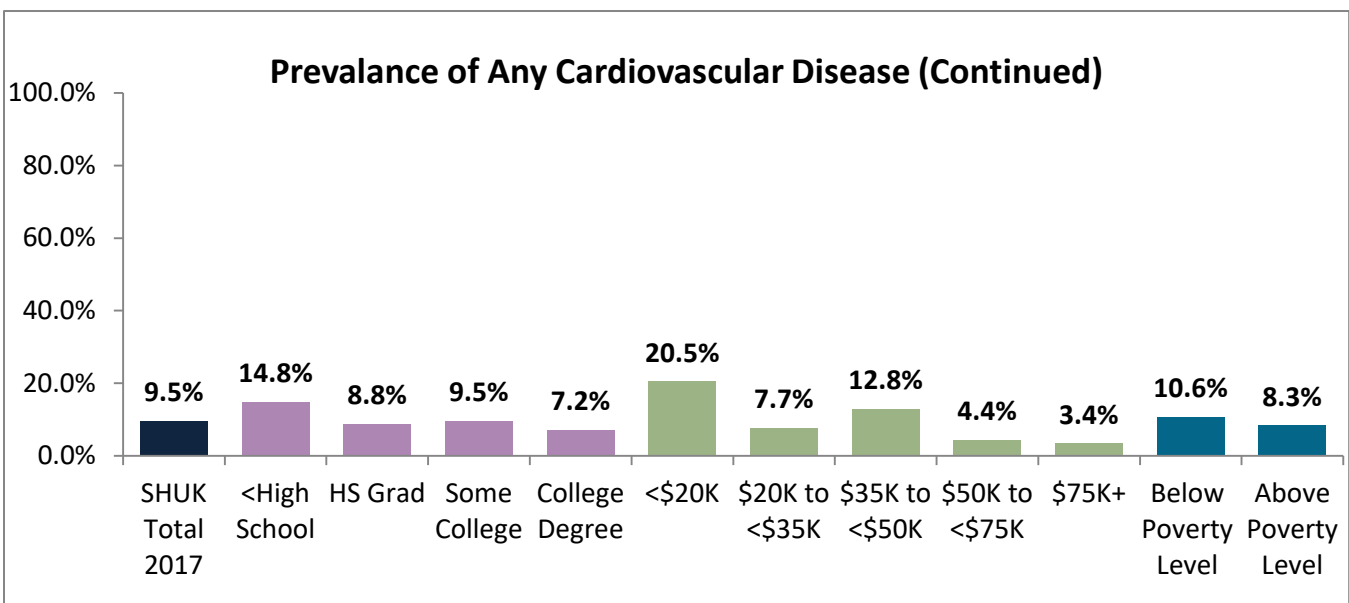
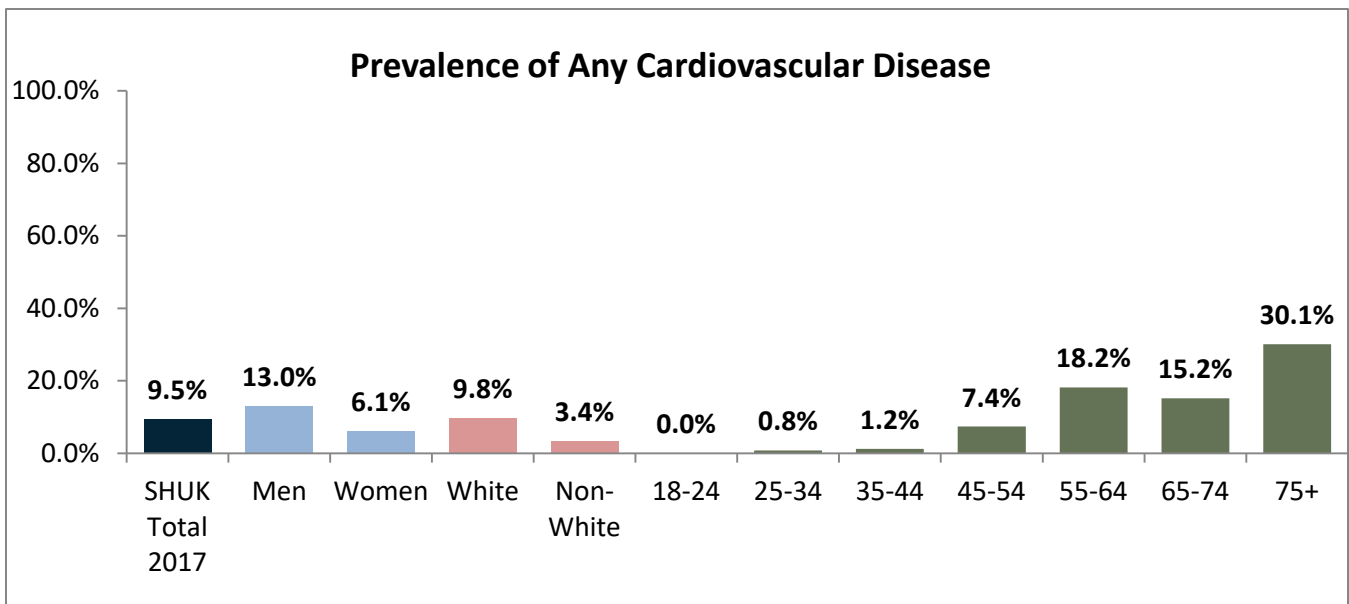


Source: SHUK Behavioral Risk Factor Survey, 2017, Q4.7: Has a doctor, nurse, or other health professional EVER told you that you had a stroke? (n=586).



# Cardiovascular Disease and Stroke (Continued)

- Q One in ten (9.5%) area adults have had some form of cardiovascular disease (e.g., heart attack, angina/CHD, and/or stroke).
- Q The highest prevalence of cardiovascular disease can be found in men, White adults, the highest age groups (55+), the lowest education group, and the lowest income group.



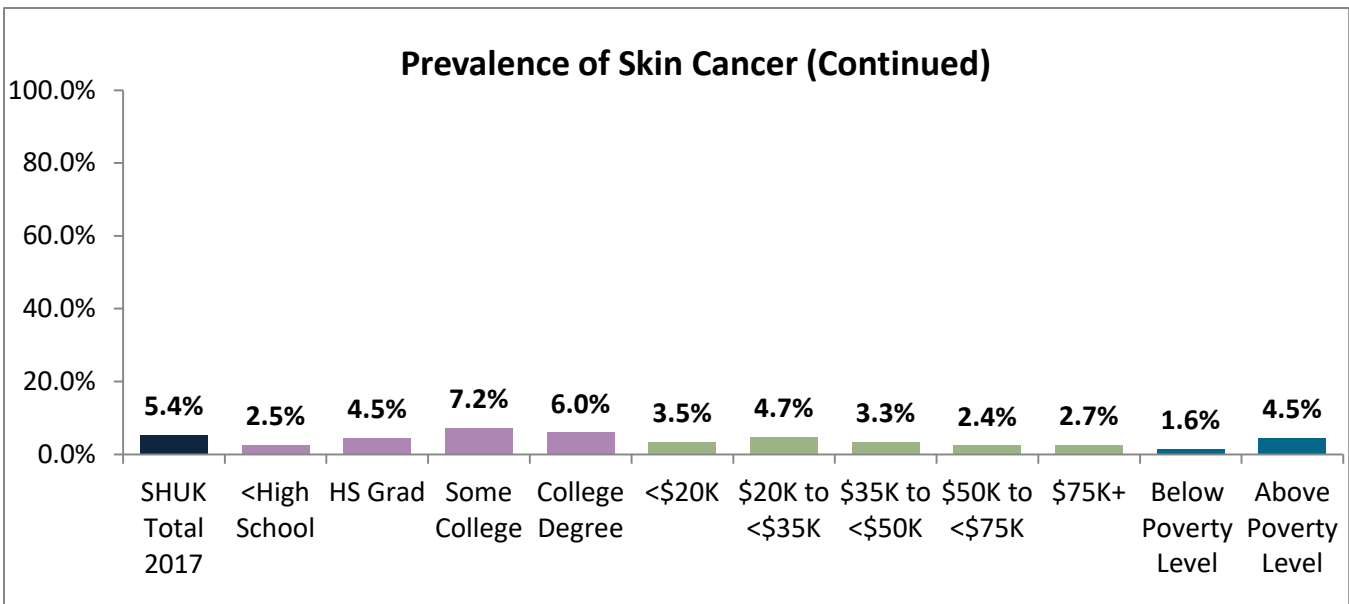
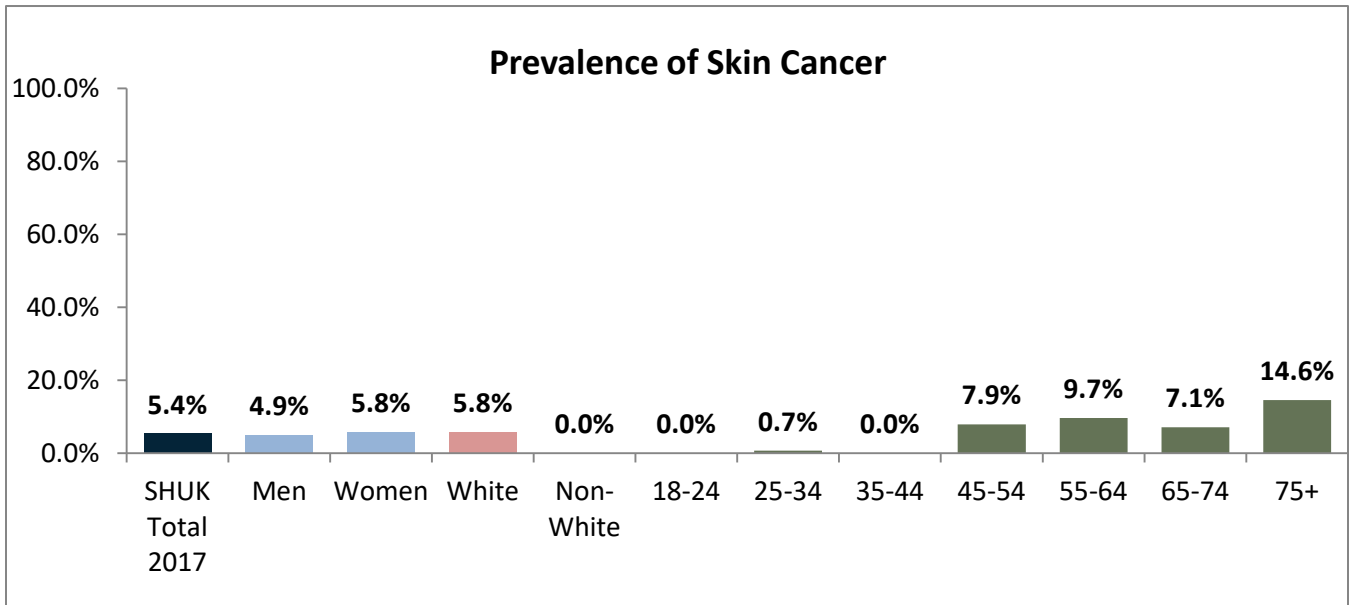
Source: SHUK Behavioral Risk Factor Survey, 2017, Q4.5/Q4.6/Q4.7.

Note: among all adults who have had some form of cardiovascular disease (heart attack, angina/CHD, stroke). (n=583)



# Cancer

- Q One in twenty (5.4%) SHUK area adults has been told they have skin cancer.
- Q The prevalence of skin cancer is higher among the oldest groups (45+), and is far more common in White adults compared to non-White adults.

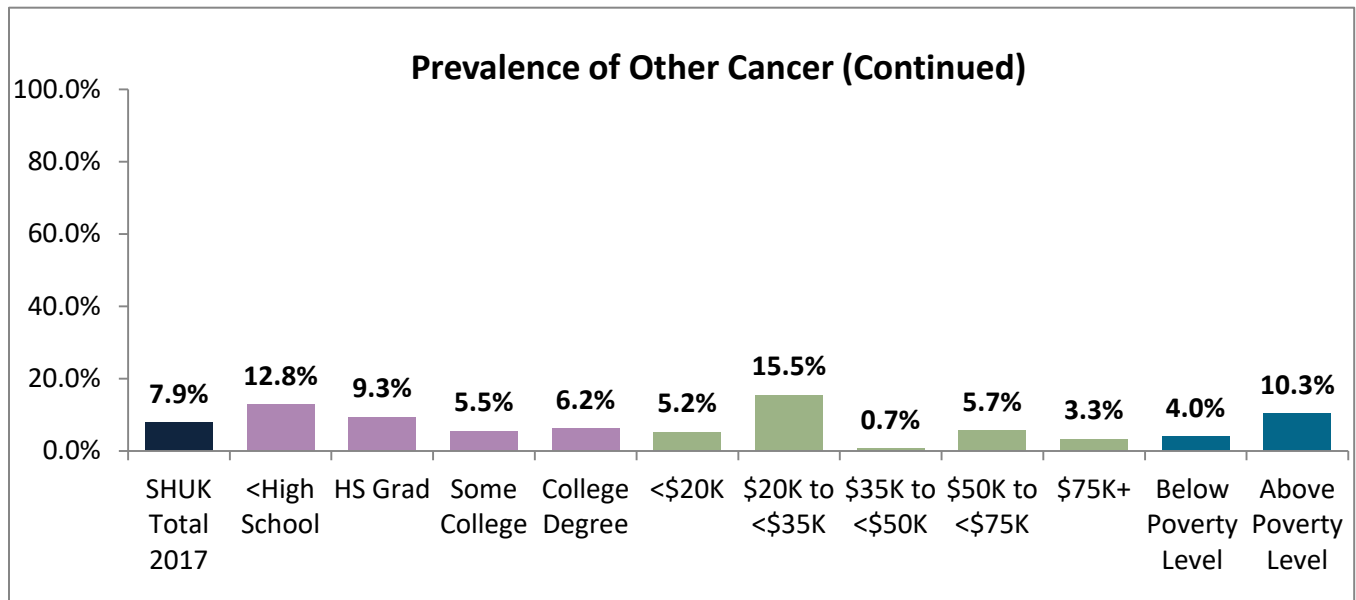
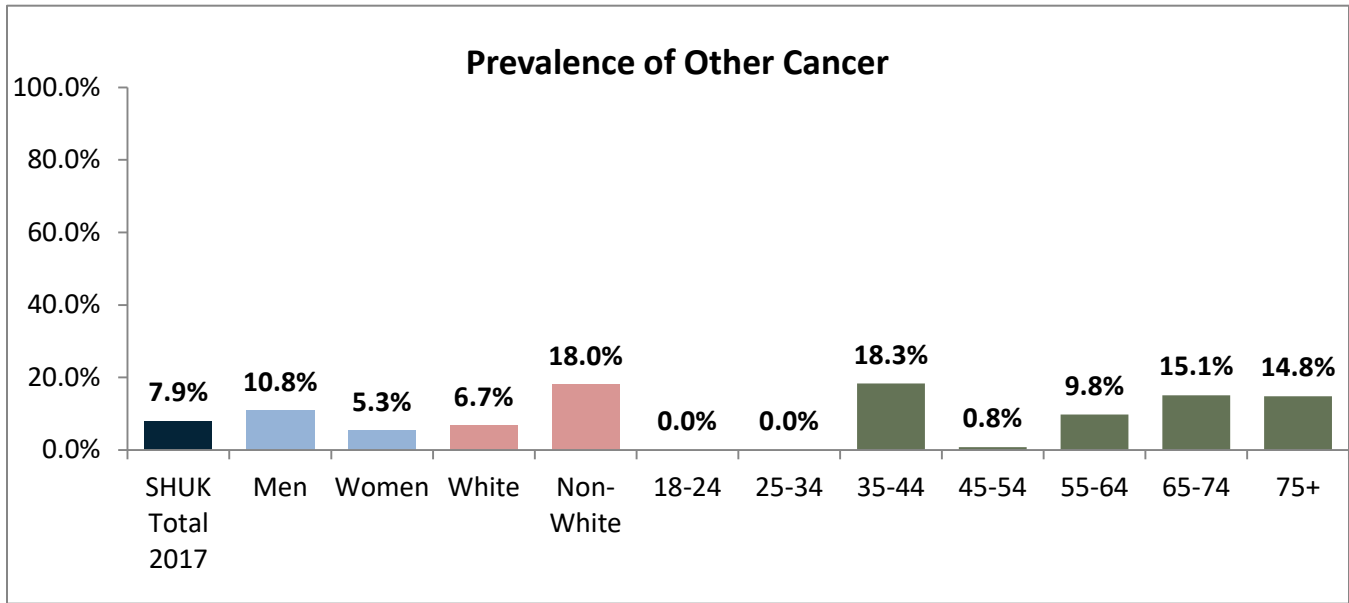


Source: SHUK Behavioral Risk Factor Survey, 2017, Q4.8: Has a doctor, nurse, or other health professional EVER told you that you had skin cancer? (n=586)



# Cancer (Continued)

- Q Among SHUK area adults, 7.9% have been told they have other forms of cancer (non-skin).
- Q Cancer is more common in area men than women, and more common in adults with no college education compared to those with a college education.

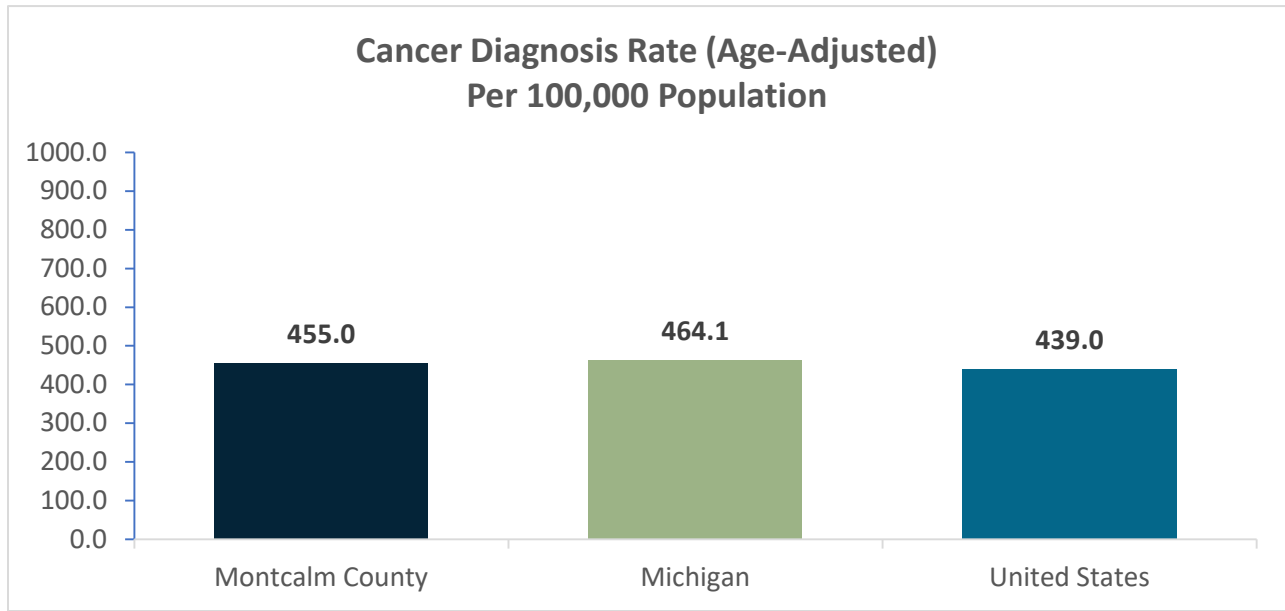


Source: SHUK Behavioral Risk Factor Survey, 2017, Q4.9: Has a doctor, nurse, or other health professional EVER told you that you had any other types of cancer? (n=587).

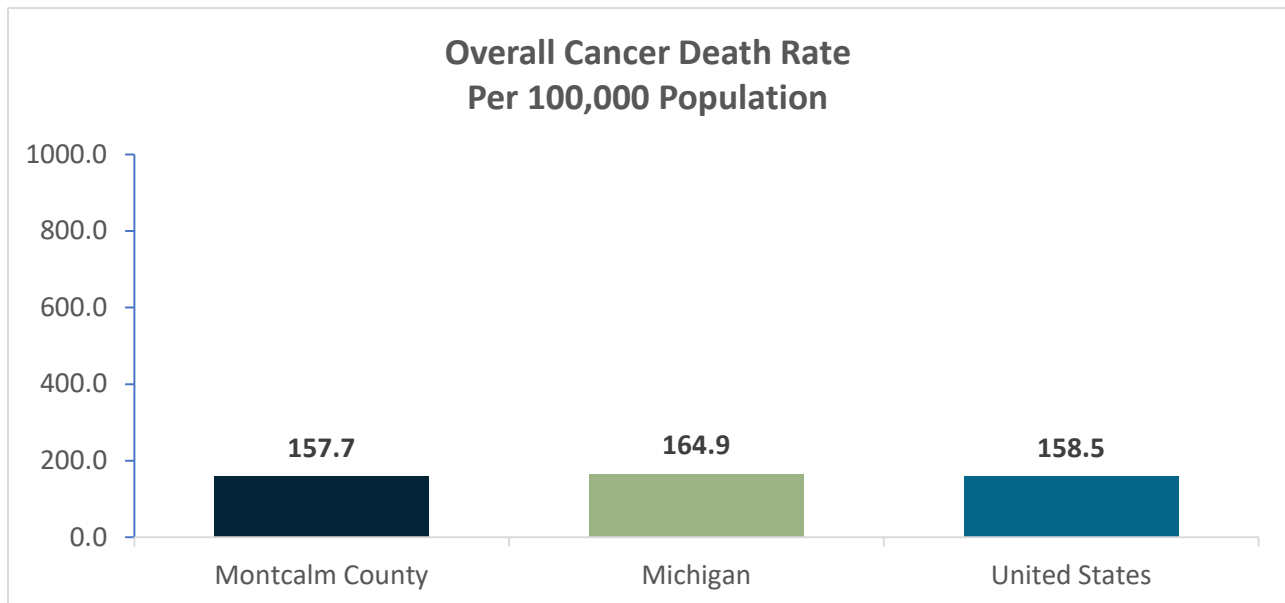


# Cancer (Continued)

- Q The cancer diagnosis rate in Montcalm County is lower than the state rate but higher than the national rate.
- Q The cancer death rate is lower in Montcalm County compared to state and national rates.



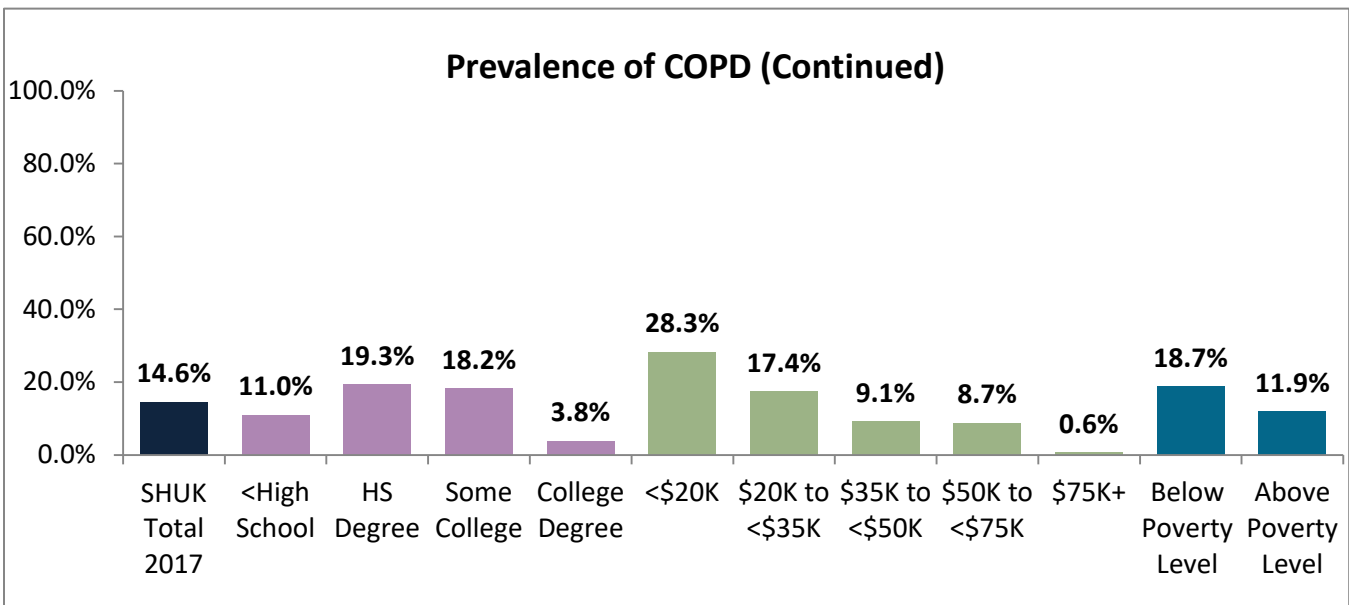
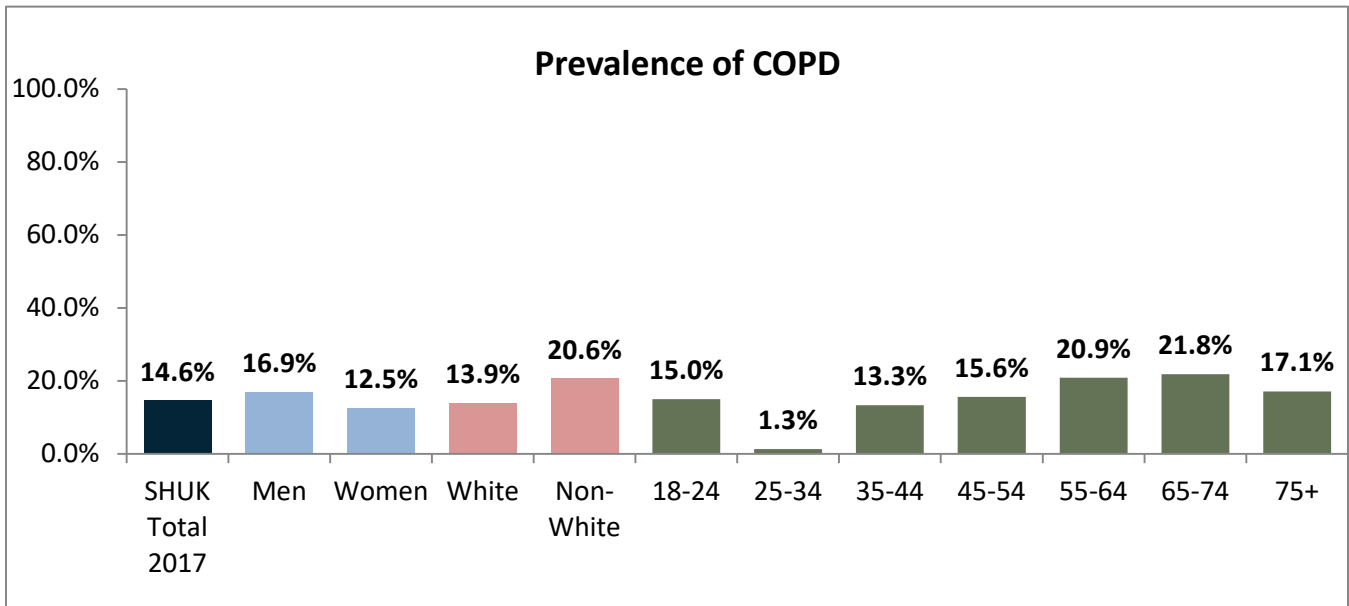
Source: MDCH Cancer Incidence Files. Montcalm County and MI 2010-2015 5-year average, US: Kaiser Family Foundation Health Facts, 2013.



Source: MDHHS Montcalm County, MI, and U.S., 2015.



- Q Almost one in seven (14.6%) area adults have chronic obstructive pulmonary disease (COPD).
- Q The disease is more common in adults who are older (55+) and/or who have low incomes, and more common in non-White adults compared to White adults.

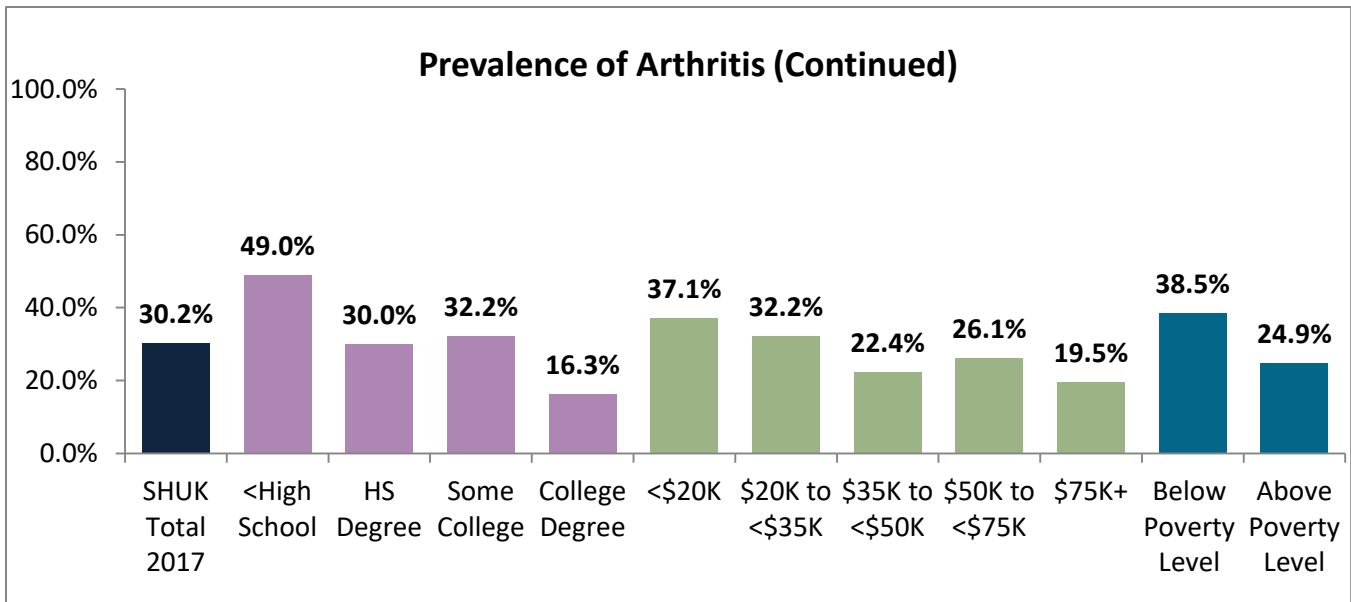
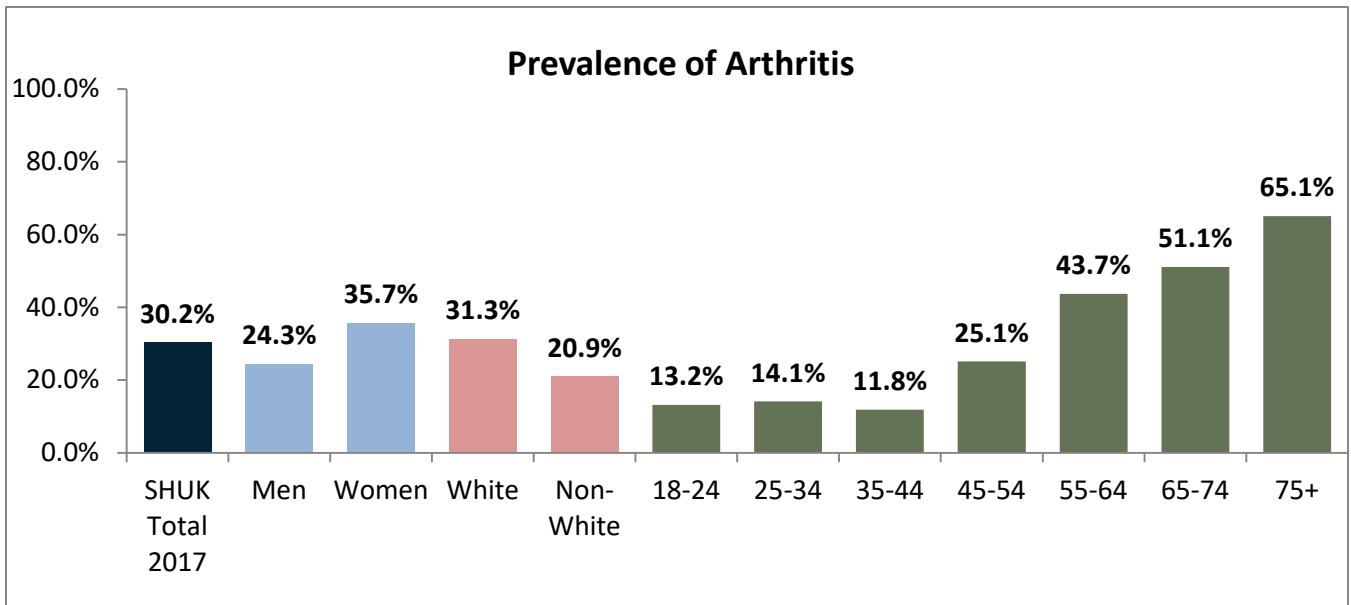


Source: SHUK Behavioral Risk Factor Survey, 2017, Q4.10: Has a doctor, nurse, or other health professional EVER told you that you had COPD (chronic obstructive pulmonary disease), emphysema or chronic bronchitis? (n=586).



# Arthritis

- Q Three in ten (30.2%) area adults have arthritis, and this is largely a condition that comes with age.
- Q The disease is also more common in women than men, more common in White adults compared to non-White adults, more common in adults with less than a high school education compared to those with more education, and more common among adults with incomes below \$35K compared to adults with higher incomes.



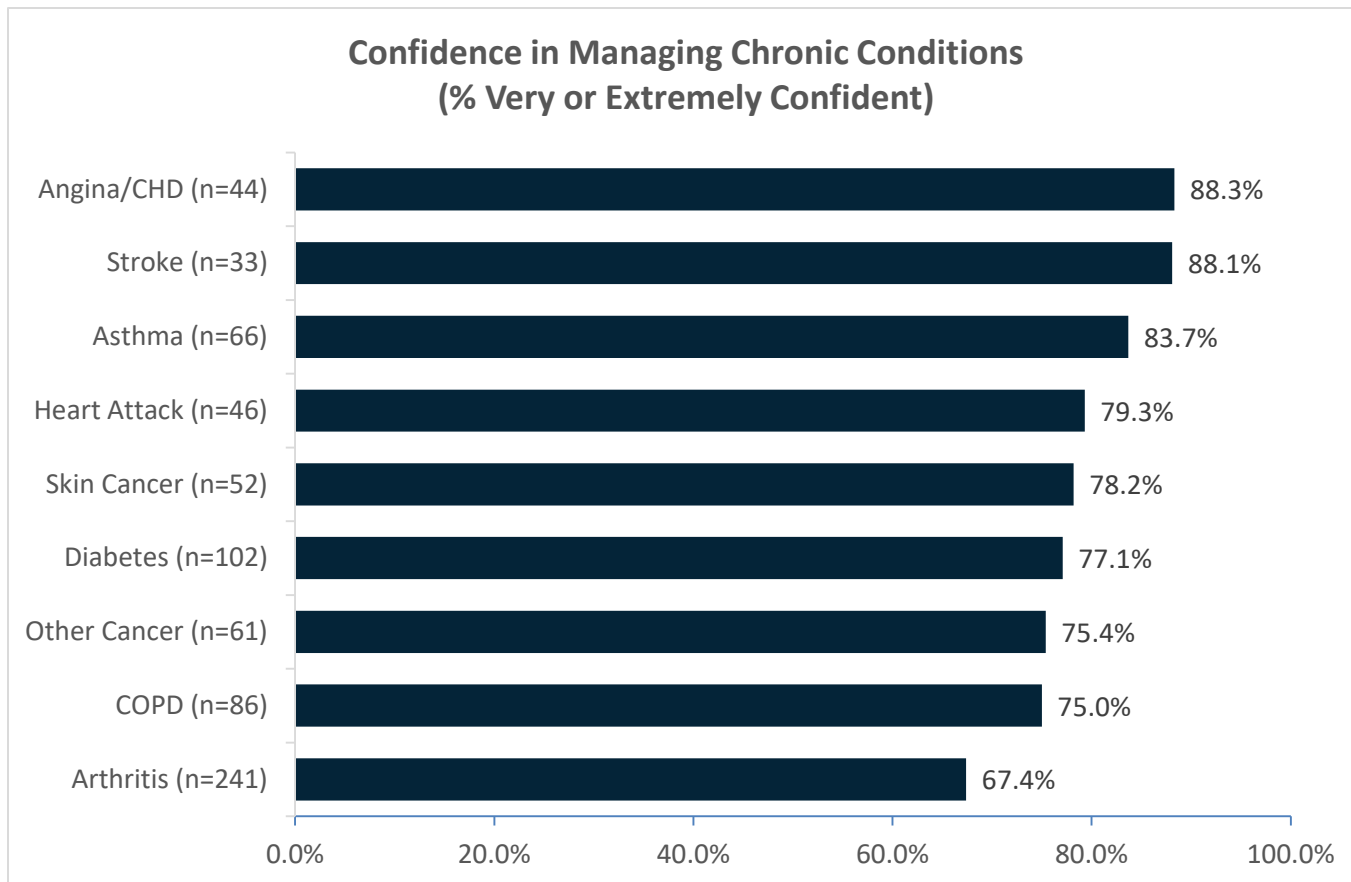
Source: SHUK Behavioral Risk Factor Survey, 2017, Q4.11: Has a doctor, nurse, or other health professional EVER told you that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia? (n=586).





# Management of Chronic Conditions

- Q A sizeable majority of adults with chronic conditions are confident that they can do all things necessary to manage their condition.
- Q The greatest barriers to confidence are inadequacy, or lack, of existing programs and services to assist them in managing their condition and/or having multiple chronic conditions that makes management difficult.

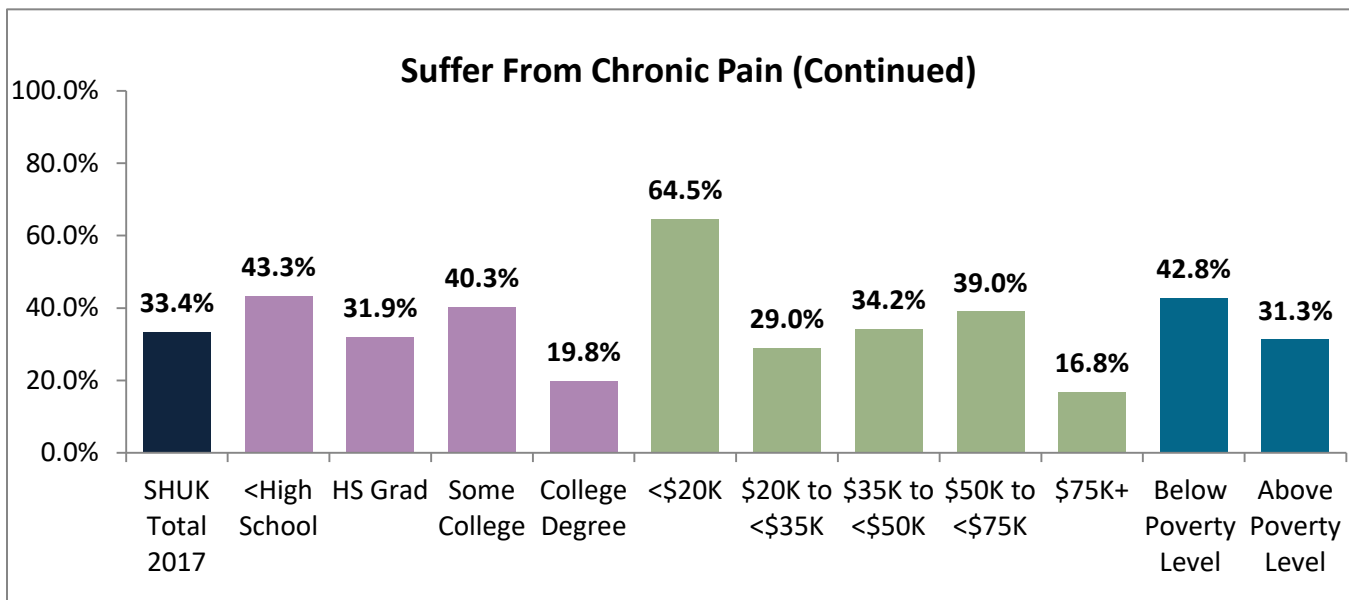
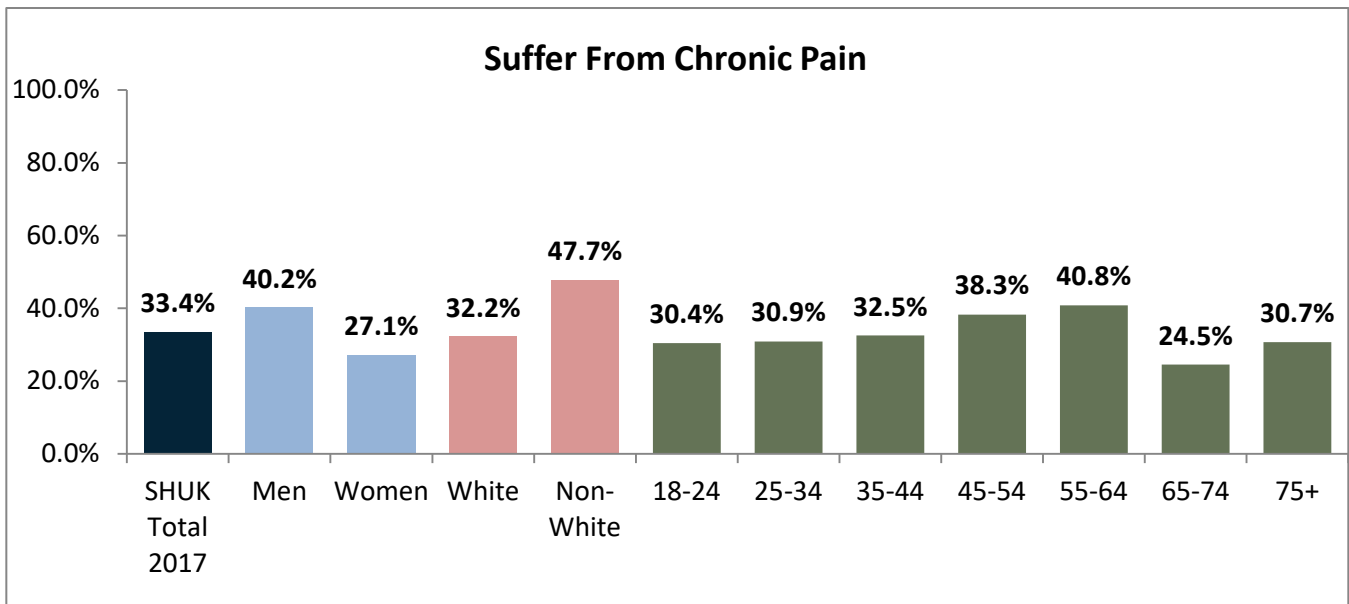


Source: SHUK Behavioral Risk Factor Survey, 2017, Q5.1: Having an illness often means doing different tasks and activities to manage your condition. How confident are you that you can do all the things necessary to manage your [insert condition]? Would you say you are not at all confident, not very confident, somewhat confident, very confident, or extremely confident?; Q5.2: (If not very or not at all confident) Why do you say you are [insert rating from ABOVE] that you can do all the things necessary to manage your [insert condition]?



# Chronic Pain

- Q One third (33.4%) of area adults suffer from chronic pain, and it is more common among non-White adults than White adults, more common in men than women, more common in adults with less than a high school education compared to those with a college degree, and more common in adults with incomes less than \$20K compared to those with higher incomes.
- Q Six in ten (59.3%) of those adults with chronic pain report their pain is managed well.

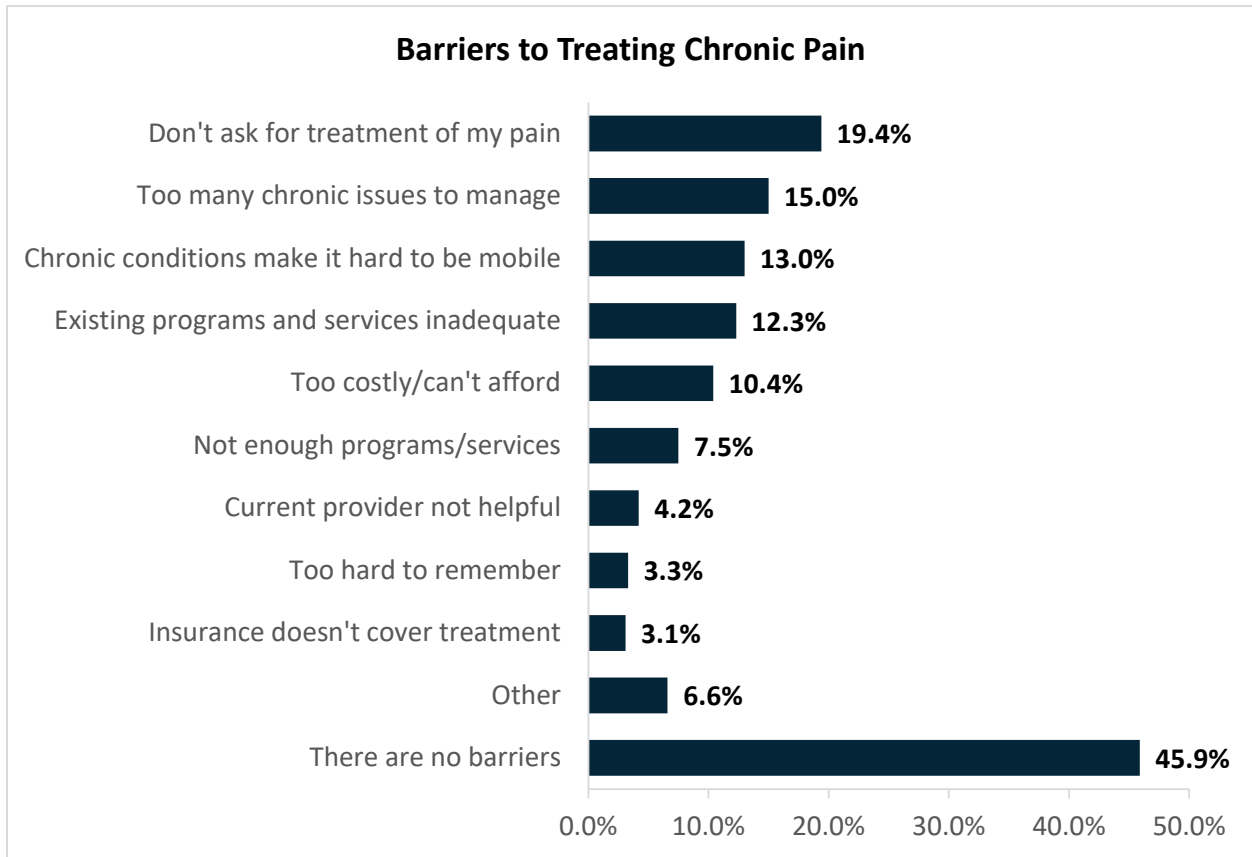


Source: SHUK Behavioral Risk Factor Survey, 2017, Q8.1: Do you suffer from any type of chronic pain; that is, pain that occurs constantly or flares up frequently? (n=586); Q8.1: (If yes) Do you feel your pain is managed well? (n=178).



# Barriers to Treating Chronic Pain

Q More than half (54.1%) of area adults suffering from chronic pain report myriad barriers to treating their pain, including: too many chronic issues to manage; their condition makes it hard to be mobile; inadequate, or lack of, programs and services that could help them deal with their pain better; and cost.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q8.3: What are some of barriers to treating your pain? (n=175)  
Note: The proportion of adults who reported they suffer from chronic pain.

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# HEALTH CARE ACCESS

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# Overall State of Healthcare Access in Community

Q According to Key Stakeholders, despite increased coverage via the Affordable Care Act and Healthy Michigan Plan, there are still access to care issues, including both primary care and specialty care. Several steps were taken to address these gaps, such as utilizing TeleMed, hiring more mid-level practitioners, and opening dental clinics. Transportation remains an enormous barrier to care and the subpopulations of residents who are mentally ill or disabled face the greatest barriers.

It depends on where you live. I think in Greenville (the hub) we have really excellent access from a primary care perspective as well as obviously hospitals and those kinds of things. We have four hospitals in our county. The other three hospitals besides United are small but still have the ability to care for patients, but primary care access outside the hub is really quite limited. People have to drive quite a while and a long time to the next appointment. Travel time is usually quite significantly long, so I think that there's an opportunity for more primary care. There's also an opportunity for us to leverage more virtual telemedicine-type visits as well, and being in a small rural community, we have a tendency not to embrace that quite as much as we could. I think there's opportunity there to improve access, but we're just not quite there yet.

We have four hospitals, so there's certainly physician's offices. We tend to see it from the perspective of individuals with mental illness and developmental disability and of course the Medicaid population because that's who we primarily serve, and we have our own on-site health clinic that we've been trying to do for a couple years. It's been difficult but what we see is that those populations have difficulty accessing services and tend to get turned away because either they're disruptive in the waiting room or they don't show up to their appointments. So, access, if you're on individual private insurance, I don't think there's an issue with access to services if you have a reliable car, but if you have a mental illness or a developmental disability and you're trying to access services, I think sometimes our people struggle with that - in getting primary care, in part because they've been turned away because they don't show up to their appointments or their car breaks down and they don't get there every time, so they get turned away. We see it from a different perspective in that we serve everybody that we can, and we do everything that we can to get them to appointments, and that's certainly a different perspective we have.

I think it's improved recently basically because of the expansion of Medicaid, but the system has responded by creating more opportunities, so we had a serious rural health provider shortage recently, but in neighboring counties, well within driving distance of Montcalm, new dental clinics have sprung up serving the Medicaid population, so we've seen the waiting times improve in Montcalm. People are getting into their oral health appointments. The Spectrum system has added primary care providers. I think for specialty services, obviously, you just don't have the market here to sustain that, but really, it's easy to get to Grand Rapids, Mount Pleasant, or Lansing - places where specialty care is available. Transportation is absolutely an issue. I'm just trying to sort of evaluate our options here, and I think I'm real excited about telemedicine as being a way we need to go because I don't think gastroenterologists are going to locate here. I think we have to find other ways to bridge that gap, and I think telemedicine is definitely an option.

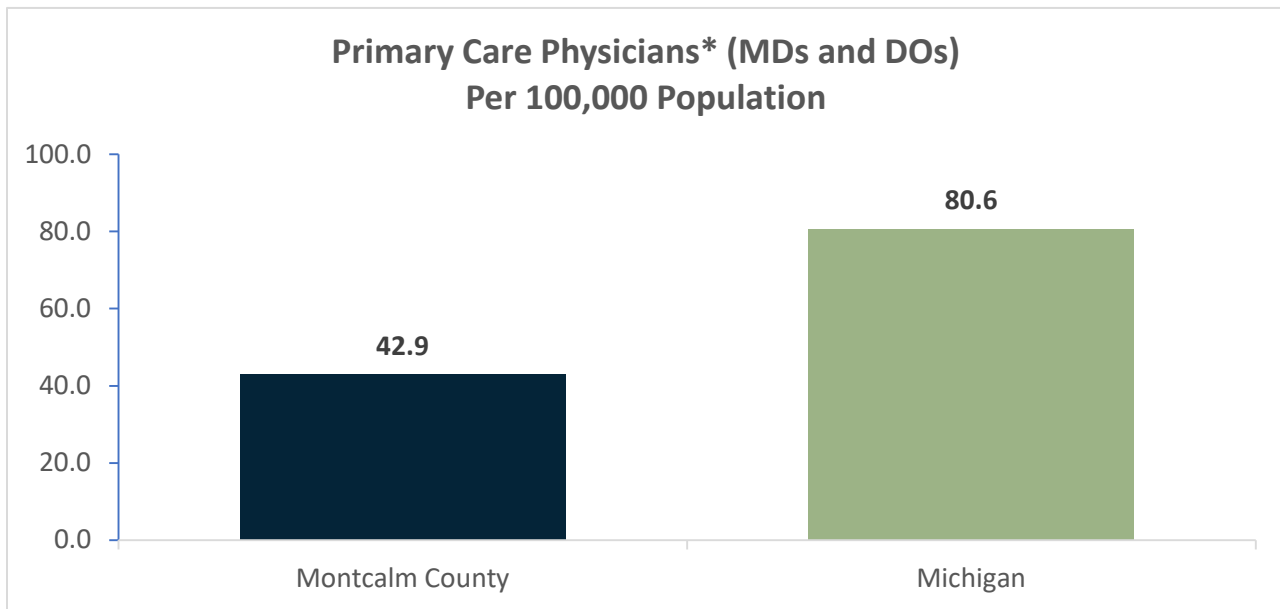
I think that we assume just because we're here people have access. Transportation is a huge issue here. Keeping folks in the primary care system as best we can, access to primary care, is an issue. We're using mid-levels, more advanced practice professions increasingly because they just need the time available and the resources available to folks.

Source: SHUK Key Stakeholder Interviews, 2017, Q3: Describe the current state of health care access in the community. (n=4)



# Health Care Providers

- Q There are far fewer primary care physicians (MDs or DOs) per capita in Montcalm County compared to the state rate. In fact, the state rate for primary care physicians per capita is almost double the rate for Montcalm County.
- Q Key Stakeholder and Key Informant comments support this finding.



Source: County Health Rankings, 2015

\*Note: Physicians defined as general or family practice, internal medicine, pediatrics, obstetrics or gynecology.

**Financially depressed area with minimal primary care providers will work here. – Key Informant**

**Few doctors in rural areas plus patients have transportation challenges to access providers and support services. – Key Informants**

**Not enough primary care - total absence of behavioral health - access to primary care level. It's because we're short on resources. It's not for lack of trying or lack of understanding. It's just very difficult finding rural physicians, but just getting resources gathered into a rural area. – Key Stakeholder**

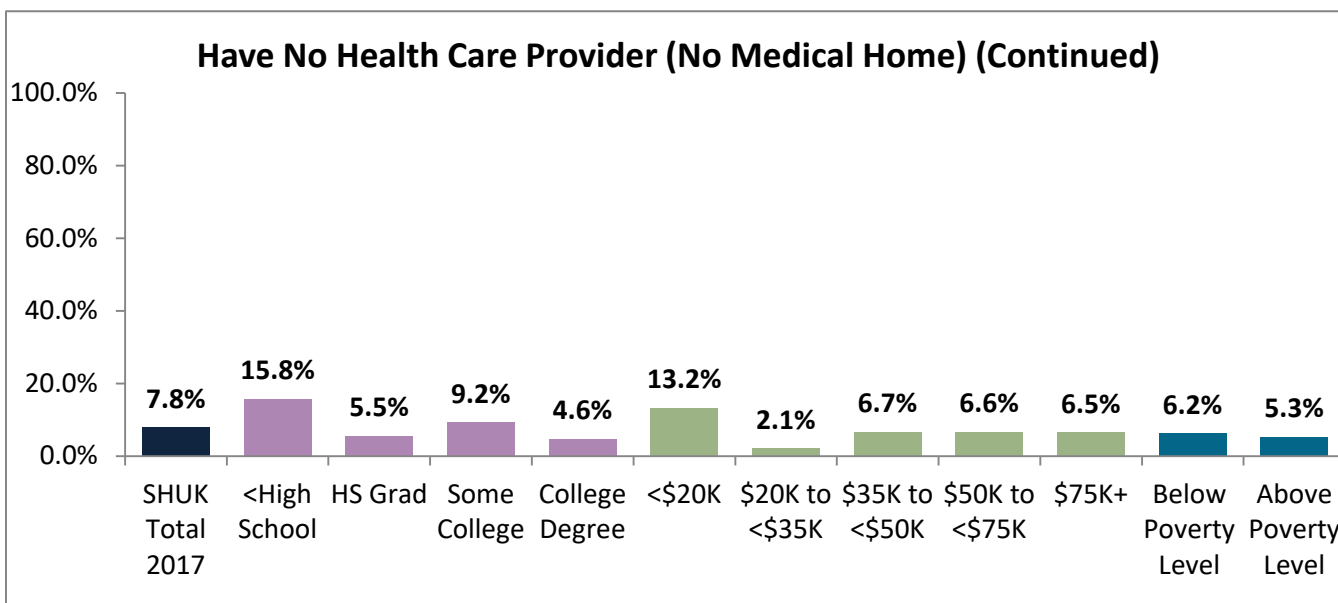
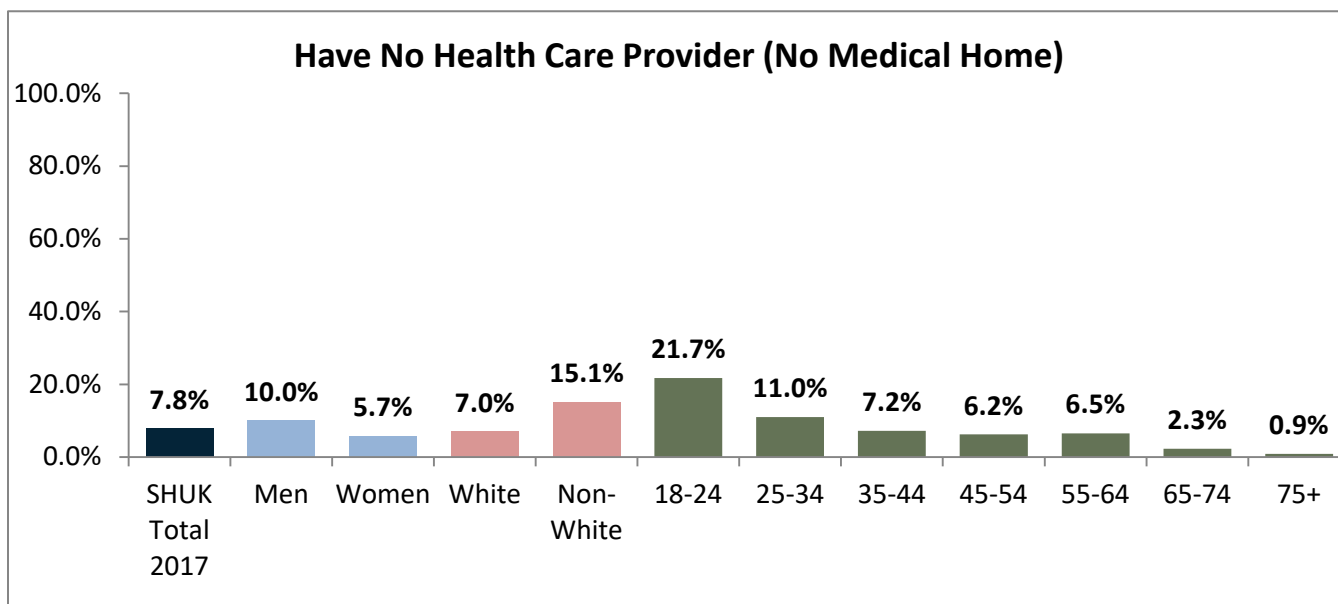
**We need to recruit more primary care physicians. – Key Informant**

Source: SHUK Key Stakeholder Interviews, 2017, Q3a: Is there a wide variety/choice of primary health care providers? (n=4); SHUK Key Informant Online Survey, 2017, Q1a: Why do you think [lack of providers] is a problem in the community? Please be as detailed as possible. (n=15)



# Health Care Providers (Continued)

- Q Almost one in thirteen (7.8%) SHUK area adults have no personal health care provider, and this rises to 9.5% for underserved adults.
- Q Men and non-White adults are more likely to lack a PCP than women and non-White adults, respectively.
- Q Adults most likely to lack a PCP come from groups that are the youngest (18-24), have no high school diploma, and have incomes less than \$20K.

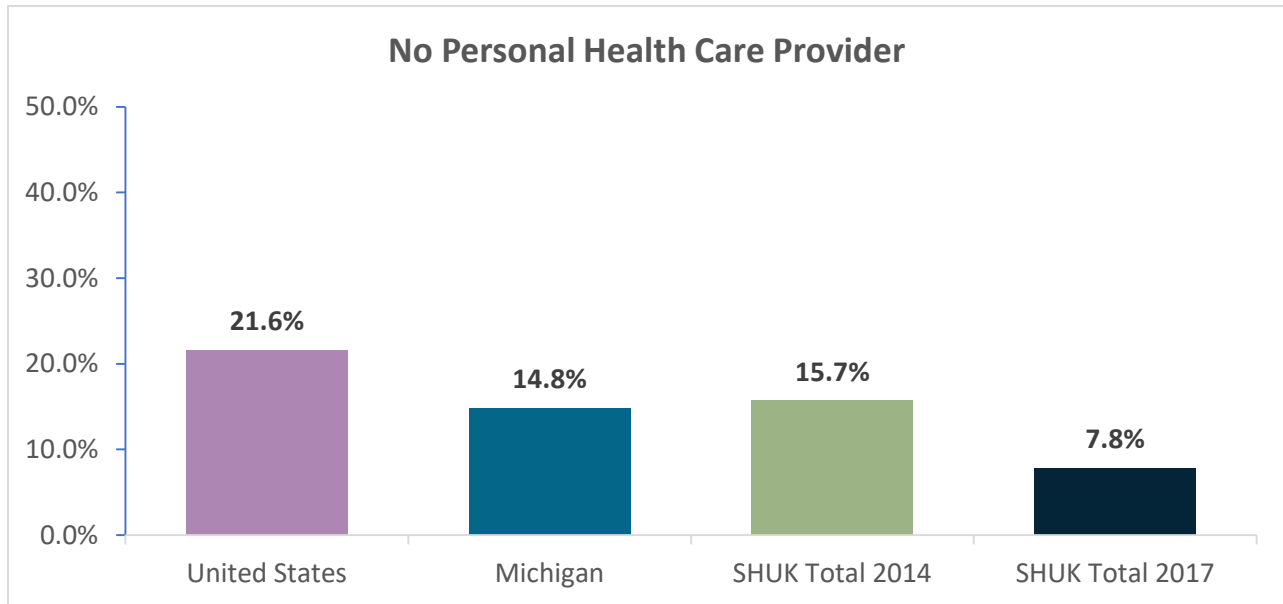


Source: SHUK Behavioral Risk Factor Survey, 2017, Q3.4: Do you have one person you think of as your personal doctor or health care provider? (n=584); SHUK Underserved Resident Survey, 2017, Q2: Do you and your family have a primary care physician that you can visit for questions or concerns about your health? (n=148)

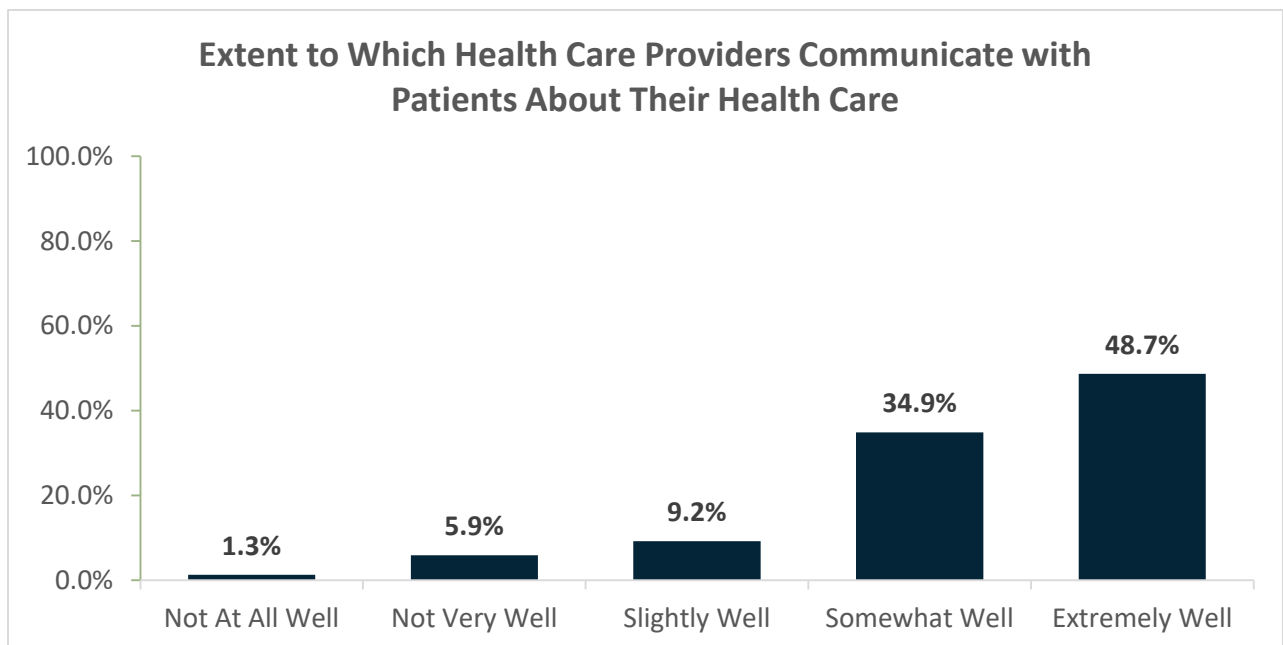


# Health Care Providers (Continued)

- Q The proportion of area adults with no personal health care provider has improved since the last CHNA in 2014 and continues to be better than state and national proportions.
- Q A large majority (83.6%) of underserved adults believe health care providers communicate well with them.



Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016; Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFSS, 2015; SHUK Behavioral Risk Factor Survey, 2014, 2017.



Source: SHUK Underserved Resident Survey, 2017, Q8: How well do you feel health care providers communicate with you about your health care? (n=152)

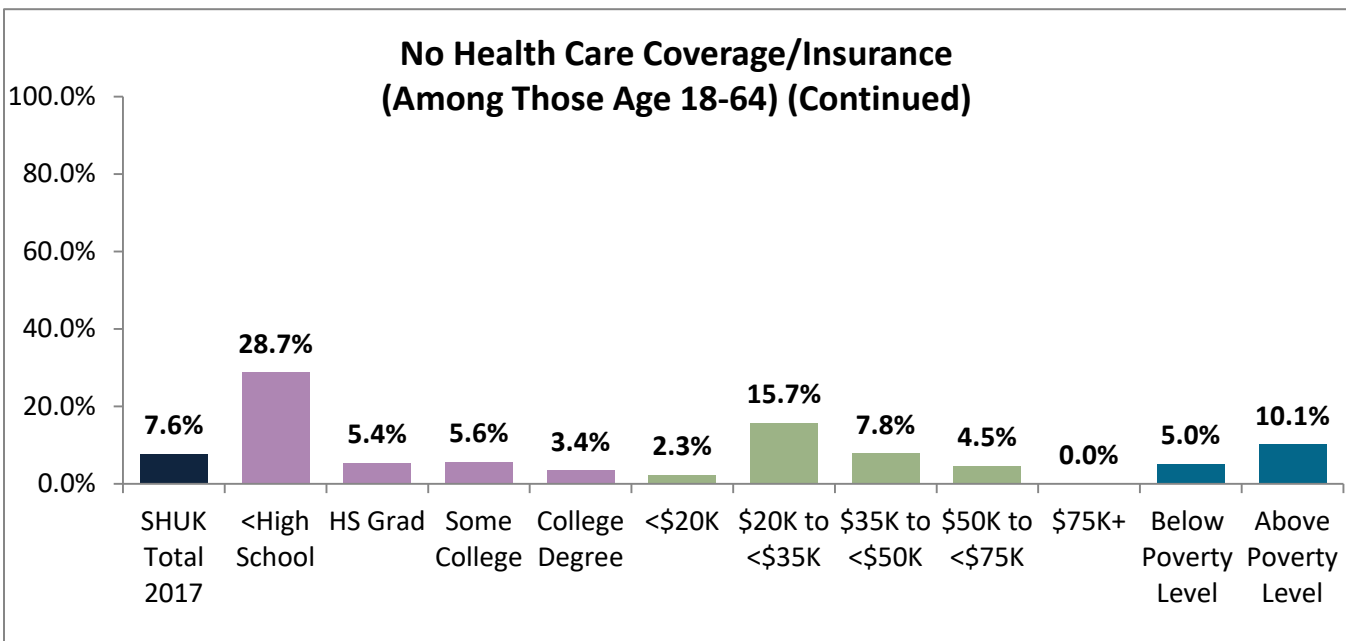
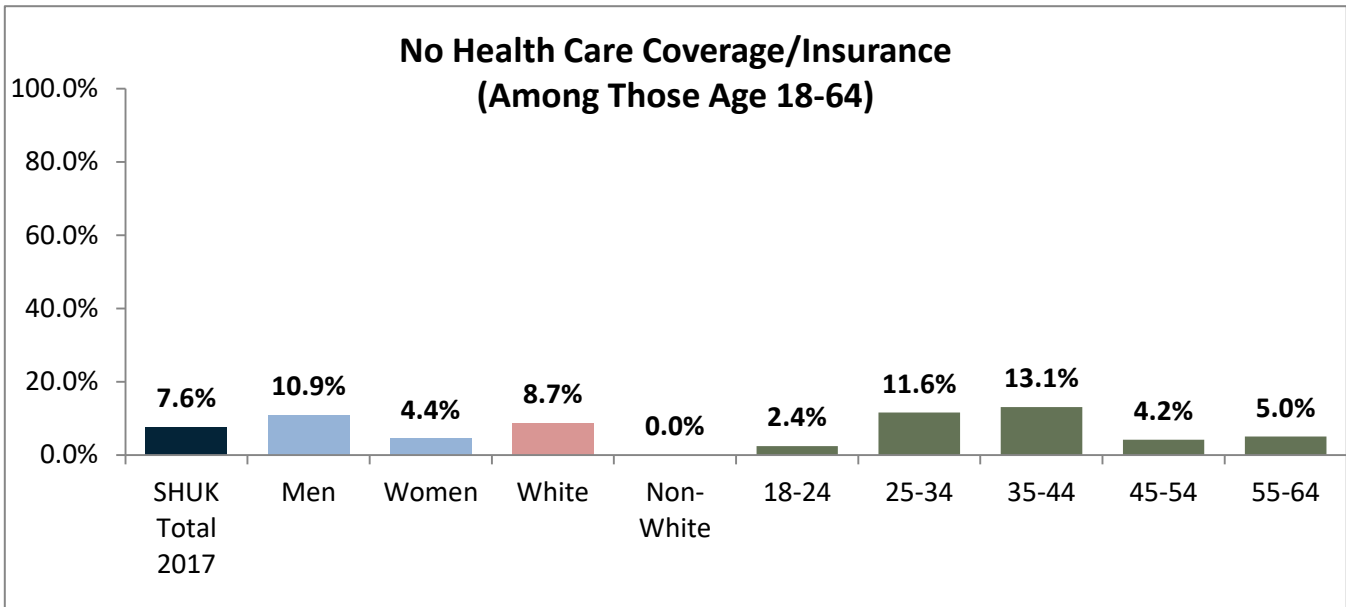






# Health Care Coverage

- Q Among SHUK area adults aged 18-64, 7.6% have no health care coverage or insurance; this rate has improved from 2014 (11.9%) and is better than the state (12.0%) or national (12.3%) rates.
- Q This proportion increases to 28.7% for adults without a high school diploma.
- Q Men and White adults are less likely to have health insurance than women or non-White adults, respectively.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q3.1: Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare or Indian Health Service? (n=322). Note: among adults aged 18 to 64.

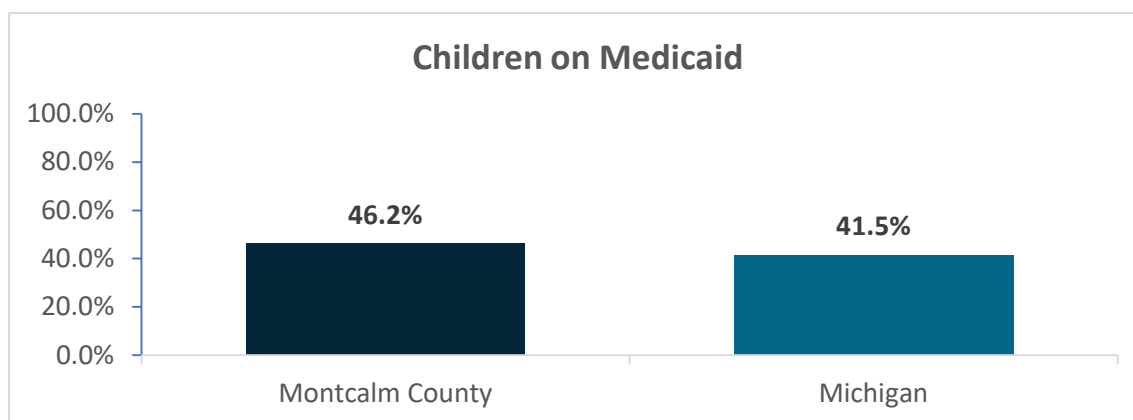


# Health Care Coverage (Continued)

- Q More often, the primary source of health coverage for all adults in the general population, is a plan purchased through an employer or union.
- Q This differs markedly from underserved adults, who are more likely, by far, to have Medicaid (73.2%) than any other coverage.
- Q More children are on Medicaid in Montcalm County compared to Michigan.

	Primary Source of Health Coverage of All Adults	
	BRFS (n=583)	Underserved* (n=153)
<b>A plan purchased through an employer or union</b>	<b>39.4%</b>	<b>15.0%</b>
<b>Medicare</b>	<b>22.9%</b>	<b>22.2%</b>
<b>A plan that you or another family member buys on your own</b>	<b>5.8%</b>	<b>3.9%</b>
<b>Medicaid or other state program</b>	<b>23.9%</b>	<b>73.2%</b>
<b>Tricare, VA, or military</b>	<b>1.3%</b>	<b>4.6%</b>
<b>Medicare supplement</b>	<b>NA</b>	<b>2.0%</b>
<b>None</b>	<b>6.4%</b>	<b>3.9%</b>

Source: SHUK Behavioral Risk Factor Survey, 2017, Q3.2: What is the primary source of your health care coverage? Is it...?; SHUK Underserved Resident Survey, 2017, Q9: Which of these describes your health insurance situation? \*Note: multiple response question.

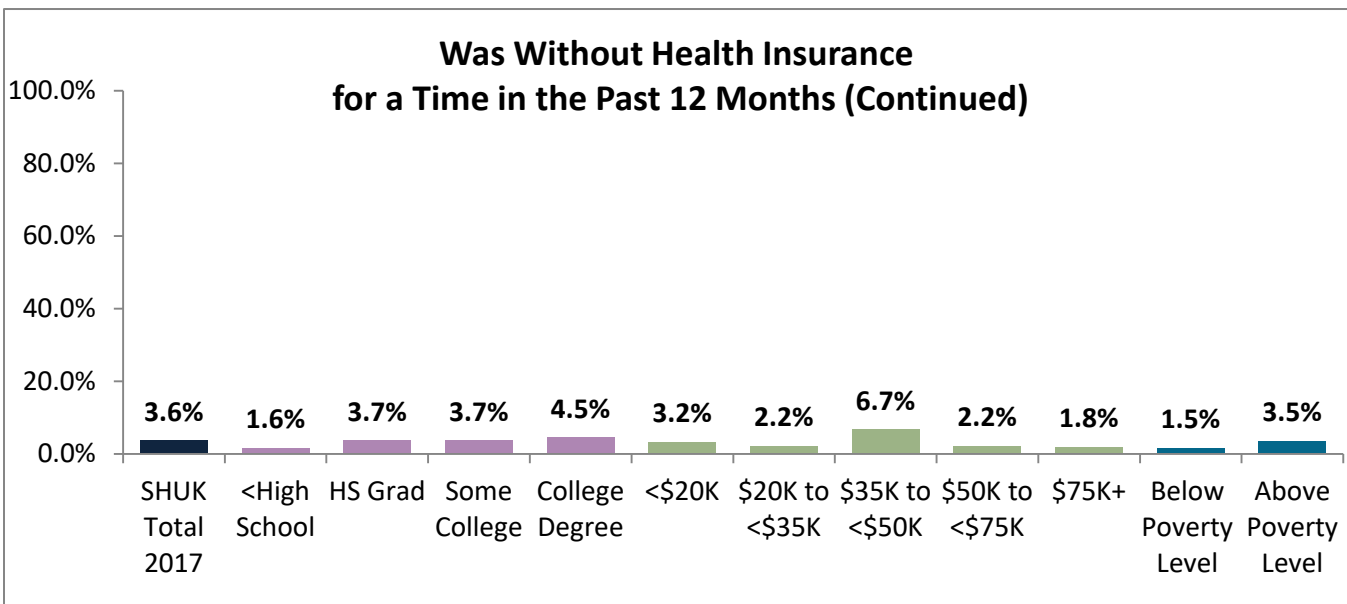
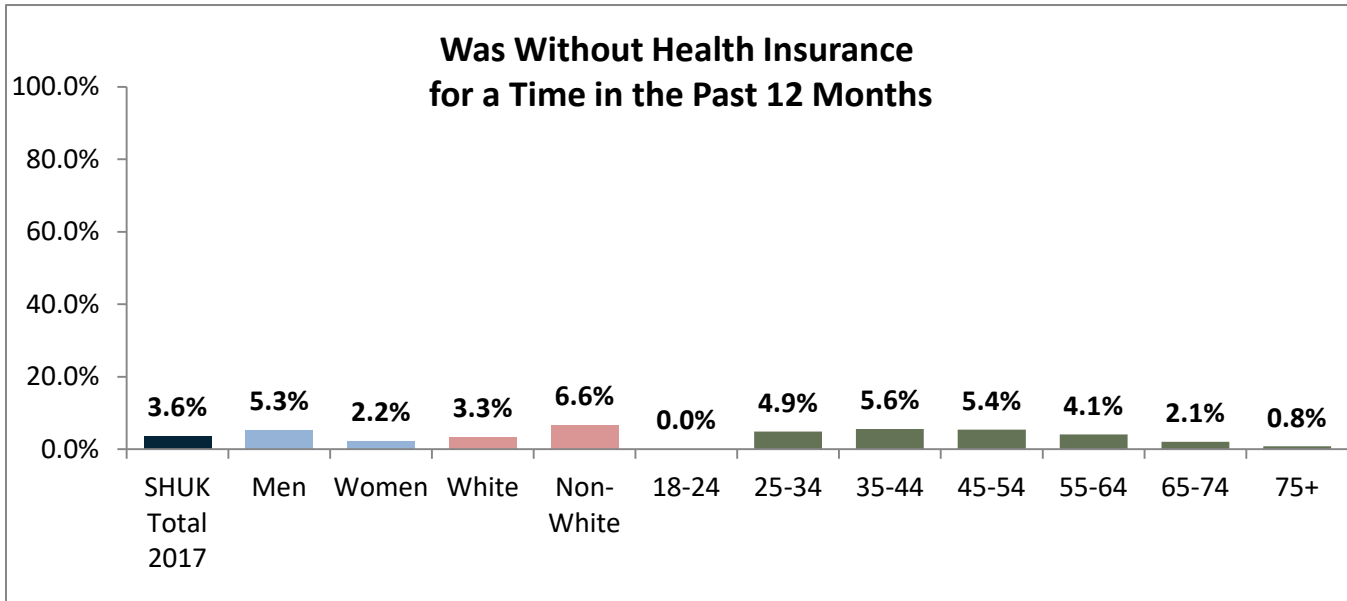


Source: Kids Count Data Book, 2016.



# Health Care Coverage (Continued)

Q Among area adults with health insurance, 3.6% went without insurance at some time during the past year.

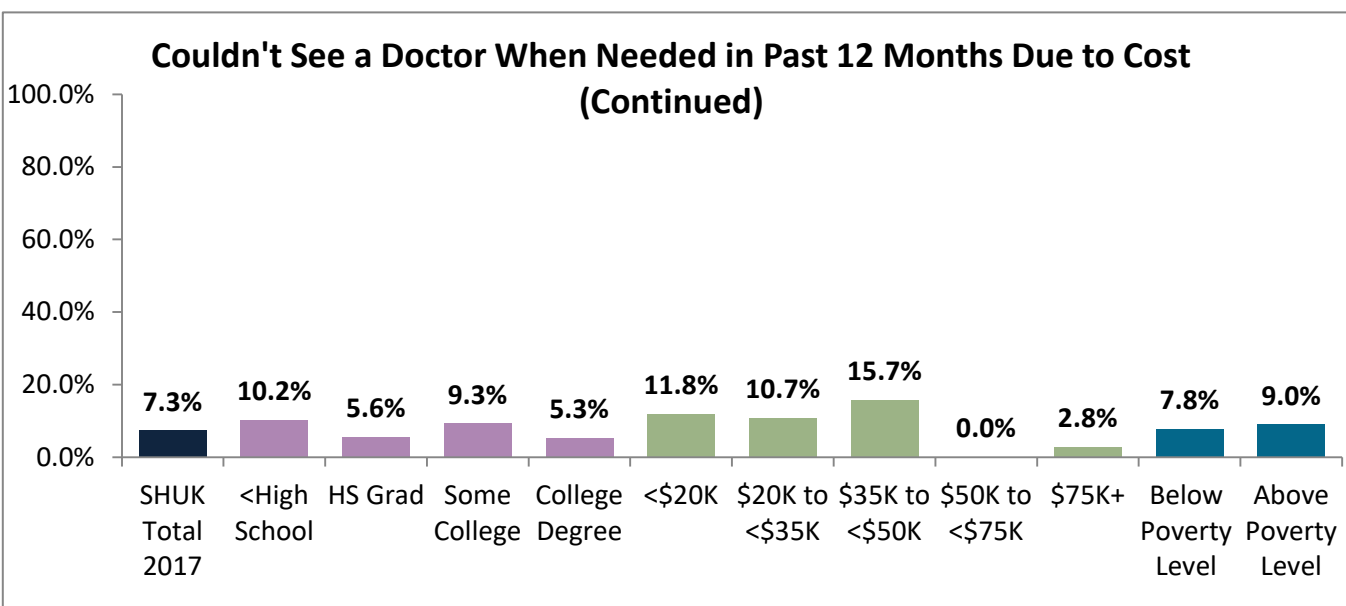
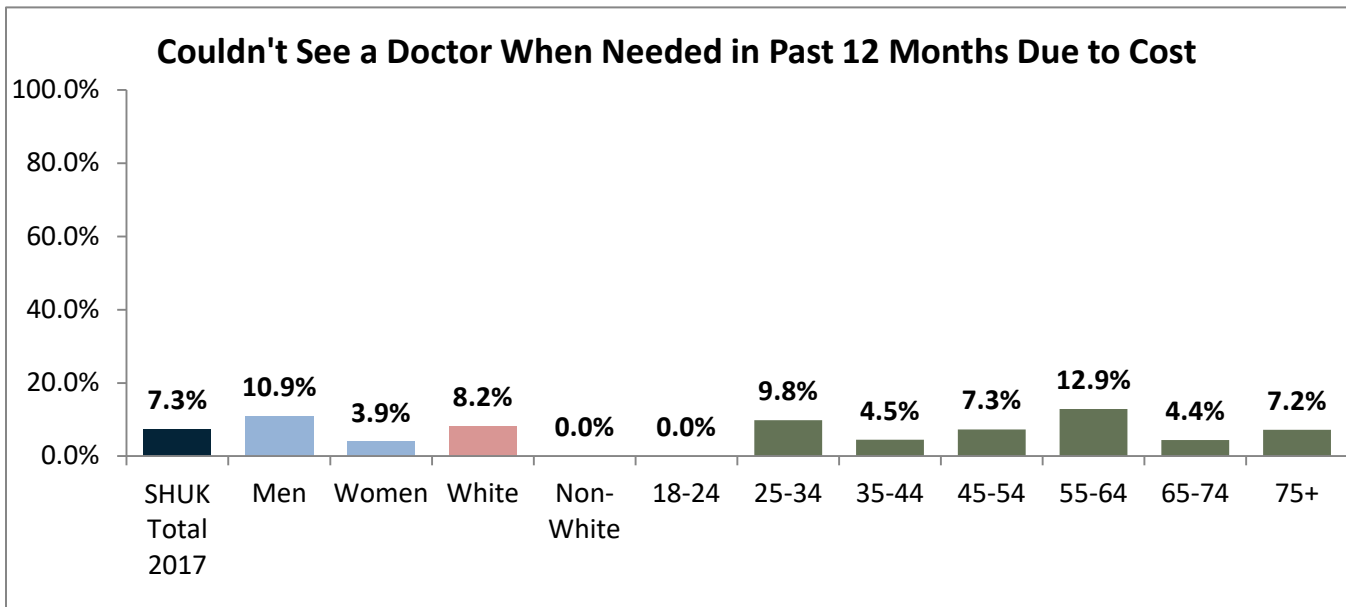


Source: SHUK Behavioral Risk Factor Survey, 2017, Q3.3: In the past 12 months was there any time when you did not have any health insurance or coverage? (n=559)  
 Note: among all adults who had health insurance.



# Problems Receiving Health Care

- Q Among all SHUK area adults, 7.3% have foregone health care in the past year due to cost; this rate has improved from 2014 (11.9%) and is better than the state (12.7%) or national (12.0%) rates.
- Q Forgoing needed care is more common in men and White adults compared to women and non-White adults, respectively.
- Q It is also most common among adults with incomes less than \$50K.

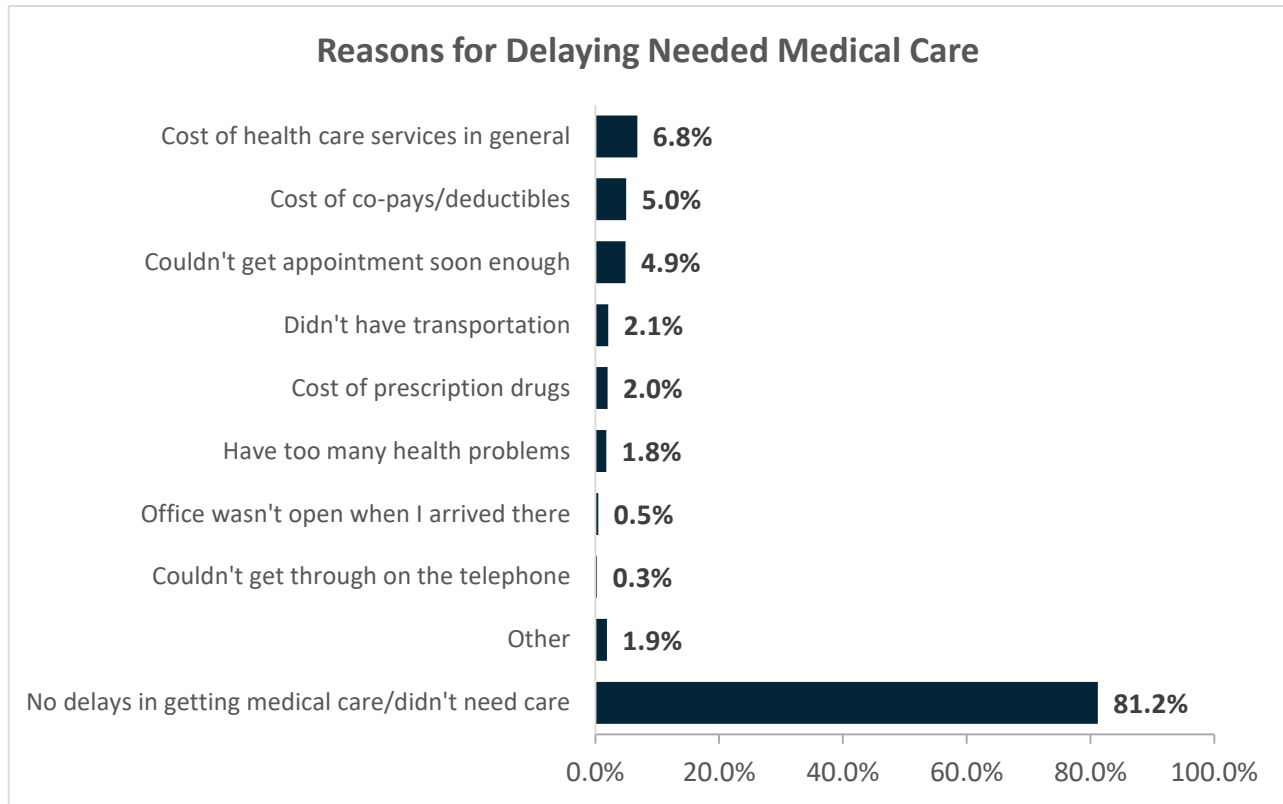


Source: SHUK Behavioral Risk Factor Survey, 2017, Q3.5: Was there a time in the past 12 months when you needed to see a doctor but could not because of cost? (n=587)



# Problems Receiving Health Care (Continued)

Q Eight in ten (81.2%) area adults did not experience delays in receiving needed medical care in the past year, but those who did cite general health care costs; an inability to afford out-of-pocket expenses such as co-pays and deductibles; and an inability to get a timely appointment, as top barriers to needed care.

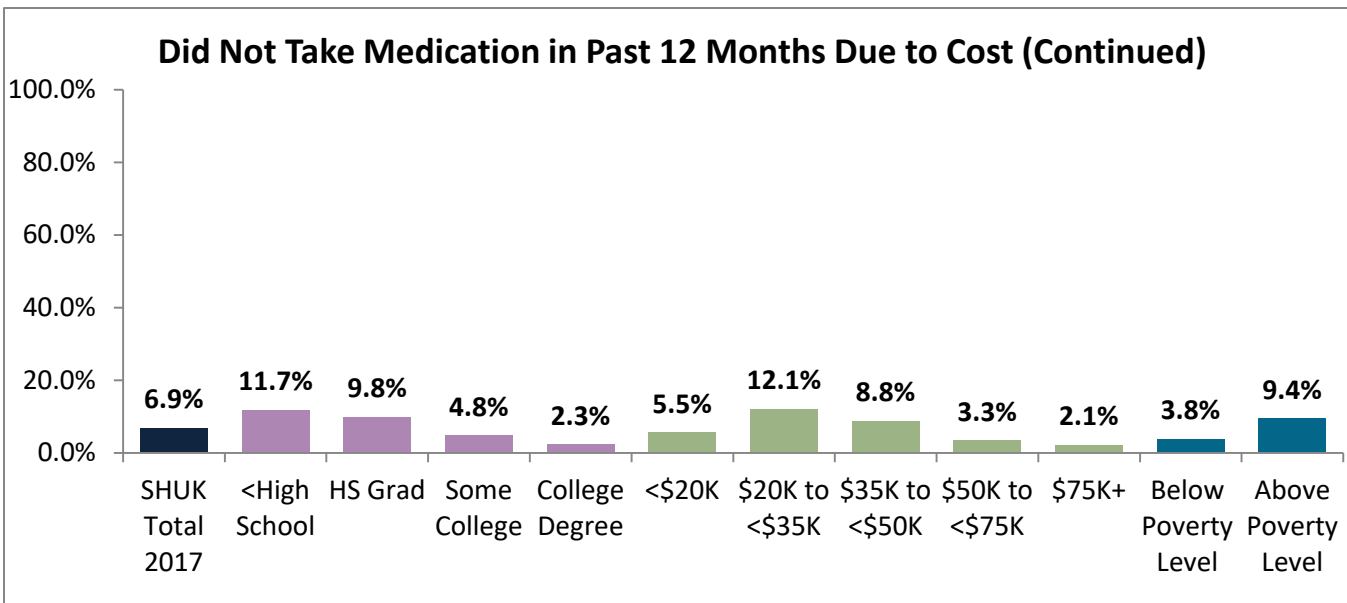
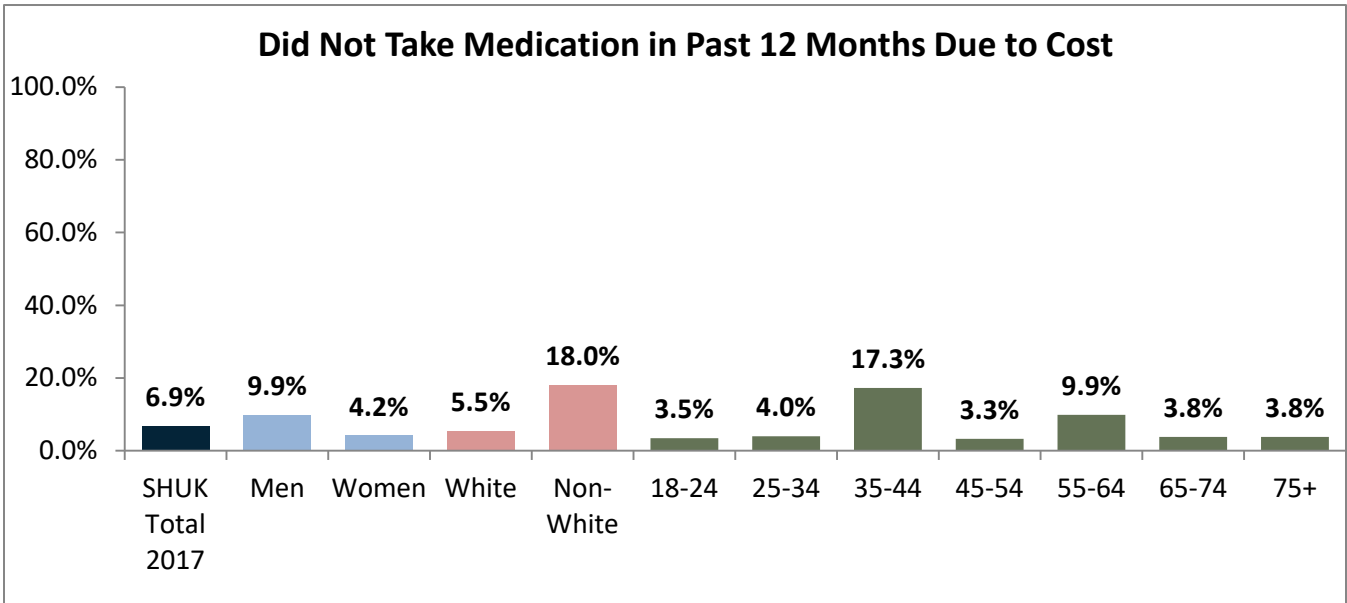


Source: SHUK Behavioral Risk Factor Survey, 2017, Q3.6: There are many reasons why people delay getting needed medical care. Have you delayed getting needed medical care for any of the following reasons in the past 12 months? (n=585)



# Problems Receiving Health Care (Continued)

- Q Among area adults, 6.9% did not take their medication as prescribed due to costs, and this proportion rises to 19.6% for underserved adults.
- Q Prescription costs tend to impact men more than women, non-White adults more than White adults, and residents without a college education.

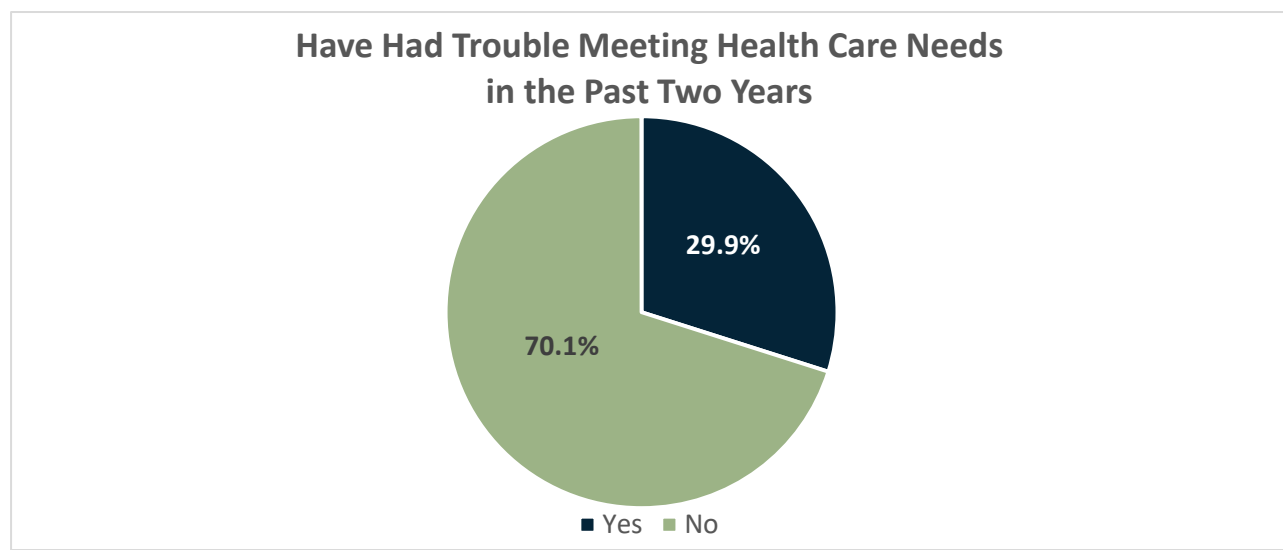


Source: SHUK Behavioral Risk Factor Survey, 2017, Q3.7: Was there a time in the past 12 months when you did not take your medication as prescribed, such as skipping doses or splitting pills, in order to save on costs? Do not include over-the-counter (OTC) medication. (n=587); Underserved Resident Survey, 2017, Q12: Have you ever skipped your medication, or stretched your supply of medication, in order to save costs? (n=153)

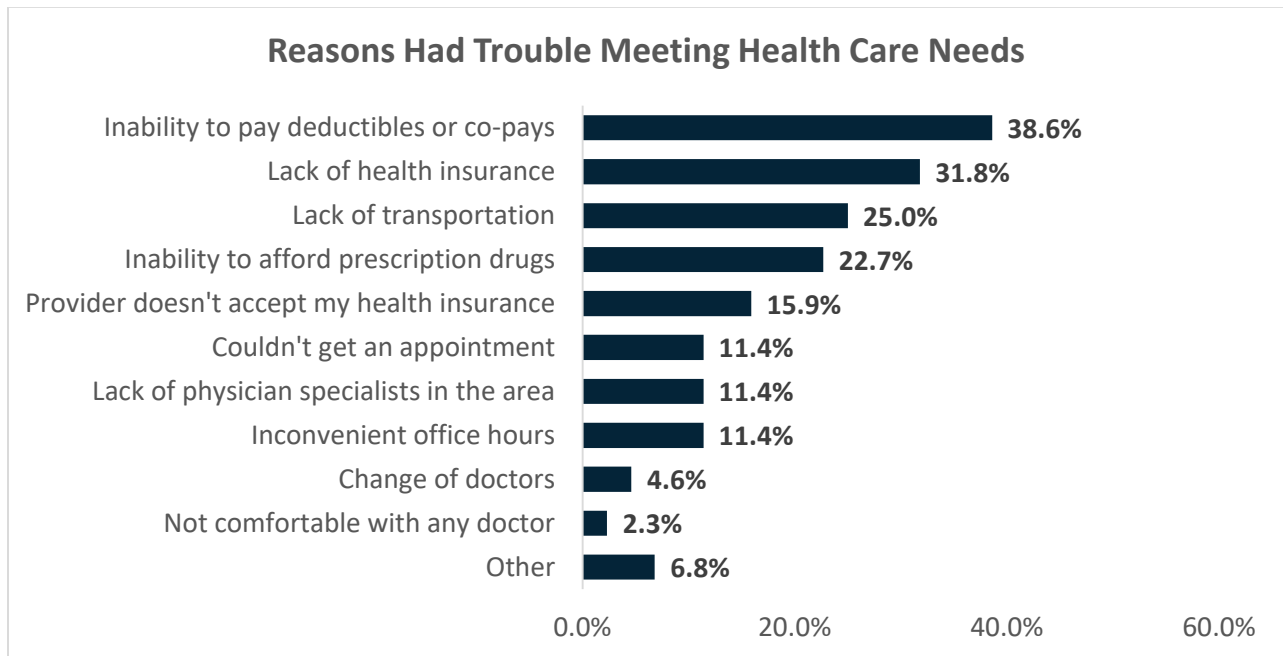


# Problems Receiving Health Care (Continued)

- Q Three in ten (29.9%) underserved adults have had trouble meeting their own or their family’s health care needs in the past two years.
- Q Common barriers for those who had trouble meeting these needs were out-of-pocket expenses (co-pays, deductibles, prescription drugs), lack of insurance, transportation, and the cost of medication.



Source: SHUK Underserved Resident Survey, 2017, Q10: In the past two years, was there a time when you had trouble meeting the health care needs of you and your family? (n=147).



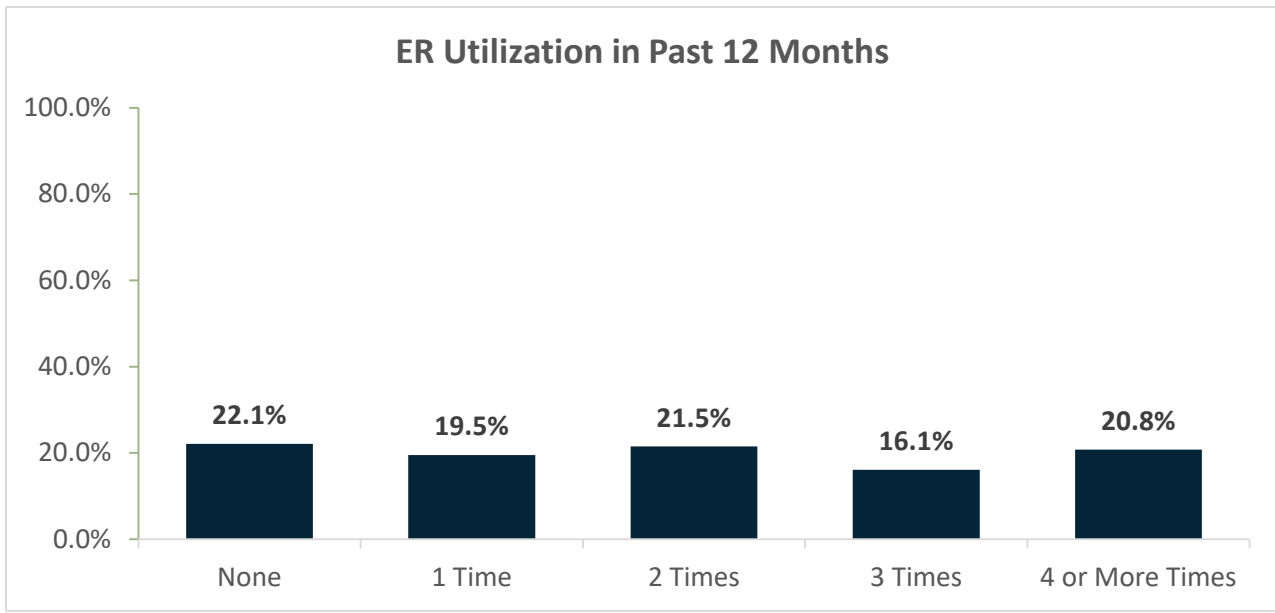
Source: SHUK Underserved Resident Survey, 2017, Q11: What are some of the reasons you had trouble meeting the health care needs of you and your family? (n=44). Note: among those who had trouble meeting health care needs of themselves/their family.





# Problems Receiving Health Care (Continued)

- Q Among underserved adults, more than three-fourths (77.9%) report either they or an immediate family member have visited the Emergency Room (ER) in the past year, and more than one-third (36.9%) visited three or more times.
- Q Key Stakeholder and Key Informant comments support the notion that ER/ED use occurs far more often than is warranted either because the circumstances are unavoidable or they are the result of mental health and/or substance abuse issues for which treatment is lacking.

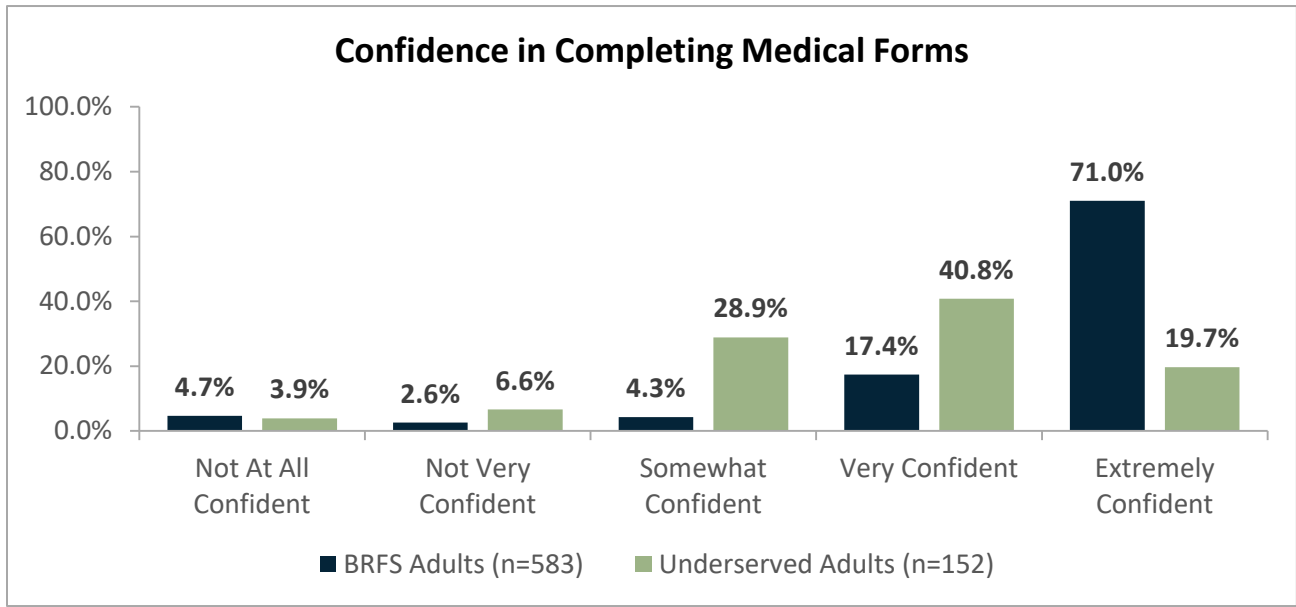


Source: SHUK Underserved Resident Survey, 2017, Q13: In the past 12 months, how many times have you, or an immediate family member, visited the Emergency Room (ER)? (n=149)

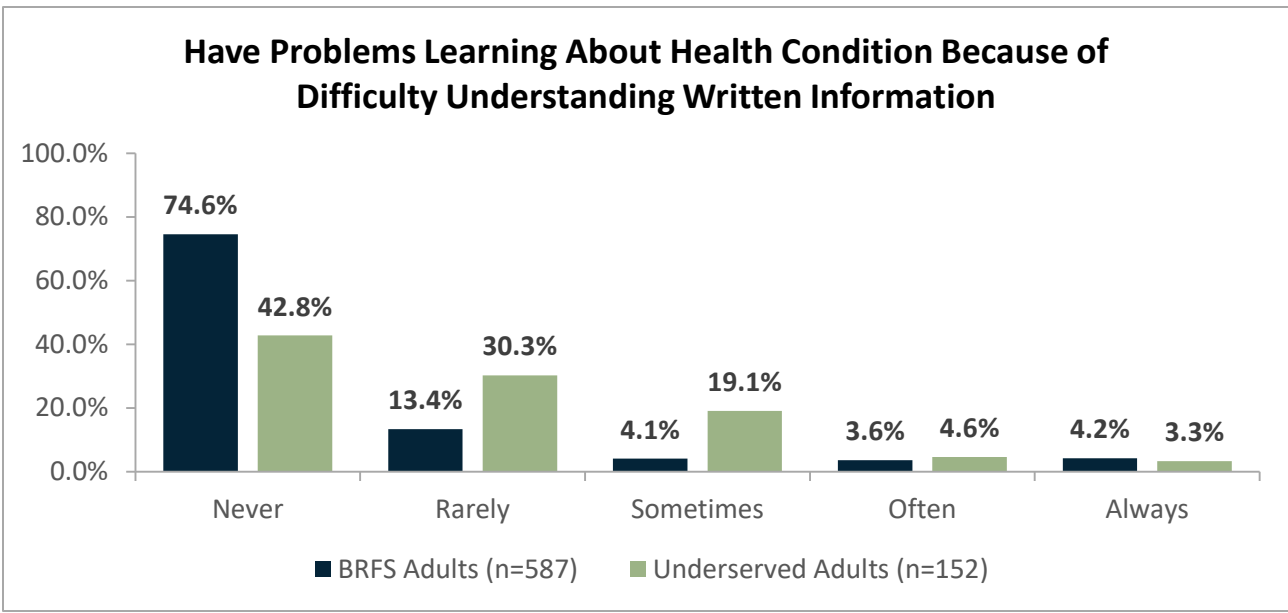
**I do not think many in our community are educated as to how to obtain appropriate health care services. For example, emergency room used for non-urgent services. – Key Informant**



Q Underserved adults are more challenged when it comes to health literacy compared to adults in the general population. For example, 88.4% adults in the general population are very or extremely confident in completing medical forms compared to 60.5% of underserved adults.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q9.1/SHUK Underserved Resident Survey, 2017, Q19: How confident are you in filling out medical forms by yourself? For example, insurance forms, questionnaires, and doctor's office forms. Would you say....?

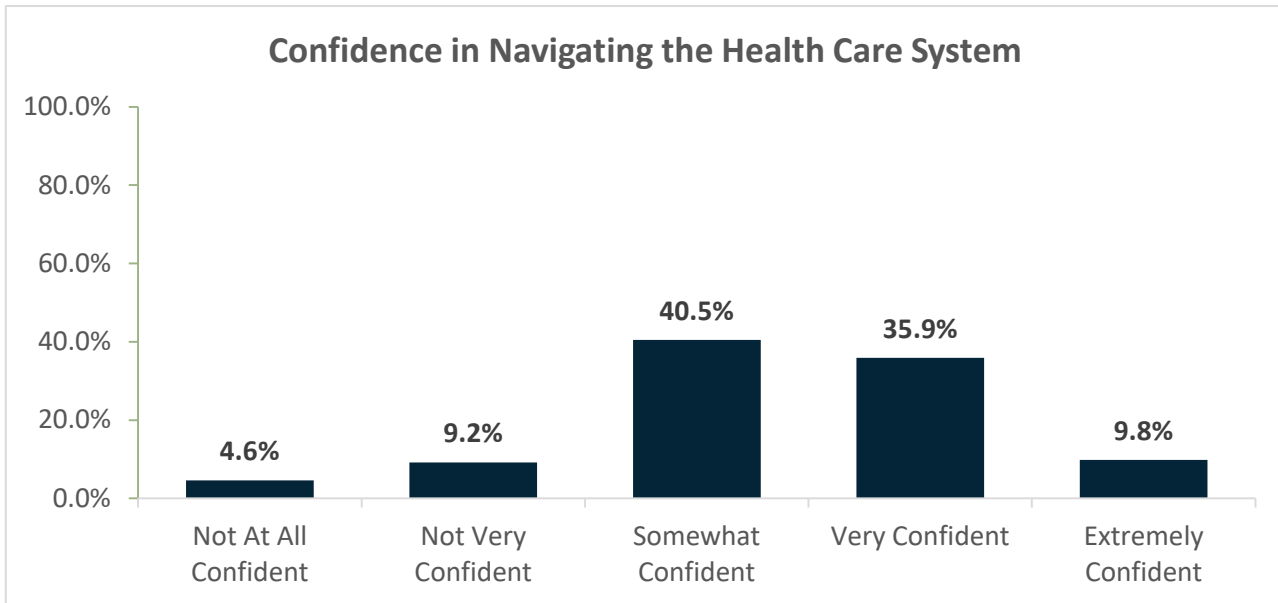


Source: SHUK Behavioral Risk Factor Survey, 2017, Q9.2/SHUK Underserved Resident Survey, 2017, Q21: How often do you have problems learning about your health condition because of difficulty in understanding written information? Would you say...?

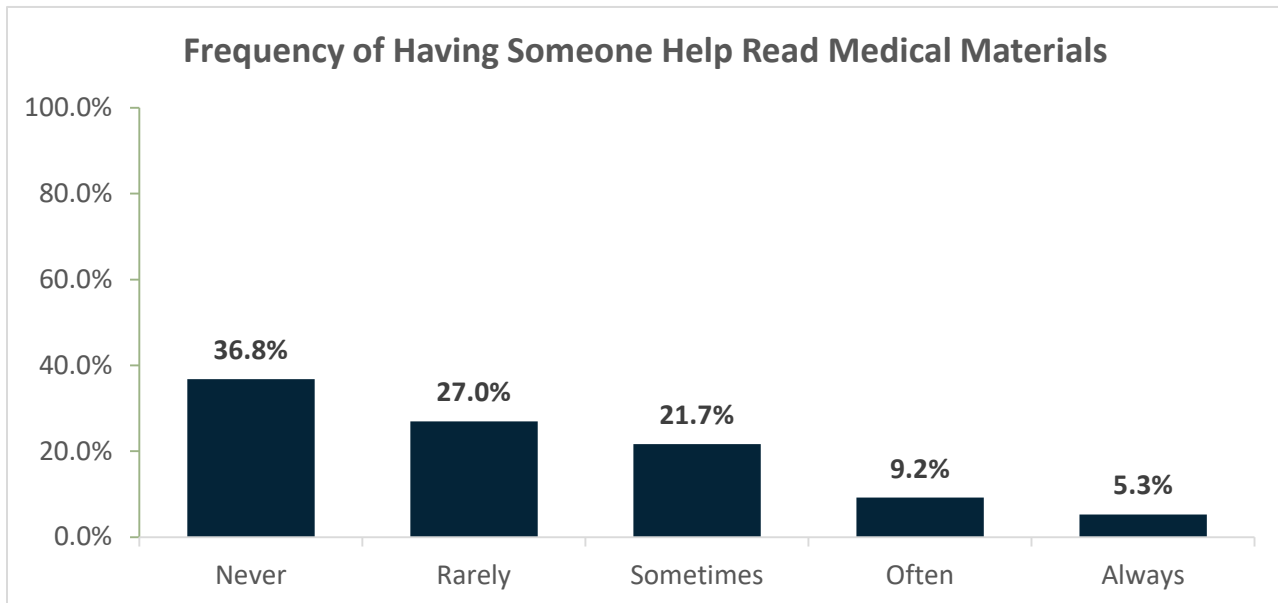


# Health Literacy (Continued)

- Q One in seven (13.8%) underserved adults are not confident in navigating the health care system and an additional 40.5% are only somewhat confident.
- Q Further, 36.2% at least sometimes require someone to help them read medical materials.



Source: SHUK Underserved Resident Survey, 2017, Q18: How confident are you that you can successfully navigate the health care system? By navigating the health care system, we mean knowing: how to use your health plan or insurance, what your plan covers, how to read your statements, where to go for services, how to find a primary care provider, what your options are for treatment, etc. Would you say...? (n=153)

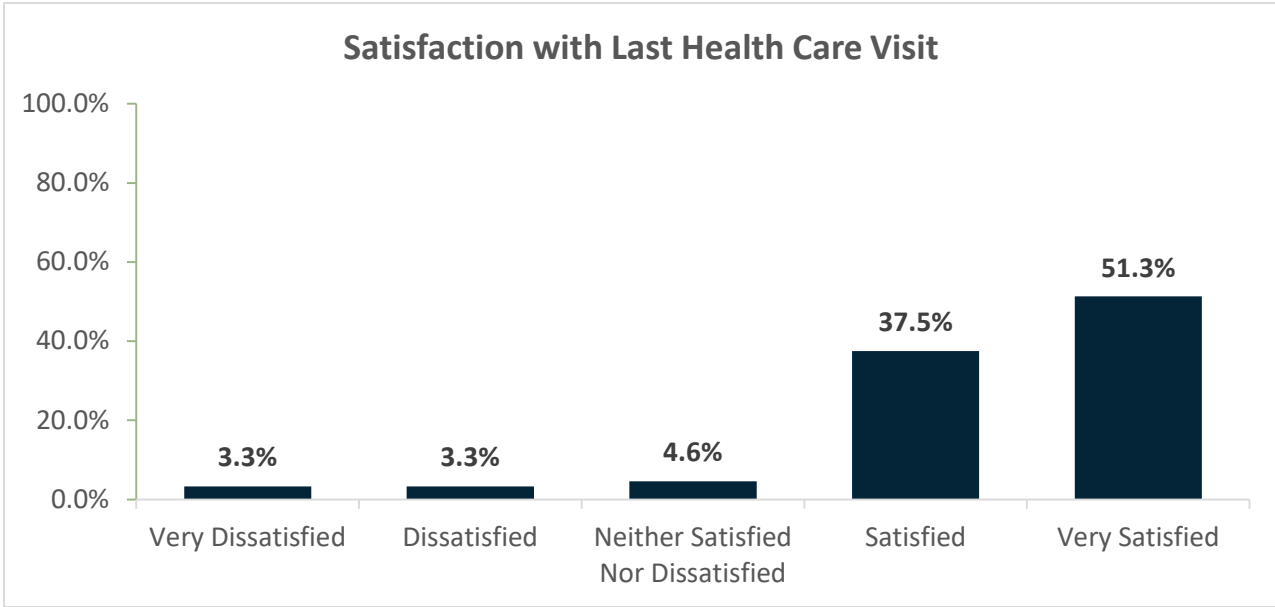


Source: SHUK Underserved Resident Survey, 2017, Q20: How often do you have someone help you read medical materials? For example, a family member, friend, caregiver, doctor, nurse, or other health professional? Would you say...? (n=152)

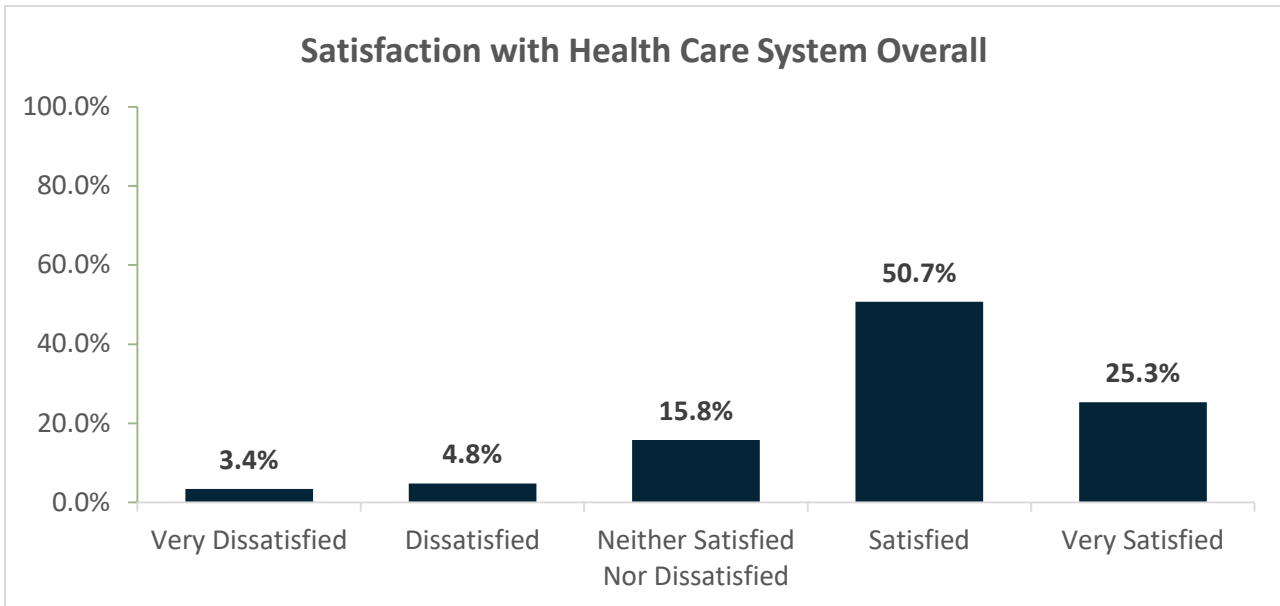


# Satisfaction with Health Care System

Q The vast majority (88.8%) of underserved adults are satisfied with their last health care visit and three-fourths (76.0%) are satisfied with the health care system overall.



Source: SHUK Underserved Resident Survey, 2017, Q4: How satisfied were you with your last visit for health care? (n=152)



Source: SHUK Underserved Resident Survey, 2017, Q6: How satisfied are you with the health care system overall? (n=146)



# Satisfaction with Health Care System (Continued)

Q Underserved residents who are satisfied with their last health care visit cite the quality of care, accessibility, attentive providers who listen, feeling comfortable with the relationship because of a history, and having providers who find solutions to their problems as reasons for satisfaction.

<p><b>Quality of care</b></p>	<p>The doctor <b>addressed my concerns immediately</b> and it was a <b>pleasant</b> visit and there were <b>no problems</b>.</p> <p><b>I had amazing labor and delivery nurses.</b></p> <p><b>I love my physician. Very kind and always makes sure any of my concerns are met.</b></p>
<p><b>Easily accessible</b></p>	<p>Was <b>able to get an ultrasound even though I wasn't scheduled for one.</b></p> <p>Always <b>answers any questions or concerns</b> I have. So <b>polite. Squeezes us in for appointment.</b></p> <p>Dr. was <b>kind, thorough, listened</b> well, and was <b>able to be seen the same day</b> I called to make an appointment.</p>
<p><b>Attentive providers</b></p>	<p>He <b>takes time to listen</b> to what's going on and is <b>thorough.</b></p> <p>My doctor makes sure <b>she fulfills my needs and listens to what I say.</b></p> <p>My doctor <b>took time to listen to all my concerns.</b></p>
<p><b>Have a history/good relationship</b></p>	<p>Because I have <b>been with my doctor for over 20 years.</b> I am <b>very comfortable</b> with him.</p> <p>I have <b>had the same doctor for years</b> and we have a <b>very good established relationship.</b></p>
<p><b>Offers solutions/meet needs</b></p>	<p>I had a problem, and <b>they fixed it, and no other doctor I went to could.</b> They <b>found the solution</b> to my problem.</p> <p>She listens and <b>gets to the bottom of things.</b></p>

Source: SHUK Underserved Resident Survey, 2017, Q5: (If satisfied with last health care visit) Why do you say that? Please be as detailed as possible. (n=108)



# Satisfaction with Health Care System (Continued)

Q Conversely, those dissatisfied with their last health care visit cite lack of, or ineffective, treatment; lack of bedside manner or empathy; and rude, pushy, or incompetent staff as reasons for dissatisfaction.

<p><b>Lack of proper treatment</b></p>	<p>Because <b>she wasn't fully able to help me</b> but she did help a little bit.</p> <p>The <b>doctor always seems to be in a hurry</b> and <b>tends to only focus on one small issue rather than the whole picture.</b></p> <p>He <b>refused to do an ultrasound.</b></p> <p>Doctor <b>would not renew my medical marijuana card.</b></p>
<p><b>No bedside manner</b></p>	<p><b>They called me and told me I had a brain tumor</b> and they would check it in a year <b>but scheduled no appointment</b> to discuss my tumor or tell me why or where it is. <b>Just “you have a tumor” over the phone and that's it.</b></p> <p>My <b>doctor is kind of weird.</b></p> <p>During testing on her heart and head, <b>the last two people that did the second test were very unpleasant - not personable.</b></p>
<p><b>Incompetent staff/rude</b></p>	<p><b>Felt disrespected</b> by a mental health person who came to see him.</p> <p><b>Paperwork keeps on getting lost.</b> Everything is electronic and they don't keep hard copies.</p>

Source: SHUK Underserved Resident Survey, 2017, Q5: (If dissatisfied with last health care visit) Why do you say that? Please be as detailed as possible. (n=18)



# Satisfaction with Health Care System (Continued)

Q Underserved residents who are satisfied with the health care system overall value the quality of care they receive, the attentive and caring providers, and the accessibility of care when they need it, but also are satisfied when their insurance covers the bulk of their treatment.

<p><b>Quality of care</b></p>	<p><b>Always able to figure out what's wrong with me</b> and able to <b>answer my questions.</b></p> <p>They've <b>really done a good job with my husband's cancer care.</b></p> <p>Our <b>therapists were amazing at helping us achieve mental happiness/well-being.</b></p> <p>They are <b>very understanding and provide me with better health.</b></p>
<p><b>Attentive providers</b></p>	<p>All of the <b>doctors</b> I have gone to in my health system <b>listen to my concerns</b> and <b>treat me with respect.</b></p> <p>They <b>always listen to my concerns</b> and help me in any way.</p>
<p><b>Good insurance</b></p>	<p>Because some of the <b>medication</b> actually helps me, not to mention some are <b>really expensive</b> and <b>my Medicaid covers it.</b></p> <p>I have <b>good insurance</b> and receive good care.</p>
<p><b>Accessible/great service</b></p>	<p><b>Flexible, good times available, willing to work with insurance, always go above and beyond.</b></p>

Source: SHUK Underserved Resident Survey, 2017, Q7: (If satisfied with the health care system) Why do you say that? Please be as detailed as possible. (n=105)



# Satisfaction with Health Care System (Continued)

Q Conversely, those dissatisfied see a system that is all about profit at the expense of quality of care, incorrect diagnosis/treatment or just a failure to discover the root causes of a problem, a system that is very costly, and cost becomes more of an issue when a person’s insurance is limited in its coverage.

<p><b>Bad model/for profit</b></p>	<p><b>Quality of care is an issue. It is more about getting people in and out than figuring out what is really going on with the patient.</b></p> <p><b>Believe that it is run by insurance and administration and it should be based on patient health. It's all politics and it should be about patient care.</b></p> <p><b>I don't think things get taken seriously. It seems like it's more of political program.</b></p>
<p><b>Incorrect/negligent treatment</b></p>	<p>Experience. <b>Husband passed away</b> and there <b>could have been things that could have been done before [to save him].</b></p> <p>There <b>seems to be only "quick solutions" instead of digging to the root of the cause.</b> There <b>doesn't seem to be a "why" solution.</b></p> <p><b>Sometimes they overlook the problems</b> I am having and they <b>don't get treated.</b></p>
<p><b>Bad insurance</b></p>	<p>With being on disability, I'm on Medicare and I have had two amputations and it's hard to recuperate at home when people are hounding me for payments on <b>medical services that aren't covered by my Medicare.</b></p> <p>It <b>lacks integrity.</b> It is <b>wishy-washy</b> and <b>certain things that should be covered are not</b> and other things should not be covered. It is <b>too hard to get treatment.</b></p>
<p><b>Cost</b></p>	<p><b>Very expensive</b> but I know doctors need to be paid.</p> <p>I think health care is <b>overpriced.</b></p>

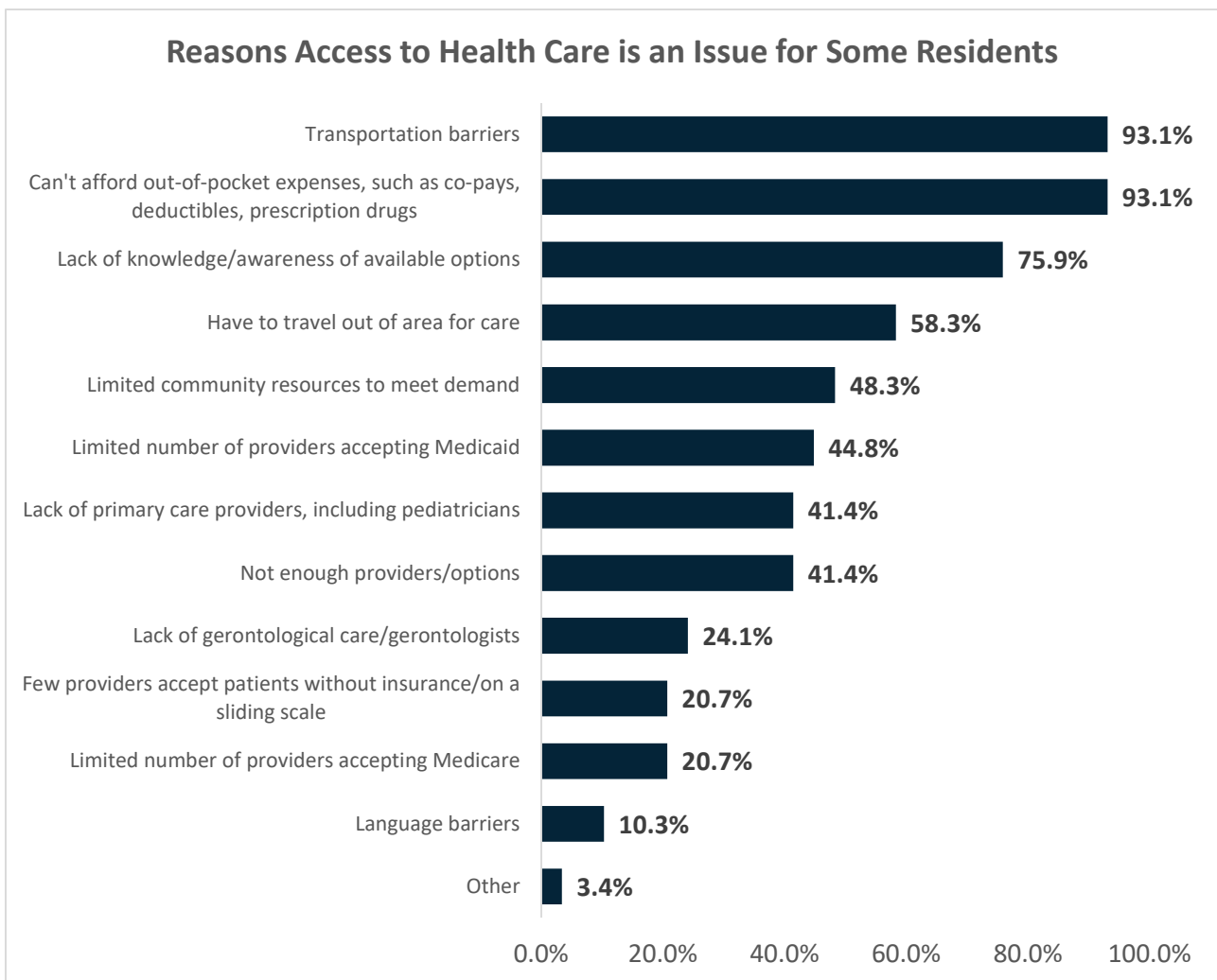
Source: SHUK Underserved Resident Survey, 2017, Q7: (If dissatisfied with the health care system) Why do you say that? Please be as detailed as possible. (n=20)





# Barriers to Health Care

- Q More than nine in ten (93.5%) Key Informants believe access to health care is a critical issue for some residents in the community.
- Q More than nine in ten (93.1%) believe the top two barriers to care for this group are transportation and the inability to afford out-of-pocket expenses such as co-pays, deductibles, spend-downs, and prescription drugs.
- Q Other major barriers are lack of awareness of available options, having to travel out of the area for services, limited community resources to meet demand, limited providers accepting Medicaid, and lack of providers, especially primary care.

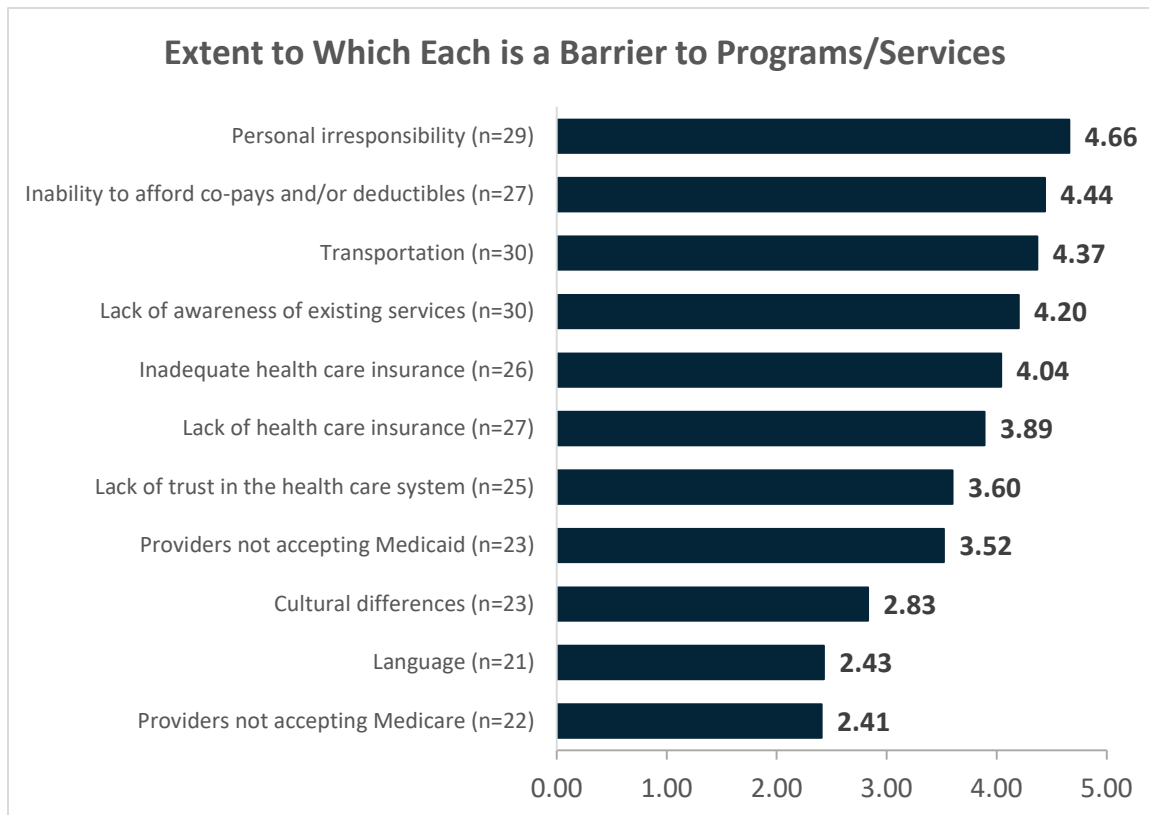


Source: SHUK Key Informant Online Survey, 2017, Q4: Do you believe that access to health care is a critical issue for some residents in your community? (n=31); Q4a (If yes) In your opinion, why is access to health care an issue for some residents in your community? (n=29)



# Barriers to Health Care (Continued)

- Q When rating the extent to which something is a barrier to health care, Key Informants, place personal irresponsibility at the top, followed by an inability to afford out-of-pocket costs, transportation, lack of awareness of existing programs/services, and inadequate health insurance.
- Q Key Stakeholders and Key Informants highlight transportation as a barrier to care.



Source: SHUK Key Informant Online Survey, 2017, Q8: To what extent is each of the following a barrier or obstacle to health care programs and services? Note: 1-5 scale, where 1=not at all, 2=not very much, 3=slightly, 4=somewhat, 5=very much.

**Many missed appointments.** – *Key Informant*

**Lack of adequate personal transportation for many. No good local/county public transportation services.** – *Key Informant*

**Inhibits people's ability to get to appointments resulting in jeopardized health status.** – *Key Informant*

As a care manager, there are **no ambu-cabs** for the community (which are a step down from an ambulance but can still handle medical needs/wheelchairs), and **no after-hours cab service.** – *Key Informant*

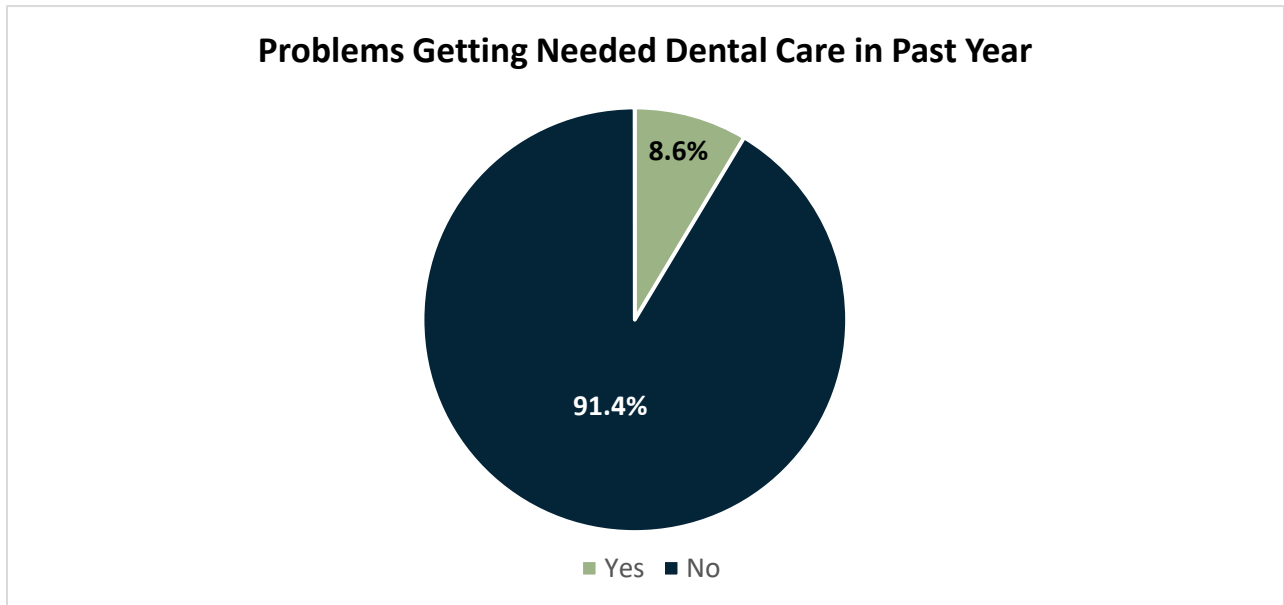
**Transportation is a huge issue here, and so that is probably the biggest issue that we have.** – *Key Stakeholder*

Source: From various questions in the Key Stakeholder Interviews and Key Informant Online Survey, 2017.

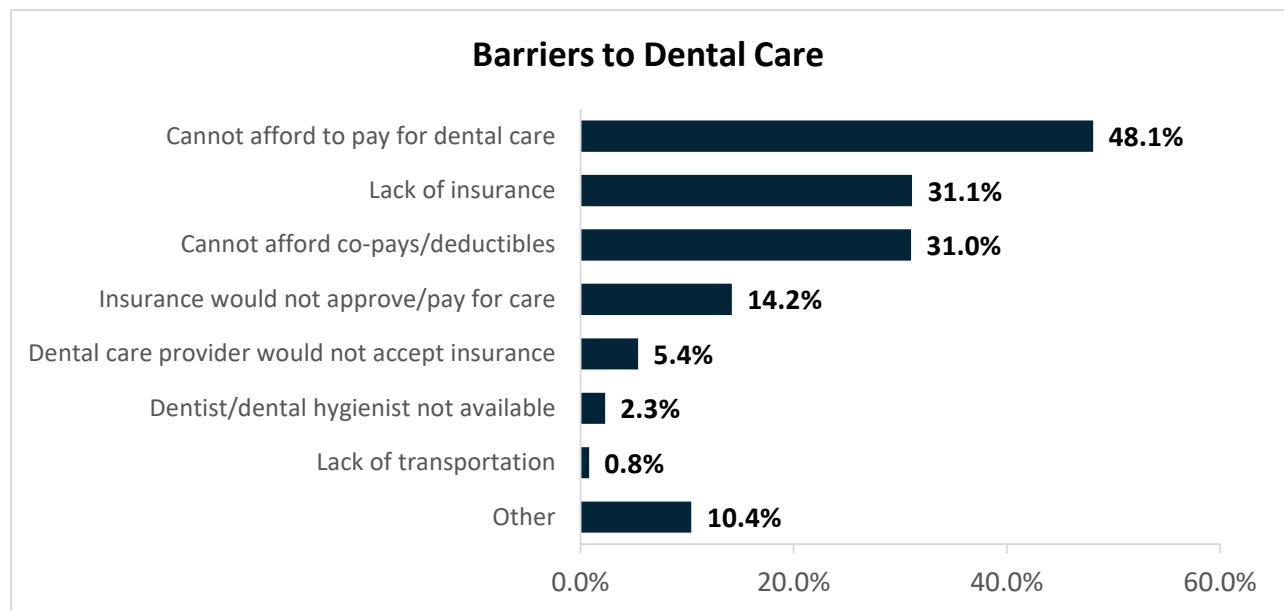


# Barriers to Dental Care

Q Few (8.6%) area adults had problems receiving needed dental care in the past year, but those who did reported an inability to afford dental care or out-of-pocket expenses and lack of insurance as the top obstacles to care.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q19.2: In the past 12 months, have you had problems getting needed dental care? (n=583)

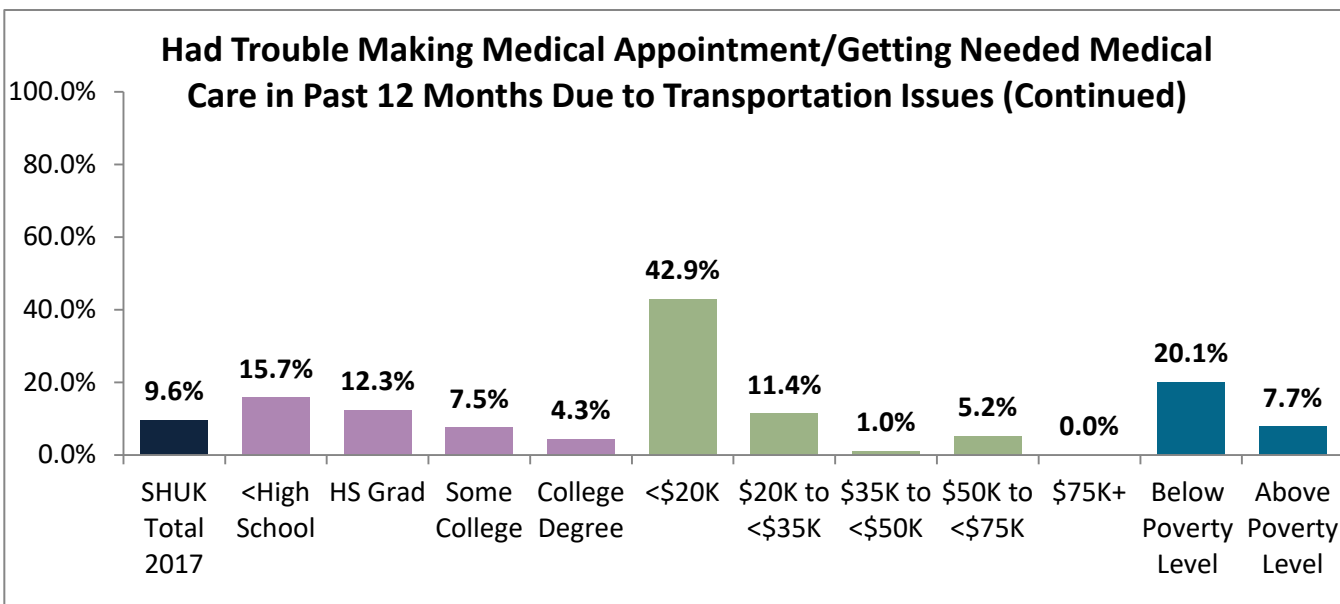
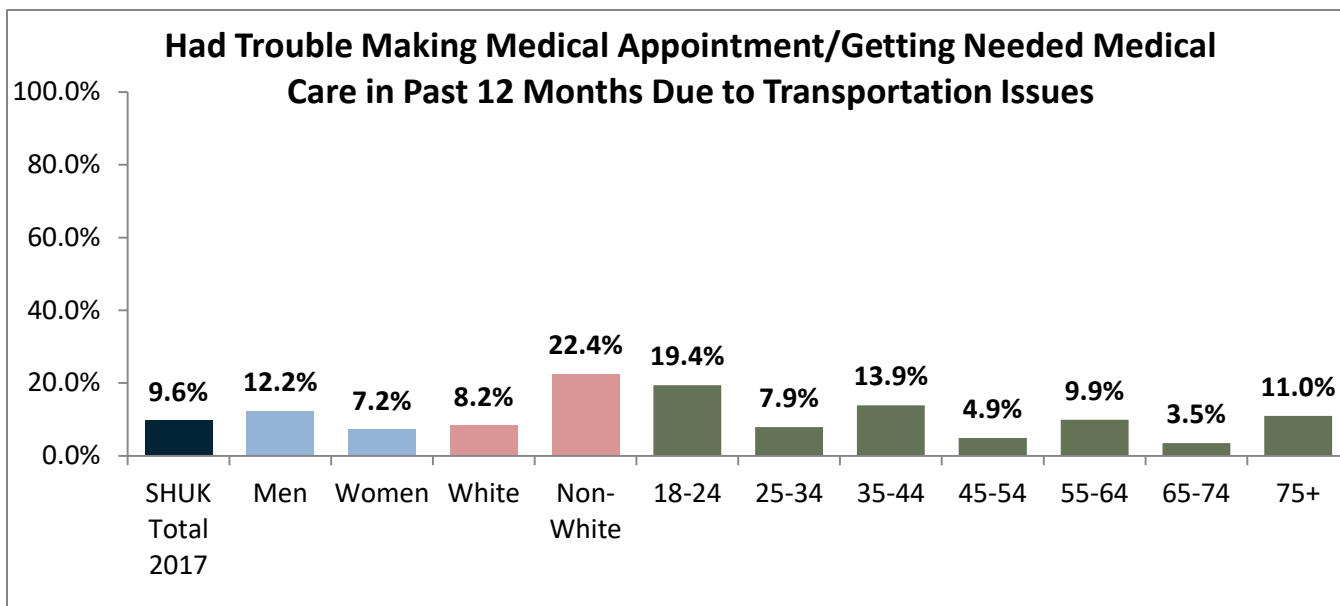


Source: SHUK Behavioral Risk Factor Survey, 2017, Q19.3: (If yes) Please provide the reason(s) for the difficulty in getting dental care. (Multiple response) (n=35)



# Transportation as a Barrier to Care

- Q Almost one in ten (9.6%) SHUK area adults had trouble making a medical appointment or getting needed medical care in the past year because of transportation issues.
- Q Those most likely to have transportation issues come from groups that are youngest (18-24), non-White, have less than a high school diploma, and have incomes below \$20K.

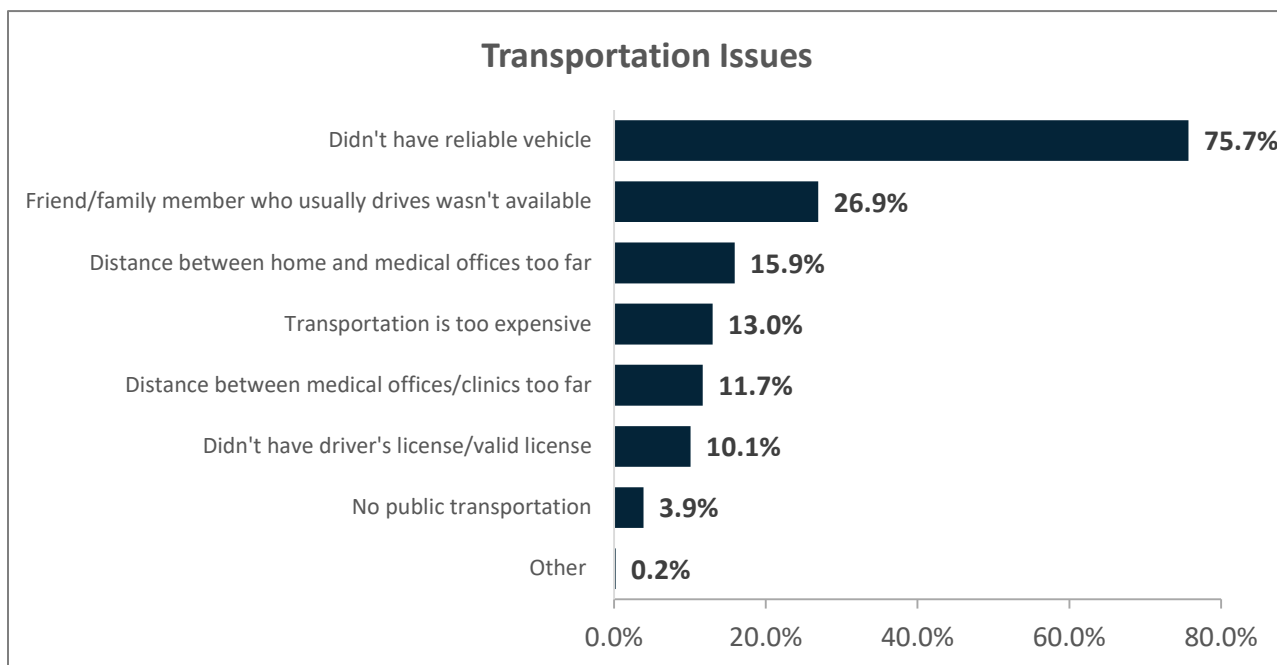


Source: SHUK Behavioral Risk Factor Survey, 2017, Q3.8: In the past 12 months, did you have trouble making a medical appointment or getting needed medical care because of transportation issues? (n=586)

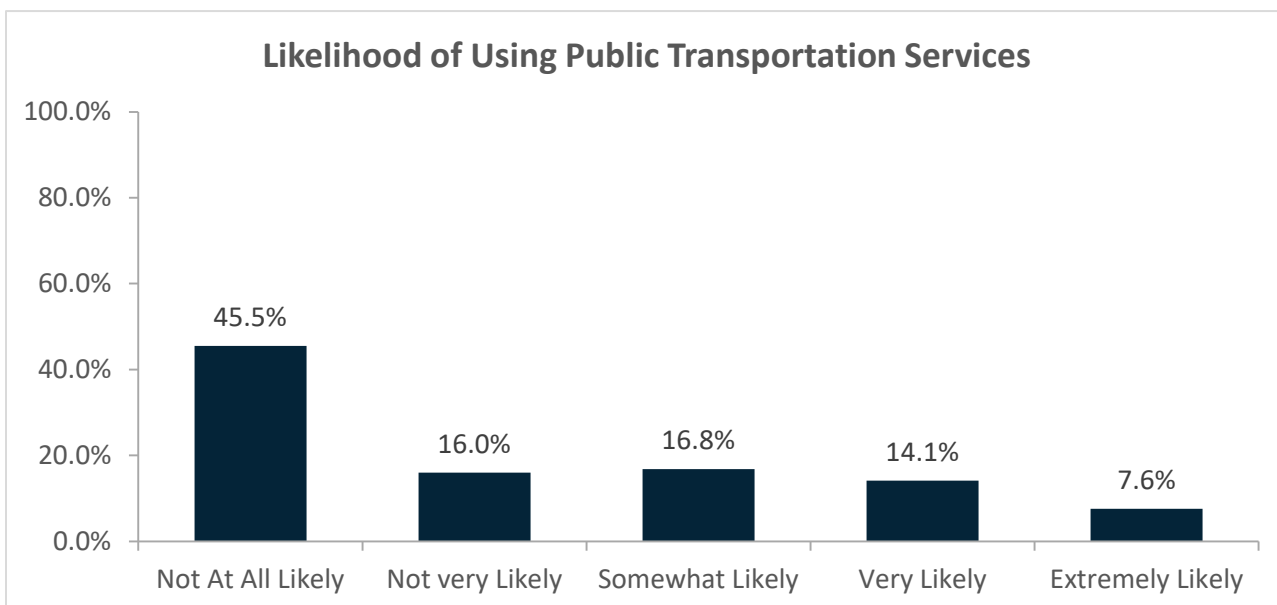


# Transportation as a Barrier to Care (Continued)

- Q Among those who had transportation issues, lack of a reliable vehicle was, by far, the main barrier, followed by family or friends being unavailable.
- Q When all area adults were asked how likely they were to use public transportation if it were available, six in ten (61.5%) said they would not likely use.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q3.9: (If yes) What were the transportation issues? (Multiple response) (n=38)

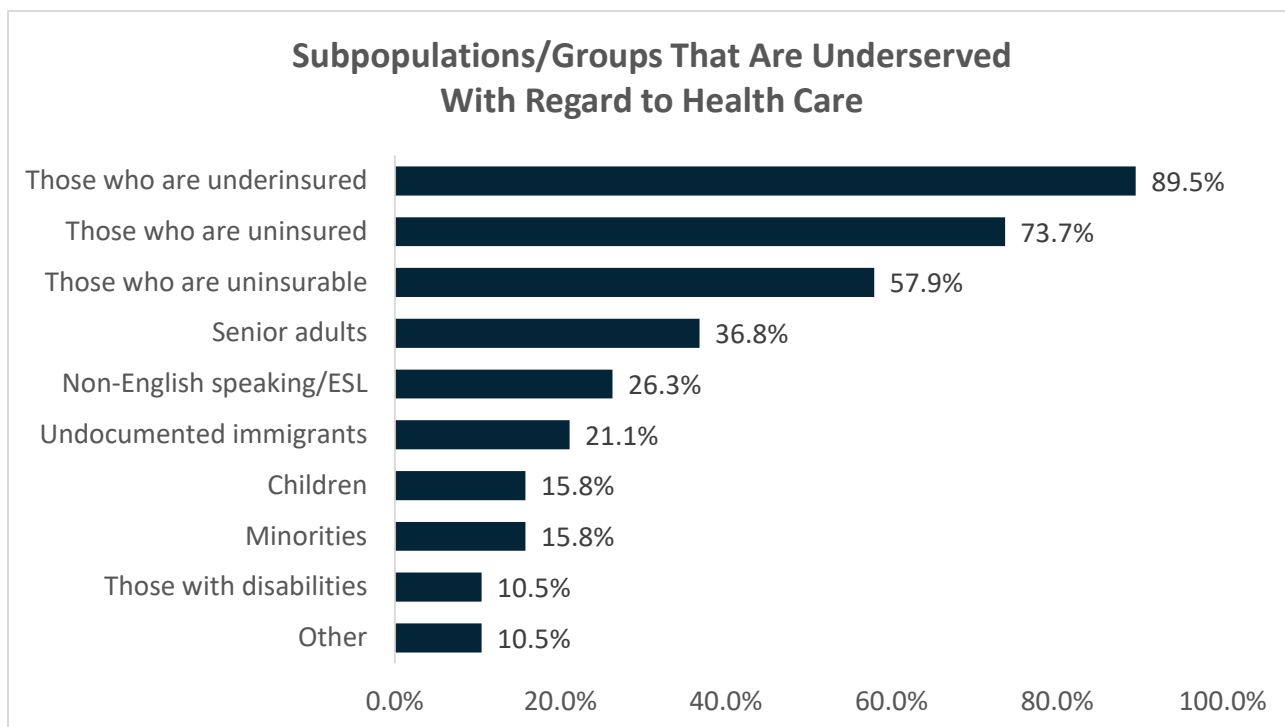
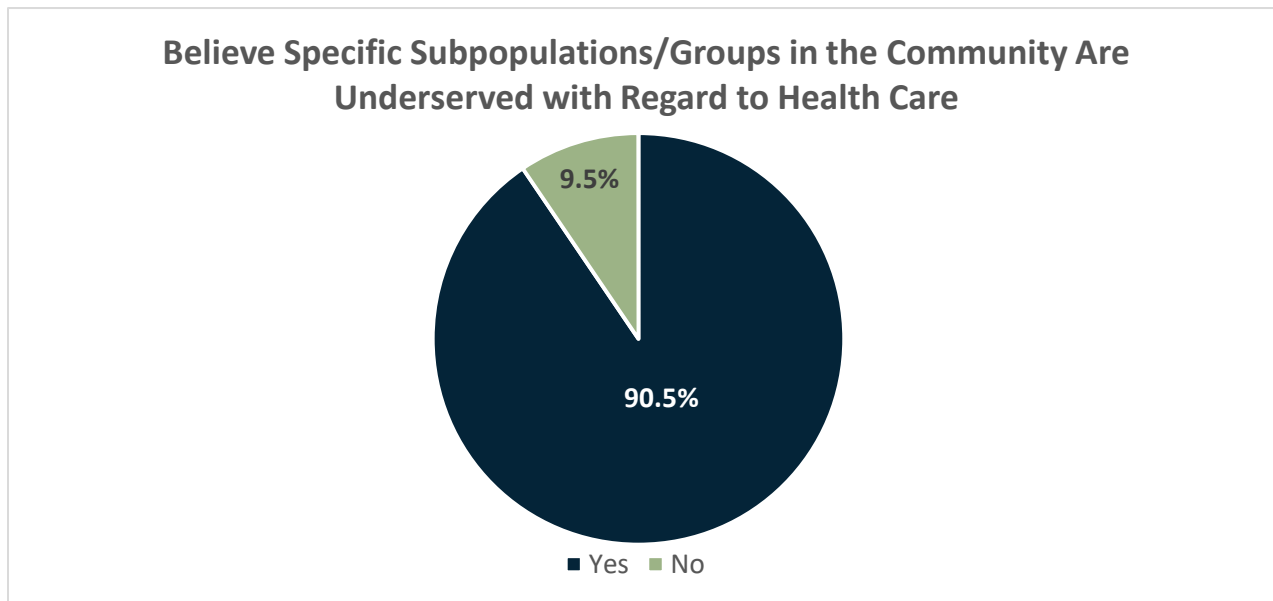


Source: SHUK Behavioral Risk Factor Survey, 2017, Q3.10: If public transportation were made more available (e.g., community vans, Uber, buses, etc.), how likely would you use these services? Are you....? (n=580)



# Underserved Subpopulations

Q Nine in ten (90.5%) Key Informants believe specific subpopulations, or groups, in the community are underserved with regard to health care, and those most underserved are the underinsured and the uninsured.



Source: SHUK Key Informant Online Survey, 2017, Q5: Are there specific subpopulations or groups of people in your community that are underserved with regard to health care? (n=21); Q5a: (If yes) Which of the following subpopulations are underserved? (n=19)



# Underserved Subpopulations (Continued)

Q Key Stakeholders and Key Informants believe access to health care programs and services is a critical issue for vulnerable and/or underserved subpopulations, because in addition to experiencing obstacles receiving care even when they have coverage, there are numerous other barriers preventing them from living optimally healthy lives. In addition to lack of services for mental health and substance abuse, there is a dearth of dental services for underserved residents.

## Insurance not utilized because of out-of-pocket expenses

We hear from our own employees that the **cost of deductibles and copays is difficult**. We have part-time employees, and they **struggle with this**. We look at health insurance each year, and we have an employee work group, and we talk about access to prescription medications and if those copays go up and how much that impacts people. – *Key Stakeholder*

The fate of Healthy Michigan Plan hangs in the balance, and we still have sort of the donut - **people who can't utilize the Marketplace**. A lot of the insurance on the Marketplace, the **deductibles make it not feasible for them to get into care**. – *Key Stakeholder*

We've seen a **huge increase in our bad debt; people who have these high copays are just not paying them**, and we understand why. – *Key Stakeholder*

**Rising insurance costs force employees to have higher payroll deductions, resulting in lower utilization of services to avoid bills**. The working poor cannot afford higher benefits due to cost per pay period. Thus, **coverage is limited** (higher deductibles/higher copays) **resulting in people avoiding doctor visits** altogether. – *Key Informant*

## Social factors

**Low income families tend to not put their health as the #1 priority** so they are a challenge to reach. – *Key Informant*

**Poverty, which affects the culture of getting and ability to pay for health care, prescriptions, and compliance** with doctor's orders. – *Key Informant*

## Lack of treatment options for dental care/mental health

**Would love to see social workers in primary care be able to arrange dental care**. – *Key Informant*

Source: SHUK Key Stakeholder Interviews, 2017, Q1: What do you feel are the two or three most pressing or concerning health issues facing residents in your community, especially the underserved? (n=4); Key Informant Online Survey, 2017, Q1: To begin, what are one or two most pressing health issues or concerns in the community? (n=34); Q1a: Why do you think it's a problem in your community? (n=34)



# Effectiveness of Existing Programs and Services

- Q Key Stakeholders say the existing programs and services in the SHUK area meet the needs and demands of area residents somewhat well because, although there are certain programs and services lacking and there are definite gaps in services, collaboration and coordination among community agencies and organizations is strong.
- Q That said, there is an opportunity for improvement by increasing awareness of existing programs and services as many are underutilized. Further, care coordination could be strengthened, especially with regard to residents with mental health challenges.

Somewhat well. Because **there are programs out there**, and **they do target certain populations**. We do **get folks to participate**, so I guess **the structure's there or the interest is there**; the initiative is there. It's **just building a higher response rate**, so it somewhat works.

I think we meet them well. I think the programs that we have, **we work really hard to help people to the best of our ability**. I think **you see that throughout the organizations in this county** that we **come together monthly**. We're really trying to help people. **Court systems** and all the **schools** - there are programs here - **we have many departments offering many different types of services**, so I believe **we're striving to do it very well**.

I think I would say somewhat well. I think **we have offered lots of programs and services through our United Lifestyles program**, and **people just don't come**, and so it's an opportunity for us to **figure out what does our community really want**. I **don't think we know that**, to be honest, so I think I would answer that question "middle of the road" just because I **don't know that we know what they need or want**.

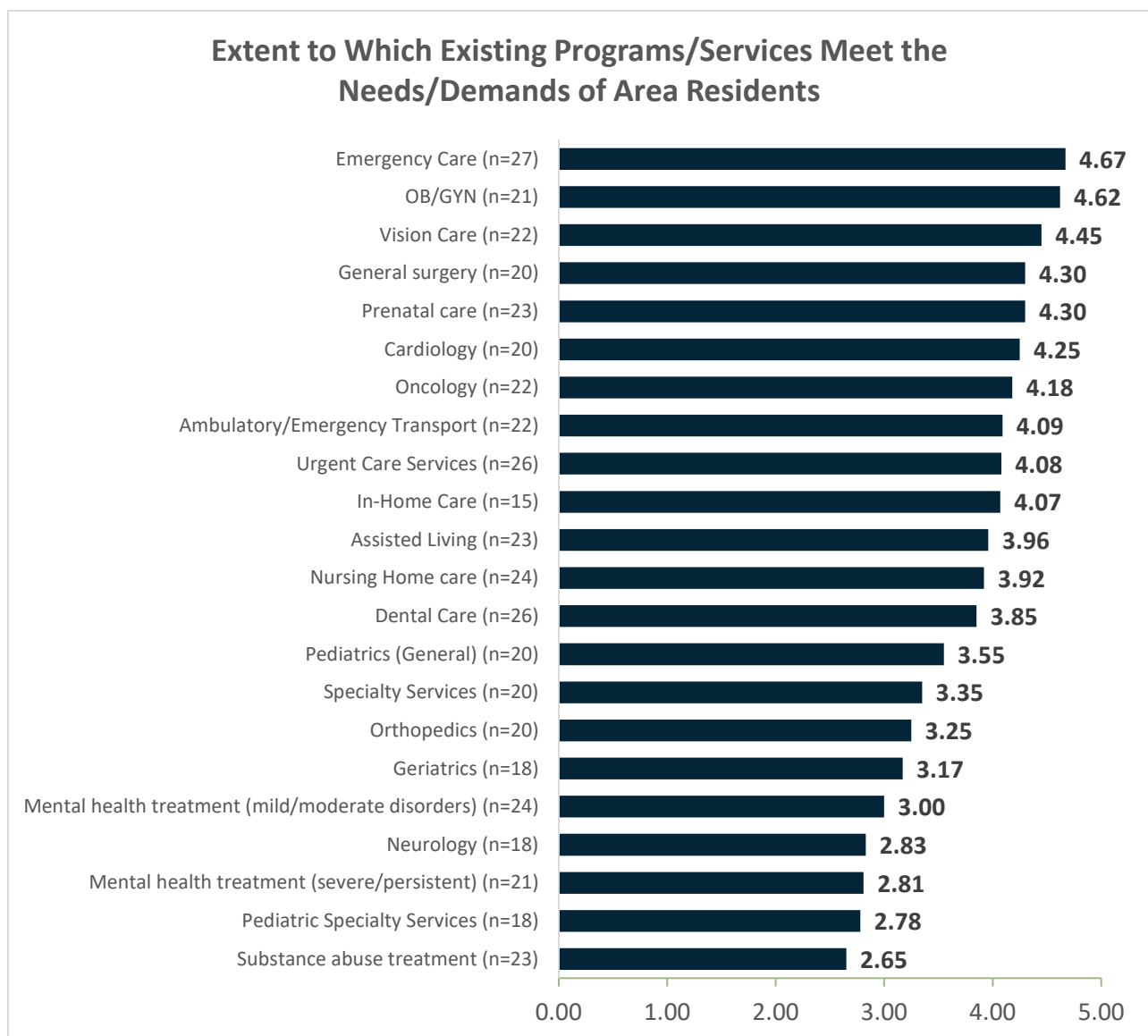
Somewhat well, I would say. I think **you need to drill down more**. So, one of the populations the Health Department has been working with in partnership with Montcalm Care Network is people with **mental illness**. And, I would say, **for that population**, for example, **we get an F-minus**. It's just that **providers don't know how to serve them; they feel unqualified to serve them**. Oftentimes they'll **discharge them from care because they're afraid they're going to do harm**, and these are folks who **desperately need good coordinated care**, and that's **just a terrible problem right there**. So, **for other people, the system can work pretty well**.

Source: SHUK Key Stakeholder Interviews, 2017, Q4: How well do existing programs and services meet the needs and demands of people in your community? Would you say they meet them not at all well, not very well, somewhat well, very well, or exceptionally well? (n=4); Q4a: Why do you say that? (n=4)



# Gaps in Programs and Services

- Q Key Informants say the programs and services that meet the needs and demands of area residents best include emergency care, OB/GYN, vision care, general surgery, prenatal care, cardiology, and oncology.
- Q Conversely, substance abuse treatment, mental health treatment for all disorders (from mild to severe), pediatric specialty services, neurology, and geriatrics do not meet the needs and demands of area residents well.
- Q Additional services lacking include: dermatology, endocrinology, inpatient services (acute floor), neurology, neurosurgery, pain management, rheumatology, psychiatry (pediatric and adult), speech for children, and urology.

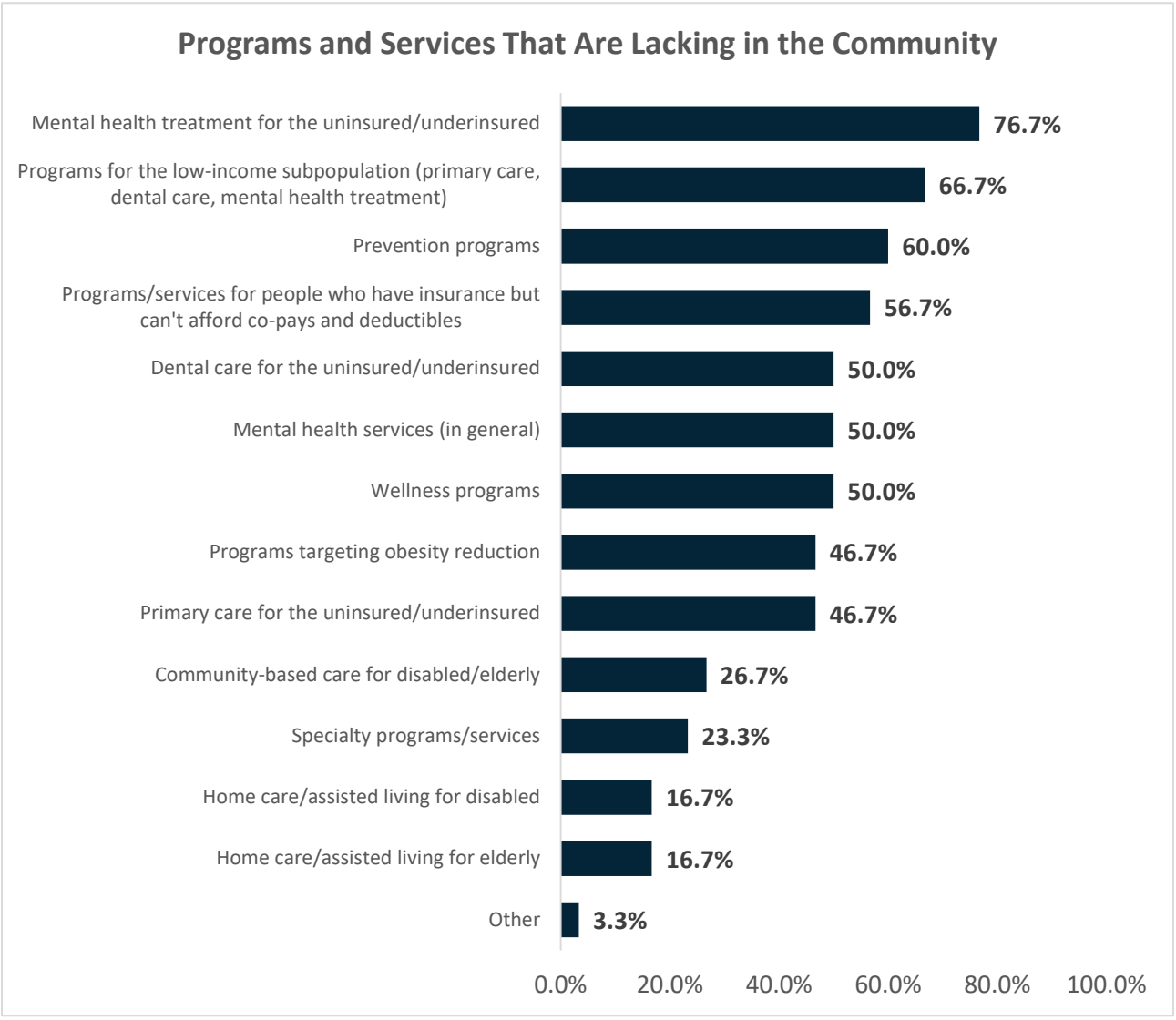


Source: SHUK Key Informant Online Survey, 2017, Q6: How well do the following programs and services meet the needs and demands of residents in your community? Note: 1=not at all well, 2=not very well, 3=slightly well, 4=somewhat well, 5=very well. Source: SHUK Key Informant Online Survey, 2017, Q6a: What specialty services are currently lacking in your community? (n=10)



# Specific Programs and Services Lacking in the Community

- Q According to Key Informants, the SHUK area most lacks programs or services focusing on mental health treatment, but also programs and services for the most vulnerable: low income, the uninsured, the underinsured, and those with insurance but who can't afford to utilize it.
- Q There is also a lack of services targeting obesity or focusing on wellness and/or prevention, as well as dental care for the uninsured/underinsured.



Source: SHUK Key Informant Online Survey, 2017, Q7: What programs and services are lacking in the community, if any? (n=30)



# Specific Programs and Services Lacking in the Community (Continued)

Q Underserved residents cite myriad programs, services, or classes that they perceive are lacking in the community; however, the two greatest areas of need are (1) access to mental health treatment, as well as education about mental health issues/awareness, and (2) parenting support groups or parenting classes. Other needs include: classes on child birth, walk-in clinics, nutrition classes, CPR classes, and classes on obesity reduction for both adults and children.

- ✓ Mental health (4)
- ✓ Parenting support, parenting classes (4)
- ✓ Lamaze classes/child birth (3)
- ✓ Nutrition classes (3)
- ✓ Walk-in clinics (3)
- ✓ CPR classes (2)
- ✓ Educational classes about mental health issues/mental health awareness (2)
- ✓ Obesity (both child and adult) (2)
- ✓ Activities for youth
- ✓ Birth control (easy access to free birth control)
- ✓ Breastfeeding support classes
- ✓ Child care
- ✓ Dental care
- ✓ Diabetic classes
- ✓ Diaper pantry
- ✓ Free education and access to workout at the local gym
- ✓ General case management to help keep you on track with everyone and everything
- ✓ Help with schooling
- ✓ Lacking good doctors
- ✓ Maybe medical/dental/hearing for senior citizens
- ✓ Medical marijuana, classes about how bad drugs are and how unsafe they are
- ✓ Mobile mammogram
- ✓ More high-tech services (MRI or CAT scan)
- ✓ More natural ways other than medicine
- ✓ Primary care doctors
- ✓ Programs for accidental overdoses (what to do if you accidentally take the wrong medication)
- ✓ Programs that assist in paying medical bills for low-income households (Medicaid and Medicare only cover so much)
- ✓ Psychiatric services
- ✓ Some exercise classes and healthy eating
- ✓ Substance abuse treatment
- ✓ Swimming classes
- ✓ Transgender issues
- ✓ Work programs for disabled

Source: SHUK Underserved Resident Survey, 2017, Q14: What health care related programs, services, or classes are lacking in your community? In other words, what programs, services, or classes do you want that are currently unavailable? Please be as detailed as possible. (n=75)



# Specific Programs and Services Lacking in the Community (Continued)

- Q Similar to Key Informants, Key Stakeholders report the SHUK area lacks programs and services related to mental health. Also, echoing Key Informants, there is a need for specialty services such as cardiovascular health, dermatology, orthopedics, and urology.

If you think about - from a medical model perspective, probably the first one that jumps to my mind is **dermatology**. We've got a **lot of patients who really need that service**, and they don't have it. Dermatology is the immediate one that comes to mind. Services like - **urology** is another one that we **really have limited access**. Even **orthopedics** is something we have **limited access** to in our county.

We're trying to build up **the arts**. Like I said, **psychiatric**. **If you have a Medicaid health plan or private insurance, you're going to have to go out-of-county to see a psychiatrist. Psychiatric inpatient is now all out-of-county now**. We used to have it in-county at Carson, but they pulled out a few years ago. And **autism services**, we're struggling with that because providers aren't there yet. And this is really up to the hospitals, but probably we **need some specialty-type surgeries and things of that nature**, even though we have four hospitals - some specialties probably.

Just speaking from experience or the people I know, **cardiovascular health** and **dermatology**.

**Diabetes education** - we all like to think it's out there, but we **don't do a very good job**. The person in charge of it ends up doing something else in the hospital. **Dental** hygiene - there's **nothing there**. **Behavioral health** - there's **nothing there**. These are gaps, **those are areas that we need to strengthen our efforts** and just finding ways to reach the people. We're not reaching - and those areas: **behavioral health, dental health** - we just don't know how to reach them. Here's an example: we served as a dental clinic for underserved or those that were unable to afford it. We did that for three years, and it was interesting because we went into it knowing we were going to lose money. Our board took it on as a community service, but we stopped doing it because the majority of the people were from outside of our county, which is not what we wanted to do. So, there is **no access to this kind of care**, and it's sad because the people we were seeing - my God, children having all their teeth extracted and all that kind of stuff. **Behavioral health - it's minimal and certainly no one accesses it. It's a stigma**.

Source: SHUK Key Stakeholder Interviews, 2017, Q4b: What programs or services are lacking in the community? (n=4)

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# RISK BEHAVIOR INDICATORS

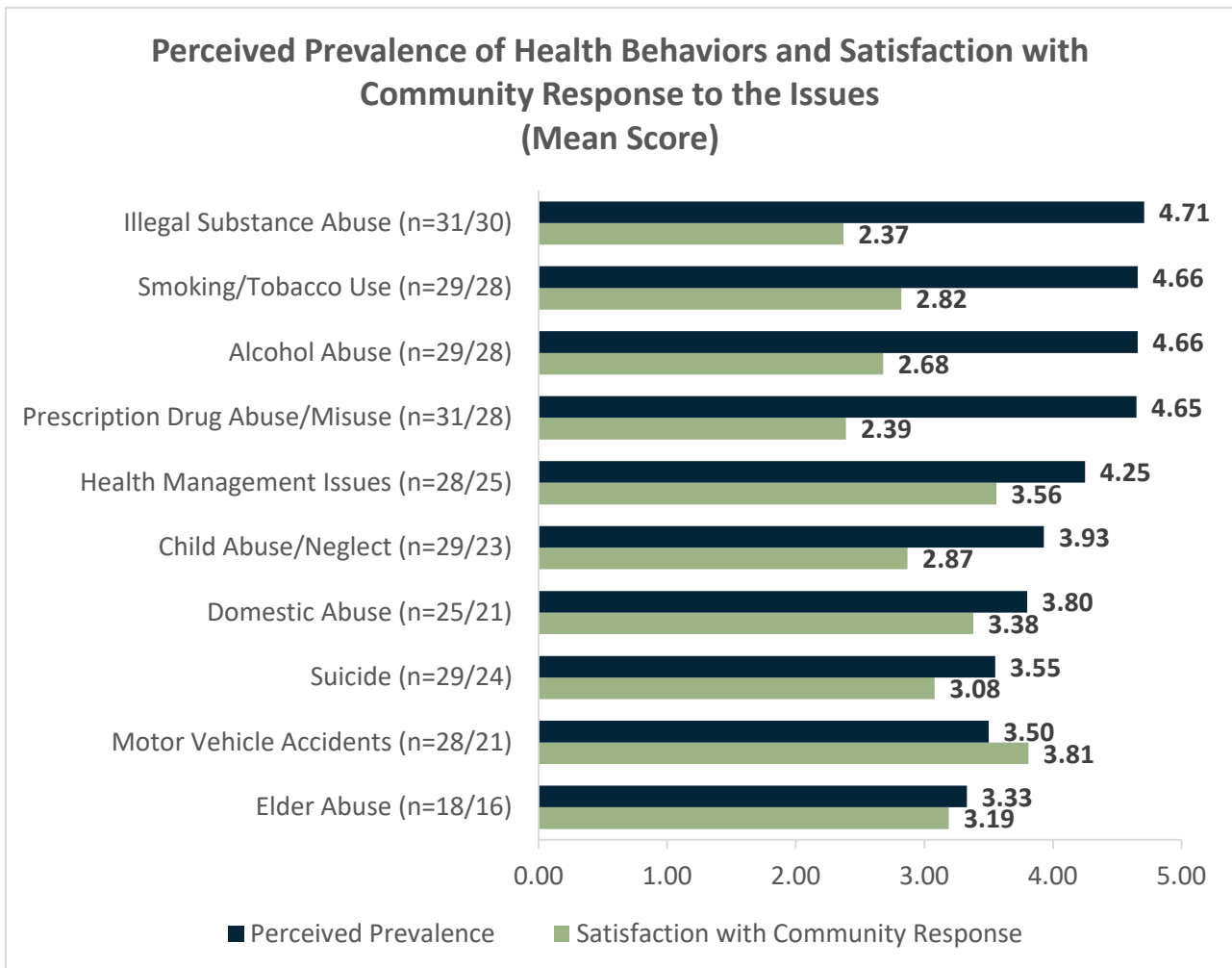
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# Prevalence of Health Behavior Issues

- Q Key Informants perceive illegal substance abuse as the most prevalent health behavior issue, up from fourth place in 2014. The next three health behavior issues perceived to be prevalent are substance abuse issues: smoking, alcohol abuse, and prescription drug abuse.
- Q Health management issues are also perceived to be prevalent.
- Q Additional health behavior issues mentioned are lack of personal responsibility and poor dietary habits.
- Q More concerning is that Key Informants are least satisfied with the community's response to anything related to substance abuse, licit or illicit.

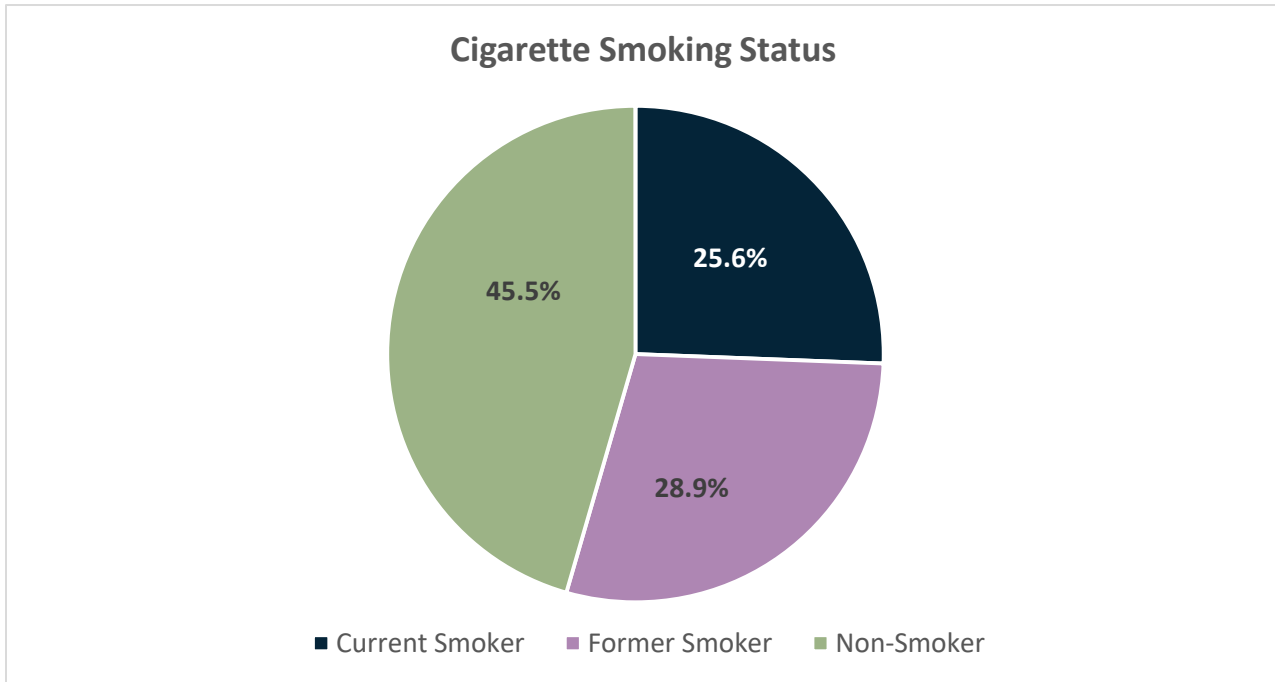


Source: SHUK Key Informant Online Survey, 2017, Q3: Please tell us how prevalent the following health behaviors are in your community. Q3a: How satisfied are you with the community's response to these issues?; SHUK Key Informant Online Survey, 2017, Q3b: What additional health behaviors are prevalent in your community, if any? (n=10). Note: Prevalence scale: 1=not at all prevalent, 2=not very prevalent, 3=slightly prevalent, 4=somewhat prevalent, 5=very prevalent; Satisfaction scale: 1=not at all satisfied, 2=not very satisfied, 3=slightly satisfied, 4=somewhat satisfied, 5=very satisfied.



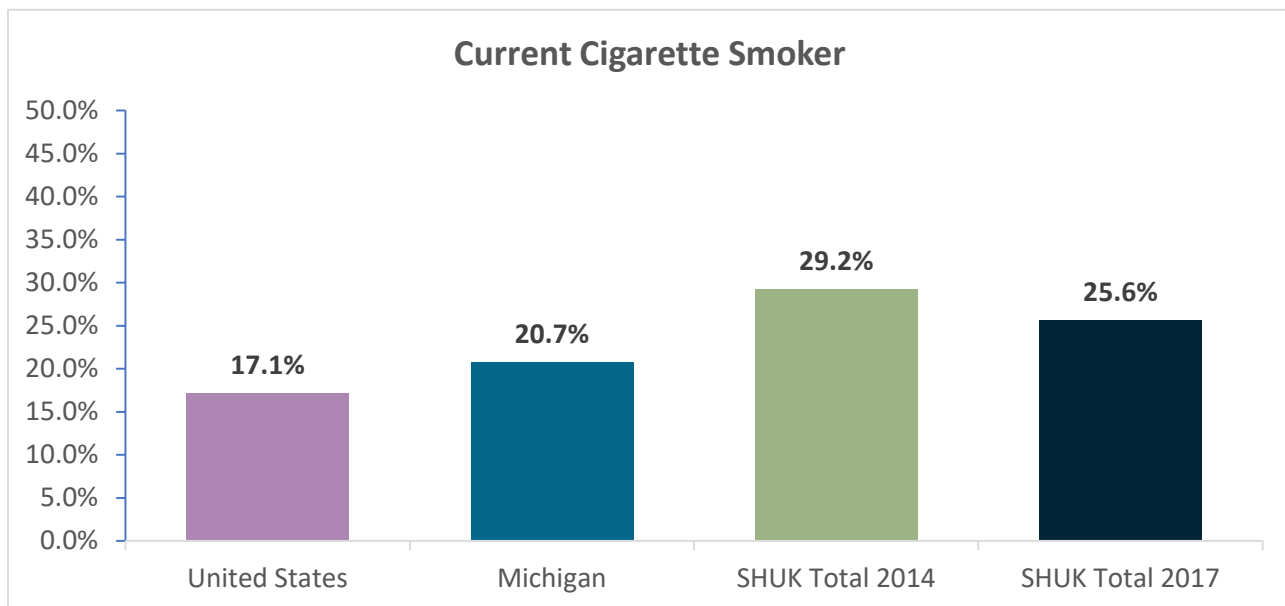
# Smoking and Tobacco Use

Q More than one-fourth (25.6%) of SHUK area adults are cigarette smokers, a rate higher than the state and national rates, but lower than the previous CHNA iteration (2014).



Source: SHUK Behavioral Risk Factor Survey, 2017, Q10.1: Have you smoked at least 100 cigarettes in your entire life? (n=587); q10.2: Do you now smoke every day, some days, or not at all? (n=370).

Note: current smoker = among all adults, the proportion reporting that they had ever smoked at least 100 cigarettes (5 packs) in their life and that they smoke cigarettes now, either every day or on some days.

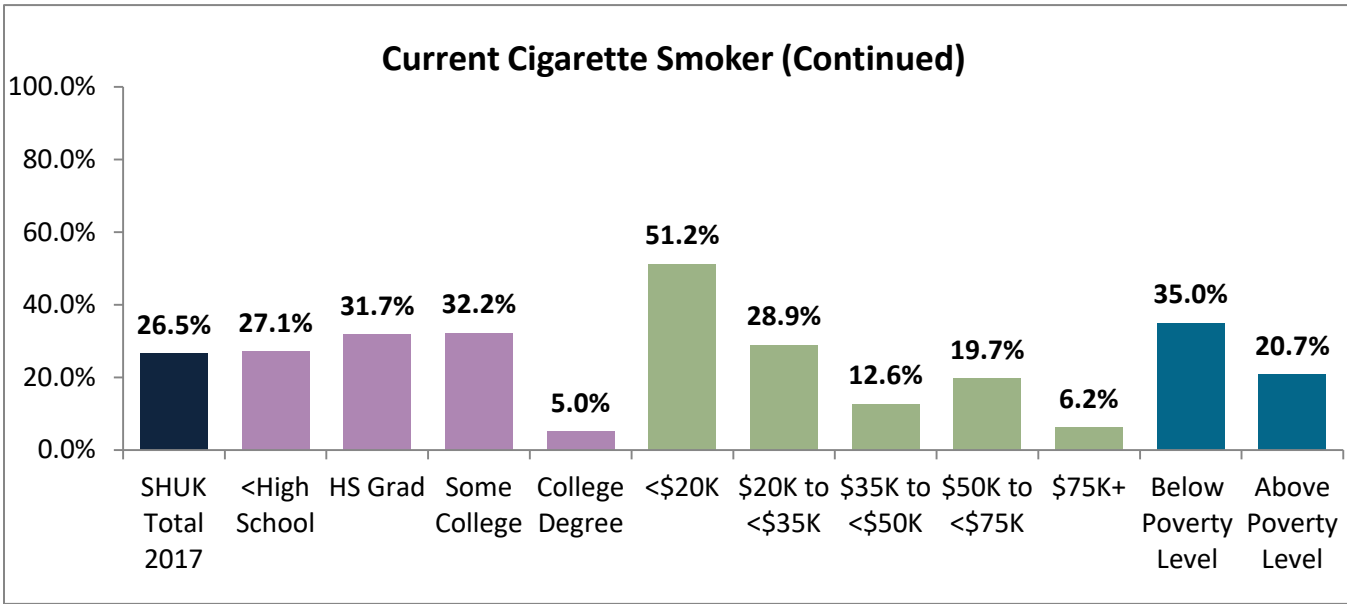
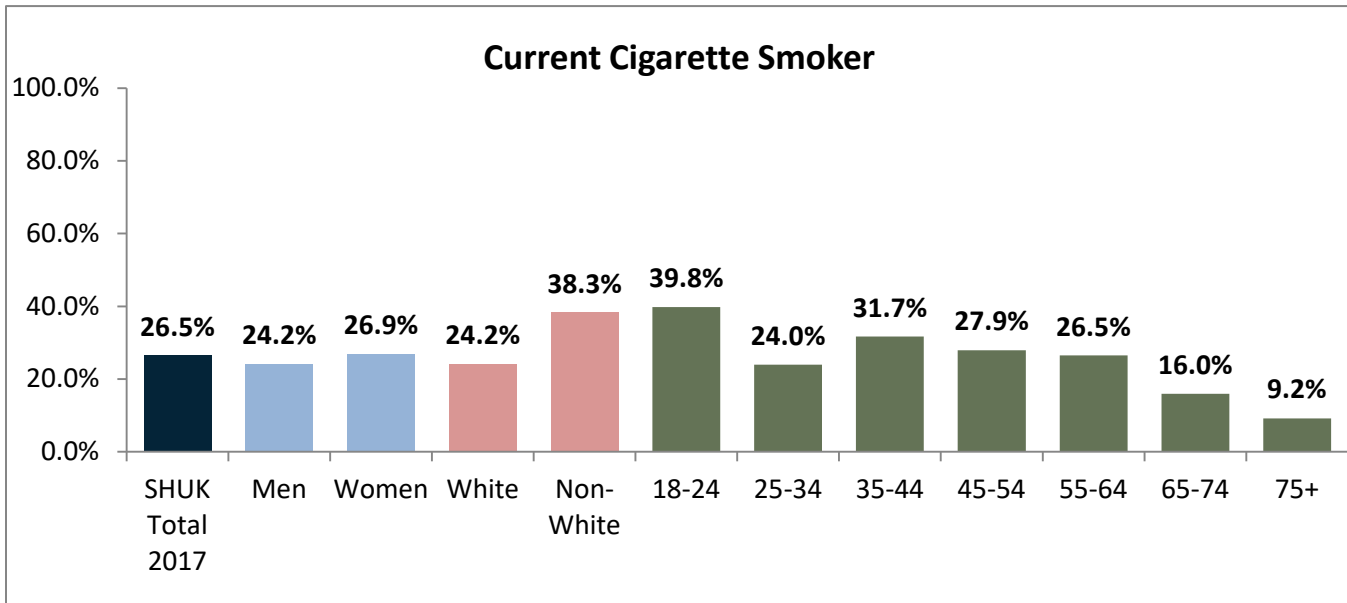


Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016; Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFSS, 2015; SHUK Behavioral Risk Factor Survey, 2014, 2017.



# Smoking and Tobacco Use (Continued)

- Q The prevalence of cigarette smoking is inversely related to age and income.
- Q Adults least likely to smoke have college degrees and/or have the highest incomes.



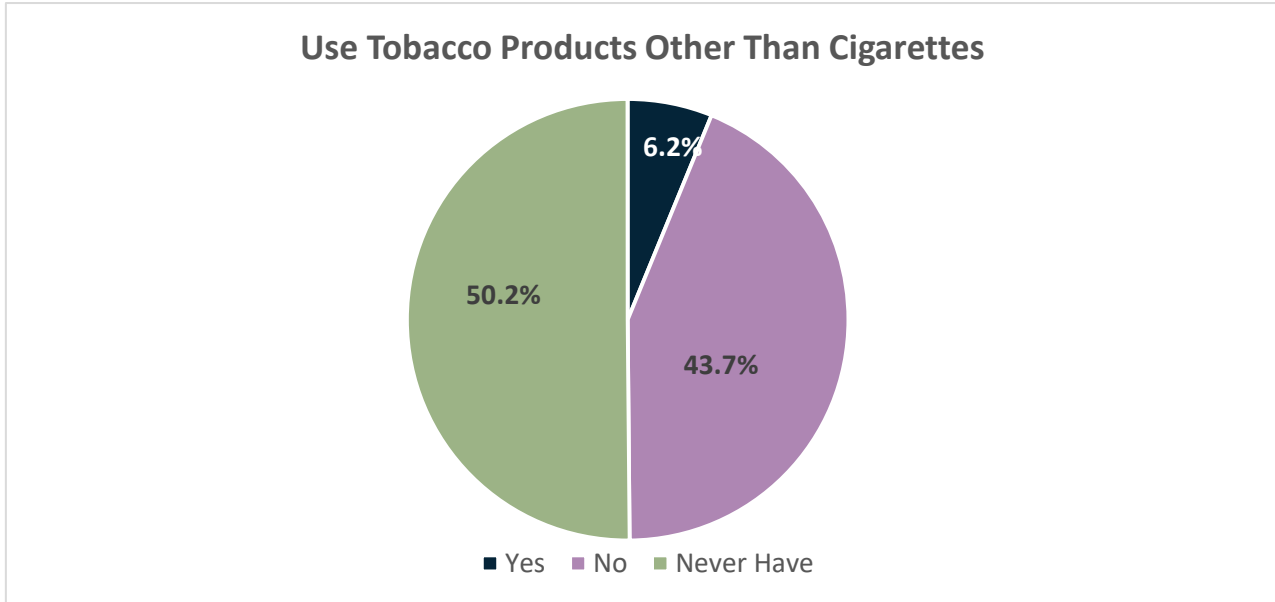
Source: SHUK Behavioral Risk Factor Survey, 2017, Q10.1/Q10.2, status = smoker. (n=587).



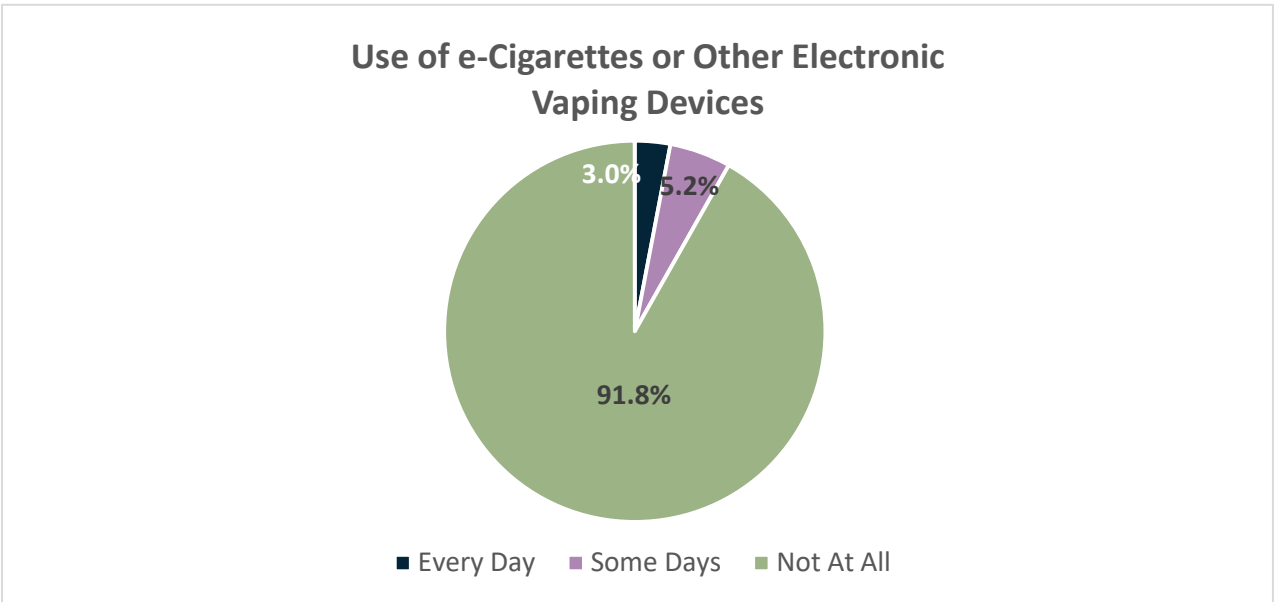


# Smoking and Tobacco Use (Continued)

Q Roughly one in sixteen (6.2%) area adults use tobacco products other than cigarettes and 8.2% report using e-cigarettes or vaping devices.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q10.3: Do you currently use any tobacco products other than cigarettes, such as chew, snuff, cigars, pipes, bidis, kreteks or any other tobacco product? (n=582).

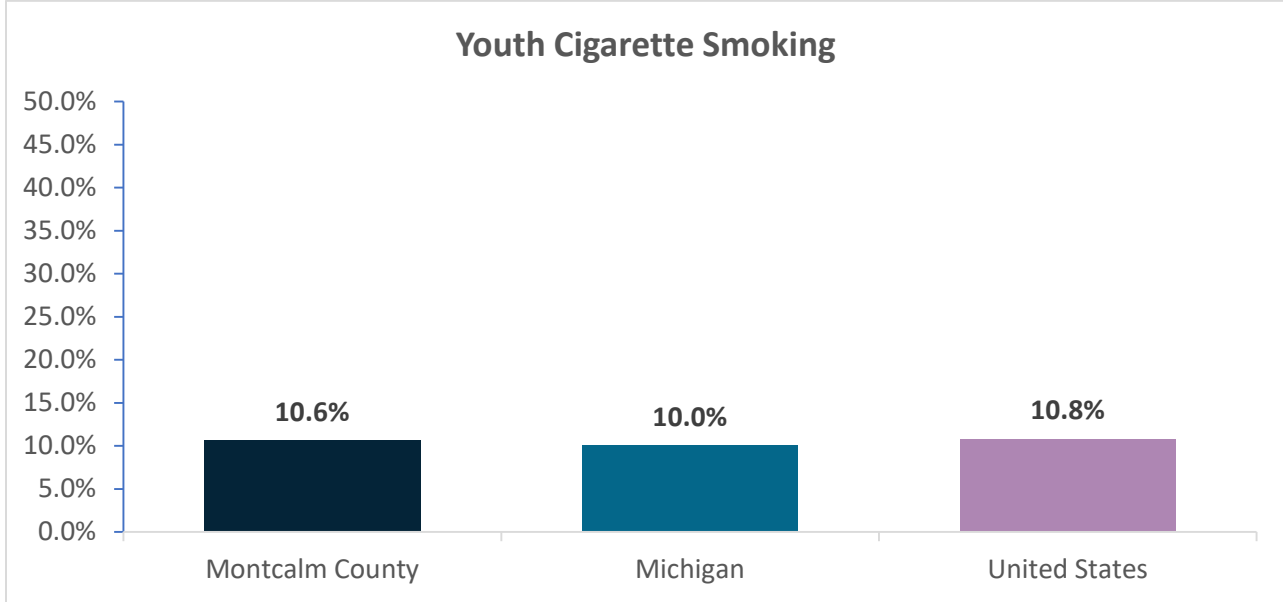


Source: SHUK Behavioral Risk Factor Survey, 2017, Q10.5: Do you now use e-cigarettes or other electronic “vaping” products every day, some days, or not at all? (n=587).



# Smoking and Tobacco Use (Continued)

Q The prevalence of smoking among youth in Montcalm County is on par with the state or national rates. Still, one in ten youth in Montcalm County smoke cigarettes.



Source: For Montcalm County: Michigan Profile for Healthy Youth (MiPhy), 2015; For MI and US: Youth Behavior Risk Survey (YRBS), 2015.



# Smoking and Tobacco Use (Continued)

- More than one-fourth (28.5%) of area adults report smoking inside their home and this rises to 34.1% for households with children.
- Among non-smoking area adults, 16.0% are exposed to smoking in their home.

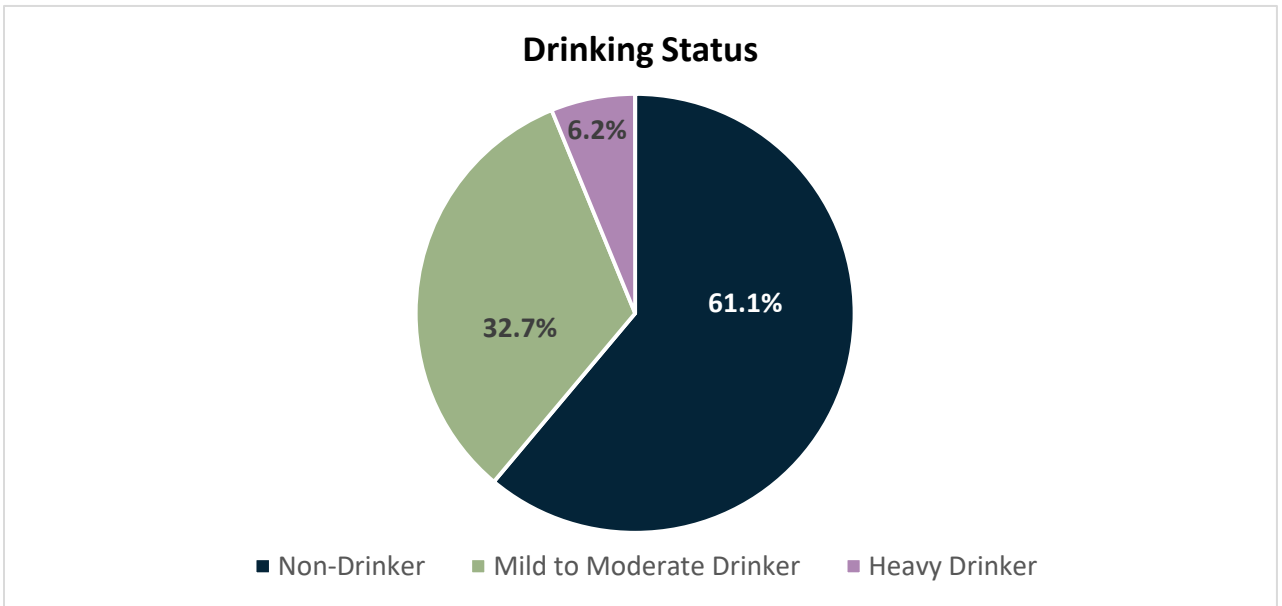
Number of People Who Smoke in the Home	Smoking in the Home				
	Total (n=583)	Have Children in the Home (n=117)	No Children in the Home (n=470)	Non-Smokers (n=467)	Smokers (n=120)
None	71.5%	65.9%	74.5%	84.0%	35.2%
1 person	18.1%	17.0%	18.7%	15.0%	27.0%
2 or more people	10.4%	17.1%	6.7%	1.0%	37.8%

Source: SHUK Behavioral Risk Factor Survey, 2017, Q10.4: Now I would like to ask you a few questions about smoking where you live. How many people that live with you smoke cigarettes, cigars, little cigars, pipes, water pipes, hookah, or any other tobacco products in the home? Do you now use e-cigarettes or other electronic “vaping” products every day, some days, or not at all?

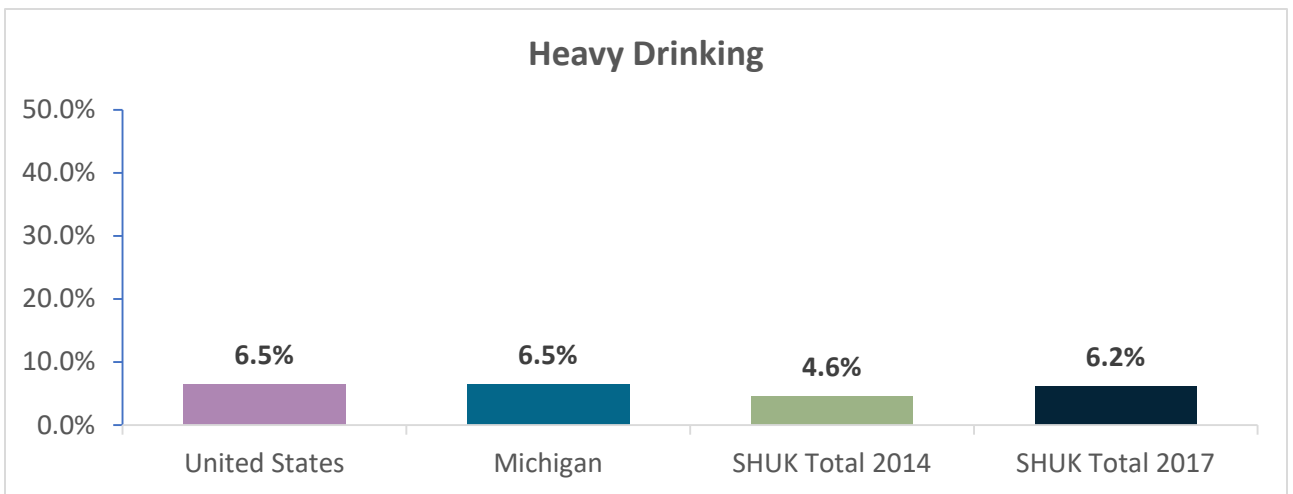


# Alcohol Use

- Q Among area adults, 61.1% are considered to be non-drinkers because they have not consumed alcohol within the past month, while 32.7% are mild to moderate drinkers and 6.2% are considered to be heavy drinkers.
- Q The prevalence of heavy drinking among area adults is slightly lower than state or national rates but has increased from the last CHNA in 2014.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q17.1: During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor? (n=583); Q17.2: One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average? (n=187). Note: heavy drinkers = the proportion who reported consuming an average of more than two alcoholic drinks per day for men or more than one per day for women in the previous month.

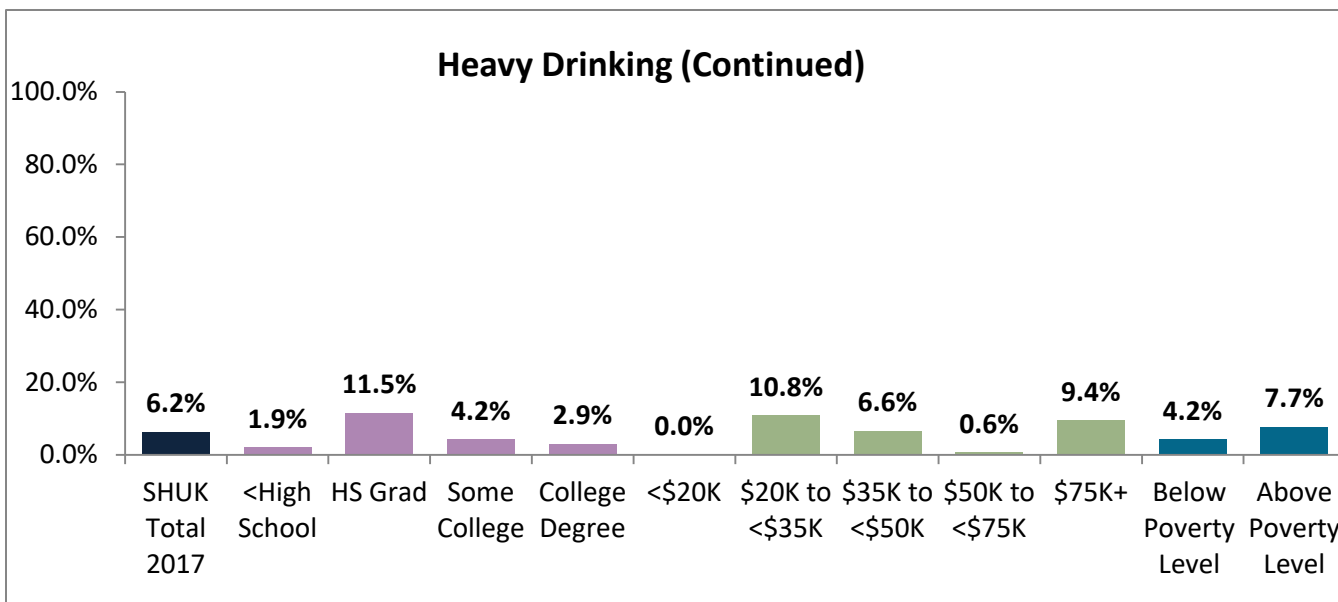
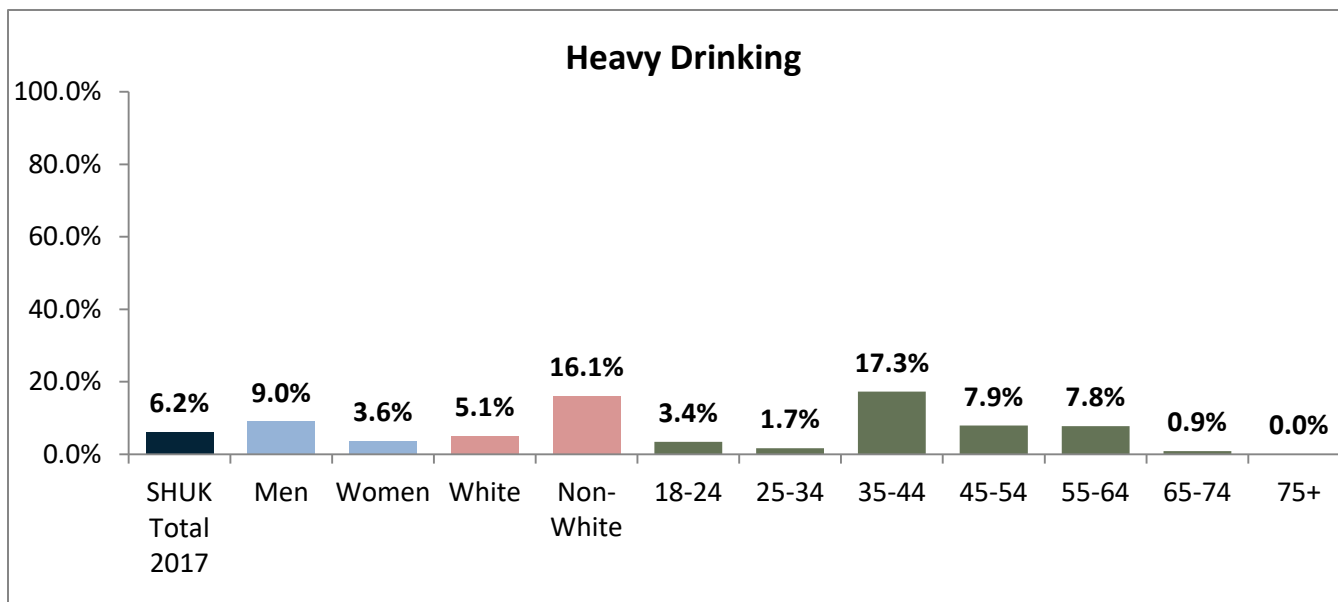


Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016; Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFSS, 2015; SHUK Behavioral Risk Factor Survey, 2014, 2017.



# Alcohol Use (Continued)

Q Among SHUK area adults, men are more likely to engage in heavy drinking than women, and non-White adults are more likely to drink heavily compared to White adults.

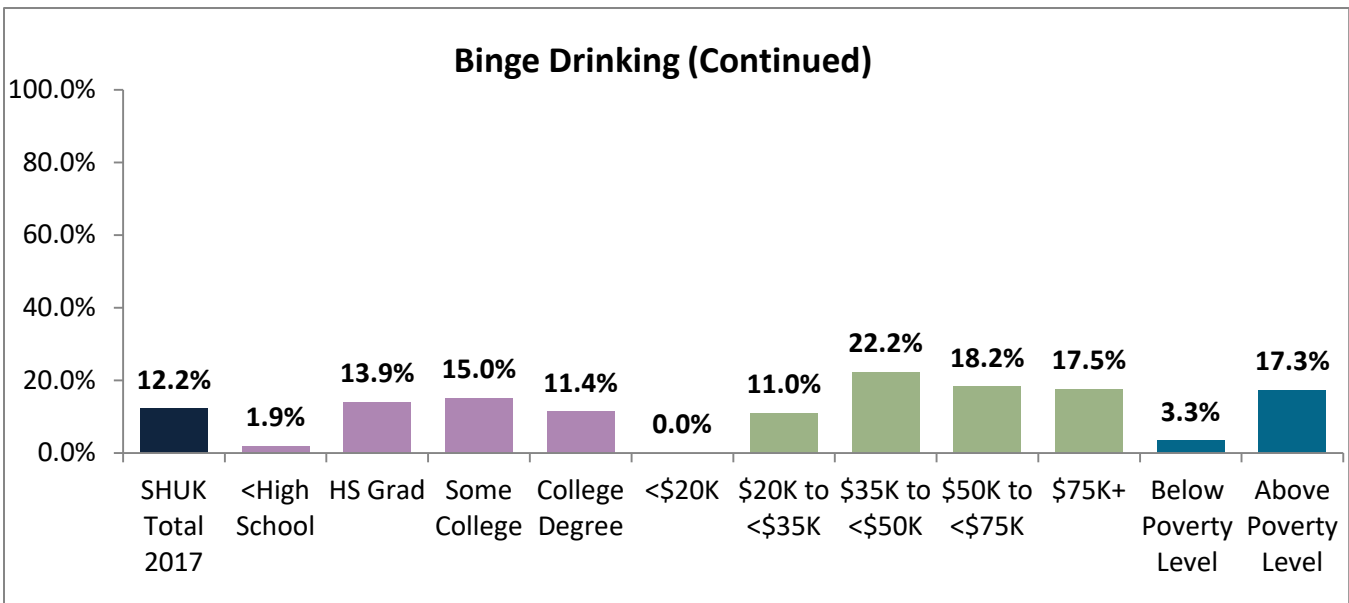
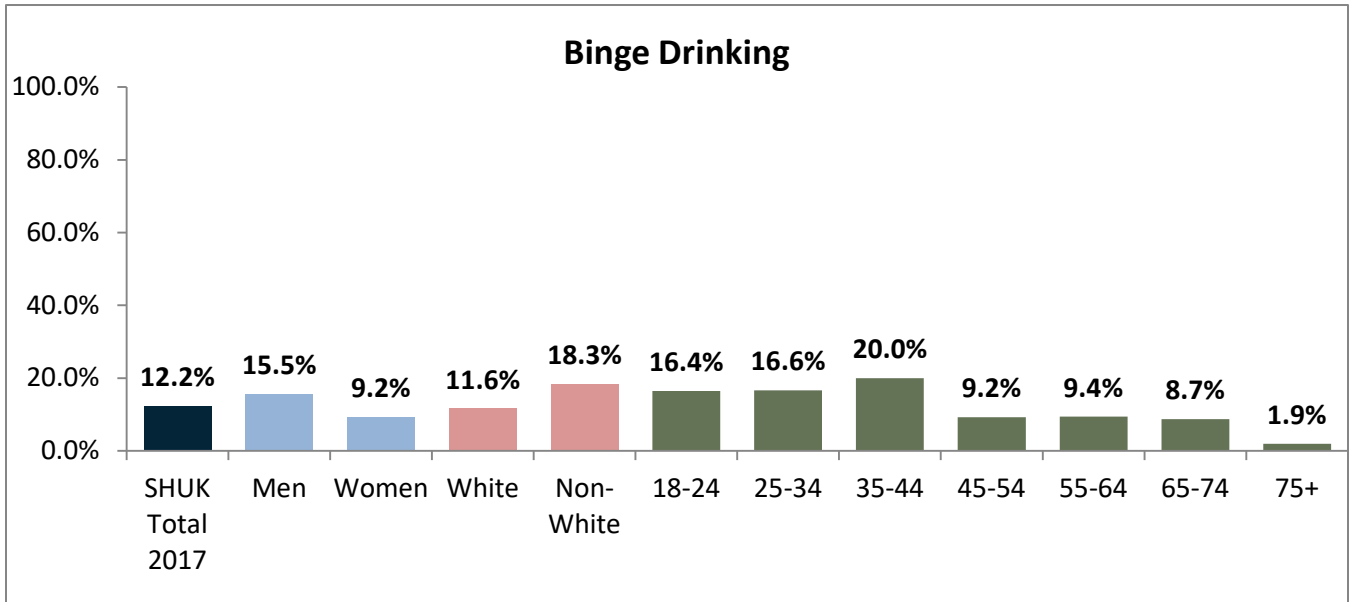


Source: SHUK Behavioral Risk Factor Survey, 2017, Q17.1: During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor? (n=583); Q17.2: One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average? (n=187). Note: heavy drinkers = the proportion who reported consuming an average of more than two alcoholic drinks per day for men or more than one per day for women in the previous month.



# Alcohol Use (Continued)

- Q More than one in ten (12.2%) area adults engage in binge drinking and the prevalence is lowest among those with no high school diploma and/or with incomes less than \$20K.
- Q Binge drinkers are more likely to come from groups that are men, non-White adults, and aged 18-44.

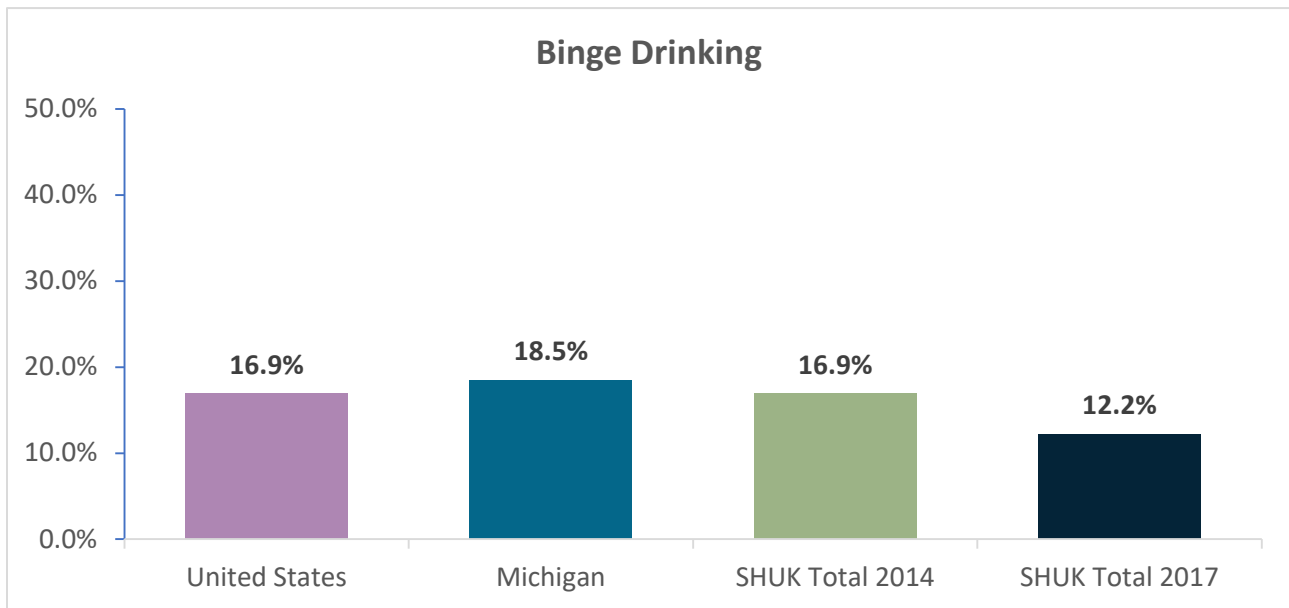


Source: SHUK Behavioral Risk Factor Survey, 2017, Q17.3: Considering all types of alcoholic beverages, how many times during the past 30 days did you have X (CATI X = 5 for men, X = 4 for women) or more drinks on an occasion? (n=581). Note: among all adults, the proportion who reported consuming five or more drinks per occasion (for men) or 4 or more drinks per occasion (for women) at least once in the previous month.

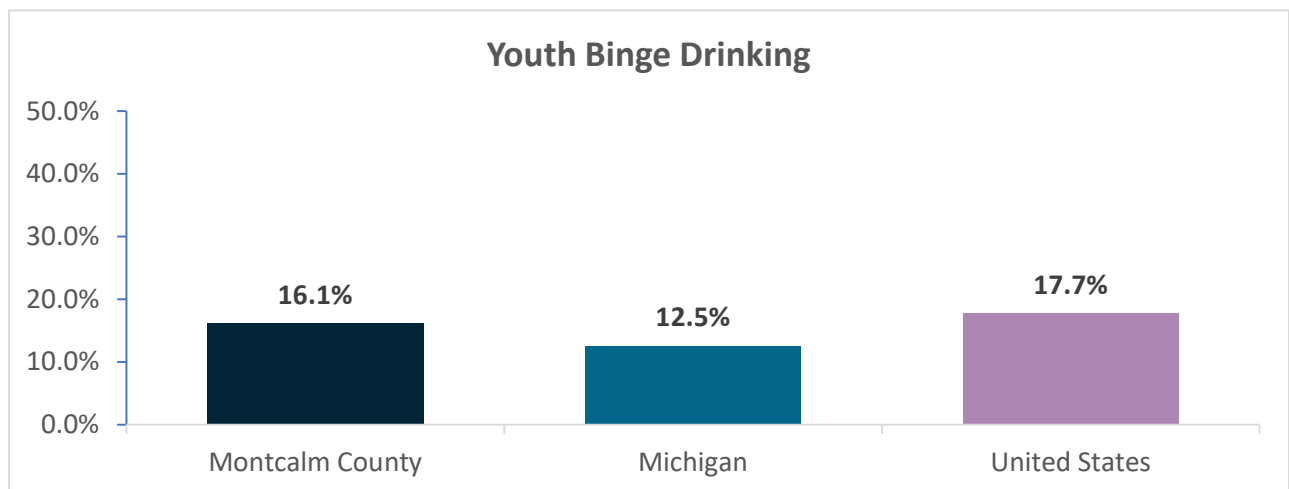


# Alcohol Use (Continued)

- Q Among area adults, the prevalence of binge drinking is lower than state or national rates, and lower than the last CHNA in 2014.
- Q The prevalence of binge drinking among youth in Montcalm County is higher than the state rate but lower than the national rate.



Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016; Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFS, 2015; SHUK Behavioral Risk Factor Survey, 2014, 2017.



Source: For Montcalm County: Michigan Profile for Healthy Youth (MiPhy), 2015; For MI and US: Youth Behavior Risk Survey (YRBS), 2015.



# Substance Abuse

Q Key Stakeholders and Key Informants consider substance abuse to be one of the most pressing or concerning health issue in the SHUK area. Not only is substance abuse prevalent and easily accessible, but like many rural areas there is an opioid epidemic that has had an enormous impact on many facets of the community. Use among area youth is also troubling. Complicating things further, there is a lack of adequate programs and services to treat substance abuse.

<p><b>Prevalence</b></p>	<p><b>Data shows that the number of individuals using and abusing substances (alcohol, opioids, etc.) has increased. Also, the number of deaths due to heroin overdoses has increased. – Key Informant</b></p> <p><b>A significant percentage of the clients my agency serves are actively using. – Key Informant</b></p>
<p><b>Youth using</b></p>	<p><b>Data shows young ages of first use and gateway drugs. Rapid progression of drug use evolution. Young children in this community continue to suffer because there are not enough services or supports to prevent addiction path from occurring in the first place. – Key Informant</b></p> <p><b>Heroin deaths of young adults, marijuana levels of use and treatment for adolescents, levels of alcohol use by youth and adults, as well as addiction for all of these substances and others. Additionally, tobacco use - cigarettes, chew, hookah, etc., levels are too high. – Key Stakeholder</b></p>
<p><b>Availability</b></p>	<p><b>Poor coping and access is readily available. Substance abuse treatment is voluntary unless there is a co-occurring condition, such as mental health concerns. – Key Informant</b></p>
<p><b>Lack of treatment options</b></p>	<p><b>Substance abuse treatment availability in our county. You can't get more intensive. And, with the opioid epidemic, access to substance abuse services, the more intensive services (e.g., co-occurring), are not there. There are no residential or intensive services. Also, we have absolutely nothing in this county for detox and getting someone into services right when it's necessary - there is no availability. – Key Stakeholder</b></p>

Source: SHUK Key Stakeholder Interviews, 2017, Q1: What do you feel are the two or three most pressing or concerning health issues facing residents in the community, especially the underserved? (n=4); Key Informant Online Survey, 2017, Q1: To begin, what are one or two most pressing health issues or concerns in the community? (n=34); Q1a: Why do you think it's a problem in the community? Please be as detailed as possible. (n=16)

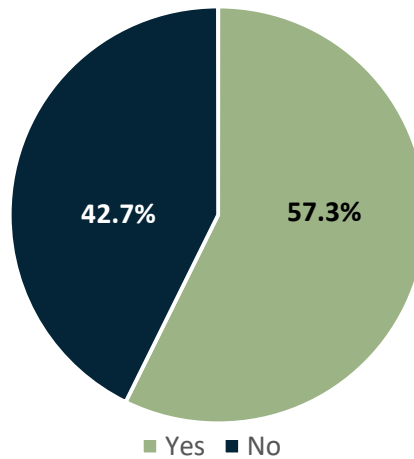




# Substance Abuse (Continued)

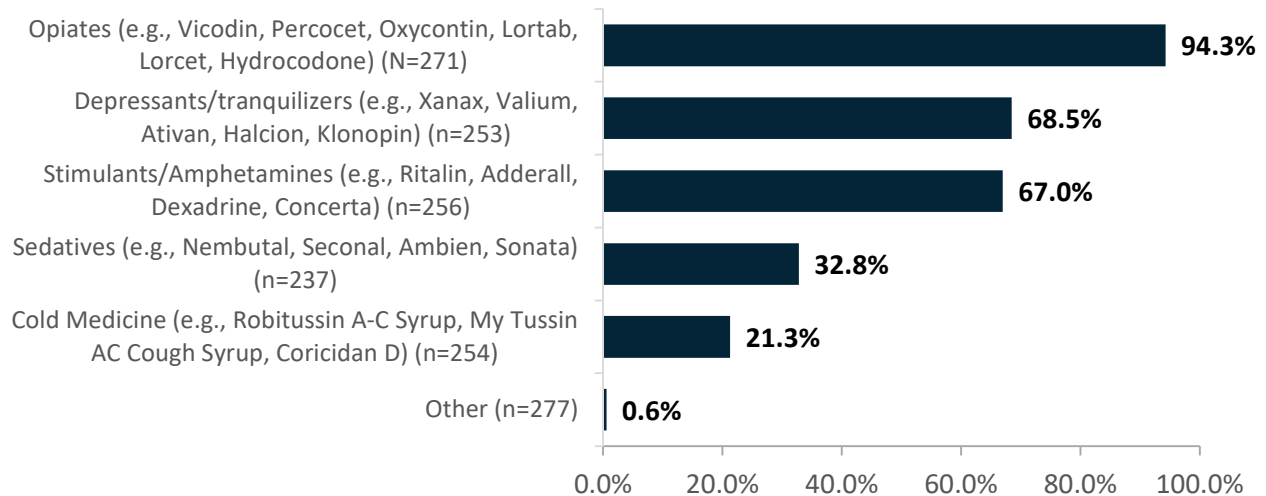
- Q Nearly six in ten (57.3%) SHUK area adults believe there is a prescription drug abuse problem in the community, and of those more than nine in ten (94.3%) believe prescription opiates are abused.
- Q More than two-thirds also believe prescription depressants and stimulants are abused.

## Believe There is a Problem with Abuse of Prescription Drugs in the Community



Source: SHUK Behavioral Risk Factor Survey, 2017, Q11.1: Do you believe there is a problem in your community with the abuse of prescription medication (e.g., Oxycontin)? (n=522)

## Prescription Drugs Abused

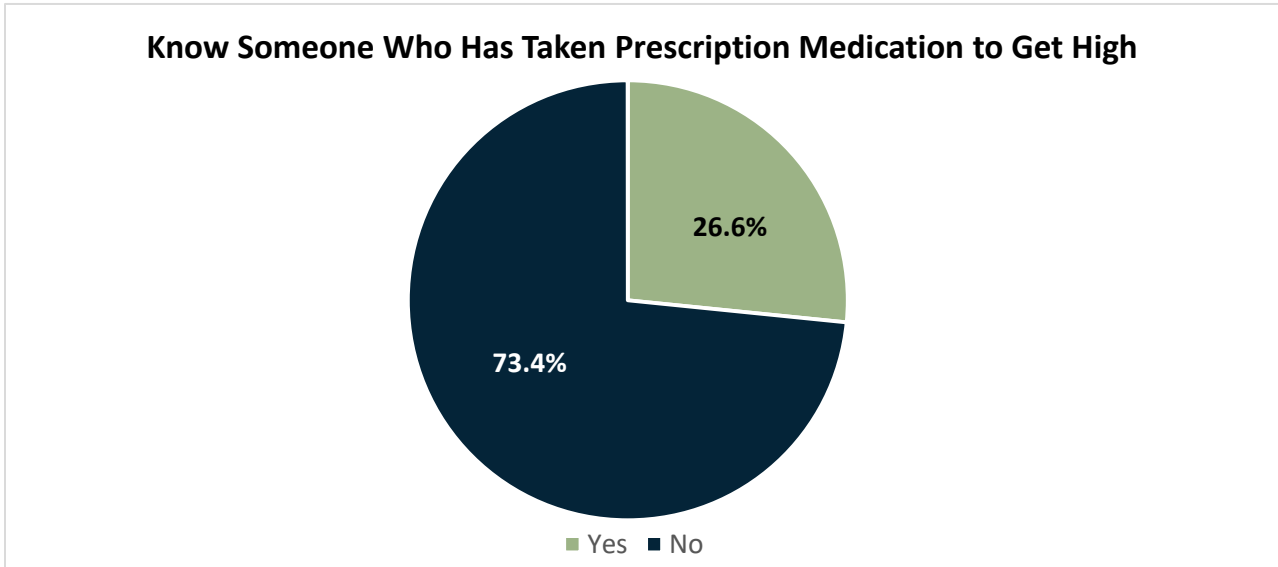


Source: SHUK Behavioral Risk Factor Survey, 2017, Q11.2-q11.7: Which prescription drugs do you feel are abused in your community?

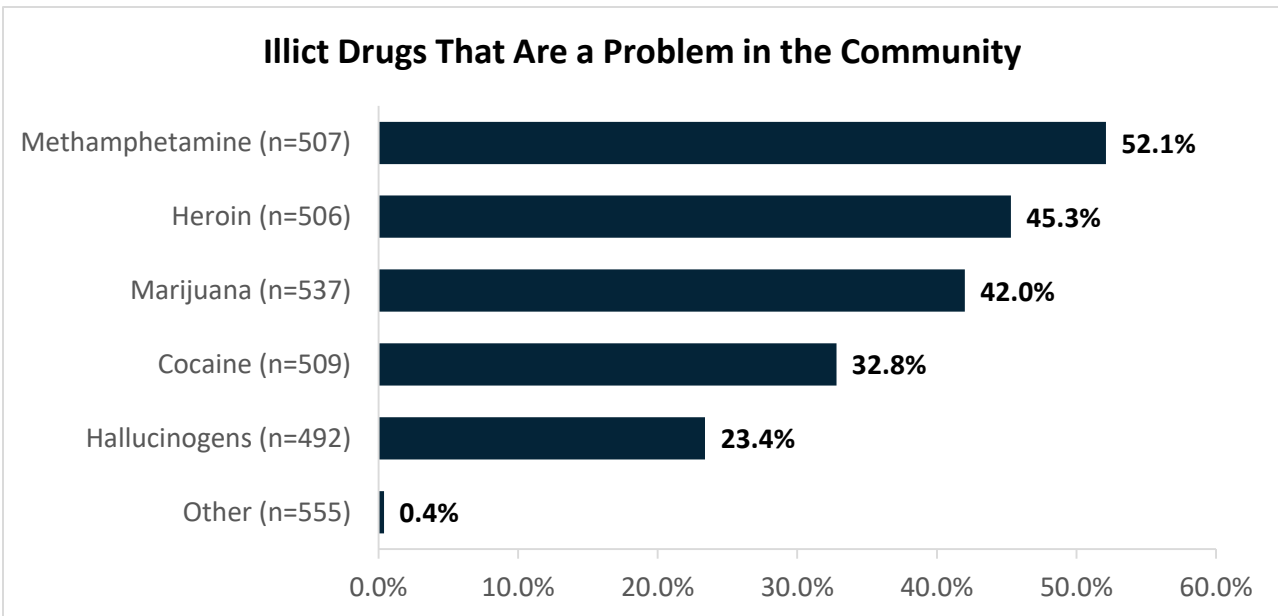


# Substance Abuse (Continued)

- Q One-fourth (26.6%) of SHUK area adults report that they know someone who has taken prescription drugs to get high.
- Q Over half of area adults believe the use of methamphetamines is a community problem and more than four in ten believe the same about heroin and marijuana use.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q11.8: Do you know someone who has taken prescription medication, such as Oxycontin, to get high? (n=574)

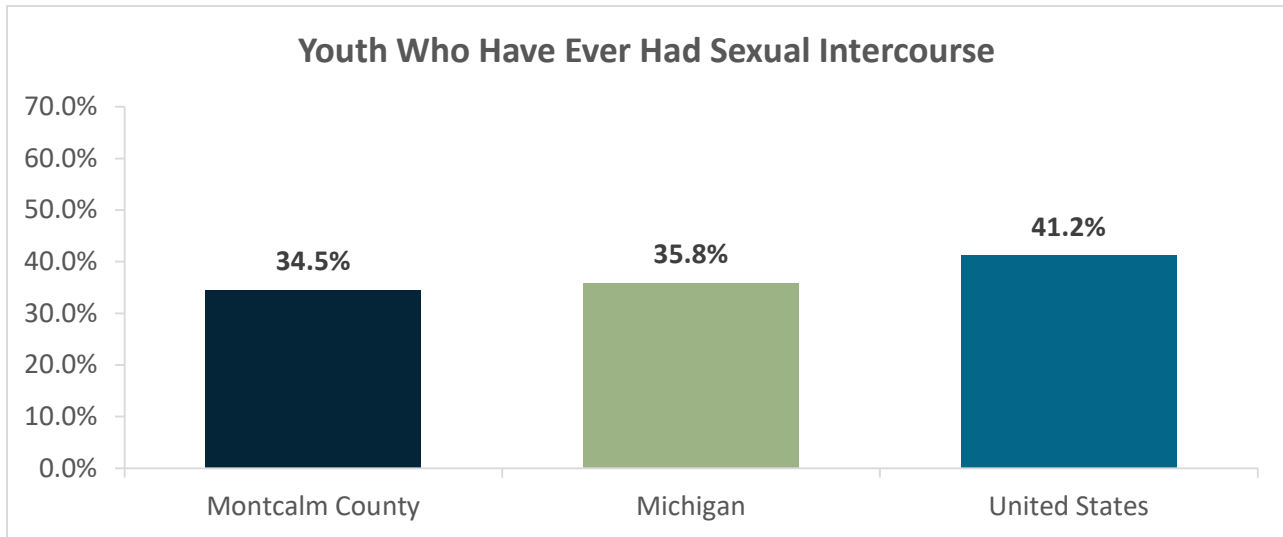


Source: SHUK Behavioral Risk Factor Survey, 2017, Q11.9-Q11.14: With regard to the use of the following drugs, which do you think are a problem in your community today?

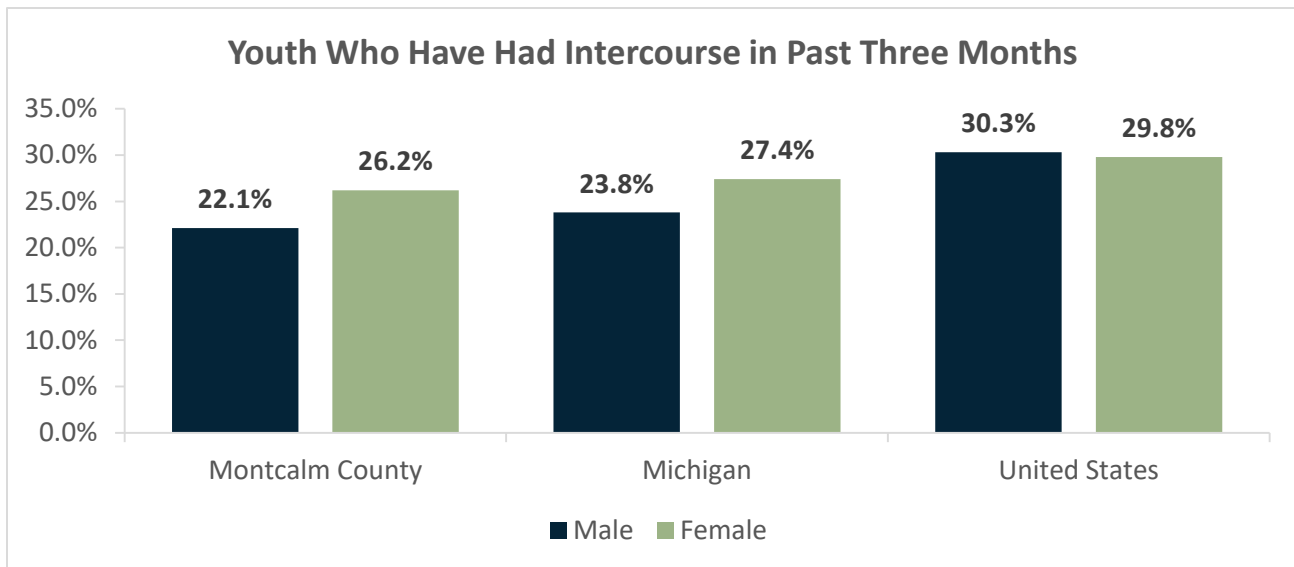


# Teenage Sexual Activity

- Q One third (34.5%) of Montcalm County teens have had sexual intercourse, a rate lower than the state or national rates.
- Q Among teens who report having had sexual intercourse in the past three months, the proportion of females is higher than the proportion of males; one-fourth (26.2%) of Montcalm County female teens and one in five male teens have had sexual intercourse in the past three months.



Source: For Montcalm County: Michigan Profile for Healthy Youth (MiPhy), 2015; For MI and US: Youth Behavior Risk Survey (YRBS), 2015.

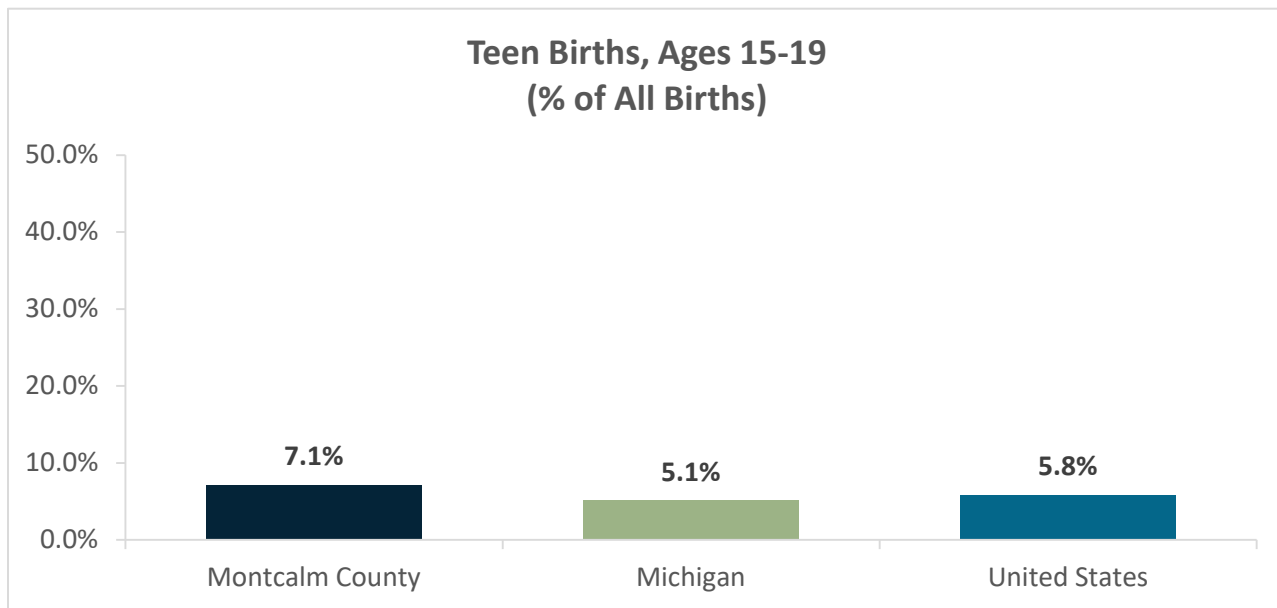


Source: For Montcalm County: Michigan Profile for Healthy Youth (MiPhy), 2015; For MI and US: Youth Behavior Risk Survey (YRBS), 2015.

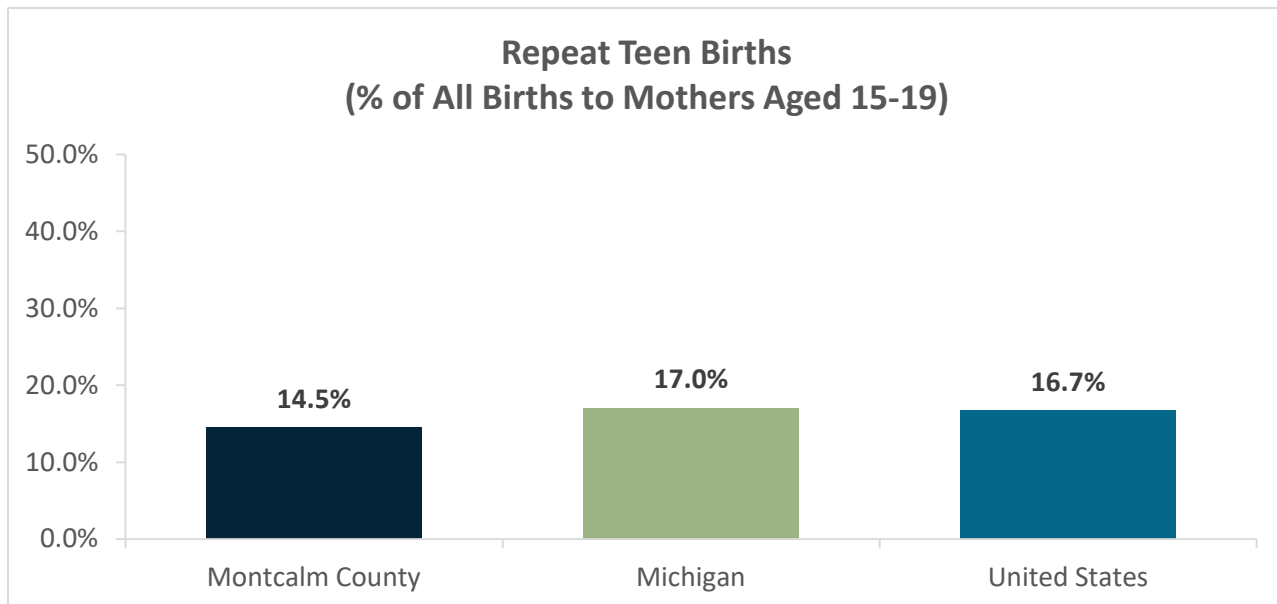


# Teenage Sexual Activity (Continued)

- Q As a percentage of all births, the rate of teen births is higher in Montcalm County than in Michigan or the U.S.
- Q Repeat teen births are lower in Montcalm County compared to the state or the nation.



Source: For Montcalm County: Michigan Profile for Healthy Youth (MiPhy), 2015; For MI and US: Youth Behavior Risk Survey (YRBS), 2015.

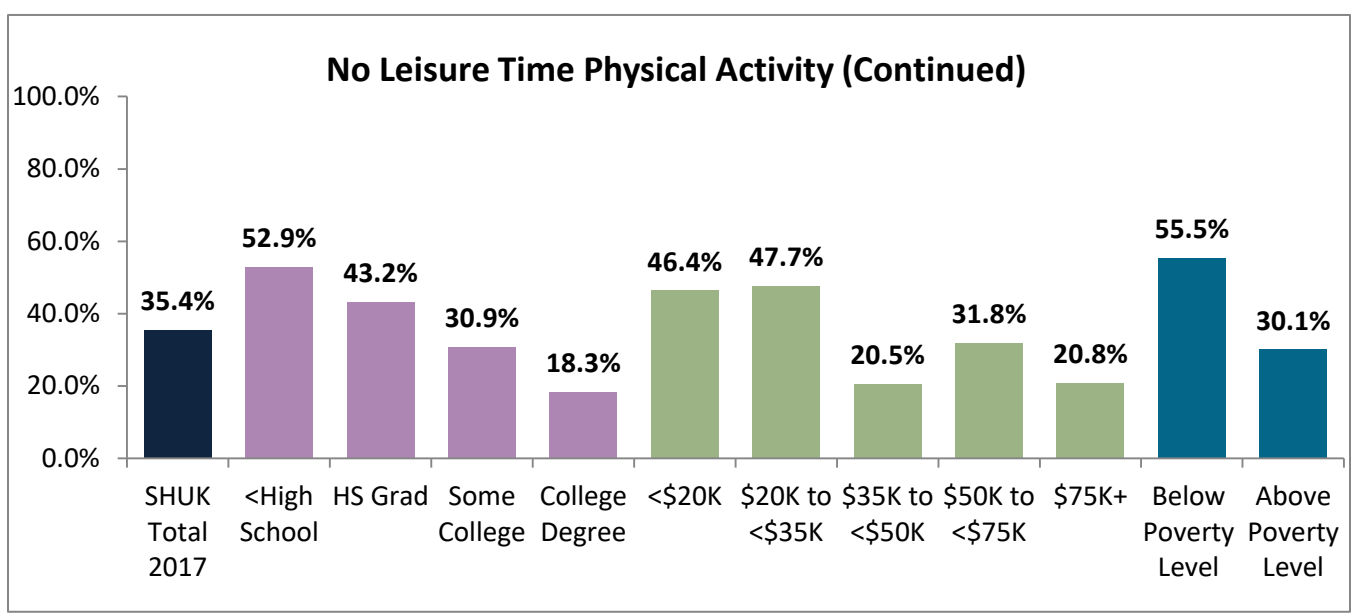
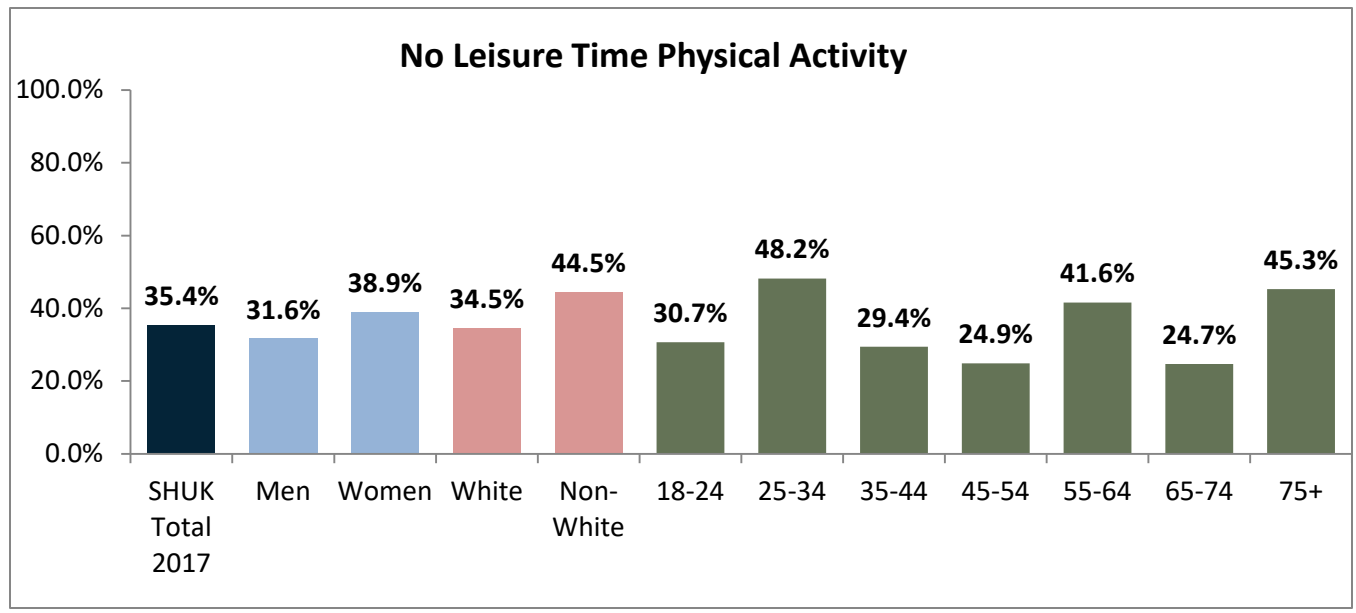


Source: For Montcalm County: Michigan Profile for Healthy Youth (MiPhy), 2015; For MI and US: Youth Behavior Risk Survey (YRBS), 2015.



# Physical Activity

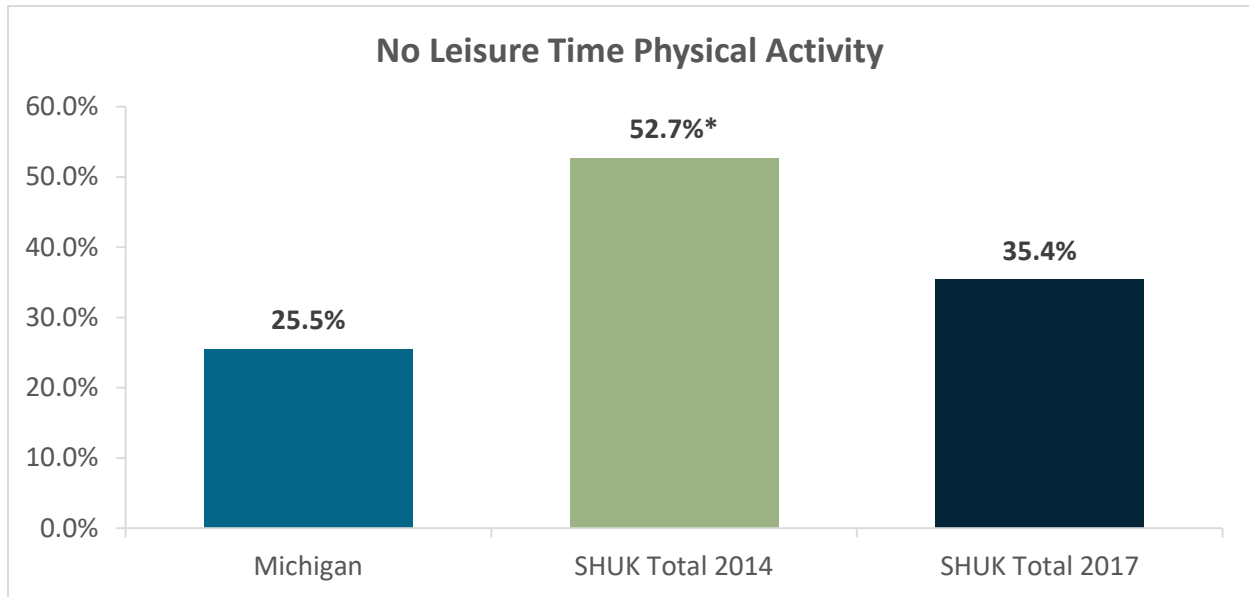
- Q More than three in ten (35.4%) area adults do not participate in leisure time physical activity outside of their job.
- Q Lack of physical activity is inversely related to income; almost half of adults with incomes of less than \$35K do not participate in physical activity compared to 20.8% of adults with incomes of \$75K or more.
- Q Further, engaging in leisure time physical activity is inversely related to education.



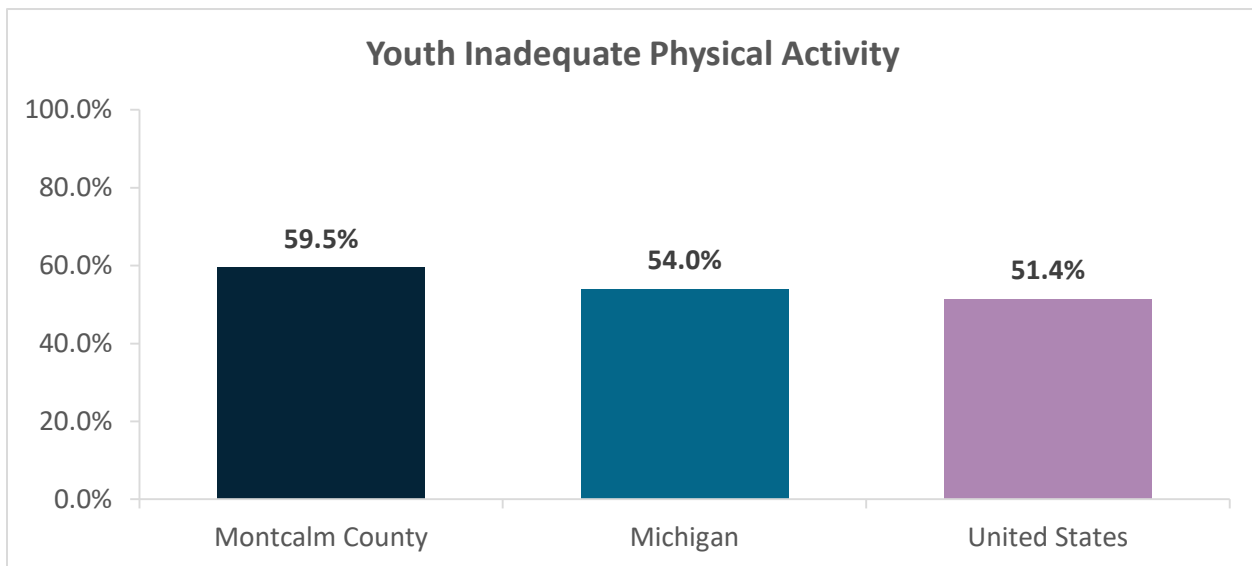
Source: SHUK Behavioral Risk Factor Survey, 2017, Q16.1: During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise? (n=582)

# Physical Activity (Continued)

- Q SHUK area adults and youth are less active than adults across Michigan.
- Q Almost six in ten (59.5%) youth in Montcalm County receive inadequate amounts of physical activity; a rate higher than the state or national rates.



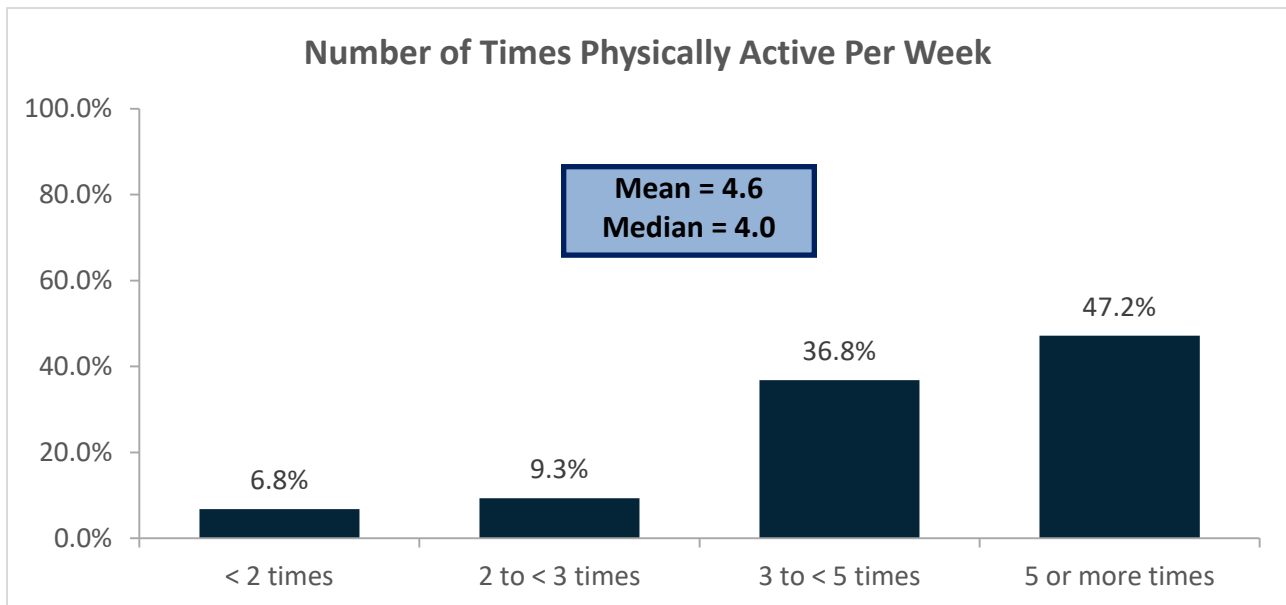
Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2016. \*Note: this measure is much higher than what is typical due to the 2014 BRFSS being conducted in the winter months. Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Michigan BRFSS, 2015; SHUK Behavioral Risk Factor Survey, 2014,



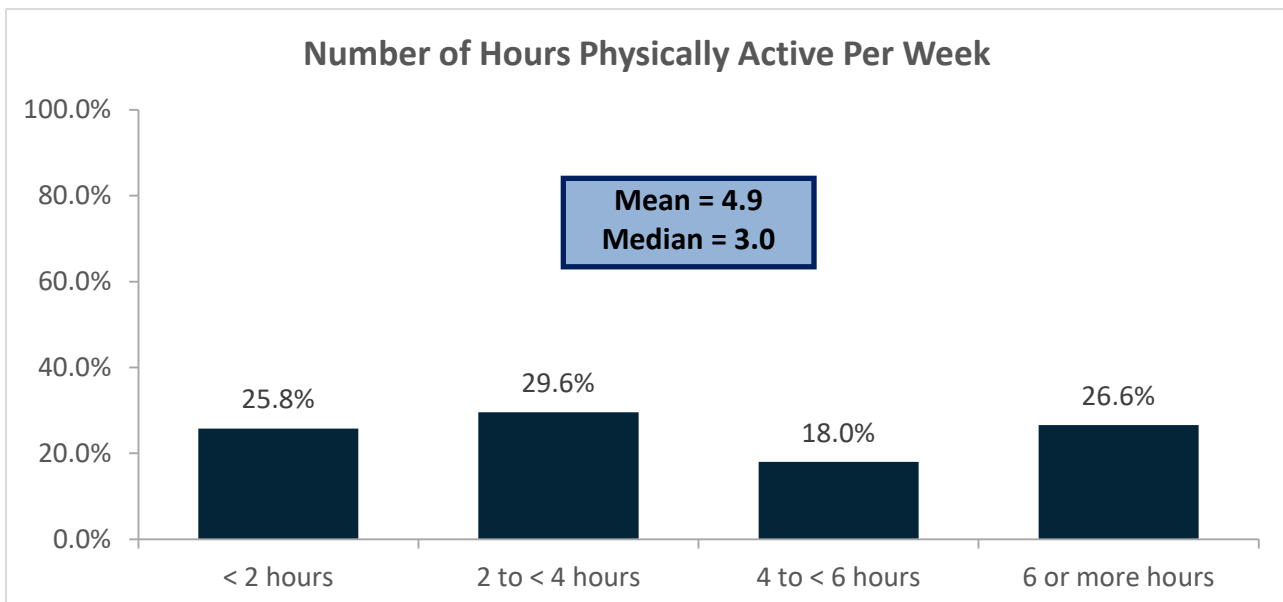
Source: For Montcalm County: Michigan Profile for Healthy Youth (MiPhy), 2015; For MI and US: Youth Behavior Risk Survey (YRBS), 2015.

# Physical Activity (Continued)

- Q Among those who exercise, 84.0% participate at least three times per week.
- Q More than half (55.4%) participate for less than four hours per week, while one-fourth (26.6%) participate for six hours or more.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q16.2: How many times per week or per month did you take part in physical activity during the past month? (n=363). Note: among those who engage in leisure time physical activity.

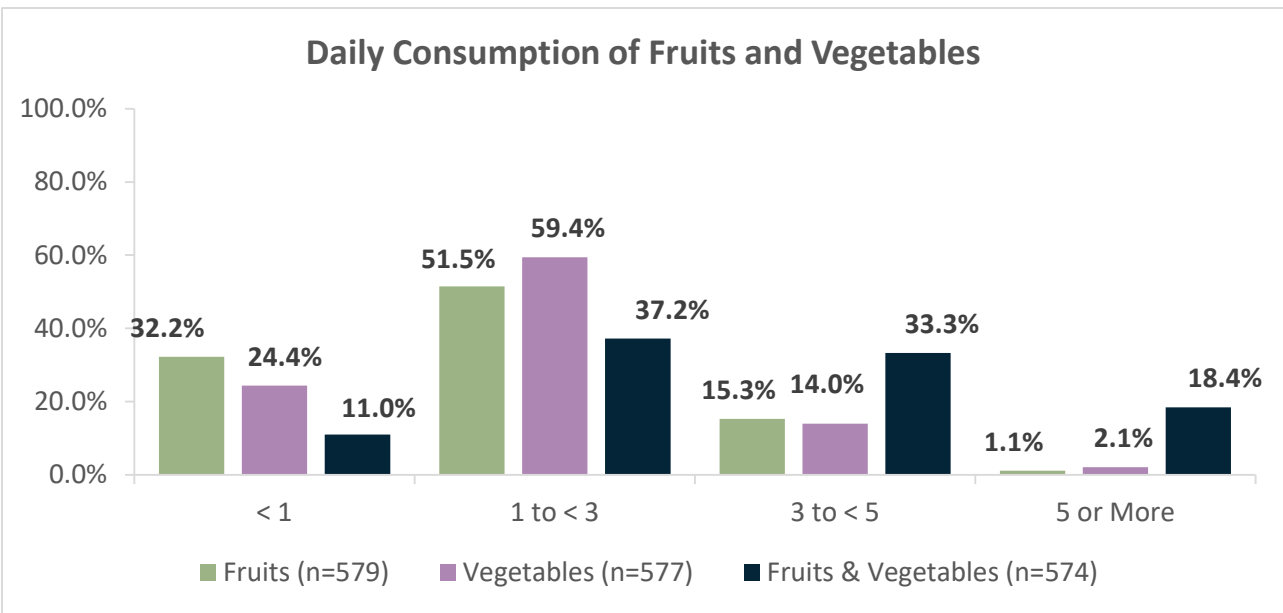


Source: SHUK Behavioral Risk Factor Survey, 2017, Q16.3: And when you took part in physical activity, for how many minutes or hours did you usually keep at it? (n=360). Note: among those who engage in leisure time physical activity.

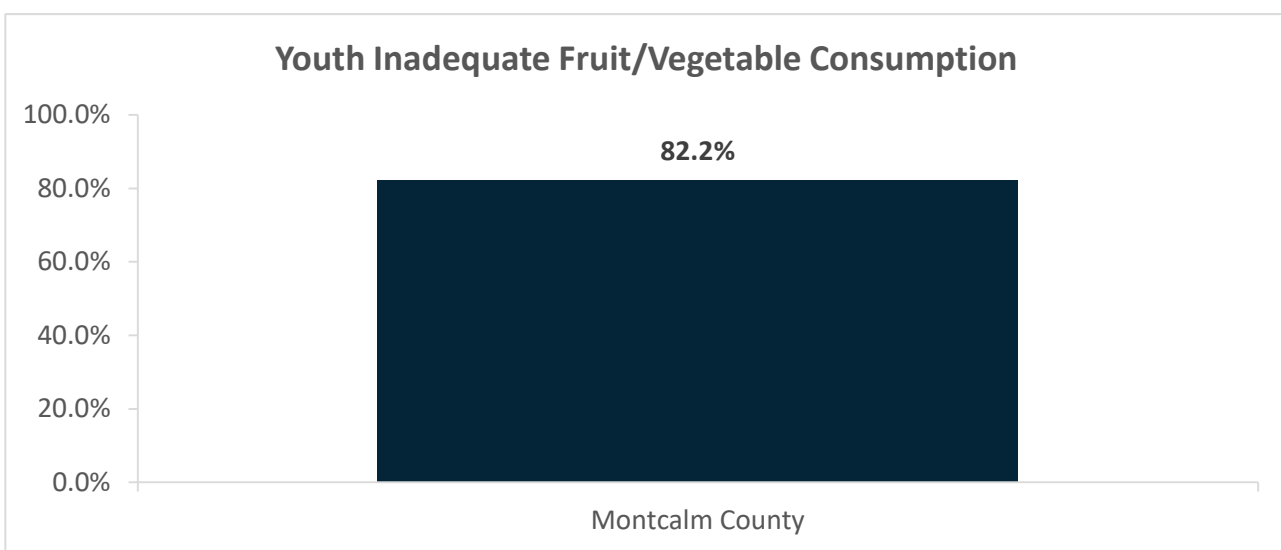


# Fruit and Vegetable Consumption

- Q Almost one in five (18.4%) SHUK area adults and youth (17.8%) consume adequate amounts of fruits and vegetables per day, which is defined as five or more times per day.
- Q Large majorities of area adults consume fruits and vegetables fewer than three times per day.



Source: SHUK Behavioral Risk Factor Survey, 2017, Q14.1: During the past month, how many times per day, week or month did you eat fruit or drink 100% PURE fruit juices? Do not include fruit-flavored drinks with added sugar or fruit juice you made at home and added sugar to. Only include 100% juice.; Q14.2: During the past month, how many times per day, week, or month did you eat vegetables for example broccoli, sweet potatoes, carrots, tomatoes, V-8 juice, corn, cooked or fresh leafy greens including romaine, chard, collard greens or spinach?



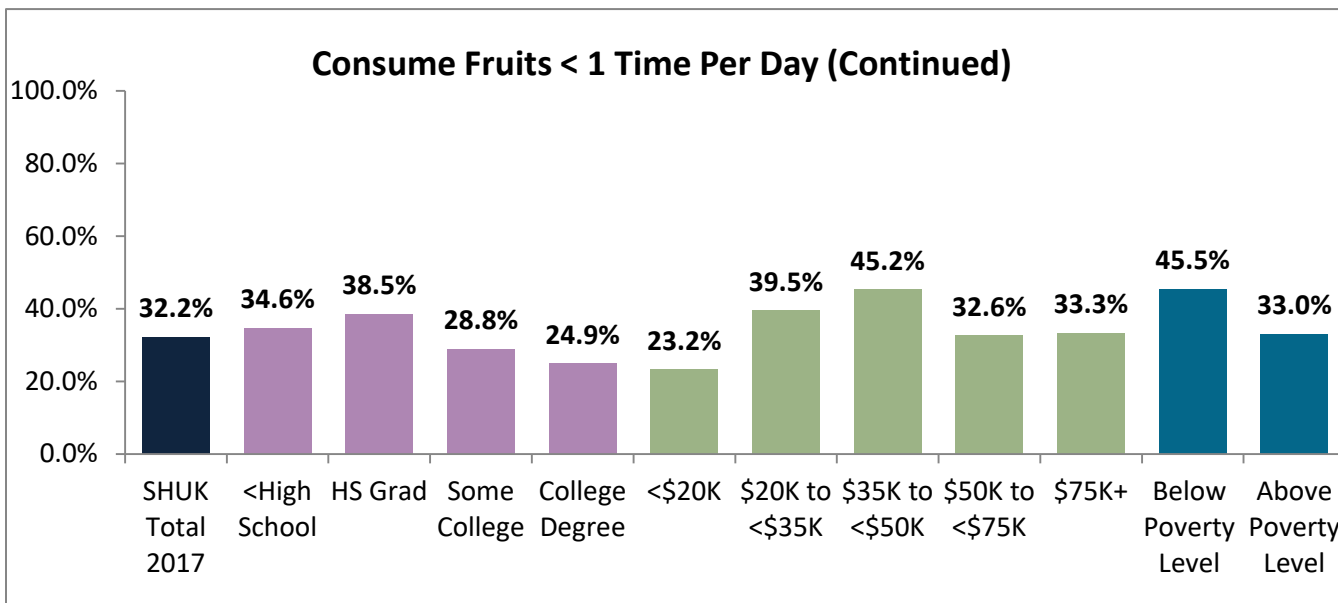
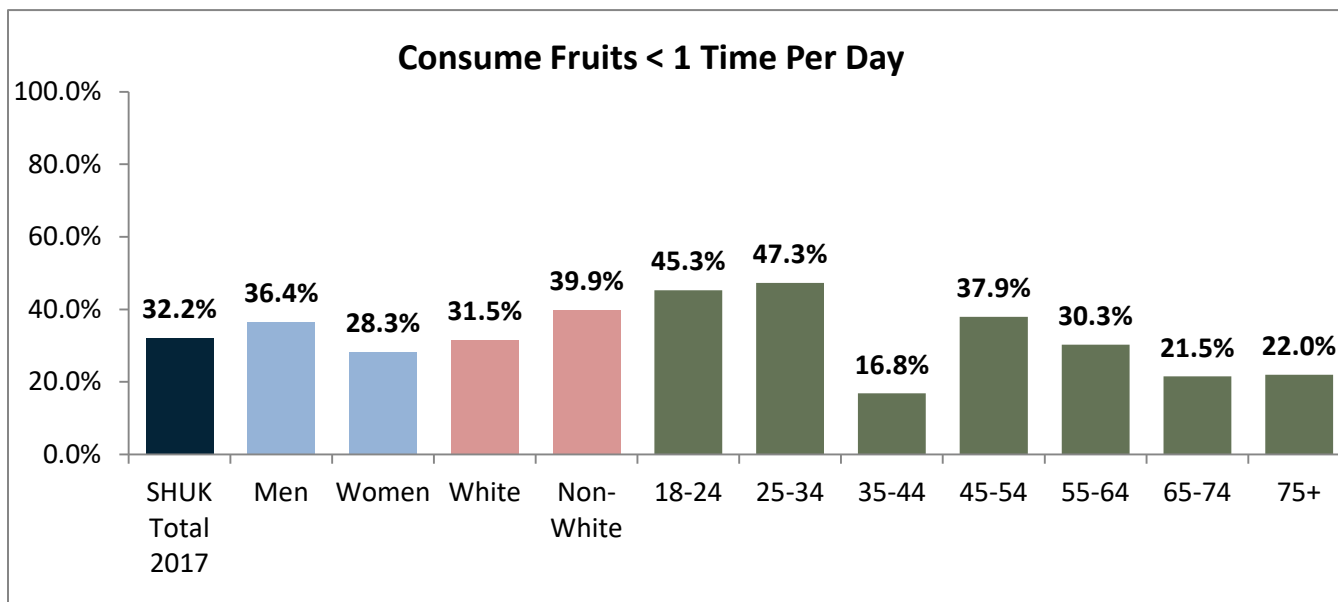
Source: For Montcalm County: Michigan Profile for Healthy Youth (MiPhy), 2015.





# Fruit and Vegetable Consumption (Continued)

- Q One-third (32.2%) area adults consume fruit less than one time per day on average.
- Q Area adults most likely to consume fruits less than one time per day are under age 35 and/or come from lower income groups.

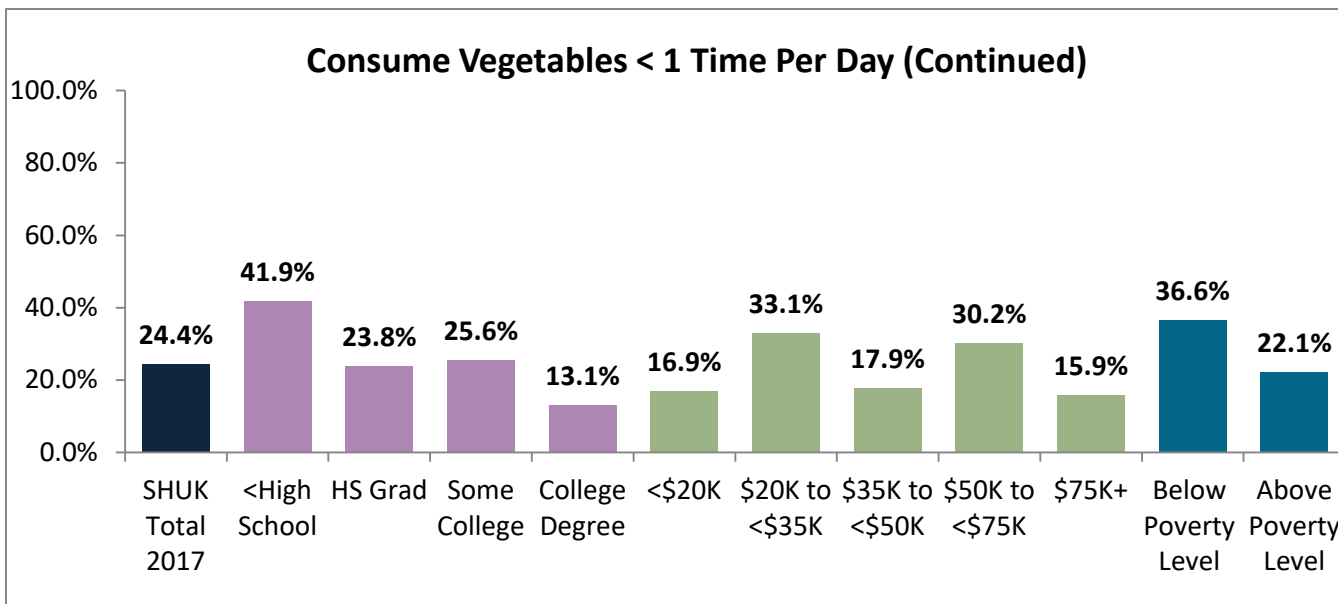
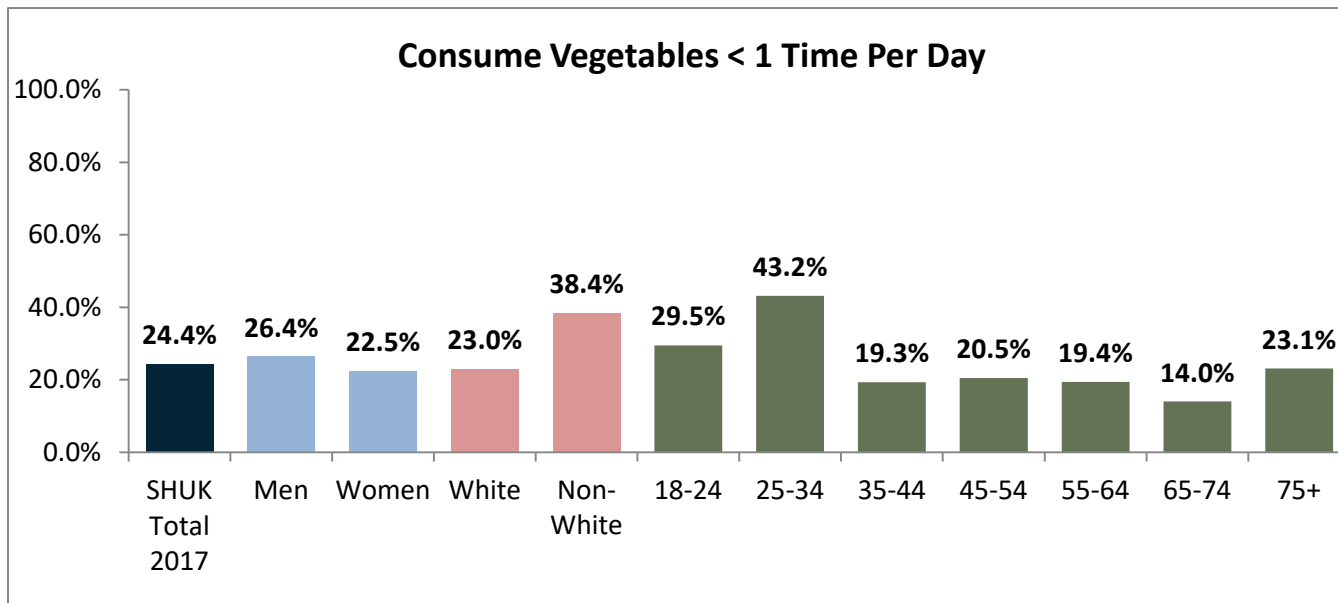


Source: SHUK Behavioral Risk Factor Survey, 2017, Q14.1: During the past month, how many times per day, week or month did you eat fruit or drink 100% PURE fruit juices? Do not include fruit-flavored drinks with added sugar or fruit juice you made at home and added sugar to. Only include 100% juice.



# Fruit and Vegetable Consumption (Continued)

Q One-fourth (24.4%) SHUK area adults consume vegetables less than one time per day, on average, and those most likely to do this come from groups that are non-White and/or have less than a high school diploma.

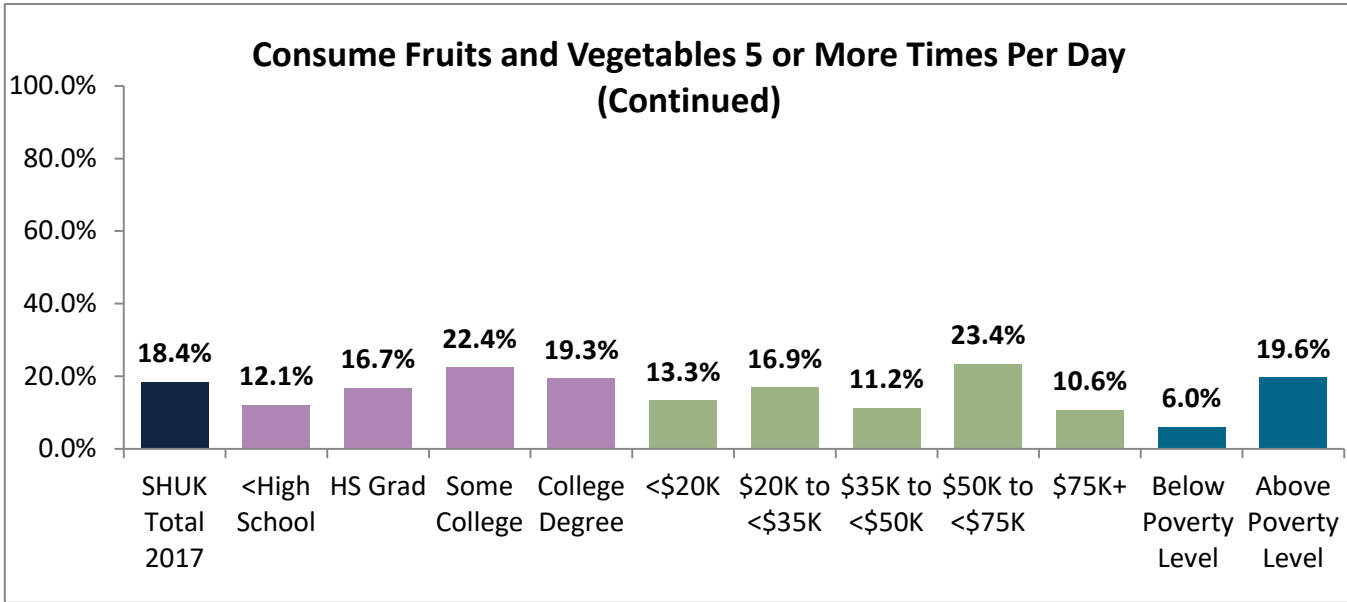
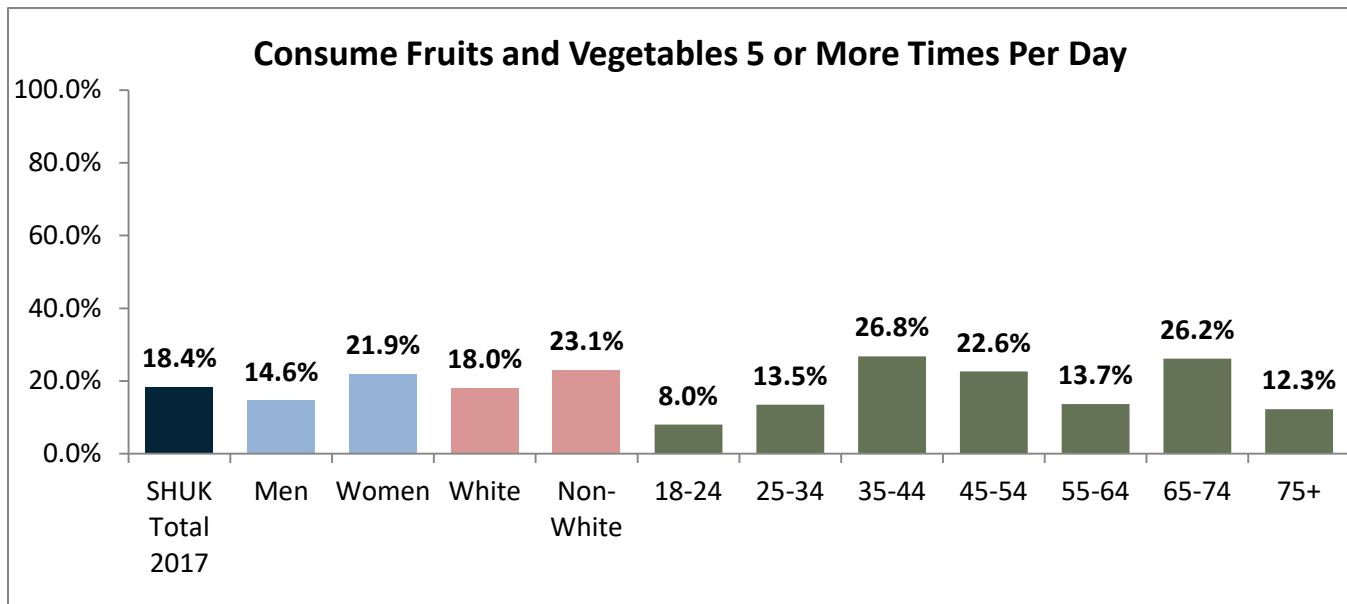


Source: SHUK Behavioral Risk Factor Survey, 2017, Q14.2: During the past month, how many times per day, week, or month did you eat vegetables for example broccoli, sweet potatoes, carrots, tomatoes, V-8 juice, corn, cooked or fresh leafy greens including romaine, chard, collard greens or spinach?



# Fruit and Vegetable Consumption (Continued)

- Q Women and non-White adults are more likely to consume adequate amounts of fruits and vegetables daily, compared to men and White adults, respectively.
- Q Adults most likely to consume adequate amounts of fruits and vegetables are college educated and/or between the ages of 35-74.

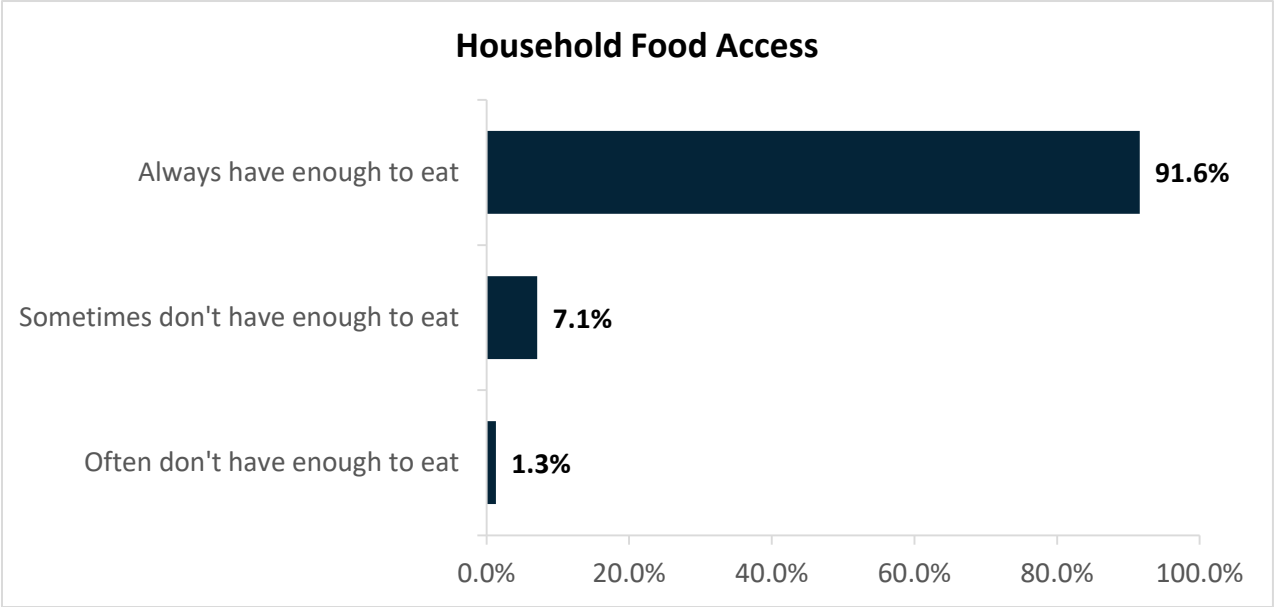


Source: SHUK Behavioral Risk Factor Survey, 2017, Q14.1: During the past month, how many times per day, week or month did you eat fruit or drink 100% PURE fruit juices? Do not include fruit-flavored drinks with added sugar or fruit juice you made at home and added sugar to. Only include 100% juice.; Q14.2: During the past month, how many times per day, week, or month did you eat vegetables for example broccoli, sweet potatoes, carrots, tomatoes, V-8 juice, corn, cooked or fresh leafy greens including romaine, chard, collard greens or spinach?

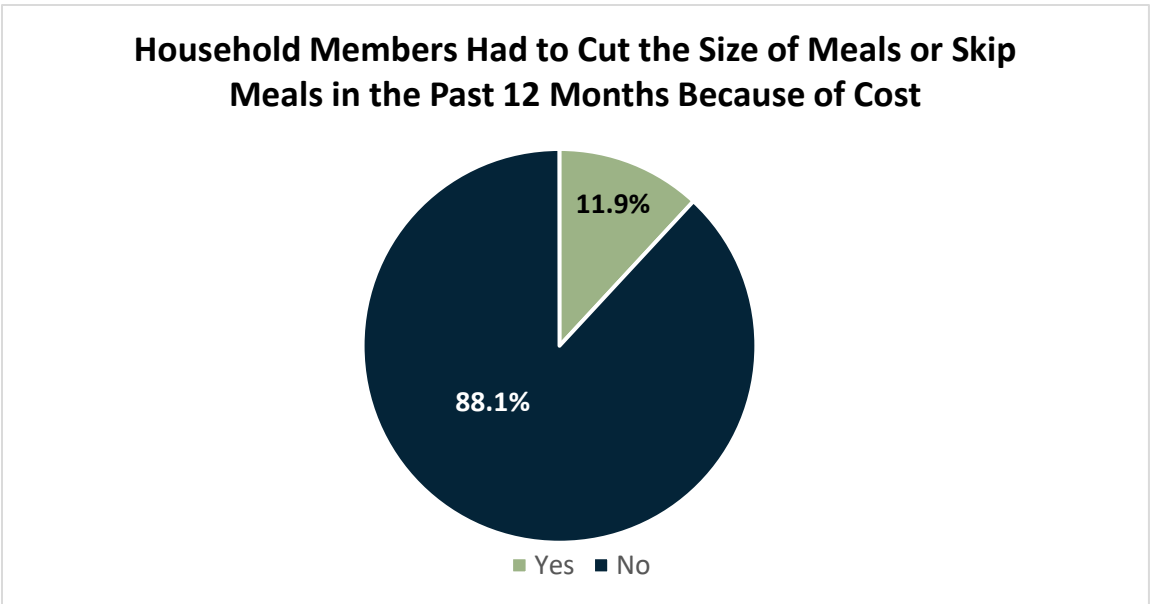


# Food Sufficiency

More than nine in ten (91.6%) area adults report they always have enough food to eat; however, roughly one in eight (11.9%) say they have had to cut the size of meals, or skip meals, because of cost.



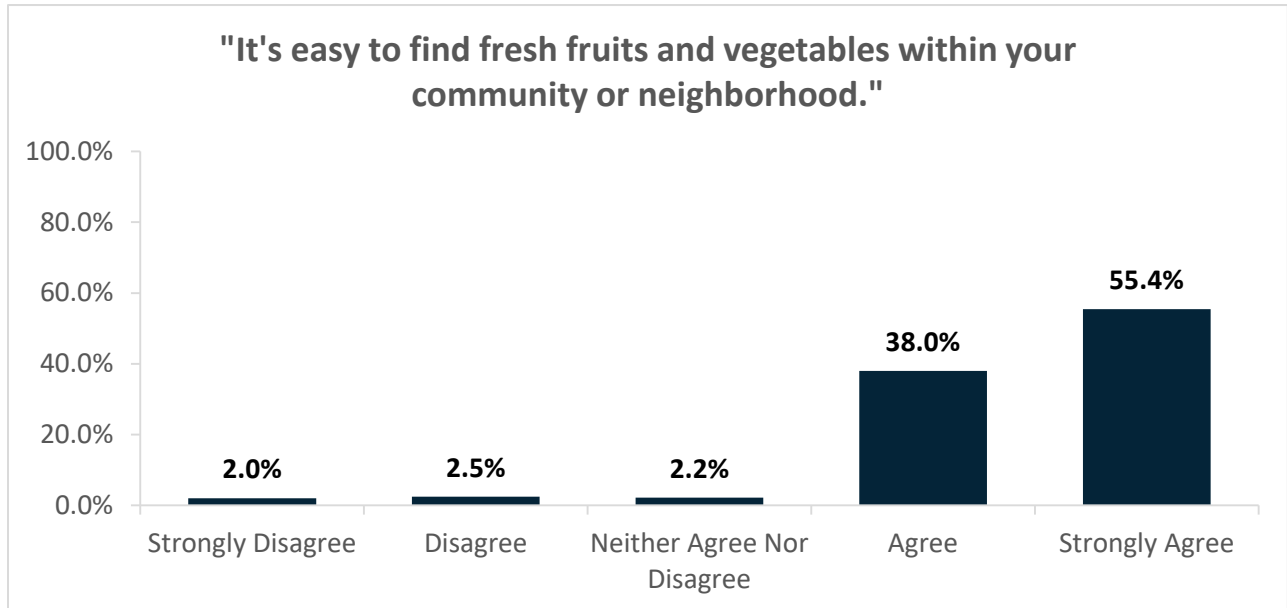
Source: SHUK Behavioral Risk Factor Survey, 2017, Q15.1: Which of the following statements best describes the food eaten in your household within the last 12 months? Would you say that...? (n=585)



Source: SHUK Behavioral Risk Factor Survey, 2017, Q15.2: In the past 12 months, did you or others in your household ever cut the size of your meals or skip meals because there wasn't enough money for food? (n=586)

# Food Sufficiency (Continued)

- Q Additionally, more than nine in ten (93.4%) area adults say that it's easy to find fresh fruits and vegetables within their neighborhood or community.

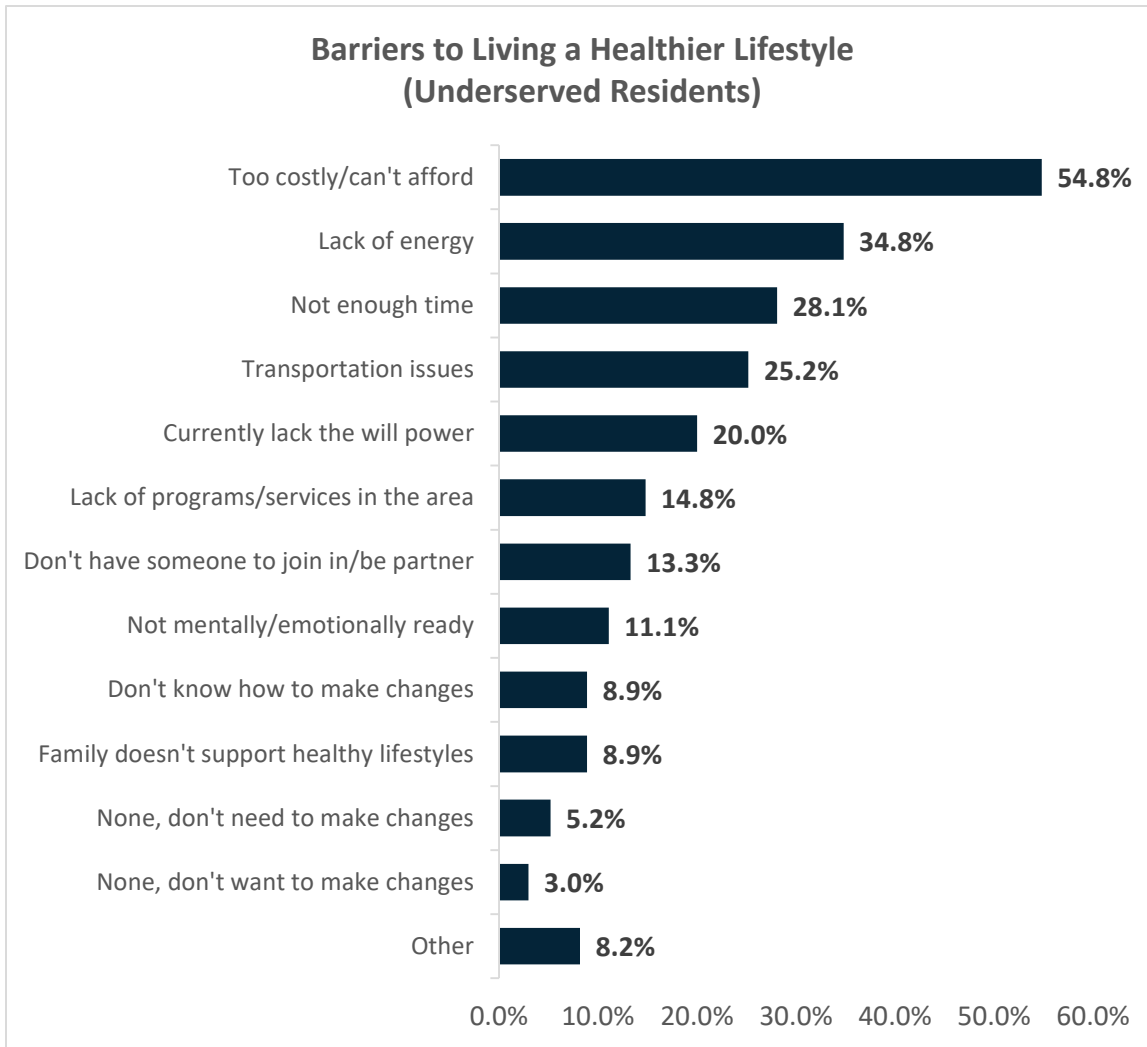


Source: SHUK Behavioral Risk Factor Survey, 2017, Q15.3: Please tell me how much you agree or disagree with the following statement. "It is easy to find fresh fruits and vegetables within your community or neighborhood." Would you say that you...? (n=581)



# Barriers to Living a Healthier Lifestyle

Q Underserved adults face many barriers when trying to live a healthier lifestyle, especially cost, followed by lack of energy/time/will power and transportation issues.



Source: SHUK Underserved Resident Survey, 2017, Q17: What are some of the barriers you face personally when trying to live a healthier lifestyle? (n=135)

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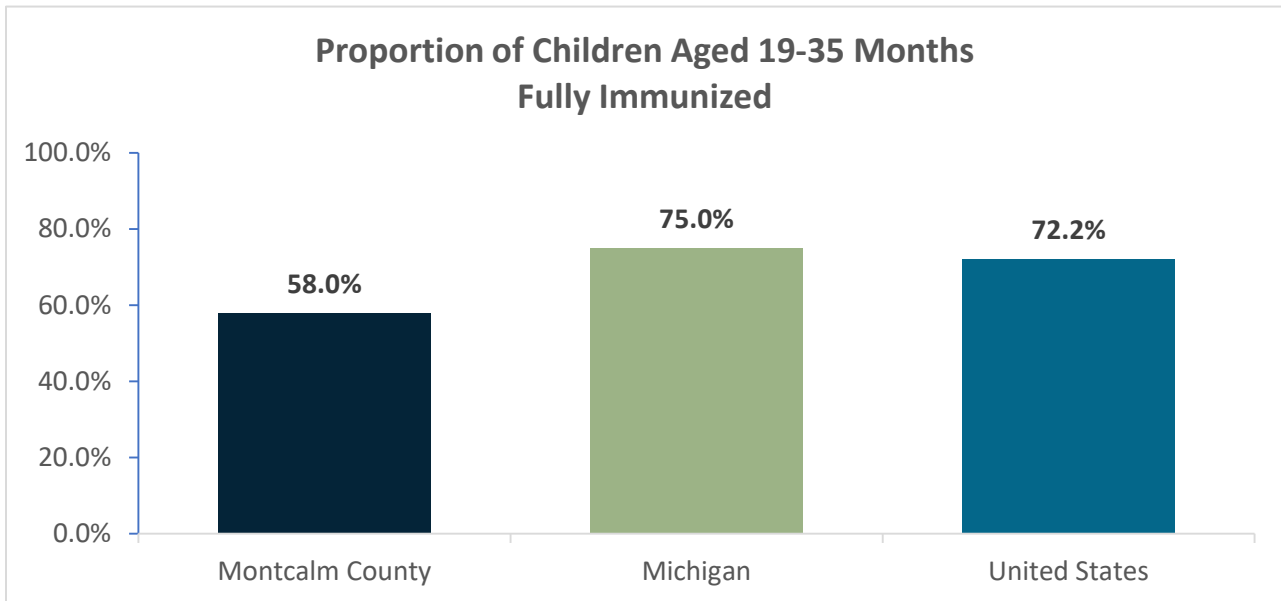
# CLINICAL PREVENTATIVE PRACTICES

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# Child Immunizations

- Q Slightly more than half (58.0%) of children aged 19-35 months in Montcalm County are fully immunized, rates far below the state or national rates.
- Q Despite the low immunization rates, Key Informants do not consider lack of childhood immunizations as one of the most pressing or prevalent health issues in the community; in fact, they rank it last of the thirteen health issues they ranked for prevalence.

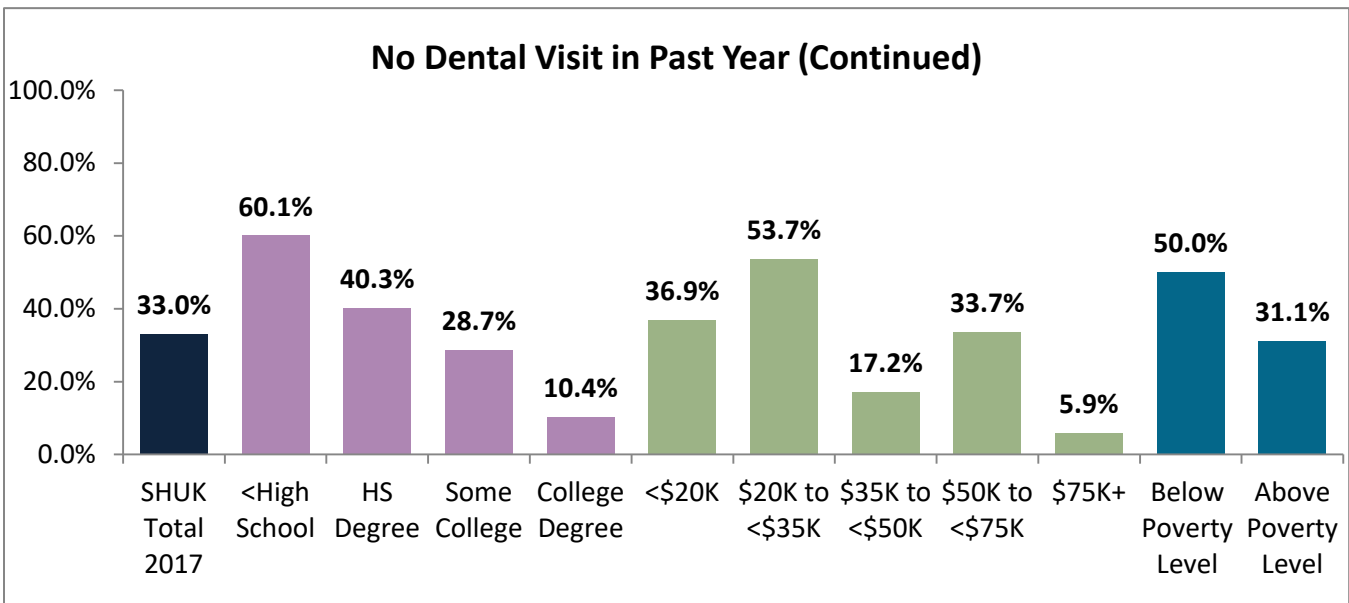
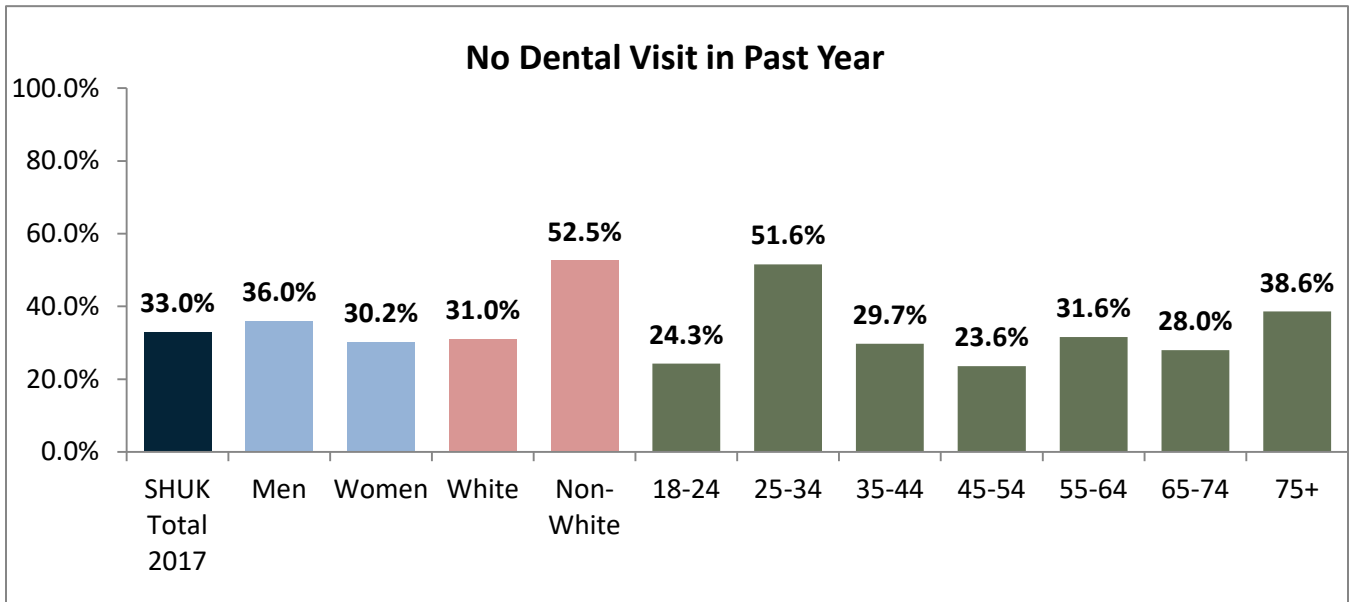


Source: Local and MI % from MICR June, 2017, National data at CDC National Immunization Survey, 2015.



# Oral Health

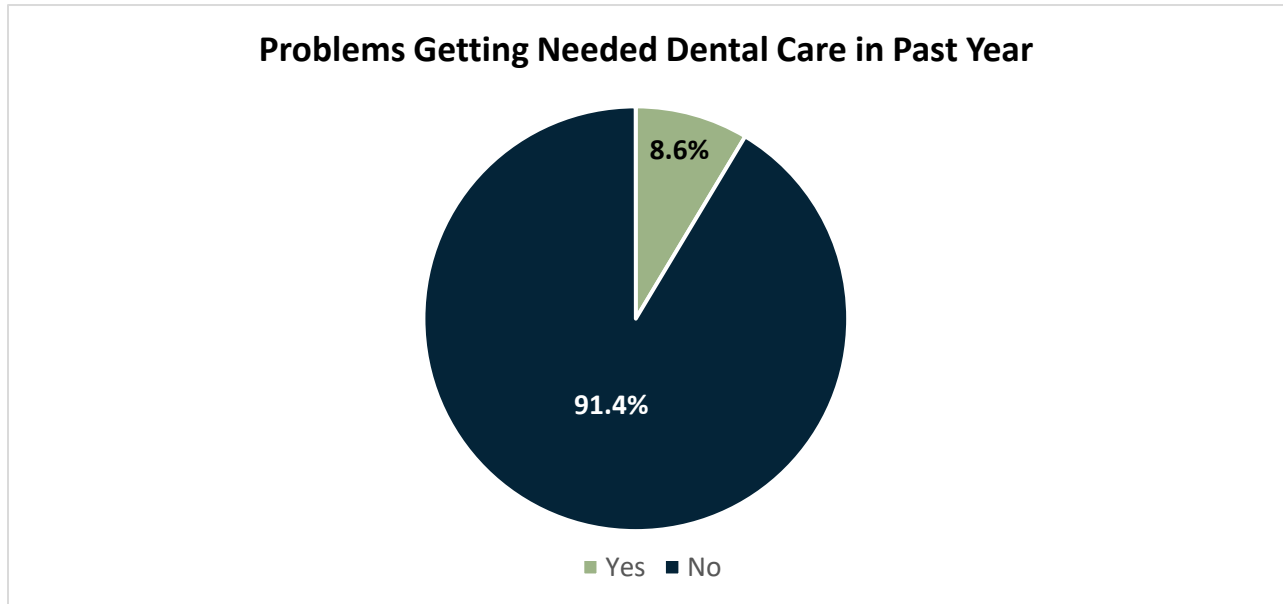
- Q One-third (33.0%) of SHUK area adults have not visited a dentist in the past year, and this proportion is up from 29.7% in 2014.
- Q Those least likely to visit a dentist include adults from groups that are non-White, have no college education, and have lower incomes.



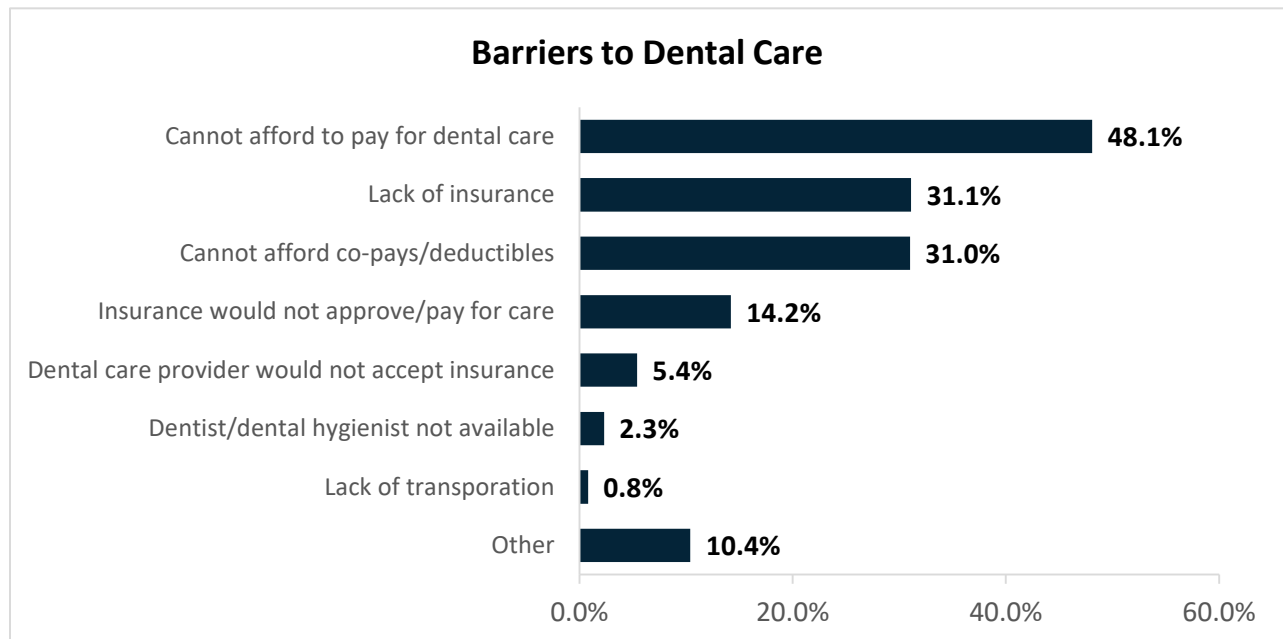
Source: SHUK Behavioral Risk Factor Survey, 2017, Q19.1: How long has it been since you last visited a dentist or a dental clinic for any reason? Include visits to dental specialists, such as orthodontists. (n=579)

# Oral Health (Continued)

- Q Very few (8.6%) area adults have had problems receiving needed dental care in the past year, but for those who have, an inability to afford dental care in general, or the out-of-pocket expenses such as co-pays and deductibles, and lack of dental insurance are the major barriers to care.



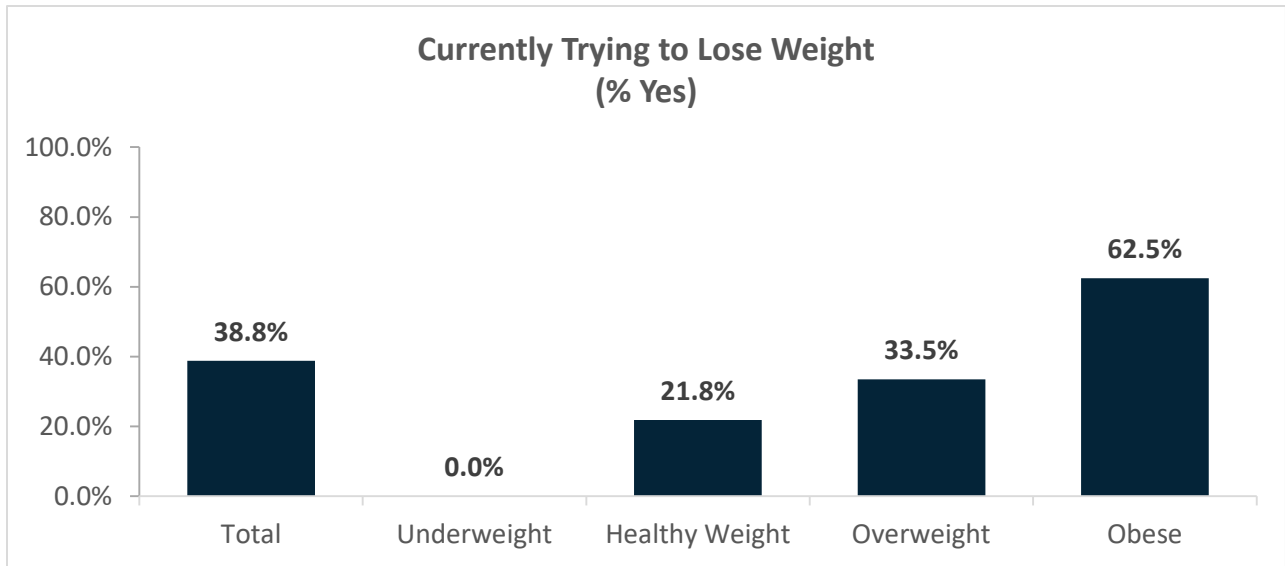
Source: SHUK Behavioral Risk Factor Survey, 2017, Q19.2: In the past 12 months, have you had problems getting needed dental care? (n=583)



Source: SHUK Behavioral Risk Factor Survey, 2017, Q19.3: Please provide the reason(s) for the difficulty in getting dental care. (Multiple response). (n=35)

# Weight Control

- Q Almost four in ten (38.8%) area adults are currently trying to lose weight but only 33.5% of adults who are overweight, and 62.5% of adults who are obese, per their BMI, are currently trying to lose weight.
- Q Further, many of those who are overweight or obese see themselves more favorably; for example, only 38.3% of those considered obese per their BMI see themselves as very overweight, and 51.1% of those who are overweight view themselves as about the right weight.



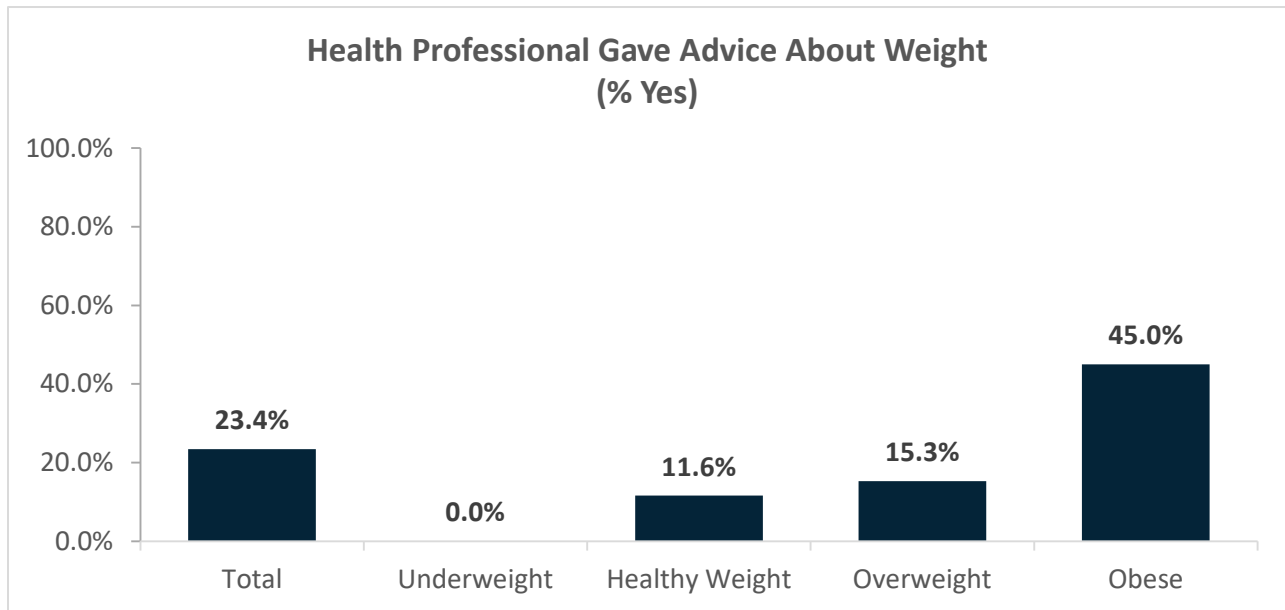
Source: SHUK Behavioral Risk Factor Survey, 2017, Q13.1: Are you currently trying to lose weight? (n=583)

Self-Described Weight	BMI Category				
	TOTAL (n=579)	Obese (n=193)	Overweight (n=205)	Healthy Weight (n=155)	Underweight (n=6)
Underweight	2.8%	0.2%	0.5%	8.1%	44.8%
About the right weight	44.5%	14.6%	51.1%	67.1%	55.2%
Slightly Overweight	38.5%	47.0%	44.1%	24.5%	0.0%
Very Overweight	14.2%	38.3%	4.3%	0.3%	0.0%

Source: SHUK Behavioral Risk Factor Survey, 2017, Q13.2: How would you describe your weight? Would you say...?

# Weight Control (Continued)

Q In light of the fact that seven in ten adults in the SHUK area are either overweight or obese per this 2017 CHNA, it is surprising that many more adults are not receiving advice from health care professionals regarding their weight; only 15.3% of adults who are overweight, and 45.0% of those who are obese, per their BMI, are receiving advice about their weight from a health professional.

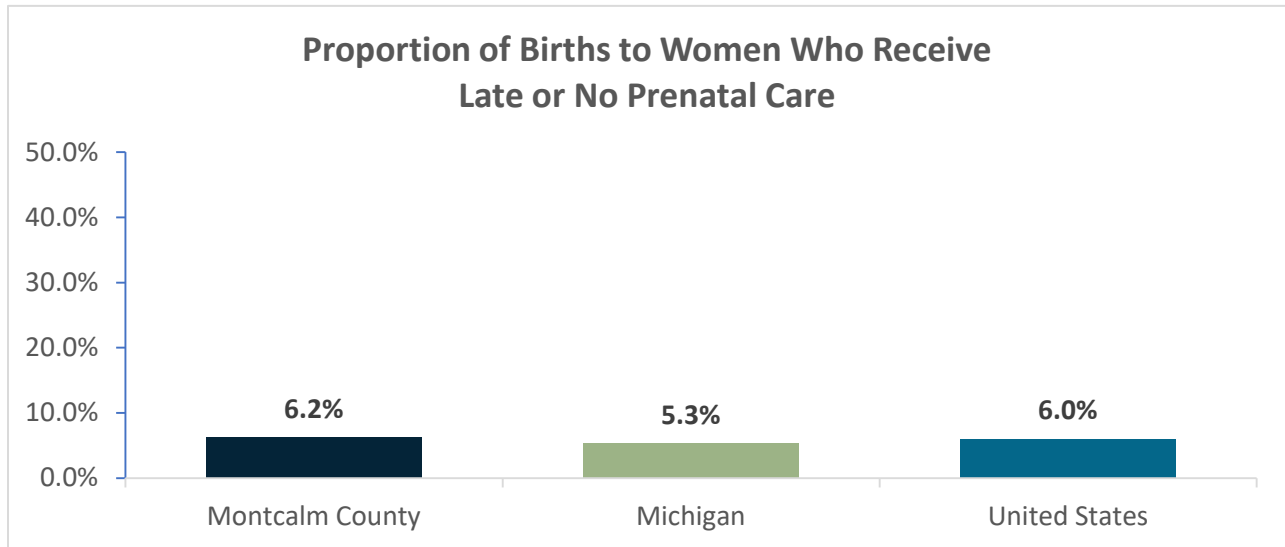


Source: SHUK Behavioral Risk Factor Survey, 2017, Q13.3: Has a doctor, nurse, or other health professional given you advice about your weight? (n=584)

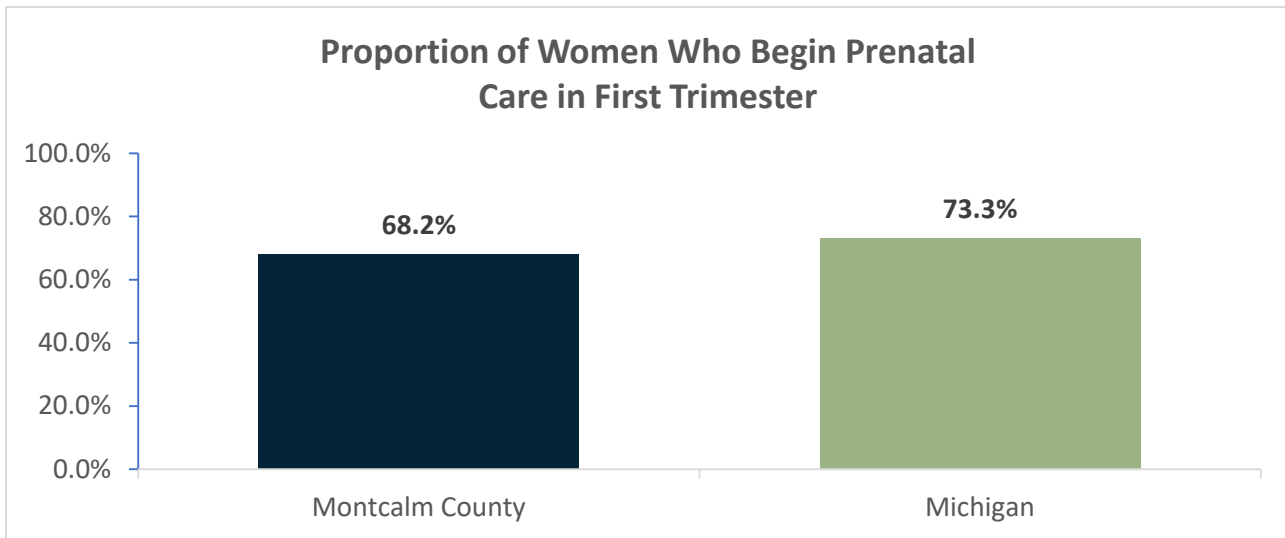


# Prenatal Care

- Q The proportion of pregnant women in Montcalm County that have late or no prenatal care is extremely low, but it is higher than the state or national rates.
- Q There is also room for improvement as three in ten (31.8%) pregnant women in Montcalm County do not receive prenatal care in the first trimester.



Source: Kids Count Data Book, 2015.



Source: MDHHS Vital Records, Montcalm County and MI, 2015.

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# SOLUTIONS & STRATEGIES

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# Partnerships That Could Be Developed

- Q Developing partnerships with organizations and agencies are strategies that would facilitate meeting community needs. There are four hospitals in Montcalm County but only three of the four collaborate with each other. Hospitals could also strengthen their relationships with physician offices. It is also important to consider the social determinants of health and be more involved in developing ways to integrate the school system and the faith-based community.

## Among health care organizations

I have two of the hospitals in our county, and then Sheridan Hospital is just up the road. We partner very well together. Sparrow Carson City though, not at all. I've been in this role since October and I've never met their President. **We've reached out several times, so I think that there is an opportunity for us to partner better with each other, but again, there's not really a desire from some of them, which is too bad.** – *Key Stakeholder*

First of all, for whatever reason, **Carson's kind of disappeared over the past couple years.** They **don't return a phone call**, so that's not something you can work on. They're part of the Sparrow system now, so it's Sparrow Carson, but it was starting to happen even before the merger. **I think they're just really on tough times.** The community could maybe be more aggressive about confronting them on that, and saying "We want you back at the table the way you used to be." – *Key Stakeholder*

We can **certainly work a lot closer with physician's offices**, but I also understand that they're trying to run a business, and that's not necessarily what they're getting paid for. They have to make ends meet, and so they don't have time to collaborate with us more. If we had really good relationships with different physicians' offices in the county **we could coordinate care or transfer care back to them**, but I think it's just the **emphasis isn't there yet or the financial incentives aren't there** yet for them to **take more of that whole-health approach and want to collaborate** with us more. – *Key Stakeholder*

## Among other area agencies/organizations

I think with the **school system**. I think there's very good leadership in the school system. I think **between the schools and the hospitals**, we could pull something together pretty meaningfully. I think the **churches** - I think that's an **untapped area**, and I think it'd be exciting to reach out to. For all of our faults and our deficits, we are a faith-based community. So, the **churches**, albeit small and many, I think would be a **great point to execute wellness and prevention.** – *Key Stakeholder*

Source: SHUK Key Stakeholder Interviews, 2017, Q6: Are there any specific partnerships that could be developed to better meet a need? (n=4)

- Q Key Informants and Key Stakeholders mention several existing resources available for residents with substance abuse, mental health, and/or obesity issues. The problem is that the demand outweighs the supply, especially for those without health insurance, but even for those with insurance there can be barriers such as providers not accepting the plan (e.g., Medicaid), insurance not covering treatment, or underutilization of a plan due to high deductibles, cop-pays, or spend-downs.

## Substance abuse

**Community Mental Health, Drug Rehabilitation Homes, Substance Abuse Counseling, Drug Treatment Court, Mental Health Court, Methadone Clinics, AA Groups, NA Groups, Alanon Groups.** – *Key Informant*

**Outpatient treatment agencies** - North Kent, Transitions, Wedgwood, and others - Health Promotion (prevention) services at Cherry Health - the recovery community - the Montcalm Alanon Club (MAC), **Montcalm Recovery and Integrated Services of Care (RISC)** and Ionia/Montcalm Families Against Narcotics (I/M FAN) - 8th Circuit **Adult Treatment Drug Court** - and the **Montcalm Prevention Collaborative, prescription drug prevention committee** and **drug drop box committee** - along with schools and hospitals. – *Key Informant*

**Montcalm County Behavioral Health, Alcoholics/Narcotics Anonymous, private counselors.** – *Key Stakeholder*

## Obesity

**MSU extension is teaching people how to cook and eat properly.** We have a **huge number of food pantries.** – *Key Informant*

**Primary care doctors, diabetes education.** – *Key Informant*

I think we have **traditional ways of helping parents learn to cook** or programs in place, for example, **farmers markets accepting bridge cards.** Those things are wonderful, but **we need to think outside our box** to address the bigger picture. – *Key Informant*

**Fitness centers, walking trails, educational sessions.** – *Key Informant*

## Mental/behavioral health

**Montcalm Care Network** - but has little resources. **Other providers do not accept Medicaid.** – *Key Informant*

**Montcalm Care Network. United Lifestyles (Spectrum).** – *Key Informant*

**CMH and other private providers.** – *Key Informant*

**Community Mental Health. Hope House. Hospital.** – *Key Stakeholder*

Source: SHUK Key Stakeholder Interviews, 2017, Q1a: Are there adequate area resources available to address these issues? (n=4); SHUK Key Informant Online Survey, 2017, Q1b: What are the resources available in the community to address/ resolve this issue? Please be as detailed as possible. (n=34)





# Resources Available to Meet Issues/Needs (continued)

Q Resources in place to address additional issues have more limited success. Programs to combat smoking have had little to no success and the various transportation options available are limited by area covered and hours of operation. Key Informants report strong programs for chronic diseases such as heart disease and diabetes, although it's unclear if these have impacted the prevalence or death rates of these conditions.

<p><b>Smoking</b></p>	<p>I think with <b>smoking cessation</b>, we're finding that traditional methods, offering <b>classes and discussions at physician offices, are not really working</b>. We're <b>not seeing an impact</b> there, and so maybe it feels like we've stopped asking or stopped trying, and I think that there's an opportunity for us to do more with smoking. – <i>Key Stakeholder</i></p> <p>We're just kind of wringing our hands and saying, "Oh my gosh, <b>people don't go to smoking cessation</b>." So, I think there's ways to get them there, but we don't have the tools to make that easy for them to do. – <i>Key Stakeholder</i></p>
<p><b>Transportation</b></p>	<p><b>City of Greenville, SHUM Foundation, Greenville Area Community Foundation, churches, schools.</b> – <i>Key Informant</i></p> <p>There are <b>ambulance services and public transportation during business hours.</b> – <i>Key Informant</i></p> <p><b>City buses, Foundation van, assisted living facility vans, private cars.</b> – <i>Key Informant</i></p>
<p><b>Chronic disease, especially diabetes</b></p>	<p><b>A strong health system with excellent cardiac care</b> [for heart disease]. – <i>Key Informant</i></p> <p><b>Diabetes education, fitness centers.</b> – <i>Key Informant</i></p> <p><b>Diabetes education, core health, visiting nurses, Cherry Street Health, Healthier Communities.</b> – <i>Key Informant</i></p>

Source: SHUK Key Stakeholder Interviews, 2017, Q1a: Are there adequate area resources available to address these issues? (n=4); SHUK Key Informant Online Survey, 2017, Q1b: What are the resources available in the community to address/ resolve this issue? Please be as detailed as possible. (n=34)



# Resources Available to Meet Issues/Needs (continued)

Q A summary of area resources available to address health and health care needs are as follows:

- Cherry Street Health
- Commission on Aging
- Convenient Care (walk-in clinic)
- Department of Health and Human Services (DHHS)
- Diabetes education
- Drug Treatment Court
- Families Against Narcotics
- Farmer's markets
- Food pantries
- MedNow, telemed, telepsych and other technology to increased health care access
- Methadone clinics
- Mid-Michigan District Health Department
- Montcalm Care Network
- Montcalm Center for Behavioral Health
- Montcalm Prevention Collaborative
- Montcalm Recovery and Integrated Services of Care (RISC)
- MSU extension
- Spectrum Health Cancer Center
- Sheridan Community Hospital
- Sparrow Carson Hospital
- Spectrum Health United Kelsey Hospital
- Support groups (e.g., AA, NA, Alanon)
- United Way of Montcalm and Ionia Counties
- United Lifestyles



# Strategies Implemented Since Last CHNA

Q Several key strategies to improve health care access have emerged out of prior CHNA research and the corresponding implementation plans: additional primary care providers have been recruited; technology-driven ways to quickly connect patients to providers via MedNow, telemedicine, and telepsychiatry have been implemented; and, Urgent Care and a walk-in clinic (with same day office visits) have been opened to meet the needs of underserved residents.

## Improved access to care

**More recruitment of primary care providers, same day office visits/ walk in clinic, health awareness through sponsoring community festivals.** – *Key Informant*

We have **added mental health, increased primary care, added adolescent care, increased dental and vision care, improve emergency services.** – *Key Informant*

The **urgent care center** is the best example of an excellent response to the assessment. – *Key Informant*

We have **increased access to providers who accept Medicaid and Medicare.** We have **improved access via telehealth. Introduced a community health worker model** both within the hospital systems as well as health departments. – *Key Informant*

I do think that the Spectrum system responded by **increasing access to primary care**, so that was good. – *Key Stakeholder*

I think if we looked at our Community Health Needs Assessment, we've **increased access by adding primary care providers.** I mean, that's probably the most visible one. – *Key Stakeholder*

## Increased use of technology to combat access issues

We have **telehealth**, have **telepsych** now. We've just started but are getting **better access to specialties through telemedicine.** We did the **MedNow** stuff, so their use of **telemedicine**, I think, has increased just over the last three years. – *Key Stakeholder*

Some **telecom access**, some **healthy living projects.** – *Key Informant*

Source: SHUK Key Stakeholder Interviews, 2017, Q10 (n=4); SHUK Key Informant Online Survey, 2017, Q16 (n=34): There was a Community Health Needs Assessments conducted in your community back in 2014. What, if anything, has been done locally to address any issues relating to the health or health care of area residents?



# Strategies Implemented Since Last CHNA (Continued)

Q Additional strategies implemented over the past few years utilized increased collaboration and coordination among local agencies and organizations to provide optimal service and engage community members to be part of the strategic planning process. It should also be noted that some initiatives, or programs, have failed to meet their goals and objectives either due to funding issues or lack of participation/utilization.

## Improved collaboration

It has **enhanced collaboration on a few projects** - such as the Primary Care Clinic in Montcalm Care Network's building. – *Key Informant*

**Spectrum Health** and the **Health Department** have detailed plans and **ran specific initiatives in schools** and in the community. They have also **shared progress**. – *Key Informant*

I think people are trying to find something. The school system - I know United Memorial has done some **work within the school system** as part of their planning and thinking, so yes, there - we do some things along the way. We hit our marks on certain things - **education**, when we can. – *Key Stakeholder*

## Community engagement

Last year, we **had a town hall meeting**, and that was kind of cool - something we want to do more of. So, **getting people involved** and planning. People are **taking the information and trying to use it**. Getting **people who are engaged**, that are **part of the process**. I think there's a genuine interest to make things happen. – *Key Stakeholder*

## Failed initiatives

**Much of the work has recently been stopped or cut due to the decisions driven by funding within Spectrum**. – *Key Informant*

Yes - there are **actually several failed initiatives**. The **211 program** is **hardly used at all**. **Several programs have been eliminated because of lack of understanding of the importance by patients**, such as **smoking cessation**, **several other programs offered by United Lifestyles**. These programs were started based on data that showed the poor health behaviors. **Perhaps there are other root causes that need to be identified and addressed in order to generate interest**. – *Key Informant*

Source: SHUK Key Stakeholder Interviews, 2017, Q10 (n=4); SHUK Key Informant Online Survey, 2017, Q16 (n=34): There was a Community Health Needs Assessments conducted in your community back in 2014. What, if anything, has been done locally to address any issues relating to the health or health care of area residents?



# Suggested Strategies to Improve Overall Health Climate

Q Key Informants offer myriad suggestions for improving the overall health care of the community but the top areas are: (1) improving the already existing collaboration between agencies and organizations through better integration and adopting a holistic/biopsychosocial/multi-disciplinary approach; (2) increased awareness via education of health information, resources, and needs; (3) focus on prevention and wellness through free education and increased health literacy; and (4) enhanced transportation options.

<p><b>Collaboration/integration/ Holistic health</b></p>	<p>We need one location that everyone in the County could go to and obtain information, education and have access and guidance on where to go for any health issue. Our health care professionals and administrators need to make healthy community their top priority.</p> <p>The idea of a one-stop is intriguing in terms of health care. Combining mental health, dental, and PCP would be wonderful for residents. Awareness - many preventative programs fail to be effective due to lack of awareness.</p> <p>Having a health 'coach' or 'navigator' to work with patients to address the whole person, make connections, navigate systems, including insurance and payment options. Also, develop a Community Wellness Campaign to address the health values, visions, and behaviors of all people in our communities.</p>
<p><b>Awareness/education</b></p>	<p>Developing a resource guide for all patients listing services available.</p> <p>More communication of services available and more mental health services.</p> <p>Health awareness. Primary care offices and community health department work together better.</p>
<p><b>Prevention/wellness</b></p>	<p>A sustained campaign for many years emphasizing wellness.</p> <p>Health literacy, free wellness programs (that are accessible during working hours), more gym reimbursements from employers and intentional branding to welcome the undocumented.</p> <p>Focus on wellness education. Focus on mental health and drug prevention.</p>
<p><b>Transportation</b></p>	<p>Transportation after hours, mental health emergency care at the hospital (separate from the 'regular' ED).</p> <p>County wide transportation. Enhanced collaboration with the hospital systems.</p>

Source: SHUK Key Informant Online Survey, 2017, Q12: What one or two things could be done in your community that would improve the overall health climate in the community? Please be as detailed as possible. (n=34)



# Suggested Strategies to Address Specific Issues/Needs

Q Key Stakeholders and Key Informants offer a number of achievable solutions to some of the **barriers to health care**, such as educating residents and health professionals on the existing programs and services, as well as living healthier lifestyles; improving marketing to recruit providers and utilize more mid-level practitioners; brainstorming as a community on the complicated and complex issues of transportation; and increase collaboration from a grass roots level to address major issues.

<p><b>Awareness/Education</b></p>	<p>Perhaps <b>educational programs for parents of school aged children</b>, made <b>available right at the school</b>. For <b>senior citizens</b>, programs at <b>Sr. Center, housing facilities, churches, etc.</b> – <i>Key Informant</i></p> <p><b>Reach out to every organization and begin a concerted effort to address these issues and become a solution.</b> – <i>Key Informant</i></p>
<p><b>More Providers</b></p>	<p><b>Improved marketing/recruiting with emphasis on the benefits of this rural setting: clean area, quiet setting, minimal traffic, many small lakes, safe schools.</b> – <i>Key Informant</i></p> <p>Have <b>physician’s assistants</b> or other <b>mid-level practitioners visit.</b> – <i>Key Informant</i></p>
<p><b>Transportation</b></p>	<p><b>Collaborative brainstorming to share resources.</b> – <i>Key Stakeholder</i></p> <p><b>Assist the ambulance companies around the area to purchase ambucabs/drivers. Create a neighbor to neighbor program</b> with specific and <b>scheduled drivers for medical patients.</b> Perhaps <b>spectrum could donate a van for wheelchair patients</b> to be transported after hours. – <i>Key Informant</i></p>
<p><b>Collaboration/integration/holistic health</b></p>	<p>I would <b>love to see our community really come together and tackle [transportation or housing] as a community</b>, so that people are <b>getting that information in school and in their churches and when they go to the grocery store and in restaurants.</b> So, <b>everybody kind of comes together for this one cause.</b> I think it’s certainly possible, so I’d love to see something like that - <b>more of a grassroots-kind of effort.</b> I don’t think your traditional “Hey, come to this class!” is going to work. I think that dialogue and conversation needs to truly start from a community standpoint. – <i>Key Stakeholder</i></p>

Source: SHUK Key Stakeholder Interviews, 2017, Q1b: What are your recommendations to resolve this issue? (n=4); SHUK Key Informant Online Survey, 2017, Q1c: What ideas do you have, if any, to resolve this issue? Please be as detailed as possible. (n=34)



# Suggested Strategies to Address Specific Issues/Needs (Continued)

Q Suggested strategies for **substance abuse** issues include: (1) through education and best practices, instructing everyone on prevention, addiction, making better choices, and begin this as early as possible in the life cycle; (2) encouraging collaboration from more organizations and agencies in the community; (3) addressing the issue from an integrated, holistic, or biopsychosocial approach; (4) placing limits/constraints on, or providing guidelines to, providers to avoid over-prescribing drugs, especially opiates; and (5) as a community, collectively thinking of more creative ways to address such complex issues as substance, which often has many layers and comorbid conditions.

<p><b>Education</b></p>	<p><b>Increased education for the general public</b> regarding <b>prevention of using/abusing, addiction</b> and <b>making positive choices</b> (e.g. physical activity for stress relief). – <i>Key Informant</i></p> <p>Add <b>education to patients</b> regarding how to <b>protect their prescription drugs</b> and <b>create a safe environment when they go home</b>. – <i>Key Stakeholder</i></p> <p><b>Integrate substance use education/treatment into our healthcare model</b>. – <i>Key Informant</i></p> <p>I do see a <b>strong need to educate our youth, adults, caretakers, teachers, general public about using at a young age</b>. – <i>Key Stakeholder</i></p>
<p><b>Collaboration</b></p>	<p>The <b>hospital needs to partner with law enforcement, mental health</b>, and others and <b>develop a task force</b> to figure out how to fix the heroin/opioid addiction problem. – <i>Key Informant</i></p>
<p><b>Holistic/biopsychosocial approach</b></p>	<p><b>Teaching and Counseling alternatives to substance abuse that address the whole person; emotionally, spiritually, physically, mentally</b>. – <i>Key Informant</i></p>
<p><b>Restrictions on providers</b></p>	<p><b>Fewer prescriptions for opioids. Make ordering physicians aware when their ordering patterns diverge from norms. Better addiction treatment programs</b>. – <i>Key Stakeholder</i></p>
<p><b>Alternative approach</b></p>	<p>We <b>need to be creative</b>. We hear about what other small towns do to address drug abuse issues and it is <b>unconventional</b>, for sure. I think we need to <b>get out of the box, because it isn't working</b>. We <b>need to think more creatively</b>. – <i>Key Informant</i></p>

Source: SHUK Key Stakeholder Interviews, 2017, Q1b: What are your recommendations to resolve this issue? (n=4); SHUK Key Informant Online Survey, 2017, Q1c: What ideas do you have, if any, to resolve this issue? Please be as detailed as possible. (n=34)



# Suggested Strategies to Address Specific Issues/Needs (Continued)

Q Although research has shown that people know what they need to do to **lose weight** or stay in shape, motivating people to take this path requires setting the tone early in life. The community must continue emphasizing the importance of exercise and healthy eating and this needs to begin early in the life cycle. If classes and gyms/exercise areas were more affordable, or more accessible, and awareness of what is available increased, people may be more inspired to participate and, in turn, lose weight. Lastly, but certainly not least in importance, providers need to be more involved in giving advice to their patients regarding weight and weight loss strategies.

<p><b>Begin early in the life cycle</b></p>	<p><b>Prevention education programs</b> starting with <b>youth in schools</b>. – <i>Key Informant</i></p> <p><b>Involving the children</b>, during the summer months, in a <b>gardening, preserving program/completion</b> with neighboring communities.</p> <p>Involving the local children, during the summer, in a <b>summer 'Olympic'</b> competing with neighboring communities. – <i>Key Informant</i></p> <p>I would love to see a <b>program for mothers and daughters</b> available to <b>middle school age girls</b>. – <i>Key Stakeholder</i></p> <p><b>Healthy lifestyles program</b>, encouraging <b>healthy eating, food preparation, weight loss, exercise, focused on children in schools</b> and on young adults, but available to anyone. – <i>Key Informant</i></p>
<p><b>More/better programs and services</b></p>	<p>I think we should have a <b>community center with a kitchen</b> so you could have <b>classes, exercise facility, and swimming pool</b> that many people could access. – <i>Key Informant</i></p>
<p><b>More collaboration</b></p>	<p><b>Increased involvement of community members from schools, churches, community centers, senior centers. Increase collaboration of medical system and community. Charity events that promote healthy lifestyles.</b> – <i>Key Stakeholder</i></p>
<p><b>Increase awareness</b></p>	<p><b>Increase community awareness, programs for kids to promote healthy lifestyles, free access to fitness centers</b> to people who cannot afford, <b>neighbor-to-neighbor awareness, health coaching</b> in churches. – <i>Key Informant</i></p>
<p><b>Provides healthier choices</b></p>	<p>I think we <b>need healthier choices of restaurants. Farm to table eateries.</b> I think we <b>need a robust farmers market.</b> We are <b>surrounded by agriculture, yet we don't have what I see in other communities.</b> – <i>Key Informant</i></p>

Source: SHUK Key Stakeholder Interviews, 2017, Q1b: What are your recommendations to resolve this issue? (n=4); SHUK Key Informant Online Survey, 2017, Q1c: What ideas do you have, if any, to resolve this issue? Please be as detailed as possible. (n=34)





# Suggested Strategies to Address Specific Issues/Needs (Continued)

Q Area professionals offer a number of recommendations specific to addressing the issue of **mental health**, by: (1) expanding services such as early screening, education, easier access of existing services, and the development of new services (e.g., inpatient psych treatment); (2) providing more comprehensive and integrated care realizing that the best way to address mental health is through a multidisciplinary approach; and (3) teaching coping skills and strategies in schools and launching a prevention campaign.

## Expand services

Continue to **expand community-based health programs**. – *Key Informant*

I certainly think if there were **larger health systems that wanted to tackle them, they probably would have the resources to do so**. We have four hospitals, and none of them have a psychiatrist on staff. – *Key Stakeholder*

**Health education on mental health, early screening, easy access to medical care, increase availability of psychiatric facilities and detox programs**. – *Key Informant*

**Create a Mental health ED, or an inpatient psych treatment facility** - perhaps owned by Spectrum. – *Key Informant*

## Integration of care/ Comprehensive care

**Integrate mental health into physical health** and hire appropriate providers. – *Key Informant*

**Primary care offices and mental health system work as a team with patient being the center of the team**. Also, **increase awareness through community events** and local community places. – *Key Informant*

**Increased cooperation between the state/county and local providers/hospitals** to come together and address the problem. – *Key Informant*

## Teach better coping skills

**More coping skills taught in the schools and strategies presented in a prevention campaign**. – *Key Informant*

Source: SHUK Key Stakeholder Interviews, 2017, Q1b: What are your recommendations to resolve this issue? (n=4); SHUK Key Informant Online Survey, 2017, Q1c: What ideas do you have, if any, to resolve this issue? Please be as detailed as possible. (n=34)



# Suggested Strategies to Address Specific Issues/Needs (Continued)

Q Key Stakeholders and Key Informants offer numerous suggestions to address other issues such as diabetes and other chronic diseases, promotion of healthier behaviors/lifestyles, and prevention or approaching health more proactively.

<b>Diabetes</b>	<p><b>A free clinic on the NE side of Greenville</b> because people still do not want outsiders in their homes. This could be a <b>walk-in clinic with an emphasis on diabetes</b> or other <b>chronic diseases</b>. – <i>Key Informant</i></p> <p><b>Free meters and supplies, free education, free medication.</b> – <i>Key Informant</i></p>
<b>Promotion of healthy behaviors</b>	<p>More jobs, more quality in the schools to attract people that can <b>change the culture</b> while offering <b>support to neighbors and friends to improve health and healthy behaviors</b>. <b>Door to door</b> connection to <b>promote healthy behaviors</b>. – <i>Key Informant</i></p> <p>We need a <b>campaign that promotes, encourages, and conveys a vision of healthy living</b>. – <i>Key Stakeholder</i></p>
<b>Prevention</b>	<p><b>Health literacy</b> seems to be a common trend with <b>assisting clients to access health care before there is a crisis</b>. Materials are not written in a way that folks with SA or MH issues may understand. Also, people do not or cannot afford the OFC visit copay so they tend to avoid. – <i>Key Informant</i></p> <p><b>More public screenings for families</b> in their home communities. <b>Partnering more with community agencies to support hosting on-site/community-based services</b> (outside of Greenville). – <i>Key Informant</i></p>
<b>Chronic disease</b>	<p><b>Switch to prevention instead of reacting</b> to chronic disease. – <i>Key Informant</i></p>

Source: SHUK Key Stakeholder Interviews, 2017, Q1b: What are your recommendations to resolve this issue? (n=4); SHUK Key Informant Online Survey, 2017, Q1c: What ideas do you have, if any, to resolve this issue? Please be as detailed as possible. (n=34)

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# APPENDIX

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# Participant Profiles

## Key Stakeholder In-Depth Interviews

**Chief Executive Officer, Sheridan Community Hospital**

**Executive Director, Montcalm Care Network**

**Health Officer, Mid-Michigan Health Department**

**President, Spectrum Health United Kelsey Hospitals**

## **Key Informant Online Survey**

Physician (5)	Director of Community Hope Counseling	Nurse Manager
Director (3)	Director of Community Relations	Professionally Retired
RN, Manager of Care Management (2)	Director, Community Outreach & Mission Integration	Public servant, retired health professional
Administrator	Executive Director	Service Center Manager
APP in primary care, rural health, adolescent medicine	Extension Educator	Social Work
APP, Family practice and youth clinic	Judicial Court Staff	Substance Use Disorder Prevention Consultant
Clergy	NP-C-Family Medicine	VP Commercial Lending Bank
Dentist	Nurse	

# Participant Profiles (Continued)

Behavioral Risk Factor Survey (Telephone)					
	TOTAL		TOTAL		TOTAL
<u>Gender</u>	(n=587)	<u>Marital Status</u>	(n=587)	<u>Own or Rent</u>	(n=577)
Male	48.0%	Married	50.9%	Own	76.1%
Female	52.0%	Divorced	11.4%	Rent	16.0%
<u>Age</u>	(n=582)	Widowed	5.8%	Other	7.9%
18 to 24	9.9%	Separated	2.1%	<u>County</u>	(n=587)
25 to 34	17.9%	Never married	26.6%	Ionia	16.6%
35 to 44	15.3%	Member of an unmarried couple	3.2%	Kent	17.7%
45 to 54	16.4%	<u>Employment Status</u>	(n=585)	Mecosta	0.7%
55 to 64	19.4%	Employed for wages	45.1%	Montcalm	61.6%
65 to 74	12.7%	Self-employed	5.2%	Newaygo	3.4%
75 or Older	8.4%	Out of work 1 year+	5.1%	<u>Zip Code</u>	(n=587)
<u>Race/Ethnicity</u>	(n=580)	Out of work <1 year	2.0%	48809	5.4%
White/Caucasian	89.9%	Homemaker	2.5%	48829	2.7%
Black/African American	1.5%	Student	1.7%	48834	3.0%
Hispanic/Latino	4.3%	Retired	25.1%	48838	24.8%
Native American	3.7%	Unable to work	13.3%	48846	9.2%
Multiracial	0.6%	<u>Education</u>	(n=587)	48850	3.8%
<u>Adults in Household</u>	(n=587)	Less than 9 <sup>th</sup> grade	4.5%	48865	1.3%
One	12.1%	Grades 9 through 11	8.4%	48884	3.0%
Two	58.1%	High school graduate/ GED	35.3%	48885	0.4%
Three	18.2%	College, 1 to 3 years	30.6%	48886	0.9%
Four	6.4%	College 4 years or more (graduate)	21.2%	49319	10.4%
Five or more	5.1%	<u>Income</u>	(n=403)	49322	0.8%
<u>Children in Household</u>	(n=587)	Less than \$10K	6.4%	49326	3.4%
None	64.7%	\$10K to less than \$15K	5.9%	49329	13.1%
One	12.7%	\$15K to less than \$20K	14.5%	49336	0.4%
Two	12.1%	\$20K to less than \$25K	8.5%	49339	3.4%
Three	9.0%	\$25K to less than \$35K	18.3%	49341	3.2%
Four or more	1.6%	\$35K to less than \$50K	15.6%	49343	4.0%
		\$50K to less than \$75K	18.0%	49347	1.1%
		\$75K or more	12.8%		

# Participant Profiles (Continued)

Underserved Resident Survey (Self-Administered)					
	TOTAL		TOTAL		TOTAL
<u>Gender</u>	(n=154)	<u>Marital Status</u>	(n=154)	<u>Own or Rent</u>	(n=149)
Male	14.3%	Married	35.1%	Own	38.9%
Female	85.7%	Divorced	12.3%	Rent	50.3%
<u>Age</u>	(n=152)	Widowed	5.2%	Other	10.7%
18 to 24	27.6%	Separated	1.9%	<u>County</u>	(n=209)
25 to 34	32.2%	Never married	35.1%	Kent	7.9%
35 to 44	15.1%	Member of an unmarried couple	10.4%	Montcalm	92.1%
45 to 54	11.2%	<u>Employment Status</u>	(n=152)	<u>Zip Code</u>	(n=171)
55 to 64	9.9%	Employed for wages	30.9%	48011	0.7%
65 to 74	2.6%	Self-employed	7.9%	48809	6.0%
75 or Older	1.3%	Out of work 1 year+	13.2%	48811	2.7%
<u>Race/Ethnicity</u>	(n=153)	Out of work <1 year	5.3%	48818	2.0%
White/Caucasian	92.2%	Homemaker	14.5%	48829	5.4%
Black/African American	0.0%	Student	1.3%	48830	0.7%
Hispanic/Latino	0.7%	Retired	5.3%	48834	4.0%
Native American	2.0%	Unable to work	21.7%	48838	27.5%
Multiracial	5.2%	<u>Education</u>	(n=153)	48850	4.0%
<u>Adults in Household</u>	(n=152)	Less than 9 <sup>th</sup> grade	1.3%	48858	0.7%
One	28.3%	Grades 9 through 11	13.7%	48877	0.7%
Two	45.4%	High school graduate/ GED	41.8%	48881	0.7%
Three	13.2%	College, 1 to 3 years	34.6%	48884	5.4%
Four	7.9%	College 4 years or more (graduate)	8.5%	48885	0.7%
Five or more	5.3%	<u>Income</u>	(n=150)	48886	2.0%
<u>Children in Household (6-17)</u>	(n=151)	Less than \$10K	30.7%	48888	7.4%
None	57.6%	\$10K to less than \$15K	21.3%	48891	4.7%
One	17.2%	\$15K to less than \$20K	12.7%	49319	5.4%
Two or more	25.2%	\$20K to less than \$25K	10.0%	49326	2.7%
<u>Children in Household (&lt;6)</u>	(n=150)	\$25K to less than \$35K	12.0%	49329	11.4%
None	36.7%	\$35K to less than \$50K	6.0%	49339	4.0%
One	34.7%	\$50K to less than \$75K	5.3%	49343	1.3%
Two or more	28.7%	\$75K or more	2.0%		

# Previous Implementation Plan Impact

## Spectrum Health United and Spectrum Health Kelsey Hospitals

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Specific Health Need Goal	Metric	Impact of Implementation Plan Strategy
<b>Access to Primary Care</b>		
<p>Increase primary care provider availability within Spectrum Health by a variety of methods including, but not limited to:</p> <p>Improve operational efficiency to optimize the number of appointments available per day.</p>	<ul style="list-style-type: none"> <li>• Access to care is available within 48 hours. Tracked using metric: Time to 3rd available appointment over established baseline by 10% by June 30, 2016</li> <li>• Access to care is available within 48 hours. Tracked using metric: Time to 3rd available appointment over established baseline by 20% by June 30, 2017</li> <li>• Access to care is available within 48 hours. Tracked using metric: Time to 3PrdP available appointment over established baseline by 30% by June 30, 2018</li> </ul>	<p>All access to care goals have been fully achieved. Convenient care volumes continue to rise in year 2 of the clinic's existence. We have been able to ensure that 2 providers are in the convenient care clinic at all times during the peak season by creating an APP float pool for PTO and gaps in the schedule. We have added 3 APP's in 2017. The physician vacancy at LFM was recently filled in 2018. Average monthly visits have increased by 46 per PCP provider compared to previous year.</p>
<p>Increase access by implementing and promoting the utilization of alternative primary care settings such as Convenient Care and telemedicine (identified further in plan).</p>	<ul style="list-style-type: none"> <li>• Grow Convenient Care utilization annually over established baseline by 1,500 visits by 6/30/16</li> <li>• Grow Convenient Care utilization annually over established baseline by 4,500 visits</li> </ul>	<p>All access to care goals have been fully achieved.</p>

## Previous Implementation Plan Impact

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Specific Health Need Goal	Metric	Impact of Implementation Plan Strategy
	<p>by 6/30/17</p> <ul style="list-style-type: none"> <li>Grow Convenient Care utilization annually over established baseline by 9,000 visits by 6/30/18</li> </ul>	
<p>Increase the number of primary care providers in outpatient clinics accepting Medicaid and Medicare.</p>	<ul style="list-style-type: none"> <li>Increase the number of primary care providers accepting Medicaid and/or Medicare over established baseline by 1 provider by 6/30/16</li> <li>Increase the number of primary care providers accepting Medicaid and/or Medicare over established baseline 2 providers by 6/30/17</li> <li>Increase the number of primary care providers accepting Medicaid and/or Medicare over established baseline by 3 providers by 6/30/18</li> </ul>	<p>All access to care goals have been fully achieved.</p>
<p>Enhance the primary care team in outpatient clinics through the implementation of non-traditional roles, such as care</p>	<ul style="list-style-type: none"> <li>Increase non-traditional primary care team members over established baseline by 2 members by 6/30/16</li> </ul>	<p>All access to care goals have been fully achieved.</p>



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manager, social work, pharmacy support, etc.	<ul style="list-style-type: none"> <li>• Increase non-traditional primary care team members over established baseline by 4 members by 6/30/17</li> <li>• Increase non-traditional primary care team members over established baseline by 6 members by 6/30/18</li> </ul>	
<b>Access to Specialty Care</b>		
Increase access to specialty providers within PSA through onsite or telemedicine visits, including but not limited to: dermatology, dental care, mental health/substance abuse and pediatrics.	Increase specialty providers (on-site or via telemedicine) over established baseline: <ul style="list-style-type: none"> <li>• 1 specialty by 6/30/16</li> <li>• 2 specialties by 6/30/17</li> <li>• 3 specialties by 6/30/18</li> </ul>	Expansion for new MedNow programs was planned strategically for FY18 based on the Nexus initiative and blackout dates for Epic builds. All MedNow program development for new use cases for FY18 were planned and implemented in the first quarter of FY18 (Inpatient and ED Pediatric Psych Consults, outpatient pediatric psych consults, outpatient benign hematology consults and the night time hospitalist program to support Gerber Hospital). This goal was met for the year in Q1 by offering the needed services for mental health patients as outlined above.
Collaborate on a best practice program to address patients who present to the emergency department with acute mental health issues.	Explore and implement at least one best practice program to address patients who present to the emergency department with acute mental health issues by June 30, 2017.	
<b>Lack of Transportation and Telemedicine</b>		
Use technology to overcome transportation barriers by using	Increase number of telemedicine visits utilization by 10% annually	The goal for FY18 was to increase the telemedicine visit utilization by 10% annually as to overcome transportation barriers within our

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telemedicine visits from provider to home or provider to service location.	through 6/30/18.	region. In Q3 FY17, we had 769 patient encounters via MedNow. In Q3 FY18, there have been over 1,181 MedNow patient encounters. This is a year over year growth of approximately 54%. MedNow continues to hold at more than a 50% increase quarterly, surpassing our goal of a 10% increase annually.
Bring healthcare directly to community residents through partnership with local organizations such as food pantries, faith communities and participation at community events	Partner with community organizations to provide services outside traditional SHUH/KH care settings: <ul style="list-style-type: none"> <li>• Partner with at least 1 organizations by 6/30/16</li> <li>• Partner with at least 2 organizations by 6/30/17</li> <li>• Partner with at least 3 organizations by 6/30/18</li> </ul>	Spectrum Health United Lifestyles Neighbor to Neighbor network began in Greenville and is currently partnering with the local faith community. In October of 2017, 700-800 Montcalm County families were provided with 6 fresh vegetables and recipe/use cards in a reusable SH branded grocery bag via the Veggie Van experience at the Greenville Expo. Finally, we partnered with our local EMS to provide CPR and First Aid training to students in the Montcalm Area Intermediate School District.
<b>Access to Care</b>		
Increase utilization of lower cost options for health care services to drive down overall cost of care.	Decrease rate of Primary Care Sensitive ED visits over established baseline by: <ul style="list-style-type: none"> <li>• 5% by June 30, 2016</li> <li>• 10% by June 30, 2017</li> <li>• 15% by June 30, 2018</li> </ul>	The effort to reduce primary care sensitive visits was assigned to our Care Management team. The strategy was to connect with emergency department high utilizers to assist with identifying and removing the barriers that impeded their ability to access the appropriate level of care. Although we were successful in fully achieving our 2016 goals of decreasing primary care sensitive visits by 5%, we have been challenged to reach subsequent goals of incremental improvement.
<b>Community Programs</b>		

## Previous Implementation Plan Impact

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Specific Health Need Goal	Metric	Impact of Implementation Plan Strategy
<p>Use an evidence-based health communication framework to activate patients' engagement in their personal health.</p>	<p>Create and implement an evidence-based health communication program to activate engagement in personal health:</p> <ul style="list-style-type: none"> <li>• Research models and develop program by 6/30/16</li> <li>• Implement a pilot program by 6/30/17</li> <li>• Fully implement program by 6/30/18</li> </ul>	<p>We have fully achieved this goal. As part of the Nexus Initiative, the Clinical Practice Model (CPM) Framework was adopted and is now functional. The CPM Framework includes six Clinical Practice Models which share common characteristics in that they are inclusive of culture and practice, surround the patient and family, and are action oriented with outcomes. This model will help to ensure that we are using an evidenced-based approach to providing care and engaging our customers in their health.</p>
<p><b>Chronic Disease</b></p>		
<p>Increase access to lower cost education that can improve an individual's health.</p>	<p>Create a low cost education program to address a component of physical health:</p> <ul style="list-style-type: none"> <li>• Identify one program by 6/30/16</li> <li>• Pilot one program by 6/30/17</li> <li>• Fully implement program by 6/30/18</li> </ul>	<p>The Society for Public Health Education (SOPHE) SCRIPT program is an award-winning, evidence-based program shown to be effective in helping thousands of pregnant women quit smoking. The SOPHE SCRIPT smoking cessation program has been successfully implemented at Spectrum Health United Lifestyles. Pregnant women receiving services from the Maternal Infant Health Program now automatically receive a referral to our in-house SOPHE SCRIPT trained educator. We have already had 5 pregnant women enroll in this evidenced-based smoking cessation program and look forward to its continued growth.</p>
<p>Create referral channels from primary care to community-based resources for lifestyle support services and chronic disease management.</p>	<p>Increase referrals to United Lifestyles over established baseline:</p> <ul style="list-style-type: none"> <li>• 5% increase by 6/30/16</li> <li>• 10% increase by 6/30/17</li> <li>• 20% increase by 6/30/18</li> </ul>	<p>Referrals to the Spectrum Health United Lifestyles Maternal Infant Health Program (MIHP) have increased by 56% since 2016. Spectrum Health United Lifestyles also experienced growth in our diabetes referrals by 17% in FY17. This was, in part, accomplished through successful implementation of the Diabetes Prevention</p>

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Specific Health Need Goal	Metric	Impact of Implementation Plan Strategy
	<p>Grow patient volume in diabetes prevention and management programs over established baseline:</p> <ul style="list-style-type: none"> <li>• 5% increase by 6/30/16</li> <li>• 10% increase by 6/30/17</li> <li>• 15% increase by 6/30/18</li> </ul> <p>Increase patient utilization of Community Health Worker programs for COPD:</p> <ul style="list-style-type: none"> <li>• Implement COPD program by 6/30/16</li> <li>• Increase patient participation by 10% by 6/30/17</li> <li>• Increase patient participation by an additional 10% by 6/30/18</li> </ul>	<p>Program. Although units of service have decreased in diabetes from 2944 in FY16, 2016 in FY17 and year-to-date 1101 for FY18, care managers continue to service patients who have diabetes. As a result of reduced volumes, staffing was adjusted which impacted the quantity of service being provided. However, in 2017 we successfully implemented our Chronic Obstructive Pulmonary Disease (COPD) component into our current home-based chronic disease management program, Core Health. To date we have 39 clients enrolled in Core Health who have COPD.</p>
<p>Increase cancer prevention methods by offering free or low cost screenings for early detection</p>	<p>Complete free or affordable cancer screening events:</p> <ul style="list-style-type: none"> <li>• At least 2 screening events by 6/30/16</li> <li>• At least 4 events by 6/30/17</li> <li>• At least 6 events by 6/30/18</li> </ul> <p>Increase participation in screening</p>	<p>Spectrum Health United Lifestyles organized 2 mobile mammography screenings in rural settings and also created an awareness program around colon cancer screening. In the fall of 2016 we provided a community health event which included lung cancer screening. In addition, in May 2017, we held a skin cancer screening in conjunction with our outpatient Cancer Center. Due to its high attendance volume, we have another planned for May</p>

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	events over established baseline: <ul style="list-style-type: none"><li>• 10% increase by 6/30/17</li><li>• 20% increase by 6/30/18</li></ul>	2018.
Educate and empower youth to mitigate health risk factors at an early age.	Implement education programs targeting youth risk behavior over established baseline: <ul style="list-style-type: none"><li>• Implement at least 2 education programs by 6/30/17</li><li>• Implement 4 education programs by 6/30/18</li></ul>	Spectrum Health United Lifestyles provided the SH SafeDrive drunk and distracted driving program to 914 9th grade students in the SHUH/KH service area. In addition, we provided 1 drug program at Greenville High School, and 2 Reproductive Health Assemblies open to all districts in the county to attend. Our Lakeview Youth Clinics provided education to Lakeview/Belding schools in nutrition, exercise, stress management, and signs of suicide.