# Community Health Needs Assessment

2019

**FINAL SUMMARY REPORT** 



# **SUBMITTED BY**



June 2019

# **TABLE OF CONTENTS**

EXECUTIVE SUMMARY	1
COMMUNITY HEALTH NEEDS ASSESSMENT OVERVIEW	5
COMMUNITY HEALTH NEEDS ASSESSMENT KEY FINDINGS	9
COMMUNITY HEALTH NEEDS ASSESSMENT FINDINGS	11
I. Socio-Demographic Statistics Overview	11
II. Social Determinants of Health	17
III. Key Health Issues	19
IV. Health Risk Behaviors	27
V. Access to Care	31
VI. Challenges and Solutions	36
IDENTIFICATION OF COMMUNITY HEALTH NEEDS	37
COMMUNITY HEALTH IMPLEMENTATION STRATEGY	39

**APPENDIX A: SECONDARY DATA SOURCES** 

APPENDIX B: SECONDARY DATA TERMINOLOGY APPENDIX C: KEY INFORMANT SURVEY TOOL APPENDIX D: KEY INFORMANT PARTICIPANTS

**APPENDIX E: COMMUNITY SURVEY TOOL** 

APPENDIX F: DEMOGRAPHIC PROFILE - COMMUNITY SURVEY RESPONDENTS

APPENDIX G: PRIORITIZATION SESSION PARTICIPANTS
APPENDIX H: IMPLEMENATION STRATEGY PARTICIPANTS
APPENDIX I: 2016 IMPLEMENTATION STRATEGY OUTCOMES
APPENDIX J: 2013 IMPLEMENTATION STRATEGY OUTCOMES



#### **EXECUTIVE SUMMARY**

The Patient Protection and Affordable Care Act of 2010 set forth new requirements for nonprofit hospital organizations in order to maintain their tax exempt status as a charitable hospital, 501(c)(3). One of the new regulations is a requirement that all nonprofit hospitals must conduct a Community Health Needs Assessment (CHNA) and adopt an implementation strategy that meets the community health needs identified in the assessment every three years. Regional One Health has conducted previous CHNA's during the fiscal years 2013 and 2016 to identify needs and resources in the community. Regional One Health contracted with Holleran Consulting (Holleran), a research firm based in Wrightsville, Pennsylvania, to execute this project.

Beginning in March 2019, Regional One Health undertook a comprehensive CHNA to evaluate the health needs of individuals living in Shelby County, in Tennessee. The aim of the assessment is to reinforce Regional One Health's commitment to the health of residents and align its health delivery efforts with the community's greatest needs. The assessment examined a variety of health indicators including risky health behaviors, chronic health conditions, access to health care, and social determinants of health. In an effort to increase collaboration during the key informant study, Regional One Health partnered with the Shelby County Health Department and multiple healthcare systems, including Baptist Memorial Health Care Corporation, Methodist LeBonheur Healthcare, and St. Jude Children's Research Hospital.

The completion of the CHNA enabled Regional One Health and its partners to take an in-depth look at its greater community. The findings from the assessment were utilized by Regional One Health to prioritize public health issues and develop a community health implementation plan focused on meeting community needs. Regional One Health is committed to the people it serves and the communities where they reside. Healthy communities lead to lower health care costs, robust community partnerships, and an overall enhanced quality of life. This CHNA Final Summary Report serves as a compilation of the overall findings of each research component.

# **CHNA Research Components**

- Secondary Statistical Data Profile
- Online Key Informant Interviews
- Community Survey conducted by the Shelby County Health Department
- Prioritization and Implementation Strategy Planning Session

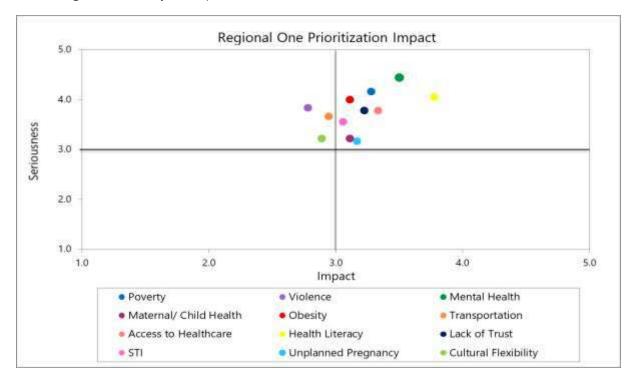


## **Key Community Health Issues**

Regional One Health, in conjunction with community partners, examined the findings of the Secondary Data, Online Key Informant Survey, and Community Survey to select Key Community Health Issues pertinent to Shelby County. Session participants are listed in appendix G. The following issues were identified (presented in alphabetical order):

- Access to Healthcare
- Cultural Flexibility
- Health Literacy
- Lack of Trust
- Maternal/Child Health
- Mental Health
- Obesity
- Poverty
- Sexually Transmitted Illness
- Transportation
- Unplanned Pregnancy
- Violence

Upon compiling the master list, participants were asked to rate each need on two criteria. Consideration was given by each participant to evaluate the key issues by the seriousness of the issue in Shelby County, as well as the ability to make an impact on the issue. The matrix below outlines the intersection of seriousness and impact ratings. Those items in the upper right quadrant are rated the most serious with the greatest ability to impact.



# **Prioritized Community Health Issues**

Based on feedback from community partners, including health care providers, public health experts, health and human service agencies, and other community representatives, Regional One Health plans to focus community health improvement efforts on the following health priorities over the next three-year cycle:

- Access to Healthcare
- Health Literacy
- Mental Health (Resource Awareness)
- Violence

Regional One Health recognizes there are identified social determinants of health as well as key health issues that the organization is not currently able to address specifically. Regional One Health's efforts to combat obesity, chronic disease, sexually transmitted illnesses, maternal/child health, transportation and poverty will be evaluated through the work under the priorities of Access to Health Care and Health Literacy.

#### **Previous CHNA and Prioritized Health Issues**

Regional One Health conducted a comprehensive CHNA in both 2013 and 2016 to evaluate the health needs of individuals living in the hospital service area within Shelby County. The purpose of the assessment was to gather information about local health needs and health behaviors. The assessment helped Regional One Health to identify 11 health issues in 2013, 5 health issues in 2016, and develop a community health implementation plan to improve the health of the surrounding community. The prioritized health issues and major outcomes identified in the previous years include:

#### **Prioritized Health Issues in 2013:**

- Teen Pregnancy
- Infant Mortality
- HIV/AIDS
- Diabetes
- Breast Cancer
- Colorectal Cancer
- Adult Obesity/Overweight
- Injury Prevention
- Education
- Violent Crime/Homicide/Firearm-Related Deaths
- Lung Health



#### **Major Outcomes from the 2013 CHNA Priorities:**

- Served approximately 180 young moms each year through the Sunrise Program.
- > Approximately 3,700 new moms received education through the Safe to Sleep Program.
- Approximately 10,000 medical visits were provided annually to HIV patients, as well as 15,000 wrap around visits.
- Provided more than 1,800 glucose and blood pressure screenings in the community and participated in more than 78 community health fairs.
- Approximately 3,677 individuals were screened through the Take Care/Be Aware Program.
- Over 100 people from various faith groups attended the Spiritual Health & Wellness Conference.
- Average of 20 participants per month attended the Memphis Area Brain Injury Support Group.
- Touched more than 300 lives through hosting Bully, Conflict Resolution and Gun Violence and Police Interaction community educational programs.

A full list of outcomes from the 2013 priorities can be found in Appendix J.

#### **Prioritized Health Issues in 2016:**

- Poverty
- Healthy Lifestyles
- Violence
- Mental Healthcare
- Sexually Transmitted Illnesses and TB

## Major Outcomes from the 2016 CHNA Priorities:

- Patient Medication Assistance Program (PMAP) served 291 patients in the Fiscal Year 2019, equating \$70,752.87 in medications provided to patients.
- Regional One Health offered 56 tours of the birth facility, as well as childbirth classes since the second quarter of 2019.
- Regional One Health has packaged 30,000 meals for the Meal Packing Event in partnership with MidSouth Food Bank for distribution to Memphians.
- Hospital Based Violence Intervention Program (HVIP) staff have evaluated more than 700 victims of violence who presented to Regional One Health in 2019.
- > Trained 2,871 trauma-informed staff members, which is an average of 258 per guarter.

A full list of outcomes from the 2016 priorities can be found in Appendix G.



#### COMMUNITY HEALTH NEEDS ASSESSMENT OVERVIEW

## **Organization Overview**

Regional One Health is home to the oldest hospital in Tennessee, chartered in 1829. Throughout its nearly 190-year history, the acute care hospital has evolved significantly, housing a tuberculosis hospital, military hospital, maternity hospital, and ultimately the Regional Medical Center, which is committed to providing quality healthcare to all citizens of the Mid-South. Regional One Health is committed to its mission and operates on the four core values of compassion, accountability, respect, and excellence.

Focusing on compassionate care and exceptional service, Regional One Health is anchored by its acute care hospital, Regional Medical Center, which is home to four highly respected Centers of Excellence including trauma, burn, neonatal intensive care, and high-risk obstetrics. The Regional Medical Center is deeply rooted in Memphis and is the only designated Level 1 Trauma Center in a 150-mile radius, as well as the only Burn Center in the region. Regional One Health also includes Regional One Health Rehabilitation Hospital, Regional One Health Extended Care Hospital, Regional One Health Surgery Center, a network of primary care physician offices, and an outpatient center.

**Mission:** "To improve the health and well-being of the people we serve by providing compassionate care and exceptional services."

**Vision:** "In collaboration with our academic partners, we will be the premier healthcare system advancing the quality of life in our communities."

The core programs and services within Regional One Health include:

- Main Campus
  - Regional Medical Center an acute care hospital providing the Mid-South with the highest quality healthcare.
  - Centers of Excellence
    - The Elvis Presley Trauma Center a designated Level 1 Trauma Center in Tennessee, Mississippi and Arkansas.
    - Firefighters Burn Center a full-service Burn Center that features 14 beds, an outpatient clinic, surgery facilities, a rehabilitation center, a research division, and special cutting-edge burn care equipment. It is the only full-service American Burn Association verified Burn Center of its kind within a 150-mile radius of Memphis.
    - Sheldon B. Korones Newborn Center one of the oldest and largest neonatal intensive care units in the United States.
    - High-Risk Obstetrics Program receives 1,500 referrals annually due to complications in pregnancy. The facility has all the comforts of home, as well as the sophisticated equipment necessary to handle complications during delivery.
  - The Rehabilitation Hospital a 23-bed inpatient facility in a newly renovated space with attractive, spacious, private rooms.



Extended Care Hospital – treats a variety of patients that require longer lengths of stay
 (18 to 35 days) than in a traditional acute care hospital.

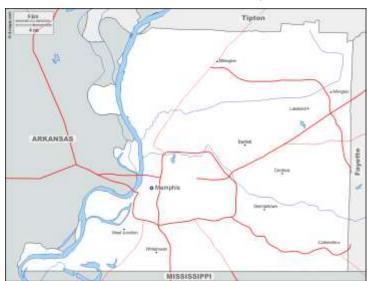
#### East Campus

- Center for Rehabilitative Medicine a collaborative effort designed to help patients increase wellness through an effective three-part approach which includes State-Of-The-Art Technology, Innovative Care Plans, and Thoughtful Analysis.
- East Campus Imaging Center a state-of-the-art facility designed to enhance the quality of care, comfort, and convenience for all patient's imaging needs.
- East Campus Multispecialty Care a site that offers primary care and specialty services, such as Internal Medicine, Cardiology, Endocrinology, Nephrology, Neurology, and Rheumatology.
- Outpatient Care Network

# **Community Served**

Regional One Health defined their current service area based on an analysis of the geographic area surrounding the hospital, which includes all residents, not excluding low-income or underserved individuals utilizing Regional One Health services reside. The primary service area is considered to be the Shelby County, Tennessee community including the City of Memphis. Regional One Health considers the community they serve to include not only the neighborhoods surrounding the campus on Memphis' downtown corridor, but also extends to the tristate area of West Tennessee, Arkansas, Mississippi, and beyond.

Memphis is a city located along the Mississippi River with a population of approximately 654,723 residents located within southwestern Shelby County, Tennessee. Notably, the City of Memphis is the second-largest city in Tennessee located within Shelby County, the state's most populous county. Shelby County encompasses a total population of approximately 937,847.



# Methodology

The CHNA was comprised of both quantitative and qualitative research components. A brief synopsis of the research components is included below with further details provided throughout the document:



- A Secondary Data Profile uses existing local-level data with state and national comparisons of demographic and health data, also known as "secondary data." Specific data sources depicting population and household statistics, education and economic measures, morbidity and mortality rates, incidence rates, and other health statistics for Shelby County were compiled. The most recent data is used whenever possible. Data was compiled and compared to state and national level data, where applicable. National comparisons and benchmarks include United States data when available.
- A <u>Community Survey</u> conducted by the Shelby County Health Department in collaboration with multiple healthcare systems including Regional One Health, Baptist Memorial Health Care Corporation, Methodist LeBonheur Healthcare, and St. Jude Children's Research Hospital. The ultimate goal of the collaboration efforts was to assess the community's health care needs in order to coordinate community-wide health care improvement efforts. The online survey was offered in three different languages (English, Spanish, and Arabic) between March and April 2019. In total, 738 residents completed a survey throughout Shelby County to promote geographical and ethnic diversity among respondents. The questionnaire modeled the Center for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS), which assesses health status, health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. A customized survey tool consisting of approximately 50 questions modeled the Center for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS) questionnaire.
- Exercited between April 1 and April 15, 2019. Key informants were invited to participate in a survey to gather a combination of quantitative ratings and qualitative feedback through closed and open-ended questions. Questions were focused around health issues and barriers for people in the community, health care access, underserved populations, and how to increase the overall health of Shelby County and the surrounding areas. Key informants were defined as community stakeholders with expert knowledge, including public health and health care professionals, social service providers, non-profit leaders, business leaders, faith-based organizations, and other community leaders. The majority of respondents (48%) are affiliated with Health care/public health organizations, followed by Non-profit/social services (20%).

#### **Research Partner**

Regional One Health contracted with Holleran, an independent research and consulting firm located in Wrightsville, Pennsylvania, to conduct research in support of the CHNA. Holleran has over 25 years of experience in conducting public health research and community health assessments. The firm provided the following assistance:

- Collected and interpreted data from secondary data sources
- Collected, analyzed, and interpreted data from key informant interviews
- Analyzed and interpreted data from community member surveys
- Prepared all reports
- Facilitated a prioritization and implementation planning session



## **Community Representation**

Community engagement and feedback were an integral part of the CHNA process. Regional One Health sought community input through key informant interviews with community leaders and partners, a community member survey available to all residents, and inclusion of community leaders in the prioritization and implementation planning process. Public health and health care professionals shared knowledge and expertise about health issues, and leaders and representatives of non-profit and community-based organizations provided insight on the community, including the medically underserved, low income, and minority populations.

#### **Research Limitations**

As with all research efforts, there are some limitations related to this study's research methods that should be acknowledged. It should be noted that in some cases, local-level secondary data may be limited or dated. This is an inherent limitation with secondary data. The most recent data is used whenever possible. Secondary data should be interpreted with particular caution, since Shelby County includes the City of Memphis. This may skew the data for some of the indicators.

Data based on self-reports should also be interpreted with particular caution. In some instances, community survey participants may over-or underreport behaviors and illnesses based on fear of social stigma depending on the health outcome of interest or misunderstanding of the question. In addition, respondents may be prone to recall bias where they may attempt to answer accurately, but remember incorrectly.

In addition, timeline and other restrictions may have impacted the ability to survey all key stakeholders and community members. Regional One Health sought to mitigate limitations by including representatives of diverse and underserved populations throughout the research components. The survey participants included a broad cross section of individuals of varying age and ethnic backgrounds, which are representative of the local community. However, the demographic profile for the community survey respondents does not particularly mirror the demographics of the actual population due to non-random recruiting techniques.

#### **Prioritization of Needs**

Following the completion of the CHNA research, Regional One Health prioritized community health issues and developed an implementation strategy to address the prioritized community needs. A description of the prioritization process is included along with a listing of the participants.



### COMMUNITY HEALTH NEEDS ASSESSMENT KEY FINDINGS

Each of the individual research components from the CHNA reveal a unique perspective on the health status of residents living in Shelby County. A number of overlapping health issues are worthy of attention for Regional One Health and its partners; however, it is important to undertake a process that pulls key themes from each component and prioritizes the community needs. The following section highlights the key takeaways that stood out across all the research components, as noted by the Holleran team.

- Access to Care: Communities across the nation continue to work diligently to decrease the barriers that community members can often face when attempting to access needed care. While there has been some evidence of progress as noted by the improved ratio of primary care providers in the county, there is overwhelming data to support that Access to Care continues to be a major concern for individuals who live in Shelby County. Almost 13% of Shelby County residents are without health insurance, as compared to nearly 11% of those in Tennessee and 10.5% in the Nation. Key informants noted the challenges of the Lack of transportation and the Availability of bilingual providers when asked to identify barriers, yet ultimately felt the most significant barrier to accessing care was that many community members do not have their Basic needs met and therefore, access to care simply is not an area of priority for the community members they serve. Community members identified the major barriers to accessing care as the Inability to pay out-of-pocket expenses and Lack of health insurance coverage. Key informants report the major barriers to accessing care to be Lack of transportation and Basic needs not met.
- Overweight/Obesity: According to secondary data findings, one-third of Shelby County residents are considered to be obese. Just over 48% of Shelby County residents who responded to the community survey self-reported that they consider themselves to be Slightly Overweight while another 17% reported they consider themselves to be Very Overweight. More than 65% of key informants report Overweight/obesity as one of the top most pressing health issues for the community. Community member feedback supports this finding as they ranked Overweight/Obesity as the community's second most pressing health issue. Not surprisingly, the issue repeats itself in the barrier section of the community survey as the majority report that Access to Affordable Fresh Fruits and Vegetables is the community's number one missing resource. On a positive note, more than 7 out of 10 community members report they are actively trying to lose weight and more than 95% of the population report they exercise on a weekly basis. However, it is an interesting caveat that almost half of the community members state they are often too tired at the end of the day to exercise. It is also important to note research shows that obesity is often rampant among populations with the lowest levels of education and the highest poverty rates. Healthy lifestyle choices like eating right and engaging in physical activity regularly are choices individuals can make to lower their risk of obesity and other associated health conditions. However, these choices are often strongly affected by the environment in which one lives.
- ➤ Chronic Disease Management: The top three causes of death in Shelby County are Diseases of the heart, Cancer, and Stroke. Death rates due to Stroke, Alzheimer's disease, and Diabetes are all higher in Shelby County when compared to Tennessee and the nation. To reinforce the challenge the community faces, respondents to the community survey report that 61.6% confirm they have



been told by a physician they are Overweight/obese, 46.3% report they have High blood pressure and 35.7% report High cholesterol. Both key informants and community members alike identified Overweight/Obesity, Diabetes, Heart Disease, and Cancer among the top ten most pressing health issues facing the community. The majority of key informants (57.7%) report the community's overall health status as "Poor". Preventative health screenings appear to be low on the community's priority list, as only approximately 20% of the members of the community have been screened for both Oral/Throat Cancer and Skin Cancer, followed by just over 30% who have been screened for Colorectal Cancer.

Violence/Poverty: Residents in the community voiced that they do not feel safe, nor do they have appropriate access to basic needs, such as shelter, food, or water. Key informants also identified the lack of needed resources, which surrounds the underlying theme of poverty in the community. The majority of respondents felt that there is a lack of safe opportunities for healthy lifestyle behaviors due to high crime and violence rates. Other key informants agreed that the community lacks access to healthy and affordable food options, even referring to the community as a food desert. The community must feel safe in their neighborhood to foster conditions that are conducive to healthy living before most of the issues identified in the report can be combatted. These issues are the source of many additional health concerns in the community. When residents cannot have their basic needs met, they are unable to live healthy lives. Obesity is a preventable problem that can lead to many other, serious health issues. Addressing the underlying and foundational issues in the community could reduce the strain on the health care system and improve the overall health outcomes for residents in the community.



#### **COMMUNITY HEALTH NEEDS ASSESSMENT FINDINGS**

# I. Socio-Demographic Statistics Overview

Regional One Health is dedicated to improving the lives of individuals living in Shelby County, by serving them outside of their established walls. As part of their ongoing commitment, Regional One Health initiated a CHNA to evaluate the health and social service needs of individuals by assessing key indicators of health and well-being. The report offers a broad, but rich, overview of the current status of individuals in the community and is a compilation of secondary data, key informant interviews, and community member testimony.

## **Overall Population Statistics**

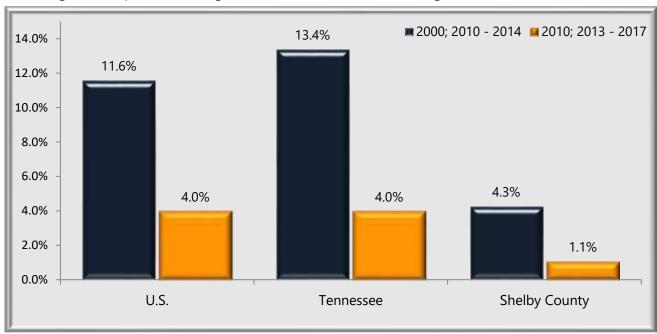
Shelby County had a 5-year estimate population of 937,847 from 2013 – 2017, rendering it the most populated county in Tennessee. The county experienced a slower population growth of 1.1% and the growth was lower than both Tennessee and the nation. Shelby County also has a notably younger population as evidence by the lower median age when compared to the state and the nation.

Table 1. Overall Population and Median Age in Years (2010 – 2014; 2013 – 2017)

	U.S.		Tennessee		Shelby County	
	2010 – 2014	2013 – 2017	2010 – 2014	2013 – 2017	2010 – 2014	2013 – 2017
Population	314,107,084	321,004,407	6,451,365	6,597,381	936,130	937,847
Male population	49.2%	49.2%	48.7%	48.8%	47.7%	47.6%
Female population	50.8%	50.8%	51.3%	51.2%	52.3%	52.4%
Median age (years)	37.4	37.8	38.3	38.6	34.8	35.3

Source: U.S. Census Bureau

Figure 1. Population Change from 2000 (2010 – 2014); Change from 2010 (2013 – 2017)



## **Racial Composition**

Over half of the population in Shelby County is predominantly Black/African-American (54.3%), which is a much larger proportion when compared to Tennessee (17.8%) and the nation (13.9%). The racial breakdown does provide a foundation for primary language statistics.

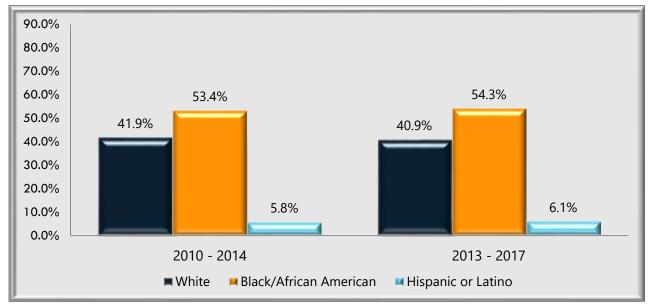


Figure 2. Racial Breakdown in Shelby County (2010 - 2014; 2013 - 2017)

The percentage of residents, aged 5 years and over, who speak a language other than English as their primary language at home is slightly higher in Shelby County (9.3%) when compared to Tennessee (7.0%), but remains much lower compared to the nation (21.3%). Residents in Shelby County who speak a language other than English at home are most likely to speak Spanish (5.3%).

Table 2. Language Spoken at Home Population, 5 Years Old and Older (2010 – 2014; 2013 – 2017)

	U.S.		Tennessee		Shelby County	
	2010 – 2014	2013 – 2017	2010 – 2014	2013 – 2017	2010 – 2014	2013 – 2017
English only	79.1%	78.7%	93.2%	93.0%	90.8%	90.7%
Language other than English	20.9%	21.3%	6.8%	7.0%	9.2%	9.3%
Speak English less than "very well"	8.6%	8.5%	2.8%	2.9%	3.9%	3.7%
Spanish	13.0%	13.2%	3.9%	4.0%	5.3%	5.3%
Other Indo-European languages	3.7%	3.6%	1.2%	1.2%	1.3%	1.3%
Asian and Pacific Islander languages	3.3%	3.5%	1.0%	1.1%	1.7%	1.7%
Other languages	0.9%	1.0%	0.6%	0.7%	1.0%	1.1%

Source: U.S. Census Bureau

# **Housing Tenure and Value**

A review of the U.S. Census data show specific community highlights related to housing and poverty in Shelby County. Housing is an important social determinant of physical and mental health. Affordable



<sup>\*</sup> Hispanic/Latino residents can be of any race, for example, White Hispanic or Black/African American Hispanic

housing helps to alleviate the financial burden and makes more household resources available to pay for health care and healthy food, which leads to better health outcomes.

Table 3. Households by Occupancy (2010 – 2014; 2013 – 2017)

	U.S.		Tennessee		Shelby County	
	2010 – 2014	2013 – 2017	2010 – 2014	2013 – 2017	2010 – 2014	2013 – 2017
Owner-occupied housing unit	64.4%	63.8%	67.1%	66.3%	58.0%	55.9%
Renter-occupied housing unit	35.6%	36.2%	32.9%	33.7%	42.0%	44.1%

Source: U.S. Census Bureau

Shelby County has a higher proportion of vacant homes (13.4%) when compared to Tennessee (12.3%) and the nation (12.2%). The majority of residents in Shelby County own their residence (55.9%). When looking at housing costs in Shelby County, a slightly higher percentage of homeowners spend more than 30% of their income on their mortgage when compared to Tennessee, but is similar to the nation. Thirty-percent of a household's total income is considered the cut off for housing-cost burden and avoiding financial hardship.

The median amount of dollars spent on housing rental is slightly higher in Shelby County (\$894) when compared to the state (\$808), but is lower compared to the nation (\$982). In addition, a higher percentage of Shelby County renters spend more than 30% of their income on rent (54.1%) in comparison to Tennessee (48.4%) and the nation (50.6%).

Table 4. Housing Characteristics (2010 – 2014; 2013 – 2017)

	U.S.		Tennessee		Shelby County	
	2010 – 2014	2013 – 2017	2010 – 2014	2013 – 2017	2010 – 2014	2013 – 2017
Households spending 30% or more of income on mortgage	34.2%	29.5%	30.7%	26.6%	34.2%	29.8%
Median value	\$175,700	\$193,500	\$139,900	\$151,700	\$131,700	\$135,700
Households spending 30% or more of income on rent	52.3%	50.6%	51.6%	48.4%	57.9%	54.1%
Median dollars	\$920	\$982	\$757	\$808	\$861	\$894

Source: U.S. Census Bureau

#### **Household Status**

Households are identified as either family households or nonfamily households. In Shelby County, a larger percentage of residents live in nonfamily households. In addition, about 31.5% live in a single-person household in Shelby County. This percentage is higher when compared to Tennessee (28.1%) and the nation (27.7%). Living alone generally entails a higher risk for social isolation. The figure on the following page warrants attention.



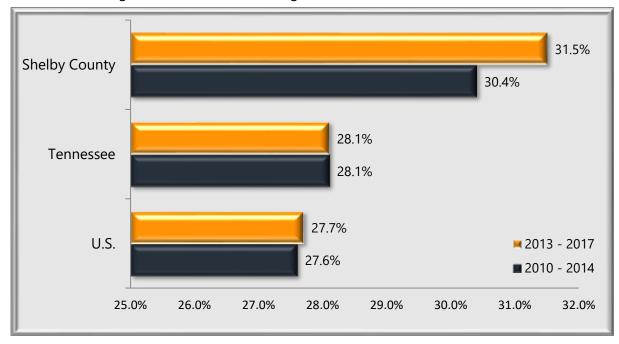


Figure 3. Householders Living Alone (2010 – 2014; 2013 – 2017)

In regards to marital status, Shelby County has a larger proportion of the population aged 15 years and over never married when compared to Tennessee and the nation. In addition, 3.4% of the population in Shelby County are separated, which is slightly higher than both the state and the nation.

Approximately 22,399 grandparents live with their own grandchild or grandchildren, under 18 years of age, in Shelby County. However, the percentage of grandparents responsible for their grandchild or grandchildren is slightly higher in Shelby County (39.9%) when compared to the nation (35.5%), but lower than Tennessee's figure of 48.0%. Based on the previous 5-year estimate (2010 – 2014), the percentage of grandparents responsible for their grandchildren has decreased.

#### **Income Statistics**

The median income for families is slightly higher in Shelby County (\$61,252) when compared to Tennessee, but is still lower than the nation. Conversely, the median income for households is lower in Shelby County. The mean earnings for workers in Shelby County (\$30,161) is comparable to the state (\$29,790), but lower than the nation (\$32,141).

The percentage of households in the county with a secondary source of income is generally consistent with the state and the nation. However, the percentage of households with supplemental security income is slightly higher in Shelby County. In addition, 19% of households in Shelby County rely on Food Stamp/SNAP (supplemental nutritional assistance program) benefits, which is higher when compared to Tennessee (15.7%) and the nation (12.6%).



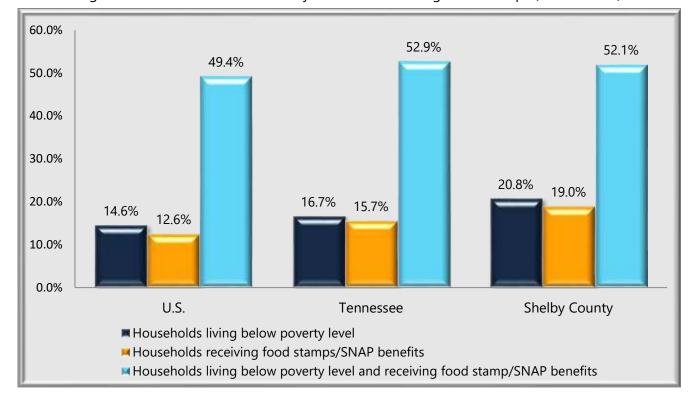


Figure 4. Households Below Poverty Level and Receiving Food Stamps (2013 – 2017)

# **Poverty Status**

In general, Shelby County residents are more likely to live in poverty when compared across the state and the nation, as determined by the federal poverty level. The federal poverty level represents the dollar amount below which a household has insufficient income to meet minimal basic needs. Households that are below 100% of the poverty level have an income less than the amount deemed necessary to sustain basic needs. In Shelby County, nearly 21% of the population has an income below 100% of the federal poverty level. The incidence of poverty among female-headed households with no husband present in Shelby County (34.1%) is worse than Tennessee (33.2%) and the nation (28.8%).

Table 5. Poverty Status of Families and People in the Past 12 Months (2013 – 2017)

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	U.S.	Tennessee	Shelby County			
All families	10.5%	12.4%	16.0%			
Married couple families	5.3%	6.0%	5.4%			
Female-headed households, no husband present	28.8%	33.2%	34.1%			
All people	14.6%	16.7%	20.8%			
Under 18 years	20.3%	24.3%	33.9%			
18 years to 64 years	13.7%	15.6%	17.6%			
65 years and over	9.3%	9.5%	9.9%			

Source: U.S. Census Bureau



#### **Employment**

The majority of the population in Shelby County is currently employed in the labor force (65.0%). Unfortunately, in 2014, the unemployment rate in Shelby County (7.9%) was much higher than Tennessee (6.5%) and the nation (6.2%). Even though the unemployment rate in Shelby County has decreased to 4.2% in 2018, it remains higher when compared to Tennessee (3.5%) and the nation (3.9%).

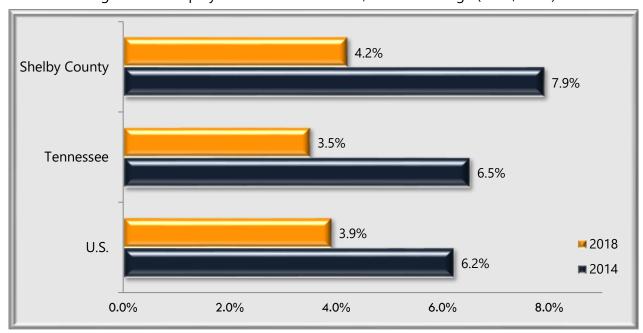


Figure 5. Unemployed Civilian Labor Force, Annual Average (2014; 2018)

#### **Education**

Education is an important social determinant of health. Evidence indicates that individuals who are less educated tend to have poorer health outcomes. There are a higher percentage of Shelby County residents aged 25 years and over with a Bachelor's degree or higher when compared to the state, but lower than the nation. Specifically, about 88% are High school graduates or higher residing in Shelby County, while nearly 31% have a Bachelor's degree or higher.

Table 6. Educational Attainment, Population 25 Years and Over (2013 – 2017)

	U.S.	Tennessee	Shelby County
Less than high school diploma	12.6%	13.5%	12.4%
High school graduate (includes equivalency)	27.3%	32.6%	27.1%
Some college, no degree	20.8%	20.9%	23.5%
Associate's degree	8.3%	7.0%	6.4%
Bachelor's degree	19.1%	16.5%	18.6%
Graduate or professional degree	11.8%	9.6%	11.9%
High school graduate or higher	87.3%	86.5%	87.6%
Bachelor's degree or higher	30.9%	26.1%	30.6%

Source: U.S. Census Bureau



#### **II. Social Determinants of Health**

An individual's health is influenced by numerous factors. Research indicates that determinants of health reaches beyond the boundaries of traditional health care and public health sectors and can be important allies in improving population health. The ranges of personal, social, economic, and environmental factors that influence health status are also known as determinants of health. Research has shown that lower educational attainment, poverty, and race/ethnicity are risk factors for certain health conditions. Addressing social determinants of health is important for improving health and reducing health disparities.

The U.S. Department of Health and Human Services Healthy People 2020, defines these conditions in the environments in which people are born, live, learn, work, play, worship, and age. The conditions affect a wide range of health, function, and quality-of-life outcomes and risks. Key informant respondents were asked to rate the quality of five key areas of social determinants of health within the community. Respondents revealed important areas in which the community struggles and excels, as well as the underlying causes of other health issues. The table below illustrates these findings by key informants.

Table 7. Ratings of Each Social Determinant of Health Key Areas by Key Informants

Tuble 7. Natings of Each Social Betermine	Very Poor	Poor	Average	Good	Excellent	N/A
<b>Economic stability</b> (poverty, employment, food security, housing stability)	46.2%	38.5%	7.7%	7.7%	0.0%	0.0%
<b>Education</b> (early childhood education and development, enrollment in higher education, high school graduation, language and literacy)	15.4%	65.4%	11.5%	3.8%	3.8%	0.0%
Social and community context (social cohesion, civic participation, perceptions of discrimination and equity, incarceration/institutionalization)	15.4%	57.7%	11.5%	7.7%	0.0%	7.7%
Neighborhood and built environment (access to foods that support healthy eating patterns, quality of housing, crime and violence, environmental conditions, transportation)	46.2%	42.3%	3.8%	3.8%	3.8%	0.0%
Health and health care (access to health care, access to primary care, health literacy)	19.2%	34.6%	30.8%	7.7%	3.8%	3.8%

Notably, the area of Health and health care had the highest percentage of respondents select "Average" (30.8%). Instinctively we might think that access to care is the biggest factor in determining health, but numerous other items significantly affect one's likelihood of good health. The overwhelming majority of key informants selected that any given area was "Very Poor" or "Poor." The top two key areas selected for "Very Poor" include Economic stability and Neighborhood and build environment. Economic stability consists of poverty, employment, food security, and housing stability. While Neighborhood and built environment contains access to foods that support healthy eating patterns, quality of housing, crime



and violence, environmental conditions, and transportation. Shelby County includes the City of Memphis, which is one of the nation's poorest large metropolitan areas. Unfortunately, the capacity of resources in the community seems to not correlate with impact; however it does offer opportunities for configuration and organization to establish a new pathway in the right direction.

### **Poverty and Struggles to Meet Basic Needs**

Poverty is an extreme issue for many families across the nation. Seeking assistance is hard enough if you are financially stable, but add it to living in poverty and it can be almost impossible to secure the necessary resources. Food insecurity refers to the lack of consistent access to enough food for an active, healthy life. Food-insecure households are not necessarily food insecure all the time. It may reflect a households needs to make trade-offs between important basic needs, such as housing or medical bills, and purchasing nutritionally adequate foods. The food insecurity rate in the overall population in Shelby County was 19.8% in 2017, which is much higher as compared to Tennessee and the nation. Counties with the highest rates of food insecurity tend to have similarly poor economic indicators, including higher rates of unemployment and poverty and lower homeownership and median income. Although related, food insecurity and poverty are not the same. According to the U.S. Department of Agriculture, about one-third of food-insecure families have annual incomes above 200% of the federal poverty level. Note, that 200% of the federal poverty level is only \$51,500 for a family of four. For families with medical expenses or living in a high cost-of-living area, it is easy to see how rapidly resources can be depleted.

# **Neighborhood and Built Environment**

Aspects of neighborhood environments, such as the presence of playgrounds and availability of affordable nutritious food, can promote health by encouraging healthy behaviors. Similarly, individuals are more likely to receive health care when accessible to where they live, either for the reason that they are located nearby or transportation is available. Poor environmental quality has its greatest impact on individuals whose health status is already at risk. Therefore, it is critical for residents to have safe opportunities in neighborhood environments including safe places to go outside of their home to engage in physical activity. Research suggests that where one lives can shape their health in many significant ways. The physical environment, social relationships, services and opportunities accessible in neighborhoods can either heighten or constrain an individual's choices promoting health and wellbeing.



#### **III. Key Health Issues**

Based on a review of the secondary data, as well as the key informant and community survey findings, the following section identifies the health issues that appear to be areas of concern for Shelby County.

## **Overall Mortality and Premature Death**

The overall age-adjusted death rate per 100,000 in Shelby County is similar to the state, but still worse than the nation. However, the age-adjusted death rate for the Black/African-American population in Shelby County (981.3) is higher when compared to both Tennessee (973.7) and the nation (854.1). The data also corresponds to a higher number of premature deaths reported in Shelby County when compared to Tennessee and the National Benchmark (Table 9). Deaths among younger individuals contribute more to the years of potential life lost measure than deaths among older people.

Table 8. Age-Adjusted Death Rate per 100,000 (2014; 2017)

	U.S.		Tennessee		Shelby County	
	2014	2017	2014	2017	2014	2017
Number of deaths	2,626,418	2,813,503	64,661	70,096	7,913	8,270
Death rate	724.6	731.9	880.0	897.1	876.1	870.1

Source: Centers for Disease Control and Prevention

Table 9. Premature Mortality, Years of Potential Life Lost Before Age 75 per 100,000 (2016; 2018)

National Benchmark <sup>b</sup>		Tennessee		Shelby	County
2016	2018	2016	2018	2016	2018
5,200	5,300	8,600	8,800	9,300	9,600

Source: County Health Rankings<sup>a</sup>

#### **Leading Causes of Death**

The top three causes of death in Shelby County are Diseases of the heart, Cancer and Stroke. While the same holds true for the state and the nation for the first two leading causes of death, the third leading cause of death in Tennessee and the nation is Accidents, also known as unintentional injuries.

Table 10. Leading Cause of Death, Age-Adjusted Death Rates per 100,000 (2017)

			, ,	
	HP 2020	U.S.	Tennessee	<b>Shelby County</b>
Diseases of heart	N/A	165.0	202.2	192.0
Malignant neoplasms (cancer)	161.4	152.5	173.4	168.9
Accidents (unintentional injuries)	N/A	49.4	63.0	53.7
Chronic lower respiratory disease	N/A	40.9	57.4	35.9
Cerebrovascular diseases (stroke)	34.8	37.6	45.0	55.4
Alzheimer's disease	N/A	31.0	46.7	49.5
Diabetes mellitus	66.6	21.5	24.0	30.0
Influenza and pneumonia	N/A	14.3	21.3	18.9
Suicide (intentional self-harm)	10.2	14.0	16.8	9.9

Sources: Centers for Disease Control and Prevention & Healthy People 2020



<sup>&</sup>lt;sup>a</sup> Rank is based on all 95 counties within Tennessee State. A ranking of "1" is considered to be the healthiest.

<sup>&</sup>lt;sup>b</sup> National benchmark represents the 90<sup>th</sup> percentile, i.e., only 10% are better.

#### **Chronic Health Conditions**

Chronic diseases are the leading cause of death and disability in the United States. Of particular concern are the age-adjusted death rates due to Stroke, Alzheimer's disease, and Diabetes, which are much higher in Shelby County than the state and the nation. Diseases of heart and Cancer continue to be the leading causes of death. Therefore, prevention is crucial through better use of resources and better lifestyle behaviors.

Community survey participants were asked to disclose the chronic conditions they have been diagnosed. The top chronic conditions that survey participants confirm they have been told by a physician they have include Overweight/Obesity, High blood pressure, and High cholesterol. The figure below shows the breakdown of the percent of respondents who selected the following chronic health conditions from a list of 14 chronic conditions.

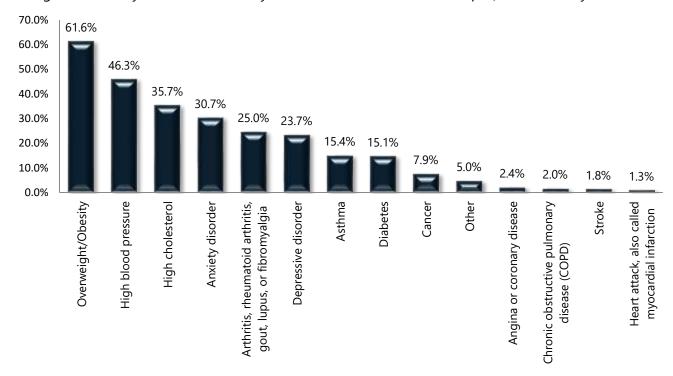


Figure 6. "Have you ever been told by a doctor, nurse, or other health professional that you have:"

Respondents could select more than one option, therefore the percentages may sum to more than 100.0%.

#### **Most Pressing Health Issues**

Key informants were asked to identify the top 5 most pressing health issues in their community, and to select the most significant of those health issues. Respondents could choose from a list of 18 health issues, as well as suggest their own that were not on the list by selecting "Other." Overweight/obesity was the top health issue identified by over half of the respondents in both 2016 and 2019. The top 5 health issues identified were Overweight/obesity, Mental health, Accessing health care services, Maternal, infant, and child health, and Unintentional injuries and violence including domestic violence, firearm-related violence, and motor vehicle accidents. Interestingly, Heart disease and Diabetes fell out



of the top 5 in 2019, but was replaced with Maternal, infant, and child health, and Unintentional injuries and violence. Key Informants identified the most significant health issue out of the top 5 health issues as Overweight/obesity (30.8%).

Table 11. Ranking of the Top Most Pressing Health Issues by Key Informants

	Selected as an Issue*	Selected as Most Significant
Overweight/obesity	65.4%	30.8%
Mental health	65.4%	19.2%
Accessing health care services	53.8%	19.2%
Maternal, infant, and child health	50.0%	3.8%
Unintentional injuries and violence	46.2%	7.7%
Diabetes	42.3%	3.8%
Heart disease	38.5%	0.0%
Cancer	26.9%	3.8%
Substance abuse	26.9%	0.0%
Other	19.2%	11.5%

<sup>\*</sup> Respondents could select more than one option, therefore the percentages may sum to more than 100.0%.

The findings gathered through the community survey are similar to those results from the key informant survey regarding the top 5 most pressing health issues identified in Shelby County. Community survey participants were also asked to identify the top 5 most pressing health issues facing the community from a list of 29 health issues. Access to Care/Uninsured was the number one health issue identified by almost half of community residents. The top 5 health issues identified by participants were Access to Care/Uninsured, Overweight/Obesity, Drug Abuse/Alcohol Abuse, Diabetes, and High Blood Pressure. The following table illustrates the top 5 most pressing health issues facing Shelby County as viewed by community survey participants.

Table 12. Top 5 Most Pressing Health Issues by Community Residents

	Selected as an Issue*
Access to Care/Uninsured	48.8%
Overweight/Obesity	45.6%
Drug Abuse/Alcohol Abuse	43.3%
Diabetes	43.2%
High Blood Pressure	40.7%
Poverty	37.9%
Heart Disease	29.0%
Mental Health/Suicide	27.8%
Cancer	24.4%
Homicide/Violent Crime	20.8%

<sup>\*</sup> Respondents could select more than one option, therefore the percentages may sum to more than 100.0%.



#### **Overweight/Obesity**

Overweight/obesity transpired as an important health concern from both the primary and secondary data analysis. Being Overweight and/or Obese is a concern as it can be a contributing factor to a variety of other chronic health conditions, such as Diabetes and Heart Disease. According the County Health Rankings, Shelby County has a larger proportion of the adult population that is obese with a body mass index equal to or greater than 30 (33%) when compared to Tennessee (32%) and the National Benchmark of 26%.

Table 13. Adults, Age 20 and Older, Reporting a BMI ≥ 30 kg/m2 (2016; 2018)

National B	National Benchmark <sup>b</sup>		Tennessee		County
2016	2018	2016	2018	2016	2018
25%	26%	32%	32%	34%	33%

Source: County Health Rankings<sup>a</sup>

Additionally, community survey participants were asked to self-report their weight. Approximately, 66% of all respondents described themselves as "Slightly overweight" or "Very overweight."

Very overweight 17.3% 48.3% Slightly overweight 29.9% About the right weight Slightly underweight 4.1% Very underweight 0.0% 10.0% 20.0% 30.0% 40.0% 50.0% 60.0%

Figure 7. "How do you describe your weight?"

Key informants ranked Overweight/obesity as the most significant health issue in Shelby County, and community survey participants ranked it second on the list. One key informant noted:

"The reason overweight/obesity should be a high priority issue to address is because it leads to so many of the other chronic and critical illnesses/diseases that are prevalent in our community...i.e. Diabetes, hypertension, cardiovascular disease, cancer. Overweight/obesity also plays a major role in mental health, especially in youth, which can lead to other risky behaviors. This issue is also extremely costly, not only to the healthcare industry, but to business as well in terms of absenteeism, loss of productivity, medical claims, disability claims, etc. Almost 40% of our youth are either overweight or obese. 75%-80% of these youth will be obese adults, which will affect, not only quality of life and personal earning potential, but also our city and county's future economic and workforce development."



<sup>&</sup>lt;sup>a</sup> Rank is based on all 95 counties within Tennessee State. A ranking of "1" is considered to be the healthiest.

<sup>&</sup>lt;sup>b</sup> National benchmark represents the 90<sup>th</sup> percentile, i.e., only 10% are better.

#### **Crime & Violence**

Both quantitative and qualitative data shows that crime is a troubling issue. High crime rates can often be linked to communities having a lack of safe opportunities for residents to engage in physical activity. A key informant emphasized, "Crime in community limits physical activity." The total crime rate per 1,000 in Shelby County (134.4) greatly exceeds the rate in Tennessee (85.3). In particular, the rate of crime against persons in Shelby County (46.6) is almost double the rate in the rest of the state (23.3).

Table 14. Reported Offenses, Rate per 1,000 (2014; 2017)

	Tennessee		Shelby	County
	2014	2017	2014	2017
Total crimes	82.4	85.3	128.0	134.4
Crimes against persons	22.9	23.3	44.7	46.6
Crimes against property	46.7	45.9	74.3	78.4

Source: Tennessee Incident Based Reporting System (TIBRS)

Additionally, the age-adjusted mortality rate per 100,000 due to homicides in Shelby County is 21.6 and ranks eighth out of the top leading causes of death for the county. Key informants ranked Unintentional injuries and violence as one of the top 5 most pressing health issues. While community survey participants ranked Homicide/Violent Crime 10<sup>th</sup> and Domestic Violence 11<sup>th</sup> among a list of 29 top health issues in the community.

#### **Behavioral Health**

Based on the primary and secondary data analysis, mental health issues arose as a top health concern. This finding is important because these concerns can be significant confounding factors for broader health problems and overall unhealthy lifestyle behaviors. The crude death rate due to suicide per 100,000 in Shelby County increased from 8.6 in 2014 to 9.9 in 2017, but the rate is still much lower than the state and the nation.

According to the County Health Rankings, Shelby County has a lower percentage of adults reporting binge or heavy drinking when compared to Tennessee and equivalent to the National Benchmark. In addition, drug overdose deaths per 100,000 population in Shelby County increased from 15 in 2016 to 19 in 2018. Community survey participants ranked Drug Abuse/Alcohol Abuse among the top 5 most pressing health issues in Shelby County.

Table 15. Drug Overdose Deaths, Drug Poisoning Deaths per 100,000 (2016; 2018)

National B	National Benchmark <sup>b</sup>		Tennessee		County
2016	2018	2016	2018	2016	2018
8	10	18	22	15	19

Source: County Health Rankings<sup>a</sup>



<sup>\*</sup>TIBRS data is not comparable to traditional Uniform Crime Reporting (UCR) summary data used by the FBI.

<sup>&</sup>lt;sup>a</sup> Rank is based on all 95 counties within Tennessee State. A ranking of "1" is considered to be the healthiest.

<sup>&</sup>lt;sup>b</sup> National benchmark represents the 90<sup>th</sup> percentile, i.e., only 10% are better.

In addition, community survey participants were asked if they have ever been told by a doctor, nurse, or other health professional and that they have certain health conditions. Nearly, 31% of participants were told they had an Anxiety disorder and 24% had a Depressive disorder. In addition, 48.2% of community respondents also report feeling stressed out or overwhelmed "Sometimes" during the past 30 days. More specifically, 14% felt their mental health was not well more than 7 days in the past month.

Furthermore, key informants ranked Mental health as the second most pressing health issue, followed by Substance abuse among the top ten. One key informant noted, "There are certainly areas, such as mental health, substance abuse, etc. where there are nowhere near the level of services available to meet the demand."

## **Overall Physical Health Status**

Measures of general health status provide information on the health of a population. Self-assessed health status is a measure of how an individual perceives his or her health and provides a strong predictive measure for overall health outcomes. Adults in poor physical or mental health, defined by the County Health Rankings, are the average number of physically or mentally unhealthy days reported within the past 30 days. Consistent with the self-rated general health status finding noted below, Shelby County residents report experiencing an average of 4.4 days of poor physical health and 4.5 days of poor mental health within the past 30 days. According to the County Health Rankings, adults in Shelby County are more likely to report fair or poor health when compared to adults in Tennessee and the Nation Benchmark.

Table 16. Adults Reporting "Fair" or "Poor" Health, Age-Adjusted (2016; 2018)

National Benchmark <sup>b</sup>		Tennessee		Shelby	County
2016	2018	2016	2018	2016	2018
12%	12%	23%	19%	22%	20%

Source: County Health Rankings<sup>a</sup>

Community survey participants were asked to rate their overall health, as well as both physical and mental health. In general, self-reported measures of health are promising among residents. Almost half of respondents (48.6%) reported having "Excellent" or "Very good" overall health. On the other hand, only about 9% reported having "Fair" or "Poor" health.

Key informants were asked to describe if the communities surrounding Regional One Health make up a healthy community. Nearly 85% of key informants overwhelmingly state that they would not consider the communities surrounding as healthy. In addition, the majority of respondents (57.7%) rate the communities overall health status as "Poor." The figure on the following page depicts how respondents rated the communities overall health status.



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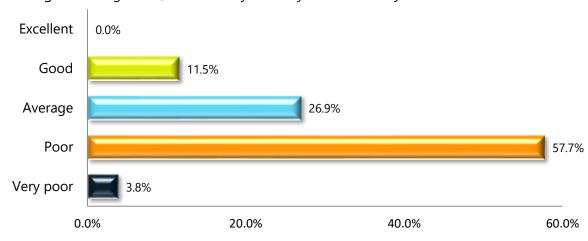


Figure 8. "In general, how would you rate your community's overall health status?"

#### **Cancer**

Cancer was identified as a health concern through the quantitative and qualitative research. According to the Centers for Disease Control and Prevention, Cancer is the number two leading cause of death in Shelby County, Tennessee, and the nation. Overall, Shelby County residents who are diagnosed with Cancer are more likely to die from it when compared to individuals across the state and the nation. For community survey participants that have ever had Cancer in their lifetime (7.3%), the most common type of cancer identified was Breast Cancer.

Overall, Shelby County has higher overall Cancer mortality rates when compared to the state and the nation. The county has notably higher mortality rates for nearly all types, except Bladder cancer and Melanoma of the skin cancer are lower in Shelby County than the state and the nation. The following table depicts mortality rates for some of the deadliest types of Cancer.

Table 17. Average Annual Age-Adjusted Cancer Mortality Rates per 100,000 by Site (2011 – 2015)

S S	HP 2020	U.S.	Tennessee	Shelby County
Breast (female)	20.7	20.9	22.1	28.5
Bladder	N/A	4.4	4.3	3.9
Colon & Rectum	14.5	14.5	16.3	20.3
Lung & bronchus	45.5	43.4	57.0	50.4
Pancreas	N/A	11.1	10.9	12.7
Melanoma of the skin	2.4	2.6	3.1	1.8
Prostate (male)	21.8	19.5	19.9	29.8
Cervix (female)	2.2	2.3	2.8	3.8
Uterus (female)	N/A	4.6	4.2	5.9
All sites	161.4	163.5	185.4	195.0

Sources: National Cancer Institute & Healthy People 2020



#### **Maternal and Child Health**

Maternal and child health issues also surfaced as an important health concern from both the primary and secondary data. In the majority of secondary data statistics, Shelby County performed worse than both Tennessee and the nation. More specifically, the following outcomes are of particular concern:

- Shelby County had a substantially larger proportion of births to unmarried mothers (60.1%) when compared to Tennessee (43.6%) and the nation (39.8%).
- Infant (9.3), neonatal (4.7), and post-neonatal (4.6) mortality rates per 1,000 live births are higher in Shelby County when compared to Tennessee, the nation, and Healthy People 2020 goals.

Table 18. Teen Birth Rate per 1,000 Females Aged 15 to 19 (2016; 2018)

National B	enchmark <sup>b</sup>	Tennessee		Shelby	County
2016	2018	2016	2018	2016	2018
19	15	45	36	55	45

Source: County Health Rankings<sup>a</sup>

<sup>&</sup>lt;sup>b</sup> National benchmark represents the 90<sup>th</sup> percentile, i.e., only 10% are better.

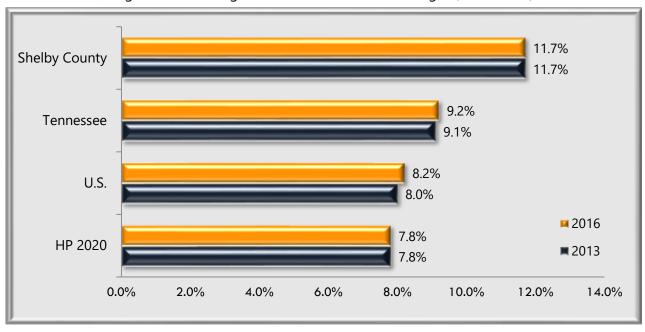


Figure 9. Percentage of Infants with Low Birthweight (2013; 2016)

Comments provided and findings gathered through the key informant and community survey echoed the results from the secondary data statistics. Precisely, one community survey participant emphasized, "Help the mothers from giving birth to moderate or high risk babies, they need to be more educated." Another participant stated, "Support and education for low income people raising children."

<sup>&</sup>lt;sup>a</sup> Rank is based on all 95 counties within Tennessee State. A ranking of "1" is considered to be the healthiest.

#### **IV. Health Risk Behaviors**

Tobacco use, physical inactivity, inadequate nutrition, unsafe sex, heavy alcohol consumption, and low rates of immunizations and screenings are behaviors that can lead to poor health outcomes. This section illustrates the health risk behaviors that contribute to poor health outcomes identified by the secondary data analysis, as well as the key informant survey and community survey findings.

The table below illustrates the health behaviors facing Shelby County according to the County Health Rankings. Surprisingly, Shelby County ranks 35 out of all 95 counties within the State of Tennessee for the Health Behaviors Rank in 2018. A ranking of "1" is considered the healthiest.

Table 19. Health Factors and Behaviors Rankings<sup>a</sup> (2016; 2018)

	National B	Benchmark <sup>b</sup>	Tenn	Tennessee		County
	2016	2018	2016	2018	2016	2018
Health Factors Rank					66	74
<b>Health Behaviors Rank</b>					28	35
Adult smoking	14%	14%	24%	22%	21%	21%
Adult obesity (BMI ≥ 30)	25%	26%	32%	32%	34%	33%
Food environment index	8.3	8.6	6.7	6.2	5.5	5.8
Physical inactivity (Adults 20+)	20%	20%	32%	30%	30%	27%
Access to exercise opportunities	91%	91%	69%	71%	90%	87%
Excessive drinking	12%	13%	12%	14%	11%	13%
Alcohol-impaired driving deaths	14%	13%	28%	28%	16%	19%
New chlamydia cases per 100,000	134.1	145.1	470.4	477.5	900.4	857.9
Teen birth rate per 1,000 (Age 15–19)	19	15	45	36	55	45
Additional Health Behaviors (not inc	luded in ove	erall ranking	s)			
Food insecurity	11%	10%	17%	15%	22%	22%
Limited access to healthy foods	2%	2%	8%	8%	9%	11%
Drug overdose deaths per 100,000	8	10	18	22	15	19
Motor vehicle crash deaths	9	9	17	15	13	12
Insufficient sleep	28%	27%	37%	36%	37%	38%

Source: County Health Rankings

#### **Tobacco Use**

Smoking is detrimental to nearly every organ in the body and is often correlated with poorer health outcomes and chronic health conditions such as Lung cancer, Stroke, and Heart Disease. Based on the County Health Rankings, Shelby County had a higher percentage of adult smokers when compared to the National Benchmark, but slightly lower compared to Tennessee. Risky behaviors related to tobacco use were measured as part of the community survey, as well. The findings do not correspond with the County Health Ranking data. Approximately, 93% of community survey participants reported "Never" or "Not Applicable" to cigarette use within the past 30 days. Furthermore, 96.5% of community survey participants reported "Never" or "Not Applicable" for use of electronic cigarette.



<sup>&</sup>lt;sup>a</sup> Rank is based on all 95 counties within Tennessee State. A ranking of "1" is considered to be the healthiest.

<sup>&</sup>lt;sup>b</sup> National benchmark represents the 90<sup>th</sup> percentile, i.e., only 10% are better.

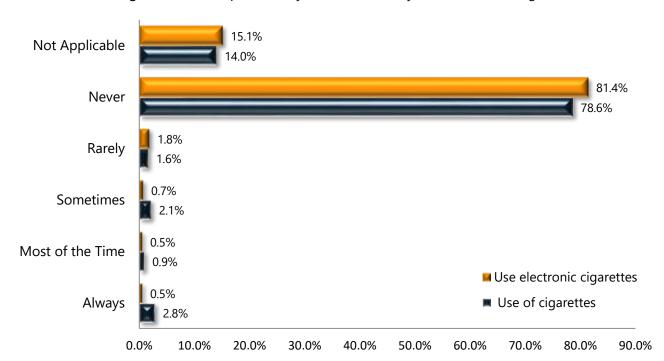


Figure 10. "In the past 30 days, how often did you do the following?"

# **Dietary and Exercise Behaviors**

A community's health and overall quality of life is affected by access to exercise opportunities. The measure is based on the proportion of residents who live reasonably close to a physical activity location. Physical activity locations may include parks or facilities identified by the NAICS code 713940 (gyms, community centers, YMCAs, pools, etc.). The percentage of residents who have access to exercise opportunities is notably lower in Shelby County when compared to the National Benchmark, but far higher than the access to exercise opportunities across Tennessee.

The majority of the community survey participants reported the place to go to exercise was at home (55.2%). This supports the lack of access to exercise opportunities and lack of safe opportunities for residents to engage in physical activity. The table on the following page shows the breakdown of the percent of participants who selected where they go to exercise or engage in physical activity. Common reasons stated to not engage in physical activity by community survey participants include: "I am too tired," "I do not have time to exercise," and "I do not like to exercise." Almost 11% of participants responded that they do not know why they are not engaging in physical activity.

Other (please specify)

Somewhere else

Ν Percentage\* Home 369 55.2% 301 45.0% Neighborhood 288 Gym or recreation center 43.0% Public parks or trails 270 40.4% 164 24.5% Workplace 7.3% Part of your daily travel/commute 49 Church 34 5.1%

26

0

3.9%

0.0%

0.0%

Table 20. Where do you go to exercise or engage in physical activity?

I do not exercise or engage in physical activity

The ability to maintain a healthy weight through diet and physical activity is influenced by both behavioral and environmental indicators. Environmental indicators include, but are not limited to, access to healthy foods and access to exercise opportunities. The food environment index measures overall food access based on two indicators, limited access to healthy foods and food insecurity. The index is based on a score of 0 (worst) to 10 (best). The first factor, limited access to healthy foods, measures the proportion of the population that is low income and does not live close to a grocery store. The second factor, food insecurity, measures the percentage of the population that did not have access to a reliable source of food during the past year. The food environment index in Shelby County (5.8) is worse than in both Tennessee (6.2) and the nation (8.6).

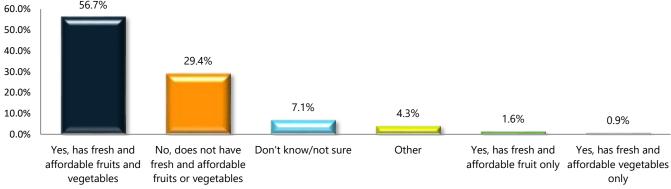
It is widely supported that physical activity joined with healthy eating can prevent health concerns. The majority of community survey participants consume both fruits and vegetables (95.3%). However, a notable proportion is only consuming fruits and vegetables one to two times per week. Most conveyed the reason for not consuming fruits and vegetables is that they do not like to eat them. Participants also reported grocery stores do not have affordable and fresh fruits and/or vegetables. Surprisingly, the majority of participants also report that a grocery store is close to their home and easy to access.

Figure 11. "In your opinion, does the convenience store, or corner store, or grocery stores have affordable and fresh fruits and/or vegetables?"

50.0%

50.0%

50.0%



Respondents could select more than one option, therefore the percentages may sum to more than 100.0%.



<sup>\*</sup> Respondents could select more than one option, therefore the percentages may sum to more than 100.0%.

Key informants reported what challenges people in the community face in trying to maintain a healthy lifestyle like exercising and eating healthy. Key informants identified the lack of needed resources, which surrounds the underlying theme of poverty in the community. The majority felt that there was a lack of safe opportunities for healthy lifestyle behaviors due to high crime and violence rates. Other key informants agreed that the community lacks access to healthy and affordable food options, even referring to the community as a food desert. The Centers for Disease Control and Prevention defines food deserts as areas that lack access to affordable fruits, vegetables, whole grains, low-fat milk, and other foods that make up a full and healthy diet. One participant reinforced these challenges stating, "Food deserts, unable to access healthy foods, lack of safe spaces for healthy exercise." Another community survey participant commented, "Address neighborhood conditions that impact health: housing, lack of safe places to exercise/play, lack of access to decent grocery stores, isolation, poor transportation system."

## **Cancer Screenings**

Screenings can assist in the early detection and treatment of many kinds of cancers. Community survey participants were asked if they receive routine screenings for Skin Cancer, Breast Cancer, Prostate Cancer, Oral/Throat Cancer and Colorectal Cancer. Over 61% of respondents had routine screenings for Breast Cancer, followed by Colorectal Cancer, Skin Cancer, and Oral/Throat Cancer.

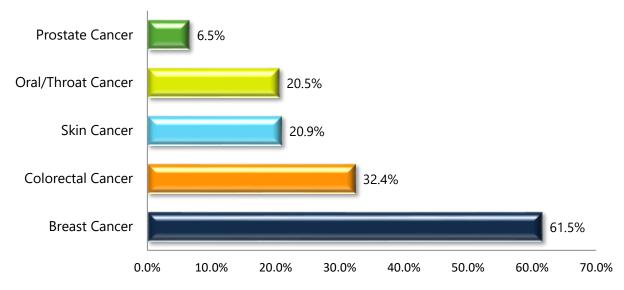


Figure 12. "Do you have a routine health screenings for the following:"

# V. Access to Care

This section illustrates the health coverage status of residents in Shelby County and highlights the barriers related to access to health care that contributes to poor health as identified by the secondary data, as well as primary research methods.

#### **Health Insurance Coverage**

Health insurance coverage can have a significant influence on health outcomes as those without health insurance tend to have worse access to care than people who are insured. Shelby County residents are more likely to be uninsured when compared to Tennessee, and the nation. However, the percentage of the population without health insurance coverage in Shelby County has decreased from 15.4% in 2010 – 2014 to 12.8% in 2013 – 2017.

Table 21. Health Insurance Coverage (2010 – 2014; 2013 – 2017)

	U.S.		Tennessee		Shelby County	
	2010 – 2014	2013 – 2017	2010 – 2014	2013 – 2017	2010 – 2014	2013 – 2017
With health insurance coverage	85.8%	89.5%	86.4%	89.1%	84.6%	87.2%
Private health insurance	65.8%	67.2%	64.6%	65.7%	61.1%	61.9%
Public coverage	31.1%	33.8%	33.7%	35.8%	33.0%	35.5%
Without health insurance	14.2%	10.5%	13.6%	10.9%	15.4%	12.8%

Source: U.S. Census Bureau

#### **Health Care Provider Access**

Based on county health rankings data, Shelby County received a ranking of 21 out of 95 for clinical care in 2018 finishing higher than the majority of counties in Tennessee. In particular, the ratio of primary care physicians and dentists to residents in Shelby County is better than Tennessee, but still worse than the National Benchmark. The mental health provider density in Shelby County (780:1) is slightly worse than the density in Tennessee (740:1), but much worse when compared to the National Benchmark density of 330:1.

Table 22. Health Care Provider Density<sup>a</sup> (2016; 2018)

	National Benchmark <sup>b</sup>		Tennessee		Shelby County	
	2016	2018	2016	2018	2016	2018
Clinical Care Rank					16	21
Primary care physician density	1,040:1	1,030:1	1,380:1	1,380:1	1,270:1	1,210:1
Dentist density	1,340:1	1,280:1	1,960:1	1,890:1	1,500:1	1,410:1
Mental health provider density	370:1	330:1	750:1	740:1	760:1	780:1

Source: County Health Rankings

Despite the provider ratios for Shelby County, key informants reported access to care as a significant issue. Very few key informants selected "Strongly Agree" or "Agree" for any of the Health Care Access statements. The ability to access primary care providers received the most positive response, but was far less than half of all responses. The availability of bilingual providers was of greatest concern as none of



<sup>&</sup>lt;sup>a</sup> Rank is based on all 95 counties within Tennessee State. A ranking of "1" is considered to be the healthiest.

<sup>&</sup>lt;sup>b</sup> National benchmark represents the 90th percentile, i.e., only 10% are better.

the respondents agreed with this statement. However, the availability of mental/behavioral health and substance abuse providers and transportation for medical appointments also received very low ratings.

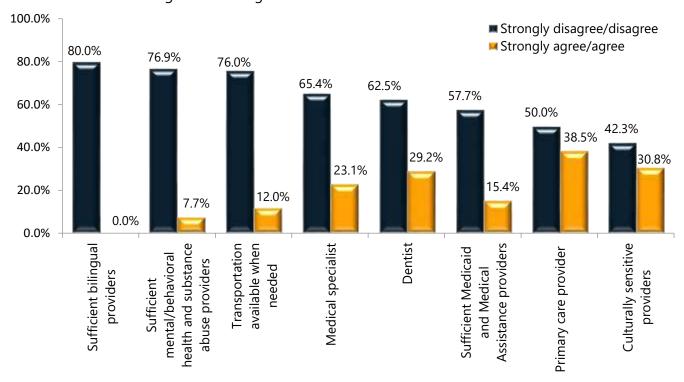


Figure 13. Ratings of Each Health Care Access Statements

See Appendix C: Key Informant Survey Tool, for full statement and response options.

Community survey participants did not report issues with accessing care. The ability of community survey participants to receive routine checkups and access the necessary health care was asked. The majority of participants report the ability to have visited a doctor for a routine checkup within the past year. In addition, 83% of participants selected "Yes" to having a primary care physician. Furthermore, 69% selected they go to the Doctor's office most often when sick. The majority also reported that they did not have any trouble getting care and did not have any issues preventing them from getting the necessary health care, which is surprising unless they are just not attempting to seek care.

# **Barriers to Accessing Health Services**

Understanding the perceived barriers the community faces in accessing health services is important in order to see the whole picture as to why people are avoiding or delaying health care. A large proportion of key informants indicated the inability to have basic needs met as the most commonly encountered barrier. Conversely, 77% of key informants selected "Basic needs not met" and choose it as the most significant barrier (42.3%). Furthermore, Lack of transportation was selected by 76.9% of key informants as well for being significant, but no one selected it as the most significant barrier. When asked to rate which one barrier is the most significant, key informants rated the Inability to navigate health care system (15.4%) and Lack of health insurance coverage (15.4%) as the second most significant.



Table 23. Ranking of the Top Barriers to Health Care Access by Key Informants

	Selected as a Barrier*	Selected as Most Significant
Basic needs not met (food/water/shelter/employment/environmental safety)	76.9%	42.3%
Lack of transportation	76.9%	0.0%
Lack of health literacy	73.1%	3.8%
Inability to navigate health care system	69.2%	15.4%
Inability to pay out-of-pocket expenses (co-pays, prescriptions, etc.)	69.2%	3.8%
Lack of health insurance coverage	69.2%	15.4%
Lack of trust	69.2%	0.0%
Availability of healthy food options	61.5%	3.8%
Emotional/physical stress	61.5%	3.8%
Language/cultural/racial/spiritual barriers	53.8%	0.0%

<sup>\*</sup>Respondents could select more than one option, therefore the percentages may sum to more than 100.0%.

Community survey participants ranked the barriers contrariwise from the key informants. While both key informants and community survey participants agreed that lack of transportation was one of the top three barriers, the most commonly encountered barrier among community survey participants was Cost/Paying Out of Pocket Expenses (81.0%), followed by Lack of Health Insurance Coverage.

Table 24. Most Significant Barriers Identified by Community Residents

	Selected as a Barrier*
Cost/Paying Out of Pocket Expenses (Co-pays, Prescriptions, etc.)	81.0%
Lack of Health Insurance Coverage	61.9%
Lack of Transportation	58.3%
Basic Needs Not Met (Food/Shelter)	47.0%
Difficult to Understand/Navigate Health Care System	40.2%
Lack of Trust	31.4%
Can't Find Doctor/Can't Get Appointment	27.6%
Language/Cultural Issues	26.6%
Lack of Child Care	22.8%
Not enough time	22.3%

<sup>\*</sup> Respondents could select more than one option, therefore the percentages may sum to more than 100.0%.

Community survey participants were also asked if they delayed getting needed medical care for any reasons in the past 12 months from a list of 10. The number one reason for delaying needed medical care by over half of the community residents was "No, I did not delay getting medical care/did not need medical care." The other reasons recognized include couldn't afford the out-of-pocket costs and couldn't get an appointment soon enough.



## **Resources Needed to Improve Access**

Both community survey participants and key informants were asked to identify key resources or services that are needed to improve access to health care in the community. Key informants were asked to identify if a series of healthcare resources or services were "Missing" (not available in the community), "Lacking" (available but not enough to meet needs) and/or "Not Affordable" (price may be a barrier in accessing service) in the community. If one thinks the resource or service is available and affordable, they could also select "Need Being Met" or "Don't Know". The three highest percentages in each category/column are colored orange in the table below.

Table 25. Ratings on Ability to Access Healthcare Resources or Services

Healthcare Resources/Services	Missing	Lacking	Not Affordable	Need Being Met	Don't Know
Advocacy for social needs (food security, housing, education, employment, etc.)	8.7%	65.2%	8.7%	13.0%	4.3%
Bilingual services	4.0%	76.0%	0.0%	4.0%	16.0%
Case management/social services	4.0%	68.0%	0.0%	16.0%	12.0%
Corporate health screenings/education programs (onsite for employees)	0.0%	24.0%	4.0%	40.0%	32.0%
Emergency care	0.0%	8.0%	32.0%	52.0%	8.0%
Federally qualified health centers (FQHCs)	0.0%	36.0%	0.0%	36.0%	28.0%
Food distribution	8.3%	66.7%	12.5%	8.3%	4.2%
Free/low cost dental care	12.0%	48.0%	8.0%	8.0%	24.0%
Free/low cost medical care	8.0%	76.0%	8.0%	4.0%	4.0%
Health education/information/outreach	8.3%	58.3%	4.2%	20.8%	8.3%
Healthy food options	12.0%	64.0%	16.0%	8.0%	0.0%
Home health care services	8.3%	45.8%	20.8%	4.2%	20.8%
Housing assistance	8.0%	56.0%	16.0%	12.0%	8.0%
Prescription assistance	12.5%	50.0%	8.3%	0.0%	29.2%
Mental health services	32.0%	60.0%	0.0%	4.0%	4.0%
Multicultural/bilingual healthcare providers	4.0%	76.0%	0.0%	4.0%	16.0%
Preventive health screenings (blood pressure, diabetes, stroke, etc.)	4.0%	48.0%	8.0%	20.0%	20.0%
Primary care services	4.3%	65.2%	17.4%	8.7%	4.3%
Specialty care services (cardiologist, neurologists, etc.)	8.3%	33.3%	37.5%	16.7%	4.2%
Substance abuse services	20.0%	60.0%	8.0%	4.0%	8.0%
Support group services	4.0%	72.0%	4.0%	8.0%	12.0%
Sexual health care	8.0%	68.0%	8.0%	12.0%	4.0%
Transportation	16.0%	72.0%	0.0%	12.0%	0.0%

Access to resources/services appears to be a significant issue in the community. The top three services selected by key informants as "Need Being Met" did not include any selection of "Missing." It seems that respondents felt these resources or services are meeting the needs of the community. Respondents listed Mental health services, Substance abuse services, Transportation, Prescription assistance, Healthy food options, Free/low cost dental care as "Missing." Key informants highest "Missing" resources or services did not reach over 32%. On average, respondents listed "Lacking" more often than any other



category. The top resources or services selected as "Lacking" are Free/Low Cost Medical Care, Bilingual services, and Multicultural/bilingual healthcare providers.

Community survey participants were asked to identify health-related resources or services that are missing in the community from a list of 25 resources or services. Over half of the community survey respondents ranked Free/Low Cost Dental Care and Free/Low Cost Medical Care as top "Missing" resources or services. The top "Missing" resources or services identified by community survey participants were Access to Affordable Fresh Fruits & Vegetables, Free/Low Cost Dental Care, Free/Low Cost Medical Care, Mental Health Services, and Transportation.

Table 26. Top Missing Resources/Services Identified by Community Residents

rable 201 reprinted by	
	Selected as Missing*
Access to Affordable Fresh Fruits & Vegetables	59.6%
Free/Low Cost Dental Care	50.7%
Free/Low Cost Medical Care	50.4%
Mental Health Services	50.2%
Transportation	44.0%
Free/Low Cost Vision/Eye Care	42.2%
Prescription Assistance	34.6%
Health and Wellness Education/Information/Outreach	33.4%
Housing	29.8%
Substance Abuse Services	29.8%

<sup>\*</sup> Respondents could select more than one option, therefore the percentages may sum to more than 100.0%.

#### **Underserved Populations**

Key informants were asked whether they thought there are specific populations who are not being adequately served by local health services in the community. An overwhelming majority of respondents (84.6%) indicated that there are specific underserved populations in the local community. Respondents felt that Low-income/poor, Black/African-Americans, and Hispanic/Latino were the populations not being adequately served. In addition, 84.6% of key informants indicated the Hospital Emergency Department as a primary place where uninsured or underinsured individuals go when they are in need of medical care.



#### VI. Challenges and Solutions

Key informants were asked to identify challenges people in the community face in trying to maintain healthy lifestyles. A variety of prominent issues in the community were recognized. The themes most commonly noted by respondents include high crime and violence, lack of access to affordable and healthy foods, and a lack of understanding and education of healthy lifestyles. Many key informants stressed that underlying factors, such as poverty and struggles to meet basic needs, may be connected to the barriers and health issues facing the community. A few comments appeared often from key informants are highlighted below:

"Often the biggest issue is the individual desire to live a healthy lifestyle. It is hard to change a lifestyle if everyone else in your life is living an unhealthy lifestyle - and unlikely to change. This is true for people at all socio-economic levels. It's great that we do have a number of programs making and attempting to make a difference - and they would likely tell you that it really does take someone willing to commit and remain committed to a healthy lifestyle."

"I have come to believe that the main challenge is a culture challenge. Memphians need to see other Memphians (like themselves) living healthy lifestyles. Grass root, neighborhood-focused efforts, with leadership from within the community that is mentored by those that can suggest strategies that work, is probably essential."

In order to get community and stakeholder input on how to address the health needs of the community, both key informants and community members were asked to provide suggestions and/or recommendations. Overwhelmingly, key informants felt organizations should be merging their resources and initiatives in an effort to implement a more collaborative approach to address the needs in the community. Conversely, 96% of key informants feel that their organization collaborates with other organizations/institutions on local efforts to improve health in the community. Community survey participants emphasized the need for more education and outreach. Participants also felt that improved access to affordable medical care, healthier food options, and transportation, should be a focus.

Consistent themes can be seen across the responses and feedback provided by key informants and community survey respondents. Overweight/obesity was selected as one of the main issues facing the community. The issue repeats in the barrier section, since the majority found that healthy food options are significant barriers. Compounding the obesity epidemic is the most significant barrier of Basic needs not met. Residents in the community do not feel safe, nor do they have appropriate access to basic needs, such as shelter, food, or water. These need to be addressed before other barriers can be tackled.

The community must feel safe in their neighborhoods to foster conditions that are conducive to healthy living before most issues identified in the report can be confronted. These issues can be the source of many additional health concerns for the community. When residents cannot have their basic needs met, they are unable to live healthy lives. Obesity is a preventable problem that can lead to many other, serious health issues. Addressing the underlying and foundational issues in the community could reduce the strain on the health care system and improve the health outcomes of the residents in the community.



#### **IDENTIFICATION OF COMMUNITY HEALTH NEEDS**

#### **Prioritization Session**

Regional One Health held a prioritization session on June 24, 2019, that included representatives from community organizations as well as key Regional One Health staff to review the results of the 2019 Community Health Needs Assessment. The goal of the meeting was to discuss and prioritize the health needs identified in the CHNA and to set the stage for community health improvement initiatives. A list of the attendees can be found in Appendix G.

#### **Process**

The meeting was facilitated by Holleran Consulting and began with an abbreviated research overview. The overview entailed the highlighted results of the secondary data research and key findings from the online key informant survey and excerpts from a community study conducted by the Shelby County Health Department.

Following the overview, participants were asked to consider, based on their expertise within the community, if anything was missing from the report that needed to be discussed. Conversation flowed as the community experts added their experience regarding social determinants of health and other challenges residents in Shelby County experience while trying to maintain their health. Throughout the discussion, a list of needs identified in both the CHNA findings, as well as the feedback received during the meeting, helped to create a "master list" of community priorities. Those priorities are listed below in alphabetical order:

- Access to Healthcare
- Cultural Flexibility
- Health Literacy
- Lack of Trust
- Maternal/Child Health
- Mental Health
- Obesity
- Poverty
- Sexually Transmitted Illness
- Transportation
- Unplanned Pregnancy
- Violence

Upon completion of the master list, participants were asked to rate each need based on two criteria. The criteria included seriousness of the issue and the ability to impact the issue. Respondents were asked to rate each issues on a 1 (not at all serious: no ability to impact) through 5 (very serious: great



ability to impact) scale. The ratings were gathered anonymously through an online voting platform. Each attendee submitted their responses through their own individual smart phones.

#### **Key Community Health Issues**

Based on the community voting, Regional One Health selected the following priorities for their 2019 - 2021 CHNA cycle:

- Access to Healthcare
- Health Literacy
- Mental Health (Resource Awareness)
- Violence

#### **COMMUNITY HEALTH IMPLEMENTATION STRATEGY**

#### **Strategies to Address Community Health Needs**

Regional One Health developed an Implementation Strategy to illustrate the hospital's specific programs and resources that support ongoing efforts to address the identified community health priorities. This work is supported by community-wide efforts and leadership from the Executive Team and Board of Directors. The goal statements, suggested objectives, key indicators, intended outcomes and initiatives, and inventory of existing community assets for each of the priority areas are listed in the grid below. Session participants can be found in Appendix H.

# Regional One Health Implementation Plan 2019 - 2021

Community Health Need	Goal/Initiative	<u>N - New</u> <u>E - Existing Programs/</u> <u>Initiatives</u> <u>P - Potential</u>	Partners working on the issue in the County	Expected Evaluation of Impact to Community Health Need	2019 - 2021 Status/Results
Access To Healthcare	Facilitate increased access to vulnerable patient populations in securing prescribed medications	E: Regional One Health S. Third Pharmacy  E: Expansion of medication assistance program for vulnerable older adults  E: One Health	<ul> <li>Regional One Health Foundation</li> <li>S. Third Primary Care Clinic</li> <li>Regional One Health Pharmacy</li> </ul>	<ul> <li>Number of prescriptions written at S. Third Primary Care and filled at the Regional One Health Pharmacy</li> <li>Number of patients 65 years of age and older enrolled in Medicare Part D receiving financial assistance with their prescription costs</li> <li>Number of prescriptions filled by Regional One Health outpatient pharmacy for One Health enrollees</li> </ul>	



					•	Number of Pharmaceutical Medication Assistance Program (PMAPs) applications completed
Access To Healthcare	Assist patients in improving their health status by providing services which address social barriers to holistic health	E: One Health E: Adult Special Care Clinic	•	Shelby County Social Service Agencies  Shelby County Community Foundations  Regional One Health Foundation  Government Agencies  Ryan White	•	Number of patients served by One Health Program  Number of One Health enrollees connected with community agencies  Number of Adult Special Care patients receiving support with their utilities
Access to Healthcare	Support patients of Regional One Health, with transportation challenges, who are in need of other non-emergent transportation, to and from medical appointments, and assist with addressing barriers to optimal health.	transportation vouchers	•	Explore potential partnerships with local rideshare companies  Provide transportation vouchers to target patient populations	•	Number of One Health enrollees using Ride Health transportation services    Number of trips provided  Average distance of trips   Number of bus or taxi vouchers distributed  Explore establishing partnerships to support non- emergent transportation to



			appo Healt  Find the second of	intments at Regional One ch primary care locations.  Reduction in patient noshow rates in primary care Number of times patient cransportation following a primary care appointment is delayed and primary care appointments canceled or missed because of cransportation issues  ber of patients provided tance with non-emergent portation through the cappoint care Clinic
Access to Healthcare	Provide wrap around services to patients to assist with maintaining their health	E: Adult Special Care E: One Health Food Pantry E: One Health Housing	<ul><li>Mental Health case</li><li>Providers service</li></ul>	
		E: One Health Screening for health benefits E: One Health Income	Service Agencies vouch Adult Cash Savers Vouchers for fresh fruits and One Hea	ber of food hers/cards issued to t Special Care patients  Ith: ber of unique individuals
		E: One Health: Substance Use Disorder SUD	serve United Healthcare	ed with food boxes ber of vouchers issued



<ul> <li>Mid-South Foodbank</li> <li>Number of patients screened for SNAP benefits</li> </ul>
Regional One Health
Foundation Board • Number of homeless
enrollees permanently housed
Community Alliance for
the Homeless • Number of One Health
Door of Hope Promise
or transitional housing
Mid -South Sober Living
Number of utility payments
Community Service made
Agency (CSA)
Number of patients linked to
MIFA health care insurance
Tester our emourance
QRS     Number of patients screened
Social Security and approved for Social
Administration Security Income
SOAR
Hospitality Hub     Number of patients assisted
Hope Works with job training
Hohe Mork?
Social Security     Number of patients linked to
,
Administration job opportunities
All: All All All All All All All All All
Alliance Healthcare     Number of patients with SUD     referred for Medication
Services referred for Medication
Assisted Treatment or
Serenity House treatment for alcohol use
Mid-South sober living disorder
First Step Recovery

			•	CAAPS	
Health Literacy	Educate the community regarding Healthy Living, with prioritized focus on nutrition	E: Regional One Health Community Health Day(s)  N: Initiation of outpatient medical nutrition therapy service for diabetic patients  P: Explore partnership to address food vulnerabilities, reducing obesity and promotions on healthy eating	•	Shelby County Health Department American Heart Association Regional One Health	<ul> <li>Initiation of outpatient medical nutrition therapy service by December 31, 2019</li> <li>Number of Regional One Health patients served through the medical nutrition therapy service</li> <li>Number of patients in Regional One Health primary care clinics receiving assistance with accessing quality foods through a Regional One Health established partnership.</li> <li>Number of meals packaged and provided to Mid-South Food Bank</li> <li>Number of lives touched through health fairs supported and sponsored by Regional One Health</li> <li>Number of individuals served through the One Health food pantry and distributed vouchers</li> </ul>
Health Literacy	Educate families regarding prenatal care, benefits of breastfeeding, how to care	E: Childbirth education; March of Dimes family support; Baby and Children	•	Regional One Perinatal Center	Establishment of a second     Centering Pregnancy location



	for a newborn, and parenting	Expos and Centering Pregnancy Program	•	Regional One Maternal Fetal Medicine	•	Number of expectant mothers participating in the Center Pregnancy Support
			•	Shelby County Health Department	•	Classes  Number of expectant
			•	March of Dimes		mothers enrolled in Regional One Health prenatal
			•	Regional One OB/GYN providers		education and childbirth program
			•	Shelby County Schools	•	Percentage of mothers who are breastfeeding at
			•	Hollywood Primary Care	•	Number of persons reached at community events with a
			•	Others to be determined		specific focus on maternal and infant health
					•	Number of infants receiving milk from the established Milk Depot
Mental Health	Regional One Health does not provide mental health services but is committed to	E: One Health Connect	•	Regional One Health  Alliance Health	•	Identification of community resources to assist mental health patients
	assisting their patients with obtaining access to needed behavioral health services.		•	Cocaine Alcohol Awareness Program (CAAP)	•	Percentage of One Health patients with a behavioral health need who receive treatment
			•	Case Management Inc. Shelby County Mental Health Providers	•	Number of patients/clients from Adult Special Care,



			•	Shelby County Social Service Agencies		primary care clinics and HVIP referred to behavioral health providers	
Violence	Assist victims of violence who present to Regional One Health's Trauma Center to secure job placement, shelter, food, and other support services as needed	E: HVIP-Violence Intervention Program E: TBI-Brain Injury Program	•	901 BLOC  Crime Victim's and Rape Crisis Center  GED Programs	•	Percent of potential clients enrolled in the HVIP program Active clients enrolled in HVIP	
			•	Local colleges and universities  NAMI - National Association for Mental	•	Number of active HVIP clients securing employment or completing educational training, annually	
			•	Illness  Moms Demand Action			
			•	Memphis Police Department Family Safety Center			

#### APPENDIX A. SECONDARY DATA SOURCES

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#### APPENDIX B. SECONDARY DATA TERMINOLOGY

#### **Definitions**

<u>Age-Adjusted Rate</u> - Age-adjustment is a statistical process applied to rates of disease, death, injuries or other health outcomes, which allows populations with different age structures to be compared.

<u>Behavioral Risk Factor Surveillance System (BRFSS)</u> - Ongoing surveillance system with the objective to collect uniform, state-specific data from surveys on adults' health-related risk behaviors, chronic health conditions, and use of preventive services.

<u>Crude Rate</u> - Expresses the frequency in which a disease or condition occurs in a defined population in a specified period of time, without regard to age or sex.

<u>Determinants of Health</u> - The personal, social, cultural, economic and environmental factors that influence the health status of individuals or populations.

**Family** - Defined as a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption.

**<u>Frequency</u>** - Often denoted by the symbol "n," frequency is the number of occurrences of an event.

**<u>Health</u>** - A state of complete physical, mental, and social well-being and not just the absence of disease or infirmity.

**Health Disparities** - Indicate the difference in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exists among specific population groups.

<u>Health Outcomes</u> - A medical condition or health status that directly affects the length or quality of a person's life. These are indicators of health status, risk reduction, and quality of life enhancement.

<u>Housing Unit</u> - A house, an apartment, a mobile home, a group of rooms, or a single room occupied (or if vacant, intended for occupancy) as separate living quarters.

<u>Household</u> - All the people who occupy a housing unit, including related family members and all the unrelated people who may be residing there. Examples include college students sharing an apartment or a single male living alone.

<u>Householder</u> - One person in each household is designated as the householder. In most cases, the householder is the person, or one of the people, in whose name the housing unit is owned or rented (maintained). The two major categories of householders are "family" and "nonfamily."

<u>Incidence Rate</u> - Refers to the number of individuals who develop a specific disease or experience a specific health-related event during a particular time period.

<u>Infant Mortality Rate</u> - Defined as the number of infant deaths per 1,000 live births per year. Infant is defined as being less than one year of age.

**Low Birth Weight (LBW)** – Indicates a birth weight less than 5 pounds 3 ounces (2,500 grams).

<u>Morbidity</u> - Refers to the state of being diseased or unhealthy within a population.



**Mortality** - Number of deaths occurring in a given period in a specified population.

**Neonatal Mortality Rate** - Defined as the number of infant deaths from birth up to but not including 28 days of age per 1,000 live births per year.

**<u>Post-Neonatal Mortality Rate</u>** - Defined as the number of infant deaths occurring from 28 days up to but not including 1 years of age per 1,000 live births per year.

<u>Poverty Guidelines</u> - A version of the federal poverty measure issued each year in the <u>Federal Register</u> by the Department of Health & Human Services. The guidelines are a simplification of the poverty thresholds used for administrative purposes (i.e. determining eligibility for certain federal programs).

<u>Preterm</u> - Births delivered less than 37 completed weeks of gestation based on obstetric estimate of gestation.

**<u>Prevalence</u>** - The total number of individuals in a population who have a disease or health condition at a specific period of time, usually expressed as a percentage of the population.

**Quality of Life** - Degree to which individuals perceive themselves as able to function physically, emotionally, and socially.

**<u>Rate</u>** - A measure of the intensity of the occurrence or frequency with which an event occurs in a defined population. Rates are generally expressed using a standard denominator such as per populations of 1,000, 10,000 or 100,000.

<u>Size of Household</u> - Includes all the people occupying a housing unit.

<u>Size of Family</u> - Includes the family householder and all other people in the living quarters that are related to the householder by birth, marriage, or adoption.

**Socioeconomic Status (SES)** - A composite measure that typically incorporates economic, social, and work status. Examinations of socioeconomic status often reveal inequalities in access to resources.

**Very Low Birth Weight (VLBW)** - Indicates a birth weight less than 3 pounds 5 ounces (1,500 grams).

<u>Vital Statistics</u> - Systematically tabulated data derived from certificates and reports of births, deaths, fetal deaths, marriages, and divorces, based on the registration of these vital events.

**Years of Potential Life Lost (YPLL)** - A measure of premature mortality or death on a population, calculated as deaths that occur before some predetermined minimum or desired life span (usually age 75, which is the average life span).

**Youth Risk Behavior Surveillance System (YRBSS)** - A national school-based survey that provides ongoing surveillance to monitor health-related behaviors that contributes to the leading causes of death and disability among youth.



#### APPENDIX C. KEY INFORMANT SURVEY TOOL



## **Key Informant Online Questionnaire**

#### **INTRODUCTION**

As part of its ongoing commitment to improving the health of the communities it serves, Regional One Health is partnering with the Shelby County Health Department and multiple healthcare systems to conduct portions of a comprehensive Community Health Needs Assessment.

The results of the survey will be compiled and shared with all of the organizations in the CHNA Collaboration including Shelby County Health Department, Baptist Memorial Health Care Corporation, Methodist LeBonheur Healthcare, and St. Jude Children's Research Hospital.

The survey should take about 10-15 minutes to complete. Please be assured that all of your responses will go directly to our research consultant, Holleran Consulting, and will be kept strictly confidential. Please note that while your responses, including specific quotations, may be included in a report of this study, your identity will not be directly associated with any quotations.

You have been identified as an individual with valuable knowledge and opinions regarding community health needs, and we appreciate your willingness to participate in this survey.

When answering the questions, please consider the community and area of interest to be the communities surrounding Shelby County.

#### **KEY HEALTH ISSUES**

۱.	Thinking of all the areas that you feel make up a healthy community, would you describe the communities surrounding Regional One Health as healthy?
	<ul> <li>Yes</li> <li>No</li> <li>Don't know</li> </ul>
2.	In general, how would you rate your community's overall health status?    Excellent   Good   Average   Poor   Very poor

3. What are the top 5 health issues you see in your community? (CHOOSE 5)



Accessing health care services	Respiratory diseases
Alzheimer's disease/dementia	Sexually transmitted diseases including HIV/AIDS
Cancer	☐ Stroke
Diabetes	Substance abuse
Heart disease	Suicide
Maternal, infant, and child health	Teen pregnancy
Mental health	☐ Tobacco use
Oral health	Unintentional injuries and violence including domestic
Overweight/obesity	violence, firearm-related violence, and motor vehicle
Other (specify):	accidents
4 Of these health issues mentioned which i	1: 4b
4. Of those health issues mentioned, which 1	is the most significant? (CHOOSE 1)
Accessing health care services	Respiratory diseases
Alzheimer's disease/dementia	Sexually transmitted diseases including HIV/AIDS
Cancer	☐ Stroke
Diabetes	Substance abuse
☐ Heart disease	Suicide
Maternal, infant, and child health	☐ Teen pregnancy
Mental health	Tobacco use
Oral health	<ul> <li>Unintentional injuries and violence including domestic</li> </ul>
Overweight/obesity	violence, firearm-related violence, and motor vehicle
Other (specify):	accidents
<ol><li>What resources are available in the com</li></ol>	nmunity to address the health issues you identified?
Diama dana and distant information	
<ol><li>Please share any additional information the box below:</li></ol>	regarding these health issues and reasons to support your response in
the box below:	

#### **ACCESS TO CARE & BARRIERS**

7. On a scale of strongly disagree through strongly agree, please rate each of the following statements about **Health Care Access** in the community.

Strongly Disagree ← → Strongly Agree

Residents in the area are able to access a primary care provider when needed. (Family Doctor, Pediatrician, General Practitioner)	☐ Strongly Disagree ☐ Disagree ☐ Neither Agree nor Disagree ☐ Agree ☐ Strongly Agree
Residents in the area are able to access a medical specialist when needed. (Cardiologist, Dermatologist, Neurologist, etc.)	☐ Strongly Disagree ☐ Disagree ☐ Neither Agree nor Disagree ☐ Agree ☐ Strongly Agree
Residents in the area are able to access a dentist when needed.	☐ Strongly Disagree ☐ Disagree ☐ Neither Agree nor Disagree ☐ Agree ☐ Strongly Agree
There are a sufficient number of providers accepting Medicaid and Medical Assistance in the area.	☐ Strongly Disagree ☐ Disagree ☐ Neither Agree nor Disagree ☐ Agree ☐ Strongly Agree
There are a sufficient number of bilingual providers in the area.	☐ Strongly Disagree ☐ Disagree ☐ Neither Agree nor Disagree ☐ Agree ☐ Strongly Agree
Providers in the area are culturally sensitive to race, ethnicity, and cultural preferences of patients.	☐ Strongly Disagree ☐ Disagree ☐ Neither Agree nor Disagree ☐ Agree ☐ Strongly Agree
There are a sufficient number of mental/behavioral health and substance abuse providers in the area.	☐ Strongly Disagree ☐ Disagree ☐ Neither Agree nor Disagree ☐ Agree ☐ Strongly Agree
Transportation (public, personal, or other service) for medical appointments and other services is available to area residents when needed.	☐ Strongly Disagree ☐ Disagree ☐ Neither Agree nor Disagree ☐ Agree ☐ Strongly Agree



Re	egional One Health – Final Summary Report	June 2019
8.	What are the <b>MOST</b> significant barriers that keep people in the community from accessing he they need it? (Select all that apply)	alth care when
	Availability of health and wellness programs/education  Availability of healthy food options  Availability of providers/appointments  Basic needs not met (food/water/shelter/employment/environmental safety)  Emotional/physical stress  Inability to navigate health care system  Inability to pay out-of-pocket expenses (co-pays, prescriptions, etc.)  Lack of health insurance coverage  Lack of health literacy  Lack of preventive health care (screenings, annual check-ups, etc.)  Lack of safe parks/recreation outlets  Lack of social support (family, friends, social network)  Lack of trust  Language/cultural/racial/spiritual barriers  Time limitations (long wait times, limited office hours, time off work)  None/no barriers  Other (specify):	
9.	Of those barriers mentioned, which 1 is the most significant? (CHOOSE 1)  Availability of health and wellness programs/education Availability of healthy food options Availability of providers/appointments Basic needs not met (food/water/shelter/employment/environmental safety) Emotional/physical stress Inability to navigate health care system Inability to pay out-of-pocket expenses (co-pays, prescriptions, etc.) Lack of health insurance coverage Lack of health literacy Lack of preventive health care (screenings, annual check-ups, etc.) Lack of safe parks/recreation outlets Lack of social support (family, friends, social network) Lack of trust Language/cultural/racial/spiritual barriers Time limitations (long wait times, limited office hours, time off work) None/no barriers Other (specify):	
10	Please share any additional information regarding barriers to health care in the box below:	



11. Are there s services?	pecific populations in t	his community that you	think are not being adequately served by local health
☐ No			
IF YES: W	nich populations are un	derserved? (Select all	that apply)
	American Indian/Alas Asian/Pacific Islander Black/African America Children/youth Disabled Families Hispanic/Latino Homeless where do you think M d of medical care? (CH	OST uninsured and und	Immigrant/refugee LGBTQ+ community Low income/poor Men Women Seniors/elderly Uninsured/underinsured Other (specify): derinsured individuals living in the area go when they
		Doctor's office Health clinic/FQHC Hospital emergency of Walk-in/urgent care Don't know Other (specify):	

#### **SOCIAL DETERMINANTS OF HEALTH**

Social Determinants of Health, defined by Healthy People 2020, are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, function, and quality-of-life outcomes and risks.

13. On Please rate the quality of the following 5 key areas of **Social Determinants of Health** within the community using a scale of very poor through excellent. An N/A option is provided if you have no experience with the area or have no opinion.

Very Poor ←→ Excellent ☐ Very Poor ☐ Poor **Economic stability** ☐ Average poverty, employment, food security, housing stability ☐ Good ☐ Excellent □ N/A ☐ Very Poor **Education** Poor early childhood education and development, enrollment in ☐ Average ☐ Good higher education, high school graduation, language and ☐ Excellent literacy □ N/A ☐ Very Poor Poor Social and community context Average social cohesion, civic participation, perceptions of ☐ Good discrimination and equity, incarceration/institutionalization ☐ Excellent □ N/A Very Poor Neighborhood and built environment Poor access to foods that support healthy eating patterns, quality ☐ Average ☐ Good of housing, crime and violence, environmental conditions, ☐ Excellent transportation  $\square$  N/A ☐ Very Poor Poor Health and health care Average Good access to health care, access to primary care, health literacy Excellent □ N/A

#### MISSING RESOURCES/SERVICES

14. For each Healthcare Resource/Service listed, please select whether you think it is missing (not available), lacking (available but not enough to meet needs) or not affordable (price may be a barrier in accessing service) within the community. If you think the service is available and affordable, please select the need being met.

Healthcare Resources/Services	Missing	Lacking	Not Affordable	Need Being Met	Don't Know
Advocacy for social needs (food security, housing, education, employment, etc.)					
Bilingual services					
Case management/social services					
Corporate health screenings/education programs (on-site for employees)					
Emergency care					
Federally qualified health centers (FQHCs)					
Food distribution					
Free/low cost dental care					
Free/low cost medical care					
Health education/information/outreach					
Healthy food options					
Home health care services					
Housing assistance					
Prescription assistance					
Mental health services					
Multicultural/bilingual healthcare providers					
Preventive health screenings (blood pressure, diabetes, stroke, etc.)					
Primary care services					
Specialty care services (cardiologist, neurologists, etc.)					
Substance abuse services					
Support group services					
Sexual health care					
Transportation					

15. Please share any additional information regarding the need and accessibility of healthcare resources of	and/or
services for individuals living in the community in the box below:	
	]

#### **OPEN-ENDED: CHALLENGES & SOLUTIONS**

- 16. What challenges do people in the community face in trying to maintain healthy lifestyles like exercising and eating healthy and/or trying to manage chronic conditions, such as diabetes or heart disease?
- 17. In your opinion, what is being done **well** in the community in terms of health and quality of life? (Community Assets/Strengths/Successes)
- 18. What recommendations or suggestions do you have to improve health and quality of life in the community?

DEMOGRAPHICS
Please answer the following demographic questions.
19. Which one of these categories would you say <u>BEST</u> represents your community affiliation? (CHOOSE 1)
Business sector Childcare/youth services Community member Education Faith-based/cultural organization Government/housing/transportation sector Health care/public health organization Mental/behavioral health organization Non-profit/social services Other (specify):
20. Are there any specific populations within the community that your organization serves? (Select all that apply)
American Indian/Alaska Native   Immigrant/refugee   Asian/Pacific Islander   LGBTQ+ community   Black/African American   Low income/poor   Children/youth   Men   Disabled   Women   Families   Seniors/elderly   Hispanic/Latino   Uninsured/underinsured   Homeless   Other (specify):  21. My organization collaborates with other organizations/institutions on local efforts to improve health in the community.   Yes   No   Don't know
CLOSING
Regional One Health and its partners will use the information gathered through this survey in guiding their community health improvement activities. Please share any other feedback you may have for them below:

Thank you! That concludes the survey.



# **APPENDIX D. KEY INFORMANT PARTICIPANTS**

Name	Agency/Organization
James Armfield	New Memphis
Jenny Bartlett-Prescott	Church Health Center
Katherine Bell-Anthony	UnitedHealth Group
Cynthia Bradford	Baptist Memorial Health Care Corporation
Amy Campbell	University of Memphis School of Law
Nancy Coffee	New Memphis
Gary Cook	Methodist/LeBonheur
Sadie Cushman	Shelby County Schools
Dr. Emilee Dobish	UT Health Sciences Center
Dr. Kathleen Forbes	Methodist/LeBonheur
Kiki Hall	Common Table Health Alliance
Dr. Alisa Haushalter	Shelby County Health Department
David Jordan	AGAPE Child & Family Services
Kathryn Leopard	CHOICES
Marian Levy	University of Memphis School of Public Health
Dr. Jon McCullers	UT Health Sciences Center
Mayor Keith McDonald	City of Bartlett Government
Susan M. Mills	Goodwill Homes Community Services
Rebecca Terrell	CHOICES
Cristie Travis	Memphis Business Group on Health
Jill Turner	New Memphis
Jennilyn Utkov	Methodist/LeBonheur
David Williams	Leadership Memphis
Dr. Jason Yaun	Memphis and Mid-South Pediatric Society
Dr. Jan Young	Assisi Foundation
Dr. Lin Zhan	University of Memphis College of Nursing

#### APPENDIX E. COMMUNITY SURVEY TOOL

# **Community Health Needs Assessment Survey**

The Shelby County Health Department is collaborating with three of the largest health care providers in the area to conduct a county-wide Community Health Needs Assessment (CHNA). The ultimate goal of the CHNA collaboration is to assess our community's health care needs in order to coordinate community-wide health care improvement efforts. Your input is <u>VITAL</u>. This survey will take approximately 20-25 minutes to complete and your individual responses will remain completely anonymous. The results of the survey will be compiled and shared with all of the organizations in the CHNA Collaboration: **Shelby County Health Department, Baptist Memorial Health Care Corporation, Methodist LeBonheur Healthcare and St. Jude Children's Research Hospital.** 

The CHNA is an online survey, and is offered in three languages to be accessible to everyone in our community. Links to the surveys are below. Please take the time to click on the appropriate language link and complete this survey. Your valuable input will help us assess health care needs in our community!

http://www.shelbytnhealth.com/CivicAlerts.aspx?AID=48



# APPENDIX F. DEMOGRAPHIC PROFILE – COMMUNITY SURVEY RESPONDENTS

Table 1. Demographic Information of Community Survey Respondents

Demographics	
Gender	
Female (n=507)	88.0%
Male (n=69)	12.0%
Age	
18 – 24 (n=26)	4.5%
25 – 34 (n=126)	22.0%
35 – 44 (n=119)	20.7%
45 – 54 (n=127)	22.1%
55 – 64 (n=131)	22.8%
65+ (n=45)	7.8%
Race/Ethnicity	
American Indian or Alaska Native (n=8)	1.4%
Asian/Pacific Islander (n=11)	1.9%
Black/African American (n=232)	40.2%
Hispanic or Latino (n=5)	0.9%
White (n=314)	54.4%
Other (n=7)	1.2%

Table 1 Cont'd. Demographic Information of Community Survey Respondents

Demographics	
Highest Level of Education	
Some school, but no diploma (n=6)	1.0%
High school diploma or GED (n=36)	6.3%
College, but no degree (n=59)	10.3%
Associate's degree (n=67)	11.7%
College graduate (n=197)	34.3%
Graduate or professional-level degree (n=200)	34.8%
Other (n=10)	1.7%
<b>Employment Status</b>	
Disabled, not able to work (n=8)	1.4%
Employed, working full-time (n=490)	84.9%
Employed, working part-time (n=36)	6.2%
Homemaker (n=9)	1.6%
Retired (n=19)	3.3%
Student (n=6)	1.0%
Unemployed (n=9)	1.6%
Annual Household Income	
Less than \$10,000 (n=17)	3.0%
\$10,000-\$14,999 (n=7)	1.2%
\$15,000-\$19,999 (n=6)	1.1%
\$20,000-\$24,999 (n=22)	3.9%
\$25,000-\$34,999 (n=49)	8.7%
\$35,000-\$49,999 (n=89)	15.7%
\$50,000 or more (n=376)	66.4%

Table 2. Source of Health Insurance of Community Survey Respondents

Health Insurance or Health Coverage Source*	
Employer sponsored (n=484)	85.4%
Medicaid or TennCare (n=19)	3.4%
Medicare (n=35)	6.2%
Tricare (n=16)	2.8%
Other (n=40)	7.1%

<sup>\*</sup> Respondents could select more than one option, therefore the percentages may sum to more than 100.0%.



# **APPENDIX G. PRIORITIZATION SESSION PARTICIPANTS**

Name	Agency/Organization		
Angela Adair	Regional One Health		
Hollie Anderson	Regional One Health		
Kim Bell	Regional One Health		
Susan Cooper	Regional One Health		
Dr. Reginald Coopwood	Regional One Health		
D'Arcy Deveaux	Regional One Health		
Pastor Walter Green			
Holly Ford	American Heart Association		
Sheena Freeman	Regional One Health		
Kiki Hall	Common Table Health Alliance		
Summer Hardy	Regional One Health		
Pastor Justin Holloway			
Angela Hughes	Regional One Health		
Matt Koyak	Regional One Health		
Dr. Patrick Malone	Regional One Health		
Cynthia Nunnally	Shelby County Health Department		
Audra Owens	Regional One Health		
Lisa Schafer	Regional One Health		
Cris Stovall	Christ Community		
Tish Towns	Regional One Health		
Rick Wagners	Regional One Health		
Allison Vance	Regional One Health		

# **APPENDIX H. IMPLEMENTATION STRATEGY PARTICIPANTS**

Name	Agency/Organization		
Jehan Ellis	Regional One Health		
Sheena Freeman	Regional One Health		
Kiki Hall	Common Table Health Alliance		
Summer Hardy	Regional One Health		
Karen Hill	March of Dimes		
Angela Hughes	Regional One Health		
Cynthia Nunnally	Shelby County Health Department		
Tammie Ritchey	Regional One Health		
Tish Towns	Regional One Health		

## **APPENDIX I. 2016 IMPLEMENTATION STRATEGY OUTCOMES**

# **Regional One Health**

Implementation Strategy Outcomes

Community Health Need	Objectives/Program Description(s)	Programs/ Initiatives <sup>*</sup>	Existing/Potential Partnerships	Expected Measures and/or Outcomes	2016 – 2019 Results
	Back To School health fair, providing	E: HVIP (provide	Riverview K8	Reduction in patient	Regional One Health's
	screenings for students returning to	bus vouchers and	School	wait times at Project	Community Education Fair at S.
	school	taxi service for		Phoenix	Third provided health
		appointments);	SCHD Lead Testing		information, as well as eye
	HVIP: violence intervention program	MedAssist; MVA		Reduction in Shelby	exams/hearing tests/dental
		Vendor;	SNAP	County uninsured rate	cleanings to approximately 300
	Project Phoenix: patient through-put	Newborn and			individuals.
	analysis	Presumptive	Dental Exams	Reduction in Level 1	
		TennCare eligibility		Emergency	Patient Medication Assistance
	Interview all self-pay patients to see if	enrollment; PFS		Department visits	Program (PMAP) has served 291
Access to	they meet certain criteria for	Charity Program;			patients in FY 2019, equating
Healthcare	state/federal programs	PMAP (Patient			\$70,752.87 in medicines
neartificare		Medication			provided to patients.
	Disability Vendor: collaborates with	Assistance			
	MedAssist to assist patients following	Program)			PFS (Patient Financial Services)
	catastrophic injuries to help patients				Charity Program served 3,711
	get social security and disability	<b>N:</b> Community Day at South Third;			patients totaling in \$217,012,148
	MVA Vendor: follow auto accident	Project Phoenix;			Disability Vendor has assisted
	patients with interviews and collect	Disability Vendor;			385 patients
	auto insurance information, they review	One Health			
	patient to see if they qualify for any				
	state/federal program				
Child and	Various classes to address the	E: Childbirth	March of Dimes	Reduction in infant	Regional One Health has offered
Family	childbirth process, nutrition of the baby	Education; March		mortality	56 tours of the birth facility, as



Health	and mother, breastfeeding process, and	of Dimes Family	A Step Ahead		well as childbirth classes since
	how to care for a newborn	Support;	Foundation	Increase knowledge of	the 2 <sup>nd</sup> quarter of 2019.
	<ul> <li>Early Prenatal Classes, Preparing</li> </ul>	Hollywood/March		prenatal education	·
	for childbirth classes,	of Dimes	Austin Milk Bank	and infant safety	Meal Packing Events: Regional
	Breastfeeding Classes, Nutrition/	Supportive			One Health has packaged 30,000
	Fit4Mom/ Yoga, Dynamic Dads,	Pregnancy	MidSouth Food	Increase percentage	meals in partnership with
	Newborn Care Classes	Program; Meal	Bank	of mothers	MidSouth Food Bank for
		Packing Events;		breastfeeding at	distribution to Memphians
		Baby and Kids		discharge	
		Expo			Milk Depot Donations
					■ 11 donors in 2018
					■ Total ounces from donors = 6,742
	DSME: course aimed at educating		Area high schools	Improvement in self-	DSME: 289 patients educated
	patients with Diabetes in an effort to		and colleges	management of	
	make them self-sufficient and able to				2,180 clients served (an average
	properly care for themselves at home		New Memphis	compliance	of 190 clients per quarter)
	Health Fairs: offers health education		LITE Memphis	Reduction in visits to	2,871 trauma-informed staff
	materials to community partners,			the Level 1 Emergency	trained (an average of 258 per
	including Diabetes, heart health and		NAHSE (National	Department	quarter)
	breast health		Association for		
Health			Health Service	Decrease disparities	
Literacy	Trauma: outreach staff work with		Executives)	within healthcare by	
	community partners to educate around			increasing health	
	injury prevention and safety		Merck: provides	education and	
			Equity of Care	awareness	
	TBI: concussion awareness and		health education		
	education of family members, as well as		materials which are	Increase access to	
	trains/teaches other clinicians how to		distributed	healthcare through	
	work with TBI patients		throughout the	job readiness	
			community		
	Community Engagement (job				



Sexually Transmitted Diseases	readiness) in partnership with organizations like NAHSE, engage with students to help prepare them for the workplace by trainings geared toward improving interviewing skills STI Counseling and condom distribution by kits containing male condoms, female condoms, dental dams and lubricant	<b>E:</b> Adult Special Care	Friends for Life  A Step Ahead Foundation	76% of ASC patients are virally suppressed, performance measure is 80%	<ul> <li>2017: 403 kits distributed</li> <li>2018: 180 kits distributed</li> <li>2019 (Jan-April): 56 kits distributed</li> </ul>
Violence	HVIP: Violence Intervention Program - work with victims of violence who present to Regional One Health's Trauma Center  Assists patients with job placement, shelter, food, and other services as needed  TBI: Traumatic Brain Injury Program - works with individuals who have acquired a TBI  Assists patients with support groups, and other services as needed	E: HVIP-Violence Intervention Progam; TBI-Brain Injury Program; Intimate Partner Screening; Block Party for Peach (Frazier Community)	901 BLOC  Crime Victim's and Rape Crisis Center  GED Programs  Local colleges and universities  NAMI - National Association for Mental Illness  Moms Demand Action  Memphis Police Department  Family Safety Center	Reduction in repeat intentional injuries  Reduction in Level 1 Emergency Department visits  Decrease retaliation referrals to safe places  Reduction in unemployment levels of HVIP and TBI patients  Increase education levels of HVIP and TBI patients	HVIP staff has reviewed more than 700 victims of violence who presented to Regional One Health in 2019.  360 of those individuals have been screened and were presented with the opportunity to receive assistance from a trained-informed staff member  17 clients enrolled during FY 2019

<sup>\*</sup>N=New, E=Existing Programs/ Initiatives, P=Potential



## **APPENDIX J. 2013 IMPLEMENTATION STRATEGY OUTCOMES**

# Regional One Health's 2013 – 2016 Community Health Needs Assessment

Prioritized Community Health Need	Objectives/Program Description(s)	Programs/ Initiatives <sup>*</sup>	Existing/Potentia I Partnerships	Expected Measures and/or Outcome	2013 - 2016 Status/Results
Teen Pregnancy	Community based program providing education regarding early prenatal care for pregnant teens and emphasizing staying in school. The program also educates adolescents on pregnancy prevention.	<b>E:</b> Sunrise Program	University of Tennessee Health Sciences Center (UTHSC) State of Tennessee	Reduction in teen pregnancy rate	Regional One Health is continuing to provide support and education to young mothers through the Sunrise Program. The teenage pregnancy rate is declining. This decline is attributed to a number of factors and initiatives throughout the community. The Sunrise Program is one of several initiatives. Approximately 180 young moms are served each year.
Infant Mortality	The focus of the Regional Perinatal Center is to improve birth outcomes and decrease infant mortality. The center serves numerous needs in its work to reduce infant mortality and improve birth outcomes, including education and training to healthcare professionals throughout the region.  Centering Pregnancy Program provides prenatal care and education in a group setting focused on women with previous preterm issues, demographic and social	E: Regional Perinatal Center; Sunrise Program; NICU Community Outreach; Worth the Wait; Safe to Sleep Program Lactation Peer Counselors N: Milk Depot	Shelby County Health Department  Healthy Memphis Common Table***  UTHSC  Tennessee Department of Health	Reduction in infant mortality rates by reducing the number of births before 39 weeks gestation  Reduction in the number of sleep related	Regional One Health is continuing to partner with several organizations and agencies to support healthy deliveries and reduce the community's Infant Mortality Rate (IMR). Regional One Health continues to maintain a strong partnership with the March of Dimes by providing both human and financial support and partnering on initiatives to address infant



	risk factors.		March of Dimes	deaths by	mortality, pre-term deliveries
				focusing on	and other pregnancy related
	NICU Community Outreach Program		Mother's Milk	prenatal	matters. The IMR is Shelby
	provides parenting classes, childbirth		Bank	education	County has declined
	classes and prenatal education classes				significantly during the last
	both at Regional Medical Center and in				decade, and while it is still
	the community.				higher that the national rate of
	and community.				6.7, progress has been and is
	Lactation Peer Counselors are volunteers				still being made.
	who meet with new moms to help them				• In 2015, 75% of our NICU
	understand breastfeeding alternatives.				families received supportive
	anderstand breastreeding alternatives.				educational materials
	Milk Depot: in partnership with Mothers				615 family members were
	Milk Bank, Regional One Health has				educated through our Family
	opened a repository where nursing				Support Program during our
	mothers can donate milk.				101 Core Curriculum
	mothers can donate milk.				education sessions
	Worth the Wait Program, through the				477 families and babies and
	March of Dimes, focuses on the				48 staff members logged
	elimination of elective deliveries before				more than 260 skin to skin
	39 weeks gestation through patient and				holding hours during our
	provider education.				2015 Kangaroo-a-Thon, a
					program designed to
	Safe to Sleep Program focuses on				promote and educate on the
	reducing the risk for SIDS and other				practice of skin- to-skin-
	sleep-related deaths, such as suffocation.				holding
					Annually 3,700 new moms
					receive education through
					the Safe to Sleep Program
					More than 100 expectant
					mothers participate in the
					Worth the Wait program,
					annually
HIV/AIDS	Regional Medical Center's Adult Special	<b>E:</b> Ryan White	Ryan White	Reduction in	Regional One Health continues
	Care Center provides primary and	Grant funding;	Planning	HIV/AIDs	to operate its Adult Special Care



	specialty care; mental health services;	Tennessee	Council	death rate	Center, and has maintained the
	medical case management and pharmacy	Center of			Center's state designation as a
	services for HIV/AIDs patients.	Excellence;	Tennessee	Improvements	Center of Excellence.
	·	24-hour HIV	Department of	in chronic	• From 2010 – 2014, the HIV
		screenings in	Health	disease	rate in Shelby County
		the ED; Wrap		management	declined by 5 percentage
		Around	Shelby County		points.
		Services; and	Health		• During 2015 – 2016, Regional
		Transportation	Department		One Health partnered with
		services			other organizations to launch
					coordinated community-
		N:			wide HIV/AIDs awareness
		Coordinated			campaigns. The 2016
		Public			campaign targeted HIV
		Awareness			patients and encouraged
		Campaign			better compliance with
					treatment plans.
					<ul> <li>Approximately 10,000</li> </ul>
					medical office visits are
					provided, annually.
					More than 15,000 wrap
					around visits are provided
					each year.
	Diabetes education program is designed	<b>E:</b> Outpatient	Healthy Memphis	Decrease in	Through the Closing the Gap
	to provide patients and families with	Education;	Common Table***	diabetes	Program more than 6,500
	educational and counseling on nutrition,	Pharm D		prevalence	patients are served, annually.
	exercise, wound care, foot care and self-	Program; M	Healthy Shelby	and mortality	• During 2014 -2016, Regional
	management skills – Closing the Gap	Power			One Health provided
Diabetes		Program; and	UTHSC		approximately 1,800 glucose
	Regional One Health's Pharmacy	Closing the			and BP screenings in the
	Residency Training Program includes a	Gap (Patient	United Healthcare		community
	seven month rotation in the accredited	Centered-			Participated in more than 78
	Diabetes Education Program through	Medical Home)	Blue Cross/Blue		community health fairs from
	which pharmacists and pharmacy		Shield of		2014 – 2016
	students teach patients and community		Tennessee		



Breast Cancer	resident how to manage their disease through behavior changes and medication management.  Community Outreach staff works as part of the Mobilizing for Action through Planning and Partnership (MAPP) to develop strategic collaborative community programs aimed at creating a healthier community.  Take Care/Be Aware Program – Breast Care Clinic provides clinical and radiological imaging services (digital mammography) for prevention and early detection of breast cancer.  Community outreach staff participates with workgroups dedicated to creating community programs targeting continuing education and awareness of breast cancer.	<b>E:</b> Breast Screenings	American Cancer Society Susan G. Komen Foundation	Reduction in breast cancer deaths  Reduction in breast cancer incidence  Increase in breast cancer early detection	Regional One Health has continued its partnerships with the Susan G. Komen Foundation, increasing its employees' involvement with efforts to support the mission and work of the foundation.  • Regional One Health has continued to provide free breast cancer screening to targeted populations.  • For the period 2-13 –2015, approximately 3,677 individuals were screened through the Take Care/Be Aware Program.
Colorectal Cancer	Gastroenterology Clinic provides clinical education and lower G.I. screenings for prevention and early colorectal cancer detection.	<b>E:</b> Screenings offered in accordance with U.S. Preventative Task Force	Tennessee Cancer Coalition  Tennessee Department of Health		N/A
Adult Obesity/Overweight	Healthy Church Challenge encourages healthy eating, exercise and weight-loss through a city-wide campaign with	<b>E:</b> Healthy Church Challenge	Healthy Memphis Common Table	Reduction in rate of adult obesity	In 2014, Regional One Health partnered with Blue Cross/Blue Shield and several local



	churches and providers.	Partnership.	UTHSC Medical		churches on the Healthy Church
	•		Students	Increase adult	Challenge. The intent of the
	*Explore opportunities to partner with	P: Memphis	Association	physical	program was to provide health
	and support the efforts of Memphis	Mobile Market		activity	education materials and
	Mobile Market to provide a sustainable	N: Regional	Blue Cross/Blue	Decrease in	challenge congregations to live
	source of healthy foods in Memphis	One Health	Shield – Tennessee	prevalence of	healthier lives. The program
	"food deserts".	Spiritual health		heart disease,	also featured a competition
		and Wellness	Local Churches	stroke and	among the participating
	Spiritual Health and Wellness Committee:	Council		diabetes	churches. Regional One Health
	Regional One Health staff works with a				provided the pre- assessment
	committee of spiritual leaders to develop			Increased	and post- challenge results for
	programs which educate their members			access to	the congregations of the
	with regard to health concerns.			better food	participating churches. More
				choices	than 300 lives were touched
	Community Outreach staff participate in				through these efforts.
	community health fairs to offer health			Improved	
	screenings, and provide health education.			health and	During the past 3 years,
				wellness	Regional One Health and the
				literacy	Spiritual Health and Wellness
					Ministers Council has
					sponsored to community wide
					Spiritual Health and Wellness
					Conference involving faith
					community from throughout
					the region. More than 100
					people from the various faith
					communities have attended the
	F: C (	NI COAD			conferences.
	Fire Safety and Burn Prevention	N: SOAR	Tennessee		Regional One Health continues
	programming focused on educating age-	(Currently	Department of		to support and host monthly
Indiana Duana at the se	appropriate audiences on preventing	training and	Health		Memphis Area Brain Injury
Injury Prevention	residential, motor vehicle, electrical and	orienting	City of Manages:		Support Group. Meetings are
	chemical fires and burns. Falls Prevention	volunteers.)	City of Memphis		held monthly, and the average
	programming focuses on educating		Schools		number of participants per
	seniors and their caregivers on risks and				month is 20.



	safety measures to reduce the number of falls and falls-related injuries. Inhalation Injuries programming which provides education to firefighters, emergency medical personnel and non-burn emergency department staff regarding chemical inhalations. Playground Safety Program provides education regarding injuries associated with climbing playground equipment.  SOAR Peer Volunteer/ Counselor offers peer volunteer emotional support to burn patients.		Shelby County Schools**		Regional One Health has held educational seminars on Seat Belt Safety and Staying Health and Independent (SHAI). SHAI sessions are held at senior living facilities through the community.
Education	Regional One Health uses its resources and expertise to help improve educational status and health literacy in the community. Initiatives are facilitated through the Speaker's Bureau, community outreach programs, and volunteer services. Regional One Health works with local high schools in helping rising juniors and seniors in preparing for life post school by providing exposure to various health careers, post-secondary educational opportunities and skills readiness. Regional One Health will explore opportunities with secondary and post-secondary institutions of learning to provide health education and awareness of health careers, with an identified education partner.	E: Partnership with several schools in the community; Teen Volunteer Program and Speaker Bureau	Leadership Memphis  Memphis Leadership Academy***  University of Memphis; Rhodes, Lemoyne-Owen College  City of Memphis/Shelby County Schools  Science, Technology and Engineering Charter Schools	Increased literacy levels Increased High School Graduation rates  Post- Secondary education preparation  Health careers on-the-job exposure/ experience	Regional One Health has maintained it's committed to dedicating both financial and human resources to improving education.  • During the past three years, the organization has started a Speaker's Bureau that serves as health education resource for various groups, including schools. Topics bureau representatives range from health careers preparation to healthy living. More than 20 employees volunteer for the Speaker Bureau, and the volunteers have been deployed to more than 10 speaking engagements during the past 2 years.  • Regional One Health has also



Violent Crime/Homicide/Fire arm-related Deaths	Hospital Based Violence Intervention, Rx for Change, was a new pilot partnership with THE MED*** Foundation and several community entities. It was established for the purpose of reducing gang violence among youth and young adults. Violence Intervention Specialists that work in conjunction with case management, security, community outreach, trauma and emergency services and pastoral care to identify and implement strategies for working with youth and young adults affected by handgun violence or violent crimes. The intervention specialists serve	E: HBVIP	Regional One Health Foundation***  City of Memphis Memphis Fast Forward  Community Based Gang & Violence Prevention Organizations	Reduction in the violent crime rates in youths and young adults  Reduction in violence in the home  Reduction in gang and drug activity	maintained its existing relationship with two local previously affiliated schools and in 2016 began a new relationship with a K-8 school, placing more than 100 volunteers in the schools to mentor, provide teacher support and tutor.  Regional One Health has continued to invest in and grow its Teen Volunteer program. More than 60 students have participated in the program within the last three years.  The HBVIP has been operational for three years. After the 1st year pilot, Regional One Health decided to maintain the program. The program has been expanded to add additional staff, as well in 2015 Blue Cross/Blue Shield award the organization a grant to support the program. Today, HBVIP is funded 100% by operational dollars. The program has been designated as a member of National
arm-related Deaths	working with youth and young adults affected by handgun violence or violent		Prevention	gang and	operational dollars. The program has been designated
	crimes. The intervention specialists serve as liaisons between young crime victims and community, social and educational resources to prevent re-injury rates.			Reduction in re- injury return rates at Regional One Health	as a member of National Network of Hospital Violence Intervention programs. Since the creation of the program, more than 100 individuals have been served.



	Explore partnering with the American	<b>E:</b> Regional	American Lung	Decrease	Regional One Health has touched more than 300 lives through hosting Bully, Conflict Resolution and Gun Violence & Police Interaction community educational programs. Through the organization support and participation of the National Youth Violence Prevention Rally and Walk, more than 100 lives were touched.  Regional One Health has
Lung Health	Lung Association on initiatives to improve lung health.	One Health funds FFS program. Provides materials, quit smoking tools, and staffing to facilitate program	Association	exposure to second hand smoke, poor air quality and other contributing factors to poor lung health through education and awareness	partnered with the Regional Charter of the American Lung Association, to sponsor Freedom from Smoking (FFS) Program. The program is offered to community members and employees, and is designed to help individuals quit smoking.

<sup>\*</sup>N=New, E=Existing Programs/ Initiatives, P=Potential



<sup>(\*\*)</sup> Memphis City and Shelby County School Districts merged creating the Shelby County Schools.

<sup>(\*\*\*)</sup> Name change of organization during time period of 2013 to 2016.

<sup>(--)</sup> No data available.