



**Dignity Health™**

St. Joseph's Hospital and  
Medical Center



Dignity Health  
St. Joseph's Hospital and Medical Center

Community Health Needs Assessment 2016



# Maricopa County Coordinated Community Health Needs Assessment

*Dignity Health*

*St. Joseph's Hospital and Medical Center*

*Phoenix, AZ*

*This community health needs assessment report is a customized version of the coordinated community health needs assessment that the Maricopa County Department of Public Health conducted in partnership with Adelante Healthcare, Banner Health, Dignity Health, Health Care for the Homeless, Mayo Hospital, Mountain Park Health Center, Native Health, and Phoenix Children's Hospital.*

**January 19, 2016**



# Table of Contents

---

I.	Executive Summary.....	4
II.	Assessment Purpose and Organizational Commitment.....	8
III.	Community Definition.....	10
A.	Definition of Community.....	10
B.	Demographic and Socioeconomic Profile.....	11
IV.	Assessment, Process and Methods.....	15
A.	Process and Methods.....	15
B.	Secondary Data Collection.....	15
C.	Primary Data.....	17
D.	Data Limitations and Information Gaps.....	21
V.	Prioritized Description of Community Health Needs.....	22
A.	Identifying Community Health Needs.....	22
B.	Process and Criteria for Prioritization.....	22
C.	Description of Prioritized Community Health Needs.....	22
VI.	Resources Potentially Available to Address Needs .....	42
VII.	Impact of Actions Taken Since Preceding CHNA.....	44
VIII.	Input Received on Most Recent CHNA and Implementation Strategy.....	45
	Appendix A. List of Data Sources.....	46
	Appendix B. Primary Data Collection Tools.....	56
	Appendix C. References.....	59

# Executive Summary

---

## Community Health Needs Assessment (CHNA) Background

The Patient Protection and Affordable Care Act (ACA) added new requirements which nonprofit hospitals must satisfy in order to maintain their tax-exempt status under section 501(c)(3) of the Internal Revenue Code. One such requirement added by ACA, Section 501(r) of the Code, requires nonprofit hospitals to conduct a Community Health Needs Assessment (CHNA) and adopt implementation strategies to meet the identified needs of the community at least once every three years. As part of the CHNA, each hospital is required to collect input from individuals in the community, including public health experts as well as residents, representatives or leaders of low-income, minority, and medically underserved populations.

Beginning in early 2015, St. Joseph's Hospital and Medical Center (SJHMC), in partnership with the Maricopa County Coordinated Health Needs Assessment (CCHNA) collaborative and the Maricopa County Department of Public Health (MCDPH) conducted an assessment of the health needs of residents of Maricopa County as well as those in their primary service area. The CHNA process undertaken and described in this report was conducted in compliance with federal requirements.

## Purpose Statement

The purpose of this community health needs assessment (CHNA) is to identify and prioritize significant health needs of the community served by SJHMC. The priorities identified in this report help to guide the hospital's community health improvement programs and community benefit activities, as well as its collaborative efforts with other organizations that share a mission to improve health. This CHNA report meets requirements of the Patient Protection and Affordable Care Act that not-for-profit hospitals conduct a community health needs assessment at least once every three years.

## Community Definition

The geographic area for this CHNA is Maricopa County, the common community for all partners participating in the CCHNA collaborative. Maricopa County is the fourth most populous county in the United States. With an estimated population of 4 million and growing, Maricopa County is home to well over half of Arizona's residents. Maricopa County encompasses 9,224 square miles, includes 27 cities and towns, as well as the whole or part of five sovereign American Indian reservations. Maricopa County is ethnically and culturally diverse, home to more than 1.2 million Hispanics (30% of all residents), 197,000 African Americans, 156,000 Asian Americans, and 65,000 American Indians. According to the U.S. Census Bureau, 14% percent of the population does not have a high school diploma, 17% are living below the federal poverty level, and over 600,000 are uninsured.<sup>1</sup>

Dignity Health defines the community served by a hospital as those individuals residing within its primary and secondary service areas. For this report the focus will be on the primary service area of SJHMC. The primary service area includes all residents in a defined geographic area surrounding the hospital and does not exclude low-income or underserved populations. Located in the heart of Phoenix, Arizona, SJHMC draws approximately 85.7% from Maricopa County, 10.75% from outside Maricopa County but within Arizona, and 3.52% from outside the state. SJHMC's primary service area is within the urban inner city areas, and it also serves the suburban and rural communities for high-risk services. According to the Community Need Index (CNI), a proprietary tool developed by Dignity Health, the primary service area includes both moderate and

high-risk areas with significant socio-economic barriers. Zip code areas with the highest risks include 85003, 85004, 85006, 85007, 85008, 85009, 85015, 85017, 85019, 85031, 85033, 85040, and 85301.<sup>2</sup>

## **Assessment, Process and Methods**

The ACA requirements are mirrored in the Public Health Accreditation Board's (PHAB) standard mandating that health departments participate in or conduct a community health assessment every three to five years. Federally funded community health centers must also ensure their target communities are of high need. The similar requirements from IRS, PHAB, and the federally funded health center requirements put forth by the United States Department of Health and Human Services provide an opportunity to catalyze stronger collaboration and better shared measurement systems among hospitals, health centers, and health departments. Additionally, limited resources for comprehensive health assessments and the move toward new population health models have created the need for an organized, collaborative, public-private approach for conducting assessments. As a result, Adelante Healthcare, Banner Health, Dignity Health, Health Care for the Homeless, Mayo Hospital, Mountain Park Health Center, Native Health, and Phoenix Children's Hospital have joined forces with Maricopa County Department of Public Health (MCDPH) to identify the communities' strengths and greatest needs in a coordinated community health needs assessment.

The process of conducting this assessment began with a review of approximately 100 indicators to measure health outcomes and associated health factors of Maricopa County residents. The indicators included demographic data, social and economic factors, health behaviors, physical environment, health care, and health outcomes. Health needs were identified through the combined analysis of secondary data and community input. Based on the review of the secondary data, a consultant team developed a primary data collection guide used in focus groups which were made up of representatives of minority and underserved populations who identified community concerns and assets. Surveys were collected from key informants to help determine community needs and priorities. Additionally, meetings were held with stakeholders from the Community Health Integration Network (CHIN) and Arizona's Communities of Care Network (ACCN) to assist with the analysis and interpretation of data findings.

## **Summary of Prioritization Process**

To be considered a health need, a health outcome or a health factor had to meet two criteria; first, existing data had to demonstrate that the primary service area had a health outcome or factor rate worse than the average Maricopa County rate, demonstrate a worsening trend when compared to Maricopa County data in recent years, or indicate an apparent health disparity; second, the health outcome or factor had to be mentioned in a substantial way in at least two primary data collection sources which were focus groups, surveys, or stakeholder meetings.

The process for prioritization included engagement with both internal Dignity Health stakeholders and community partners. The first step of the process was a comprehensive presentation by MCDPH that included an overview of the CHNA findings and key emerging health needs. The second step in the process involved review and prioritization of the key emerging health needs outlined in the MCDPH presentation by the CHIN and ACCN. A Dignity Health Six Sigma expert led the sessions using a 4-square, priority/benefit matrix. The X axis showed the level of effort required to address a particular health need whereas the Y axis showed the benefit to the community by addressing the health need. As participants discussed each health need, consideration was given to the size of the problem, disparity and equity, known effective interventions,

resource feasibility and sustainability, and community salience. Through consensus, participants made final recommendations to SJHMC for priority health needs.

## **Summary of Prioritized Needs**

The following statements summarize each of the areas of priority for SJHMC, and are based on data and information gathered through the CHNA.

### Access to Care

Community members and key informants overwhelmingly felt that access to care is an important issue for the community. Within SJHMC's primary service area, one out of every five residents lack health insurance.<sup>3</sup> Additionally, there are disparities experienced across members of certain racial/ethnic backgrounds, with Hispanics and American Indians being least likely to have insurance. The number of adults reporting they have a usual source of health care is decreasing, with one out of every three reporting they do not have a regular doctor they see for care.<sup>4</sup>

### Mental/Behavioral Health

Mental health was ranked as the most important health problem impacting the community by key informants. This was echoed by participants in the focus groups who believe mental health is one of top health issues impacting community residents. Mental health is among the top ten leading causes of emergency department visits and inpatient discharges for SJHMC's primary service area and the highest rates of visits can be attributed to adults ages 18 to 34.<sup>5</sup>

### Substance Abuse

Substance abuse was one of the top concerns for both focus group participants and key informants. Key informants listed alcohol and drug abuse as two of the riskiest health behaviors community members are engaging in. Fifteen percent of adults 18 years of age and older report binge drinking (defined as having 5 or more drinks for men and 4 or more drinks for women on one occasion) in the last 30 days on the Behavioral Risk Factor Surveillance System survey.<sup>6</sup> Furthermore, approximately one out of every four high school seniors reported binge drinking in the last 2 weeks on the Arizona Youth survey.<sup>7</sup>

### Obesity

Key informants felt that being overweight, poor eating habits and lack of exercise were among the top five risky health behaviors community members were engaging in. According to the 2013 Youth Risk Behavior survey, the number of obese high school students is increasing and now accounts for 13.7% of all students.<sup>8</sup> The percentage of adults that report being overweight and obese on the Behavioral Risk Factor Surveillance System survey is decreasing. However, Hispanic residents continue to experience disparities related to obesity and in 2013, 34.1% reported being obese.<sup>9</sup>

### Respiratory Illness (i.e. Asthma, COPD, Lung Disorders)

Chronic lower respiratory conditions are the third leading cause of death for SJHMC's primary service area.<sup>10</sup> Additionally, asthma and pneumonia are among the top ten leading causes of emergency department visits.<sup>11</sup> According to the Behavioral Risk Factor Surveillance System survey (2013) 14.5% of adults reported having been told they have asthma by a medical doctor at some point in their lives, and 8.6% report currently having the disease.<sup>12</sup>

### Diabetes

The number of deaths related to diabetes is decreasing in Maricopa County, but it is still the seventh leading cause of death in SJHMC's primary service area indicating a sustained health need.<sup>13</sup> Additionally, the number of adults reporting they have been told they have diabetes is increasing. In 2013, 10.2% of Maricopa County adults responding to the Behavioral Risk Factor Surveillance System survey reported having been told they have diabetes by a healthcare professional.<sup>14</sup>

### Cardiovascular Disease

Cardiovascular disease is second leading cause of death for Maricopa County and the primary service area.<sup>15</sup> Adults age 75 and older have the highest rate of cardiovascular disease-related hospital visits in Maricopa County.<sup>16</sup> Although White non-Hispanics have the highest rate of cardiovascular disease-related mortality, African Americans have the highest rate of emergency department visits which indicates a potential health disparity in cardiovascular disease diagnoses, treatments, or preventative care.<sup>17</sup>

### Injury

Unintentional injury is the fifth leading cause of death for SJHMC's primary service area.<sup>18</sup> It is also the leading cause of emergency department visits and the second leading cause of inpatient discharges.<sup>19</sup> Males are more likely to suffer from an unintentional injury with the exception of falls which are more prevalent among females.<sup>20</sup> Focus group participants reported neighborhood safety as a significant community health concern. Injuries related to interpersonal violence can be attributed to unsafe neighborhoods and key informants felt neighborhood safety was among the top ten factors that would improve quality of life in the community.

## **Resources Potentially Available**

Resources potentially available to address identified needs include services and programs available through hospitals, government agencies, and community based-organizations. Resources include access to over 40 hospitals for emergency and acute care services, over 10 Federally Qualified Health Centers (FQHC), over 12 food banks, 8 homeless shelters, school-based health clinics, churches, transportation services, health enrollment navigators, free or low cost medical and dental care, and prevention-based community education.

The Health Improvement Partnership of Maricopa County (HIPMC) is a collaborative effort between MCDPH and a diverse array of public and private organizations addressing healthy eating, active living, linkages to care and tobacco-free living. With more than 70 partner organizations, this is a valuable resource to help SJHMC connect to other community based organizations that are targeting many of the same health priorities.<sup>21</sup>

This CHNA report was adopted by the SJHMC community board in January 2016.

This report is widely available to the public on the hospital's web site, and a paper copy is available for inspection upon request at St. Joseph's Hospital and Medical Center's Department of Community Health Integration.

Written comments on this report can be submitted to the St. Joseph's Hospital and Medical Center's Department of Community Health Integration, by e-mail to [CommunityHealth-SJHMC@DignityHealth.org](mailto:CommunityHealth-SJHMC@DignityHealth.org) or by phone to 602-406-2288.

# Assessment Purpose and Organizational Commitment

---

## Community Health Needs Assessment (CHNA) Background

St. Joseph's Hospital and Medical Center (SJHMC) is dedicated to enhancing the health of the communities it serves. The findings from this Community Health Needs Assessment (CHNA) report will serve as a foundation for understanding the health needs found in the community and will inform the implementation strategies selected. This report complies with federal tax law requirements set forth in Internal Revenue Code section 501(r) requiring hospital facilities owned and operated by an organization described in Code section 501(c)(3) to conduct a CHNA at least once every three years. With regard to the CHNA, the ACA specifically requires nonprofit hospitals to: (1) collect and take into account input from public health experts as well as community leaders and representatives of high need populations—this includes minority groups, low-income individuals, medically underserved populations, and those with chronic conditions; (2) identify and prioritize community health needs; (3) document a separate CHNA for each individual hospital; (4) and make the CHNA report widely available to the public. In addition, each nonprofit hospital must adopt an Implementation Strategy that describes how the hospital will address the identified significant community health needs.

## Purpose Statement

The purpose of this CHNA is to identify and prioritize significant health needs of the community served by SJHMC. The priorities identified in this report help to guide the hospital's community health improvement programs and community benefit activities, as well as its collaborative efforts with other organizations that share a mission to improve health. This CHNA report meets requirements of the Patient Protection and Affordable Care Act that not-for-profit hospitals conduct a community health needs assessment at least once every three years.

## Organizational Commitment

Since 1895, SJHMC has delivered high-quality, affordable, health care services in a compassionate environment that meets each patient's physical, mental and spiritual needs. Upholding the core values of dignity, justice, stewardship, collaboration, and excellence, our healing philosophy serves not just our patients, but our staff, our communities, and our planet.

Rooted in Dignity Health's mission, vision and values, SJHMC is dedicated to delivering community benefit with the engagement of its management team, Community Board and Community Health Integration Network (CHIN). The board and its committee on community health and benefit issues are composed of community members who provide stewardship and direction for the hospital as a community resource.

The Community Board and its chairperson, Harry Garwal, Patty White, the hospital's President and CEO, the Executive Management Team and the community are involved in the CHNA process, Community Benefit planning process, and the prioritization of the identified unmet health-related needs to inform the development of the programs for each year and how they link to the hospital's strategic plan. This commitment is reflected in the hospital's Community Health Integration and Community Benefit programs, which are a demonstration of the hospital's commitment to improving the lives of the communities within Arizona. The Community Board, leadership and CHIN hold the planning of the community needs, oversee the

CHNA and its adoption through setting the priority for the Community Benefit Plan and approving the strategies for implementing the programs that will work with the community. They will continue to monitor the outcomes of the programs and ensure the appropriate resources are made available to sustain a healthier Arizona.

The key staff positions dedicated to planning and carrying out the community benefit programs include, but are not limited to the following:

- Director of Community Health Integration and Community Benefit provides the leadership, oversight, evaluation, and effectiveness of the community benefit programming for the hospitals and its affiliates.
- Directors of Hospital Service Lines provide oversight of the programs within their departments that are providing community benefit programming to meet the needs within the community.
- Community Benefit Specialists and Program Coordinators provide program coordination, outreach efforts, and community integration. These program coordinators are integrated within the hospital departments delivering the programs.
- Community Benefit Analyst provides oversight of the evaluation and outcomes of the programs to meet the needs within the community.

SJHMC's community benefit program includes financial assistance provided to those who are unable to pay the cost of their care, unreimbursed costs of Medicaid, subsidized health services that meet a community need, and community health improvement services. Our community benefit also includes monetary grants we provide to not-for-profit organizations that are working together to improve health on significant needs identified in our CHNA.

In addition, we are investing in community capacity to improve health – including by addressing the social determinants of health – through Dignity Health's Community Investment Program. In Arizona, \$7,450,000 has been invested through Dignity Health Community Investments. The following are the investments made to date:

<u>Name</u>	<u>Amount</u>
Arizona Community Foundation	\$ 5,000,000
Chandler Christian Community Center	\$150,000
Chicanos por la Causa (Prestamos)	\$1,000,000
Children's Museum of Phoenix	\$500,000
Children's Museum of Phoenix	\$100,000
First American Credit Union (linked deposit)	\$100,000
<u>Native American Connections, Inc.</u>	<u>\$690,000</u>
	\$ 7,450,000

These investments were made to improve the community through social impact funding with the Arizona Community Foundation; improve a local food bank who also provides social supports to the Chandler Community; provide low-interest loans to small, start-up business to minority groups; improve early childhood learning; provide low-interest rates to individuals who are unable to secure loans for homes; and transitional housing for adolescents. All these projects and investments continue to create healthier, safe, communities in Arizona.

# Community Definition

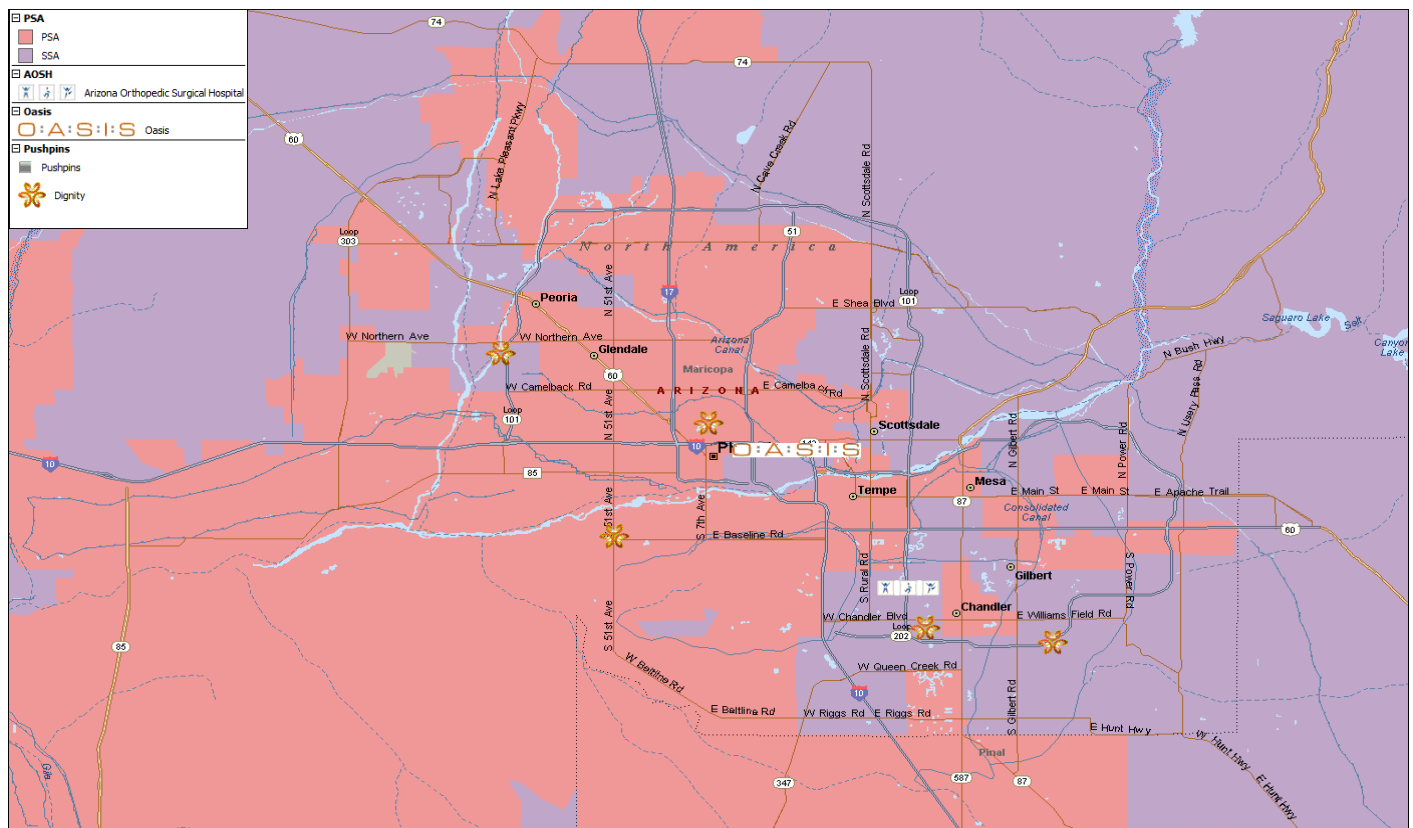
## Definition of Community

The geographic area for this CHNA is Maricopa County, the common community for all partners participating in the Maricopa County Coordinated Health Needs Assessment collaborative (CCHNA). However, SJHMC's primary service area specific information will also be provided when available.

Maricopa County is the fourth most populous county in the United States. With an estimated population of four million and growing, Maricopa County is home to well over half of Arizona's residents. Maricopa County encompasses 9,224 square miles, includes 27 cities and towns, as well as the whole or part of five sovereign American Indian reservations.

Dignity Health defines the community served by a hospital as those individuals residing within its primary and secondary service areas. For this report the focus will be on the primary service area of SJHMC. The primary service area includes all residents in a defined geographic area surrounding the hospital and does not exclude low-income or underserved populations. The primary service area for SJHMC includes the zip codes making up the top 75% of the total patient cases.

The city of Phoenix is primarily served by SJHMC for acute care and trauma services. The city of Phoenix is the capital, and largest city, of the state of Arizona. Phoenix is the anchor of the Phoenix metropolitan area, also known as the Valley of the Sun. Surrounding communities include Tempe, Scottsdale, Glendale, Peoria, Tolleson, Avondale, Buckeye, Goodyear Surprise and Gila Bend.



## Demographic and Socioeconomic Profile

Primary Care Area (PCA) Statistical Profiles are revised annually and provide detailed information on the demographics, health resources, hospital utilization, and health status indicators in defined geographic areas throughout Arizona. According to the Arizona Department of Health Services (ADHS), the Avondale, Buckeye, Camelback East, Central City Village, Chandler Central, Estrella Village, Glendale Central and North, Laveen, Maryvale Village, Peoria North, Surprise and Tempe North PCAs have been federally designated as a Medically Underserved Areas.<sup>22</sup> More than half of the population of SJHMC's primary service area is adults between 20-64 years of age. Nearly 17% of residents do not have a high school diploma, and approximately 20.1% are without health insurance. These data show that the population as a whole is majority White, and with a median income below Maricopa County and the state of Arizona. Table 1 provides the specific age, sex, and race/ethnicity distribution and data on key socio-economic drivers of health status of the population in SJHMC's primary service area compared to Maricopa County and the state of Arizona.

	<i><b>SJHMC PSA</b></i>	<b>Maricopa County</b>	<b>Arizona</b>
<b>Population: estimated 2015</b>	2,777,683	3,947,382	6,561,516
<b>Gender</b>			
• <b>Male</b>	49.8%	49.4%	49.7%
• <b>Female</b>	50.1%	50.6%	50.3%
<b>Age</b>			
• <b>0 to 9 years</b>	14.7%	14.2%	13.9%
• <b>10 to 19 years</b>	14.0%	14.1%	13.8%
• <b>20 to 34 years</b>	23.7%	21.3%	20.5%
• <b>35 to 64 years</b>	35.6%	37.4%	37.0%
• <b>65 to 84 years</b>	10.5%	11.4%	13.1%
• <b>85 years and over</b>	1.4%	1.6%	1.7%
<b>Race</b>			
• <b>White</b>	66.2%	80.0%	78.9%
• <b>Asian/Pacific Islander</b>	3.7%	3.9%	3.1%
• <b>Black or African American</b>	6.3%	5.2%	4.2%
• <b>American Indian/Alaska Native</b>	2.5%	1.9%	4.4%
• <b>Other</b>	17.2%	6.0%	6.3%
• <b>2 or more Races</b>	4.1%	3.0%	3.1%
<b>Ethnicity</b>			
• <b>Hispanic</b>	38.4%	29.9%	30.1%
<b>Median Income</b>	\$48,135	\$53,596	\$49,774
<b>Uninsured</b>	20.1%	17.2%	16.8%
<b>Unemployment</b>	8.5%	6.1%	6.3%
<b>No HS Diploma</b>	17%	13.6%	14.3%
<b>Limited English Proficiency</b>	7.4%	10%	9.5%
<b>Renters</b>	38.4%	37.5%	35.6%
<b>Medicaid Patients</b>	17.5%	13.8%	20.0%
<b>CNI Score</b>	3.9	3.4	
<b>Medically Underserved Area</b>	Yes		

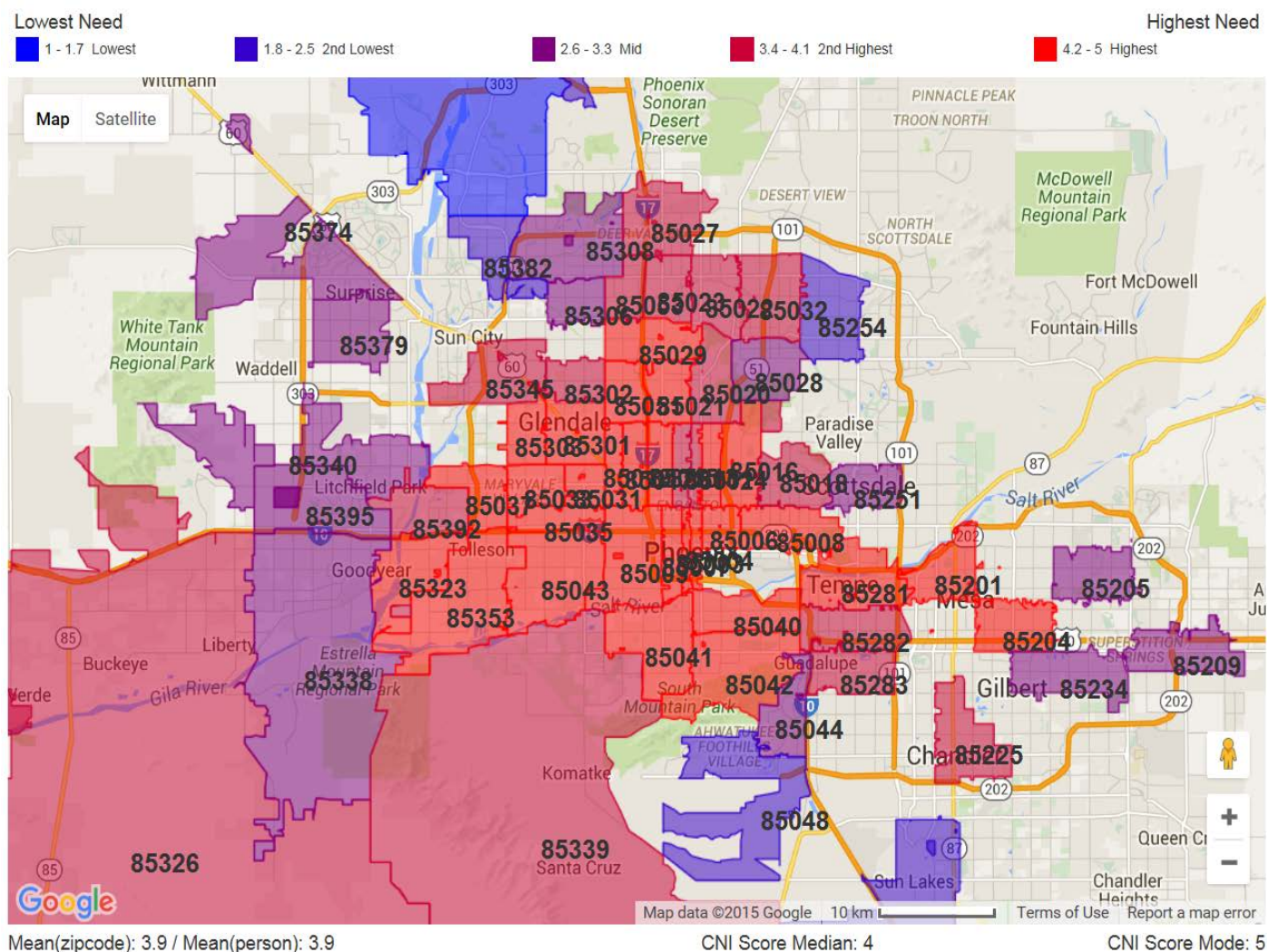
Source U.S. Census American Community Survey

SJHMC is one of the few hospitals along the "light rail line" which provides the opportunity for the community to access the health services and community resources offered by the hospital. The community is in the center of Phoenix, but, with the rail service, it provides ready access to services for individuals who have complex health needs. Within Maricopa County, there is a concentration of the minority populations in close proximity

to the hospital. Access to affordable health care continues to challenge individuals who do not qualify for Medicaid and Marketplace insurance. Many of these individuals seek care within the Emergency Department and local free clinics.

## Community Need Index

Dignity Health has developed the nation's first standardized Community Need Index (CNI) in partnership with Truven Health Analytics. The CNI identifies the severity of health disparity for every zip code in the United States based on specific barriers to healthcare access. The CNI considers multiple factors that are known to limit health care access such as income, language, educational, insurance and housing barriers. The ability to pinpoint neighborhoods with significant barriers to health care access is an important new advancement for public health advocates and care providers. According to the CNI illustrated below, the primary service area has a mean CNI score of 3.9 and includes both moderate and high-risk areas with significant socio-economic barriers. Zip code areas with the highest risks include 85003, 85004, 85006, 85007, 85008, 85009, 85015, 85017, 85019, 85031, 85033, 85040, and 85301.<sup>23</sup>



Primary Service Area CNI scores

Zip Code	CNI Score	Population	City	County	State
85003	5	9847	Phoenix	Maricopa	Arizona
85004	5	4999	Phoenix	Maricopa	Arizona
85006	5	26115	Phoenix	Maricopa	Arizona
85007	5	14671	Phoenix	Maricopa	Arizona
85008	5	59012	Phoenix	Maricopa	Arizona
85009	5	54125	Phoenix	Maricopa	Arizona
85012	3.4	6795	Phoenix	Maricopa	Arizona
85013	3.8	19767	Phoenix	Maricopa	Arizona
85014	4.2	25403	Phoenix	Maricopa	Arizona
85015	5	38934	Phoenix	Maricopa	Arizona
85016	4.4	34816	Phoenix	Maricopa	Arizona
85017	5	39595	Phoenix	Maricopa	Arizona
85018	3.8	35091	Phoenix	Maricopa	Arizona
85019	5	24959	Phoenix	Maricopa	Arizona
85020	4	33083	Phoenix	Maricopa	Arizona
85021	4.6	38163	Phoenix	Maricopa	Arizona
85022	3.6	47903	Phoenix	Maricopa	Arizona
85023	4	33773	Phoenix	Maricopa	Arizona
85027	3.4	38107	Phoenix	Maricopa	Arizona
85028	2.6	19518	Phoenix	Maricopa	Arizona
85029	4.4	43928	Phoenix	Maricopa	Arizona
85031	5	30821	Phoenix	Maricopa	Arizona
85032	4	65885	Phoenix	Maricopa	Arizona
85033	5	54369	Phoenix	Maricopa	Arizona
85035	5	45365	Phoenix	Maricopa	Arizona
85037	4.4	47687	Phoenix	Maricopa	Arizona
85040	5	30927	Phoenix	Maricopa	Arizona
85041	4.4	62119	Phoenix	Maricopa	Arizona
85042	4.2	43414	Phoenix	Maricopa	Arizona
85043	4.6	39856	Phoenix	Maricopa	Arizona
85044	2.6	38849	Phoenix	Maricopa	Arizona
85048	2.4	33983	Phoenix	Maricopa	Arizona
85051	4.8	41168	Phoenix	Maricopa	Arizona
85053	3.4	28794	Phoenix	Maricopa	Arizona
85086	2	47383	Phoenix	Maricopa	Arizona
85122	4.2	52773	Casa Grande	Pinal	Arizona
85201	4.8	47048	Mesa	Maricopa	Arizona
85204	4.4	63815	Mesa	Maricopa	Arizona
85205	3.2	40162	Mesa	Maricopa	Arizona
85209	2.8	41501	Mesa	Maricopa	Arizona
85225	4	71319	Chandler	Maricopa	Arizona
85234	2.6	51866	Gilbert	Maricopa	Arizona
85248	2.2	33226	Chandler	Maricopa	Arizona
85251	3.2	34971	Scottsdale	Maricopa	Arizona
85254	2.2	45803	Scottsdale	Maricopa	Arizona
85281	4.6	59597	Tempe	Maricopa	Arizona
85282	3.6	50161	Tempe	Maricopa	Arizona
85283	3.8	45033	Tempe	Maricopa	Arizona
85301	5	61086	Glendale	Maricopa	Arizona
85302	3.8	37500	Glendale	Maricopa	Arizona
85303	4.6	33786	Glendale	Maricopa	Arizona
85306	3.2	24403	Glendale	Maricopa	Arizona
85308	2.6	65035	Glendale	Maricopa	Arizona
85323	4.4	45472	Avondale	Maricopa	Arizona

	85326	4	61835	Buckeye	Maricopa	Arizona
	85338	3	49933	Goodyear	Maricopa	Arizona
	85339	3.6	43207	Laveen	Maricopa	Arizona
	85340	3	31650	Litchfield Park	Maricopa	Arizona
	85345	4	59844	Peoria	Maricopa	Arizona
	85353	4.2	37852	Tolleson	Maricopa	Arizona
	85364	4.6	72917	Yuma	Yuma	Arizona
	85374	2.8	46014	Surprise	Maricopa	Arizona
	85379	3	48023	Surprise	Maricopa	Arizona
	85382	2.4	44000	Peoria	Maricopa	Arizona
	85383	1.6	44476	Peoria	Maricopa	Arizona
	85392	3.8	39418	Avondale	Maricopa	Arizona
	85395	2.6	31175	Goodyear	Maricopa	Arizona
	85541	3.2	22408	Payson	Gila	Arizona

# Assessment Process and Methods

---

## ***Process and Methods***

The ACA requirements are mirrored in the Public Health Accreditation Board's (PHAB) standard mandating that health departments participate in or conduct a community health assessment every three to five years. Other PHAB standards require health departments to conduct a comprehensive planning process resulting in a community health improvement plan, and implement strategies to improve access to health care. Federally funded community health centers must ensure their target communities are of high need, and address the shortage of health services that are occurring within these communities. The similar requirements from IRS, PHAB, and the Federally funded health center requirements put forth by the United States Department of Health and Human Services provides an opportunity to catalyze stronger collaboration and better shared measurement systems among hospitals, health centers, and health departments. Additionally, limited resources for comprehensive health assessments and the move toward new population health models have created the need for an organized, collaborative public-private approach for conducting assessments.

Maricopa County hospitals and health centers play significant roles in the region's overall economy and health. In addition to providing safe and high-quality medical care, these institutions work to improve regional health through programs that promote health in response to identified community needs. Additionally, health care partners are often serving the same or portions of the same communities across Maricopa County. As a result, Adelante Healthcare, Banner Health, Dignity Health, Healthcare for the Homeless, Mayo Hospital, Mountain Park Health Center, Native Health, and Phoenix Children's Hospital have joined forces with Maricopa County Department of Public Health (MCDPH) to identify the communities' strengths and greatest needs in a coordinated community health needs assessment.

The CHNA utilized a mixed-methods approach that included the collection of secondary or quantitative data from existing data sources and community input or qualitative data from focus groups, surveys, and meetings with community stakeholders. The process was reiterative as both the secondary and primary data were used to help inform each other. The advantage of using this approach is that it validates data by cross-verifying from a multitude of sources.

## ***Secondary Data***

Many of the challenging health problems facing the United States in the 21st century require an understanding of the health not just of individuals but also of communities. The challenge of maintaining and improving community health has led to the development of a "population health" perspective.<sup>24</sup> Population health can be defined as "the health outcomes of a group of individuals, including the distribution of such outcomes within the group."<sup>25</sup> A focus on population health implies a concern for the determinants of health for both individuals and communities. The health of a population grows directly out of the community's social and economic conditions as well as the quality of its medical care. As a result, the CHNA utilized a community health framework for this report to develop criteria for indicators used to measure health needs.

CCHNA partners selected approximately 100 data indicators to help examine the health needs of the community (Appendix A). These indicators were based on the Center for Disease Control and Prevention's (CDC) Community Health Assessment for Population Health Improvement: Most Frequently Recommended

Health Metrics report.<sup>26</sup> While this report does not identify the specific indicators that should be utilized, it does specify the categories of information that should be considered.

The following five data categories describe the type of health factor and health outcome indicators utilized in the CHNA (See Table 2):

- Health Outcomes include: morbidity, which refers to how healthy people are by measuring disease burden and quality of life (e.g. obesity rates, asthma incidence, and low birth weight babies, etc.); and mortality, which measures causes of death by density rates (e.g. cancer mortality, motor vehicle deaths, etc.);
- Health Care includes access, which refers to factors that impact people's access to timely, affordable clinical care (e.g. primary care physicians, number of federally qualified health centers, etc.); and health insurance coverage;
- Health Behavior refers to the personal behaviors that influence an individual's health either positively or negatively (e.g. breastfeeding, physical activity, eating fruits and vegetables, etc.). This also includes delivery, which measures clinical care being delivered to the community (e.g. rate of preventive screenings, ambulatory care sensitive discharges, etc.);
- Demographics and Social Environment describe the population of interest by measuring its characteristics (e.g. total population, age breakdowns, limited English proficiency, etc.). Unlike other categories, demographic indicators are purely descriptive and not generally compared to benchmarks or viewed as positive or negative. This category also includes measures of social status, educational attainment, and income, all of which have a significant impact on an individual's health and;
- Physical Environment measures characteristics of the built environment of a community that can impact the health of that community either positively or negatively (e.g. parks, grocery stores, walkability, etc.)

Health Outcome Metrics		Health Determinants and Correlated Metrics			
<i><b>Mortality</b></i>	<i><b>Morbidity</b></i>	<i><b>Access to Healthcare</b></i>	<i><b>Health Behaviors</b></i>	<i><b>Demographics &amp; Social Environment</b></i>	<i><b>Physical Environment</b></i>
Leading Causes of Death	Hospitalization Rates	Health Insurance Coverage	Tobacco Use/Smoking	Age	Air Quality
Infant Mortality	Obesity	Provider Rates	Physical Activity	Sex	Water Quality
Injury-related Mortality	Low Birth Rates	Quality of Care	Nutrition	Race/Ethnicity	Housing
Motor Vehicle Mortality	Cancer Rates		Unsafe Sex	Income	
Suicide	Motor Vehicle Injury		Alcohol Use	Poverty Level	
Homicide	Overall Health Status		Seatbelt Use	Educational Attainment	
	STDs		Immunizations & Screenings	Employment Status	
	Communicable Diseases			Language Spoken at Home	

Source CDC's Community Health Assessment for Population Health Improvement: Most Frequently Recommended Health Metrics

Quantitative data used in this report are high quality, population-based data sources and were analyzed by MCDPH, Office of Epidemiology. Data came from local, state, and national sources such as the Maricopa County Department of Public Health, Arizona Department of Health Services, Arizona Criminal Justice Commission, U.S. Census Bureau, U.S. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System survey, and Youth Risk Behavior survey.

## ***Primary Data***

The broad interests of the community were incorporated through three means. First, data was collected through focus groups engaging members of underserved populations and communities. Second, surveys were conducted with key informants who serve the primary service area. Finally, a series of meetings were held with key stakeholders from SJHMC's primary service area. Members of the CHIN and Arizona's Community of Care Network (ACCN) provided input on the selection of data indicators, provided feedback on data collected, and aided in the selection of final priorities. Membership of the above mentioned committees and collaborations intentionally represent vulnerable and disenfranchised populations including the homeless, uninsured/underinsured, Medicaid, Medicare, immigrant, disabled, mentally ill, and elderly.

## **Focus Groups**

Members of the community representing subgroups, defined as groups with unique attributes (race and ethnicity, age, sex, culture, lifestyle, or residents of a particular area of Maricopa County), were recruited to participate in focus groups. A standard protocol was used for all focus groups (See Appendix B) to understand the experiences of these community members as they relate to accessing health care, health disparities and chronic disease. In all, a total of twelve focus groups were conducted with 127 community members from the following groups: (1) older adults (65-74 years of age); (2) adults without children; (3) adults with children; (4)

American Indian adults; (5) Lesbian, Gay, Bisexual, Transgender, and Questioning (LGBTQ) adults; (6) African American adults; (7) Hispanic/Latino adults (English); (8) adults with children (Spanish); (9) low socio-economic status adults (Spanish), and (10) young adults (18-30 years of age).

Content analysis was performed on focus group interview transcripts to identify key themes and salient health issues affecting the community residents. The most common problem identified was access to care. Specific barriers discussed included lack of transportation, high cost of doctor visits, high deductibles, unexpected or complicated bills from insurance, and a perceived lack of cultural competency and respect from providers. Participants also identified mental health, substance abuse, and community safety as important issues. Additionally, American Indian and African American participants felt diabetes was a significant health concern for their community.

Recommended strategies for health improvement discussed amongst the participants included:

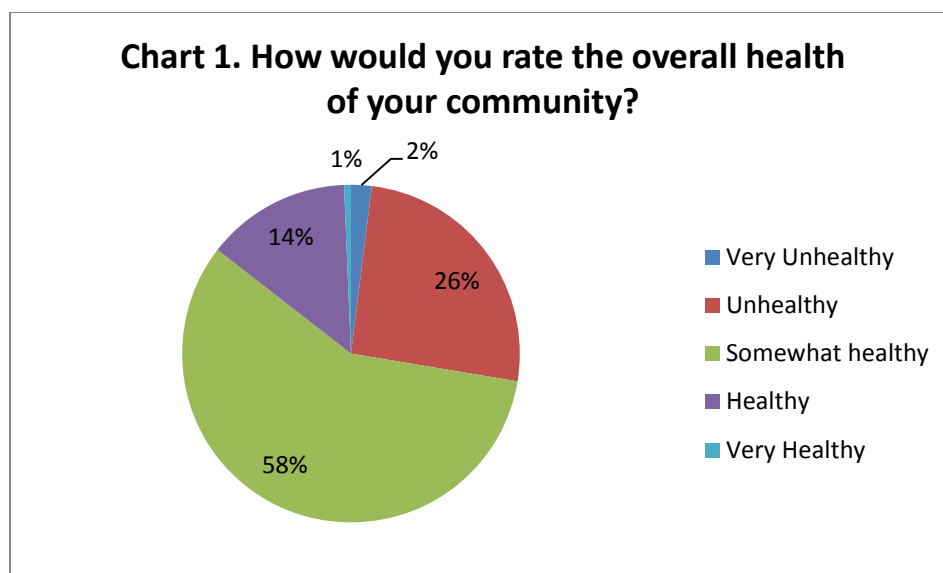
- More health care navigators/advocates
- More community education/awareness of resources
- More transparency in health care (insurance, side effects, alternatives, toxins, etc.)
- Better access to healthy, affordable food
- Increased training/education of health care professionals (e.g., proper use of pronouns for transgendered individuals, updated technologies/medical research, alternative medicine options, etc.)

### **Key Informant Surveys**

In order to identify and understand community health needs, a community health survey was administered to key informants. Key informants were identified as health or community experts familiar with target populations and geographic areas within SJHMC's primary service area. The survey instrument was created by MCDPH based on recommendations from the National Association of County and City Health Officials, Centers for Disease Control and Prevention, and Dignity Health leadership.

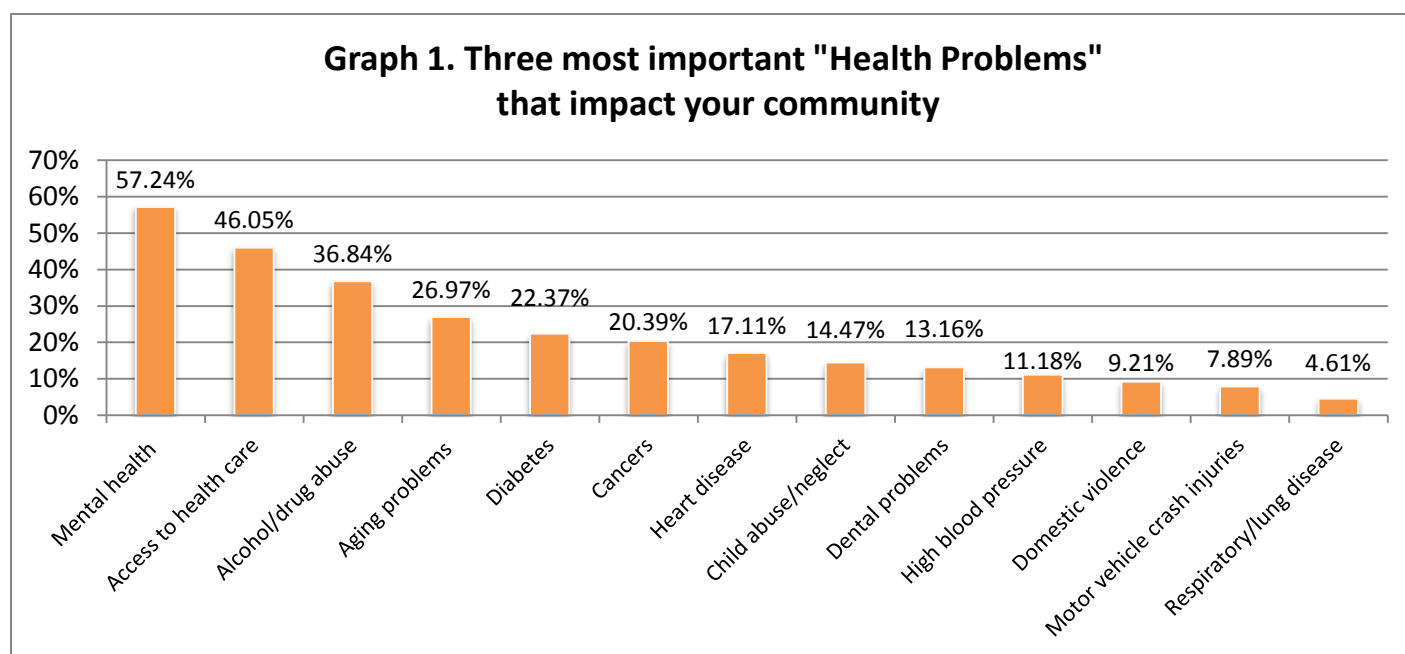
The survey was administered to 152 key informants who provide services throughout SJHMC's primary service area. The survey asked respondents about factors that would improve "quality of life," most important "health problems," in the community, "risky behaviors" of concern, and their overall rating of the health of the community (Appendix B).

When surveyed about the overall health of the community, an alarming 28% felt the community was either "very unhealthy" or "unhealthy".



Source Key Informant Survey

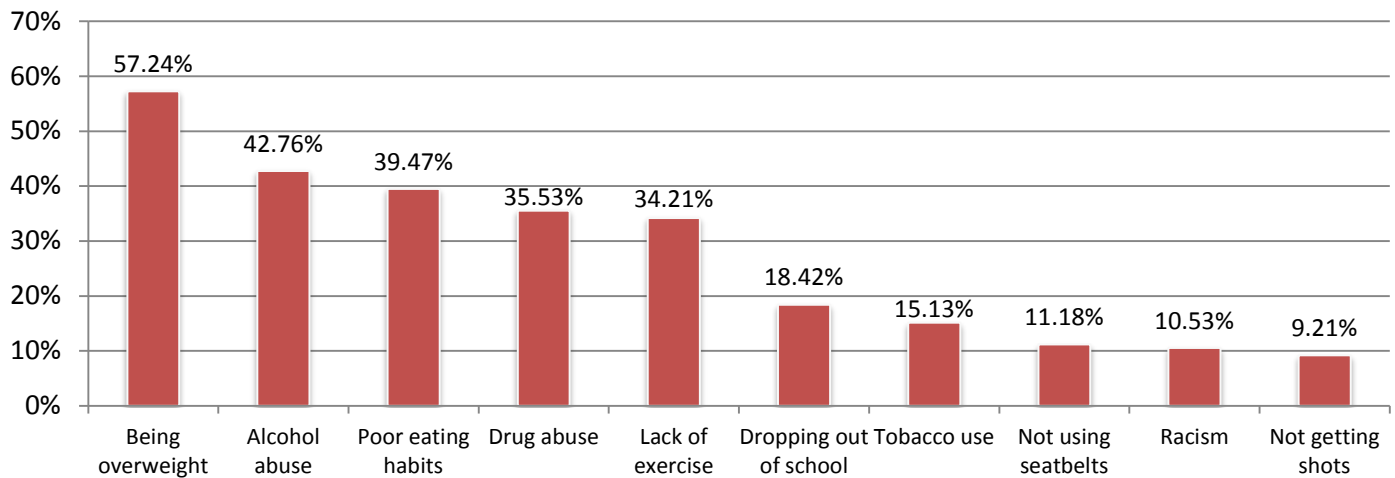
Key informants felt the most important health problems impacting their community are mental health, access to health care, alcohol/drug abuse, aging problems, and diabetes (Graph 1).



Source Key Informant Survey

When asked to rank the three most important risky behaviors seen in the community, the top five answers selected by respondents included being overweight, alcohol abuse, poor eating habits, drug abuse, and lack of exercise (Graph 2). Though the responses reflect distinct behaviors, there appears to be some overlap with primary concerns of key informants centering on the areas of substance use, healthy eating, and active living.

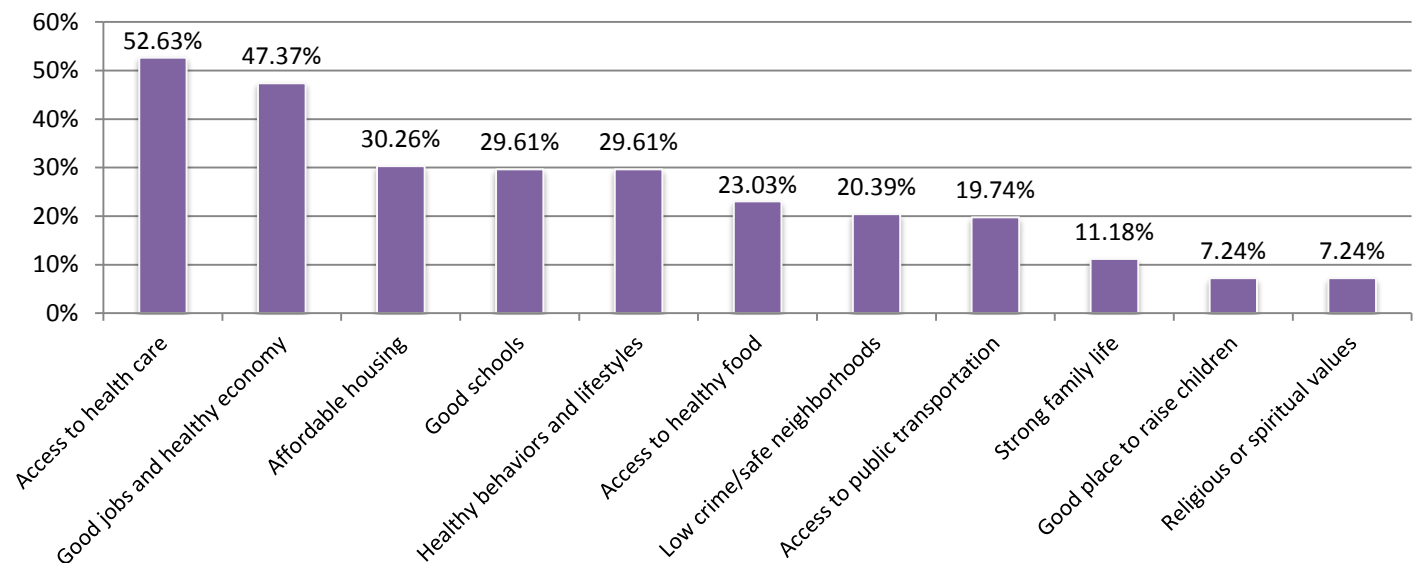
**Graph 2. Three most important "Risky Behaviors" seen in your community**



Source Key Informant Survey

Lastly, the most important factors key informants felt would improve the quality of life within their community included access to healthcare, good jobs and healthy economy, affordable housing, good schools, and healthy behaviors and lifestyles (Graph 3).

**Graph 3. Three most important factors that you think will improve quality of life in your community**



Source Key Informant Survey

## Community Input/Engagement

Community input for the CHNA included engagement from the following Dignity Health sponsored stakeholder groups:

### **St. Joseph's Hospital and Medical Center Community Health Integration Network (CHIN)**

Each Dignity Hospital and Joint Venture Hospital participated and gave input at the Community Health Integration Network (CHIN) that is facilitated by the St. Joseph's Hospital and Medical Center Board of Directors and representatives from the community and experts within the hospitals that are working collaboratively to meet the needs within the communities' they serve. A key function of the Community Health Integration Network (CHIN), comprised of Dignity Health, community agencies, and community members, is to participate in the process of establishing program priorities based on the community needs and assets and to review, advise, and make recommendations to Dignity Health –St. Joseph's Hospital and Medical Center's Board's Community Benefit Committee.

### **St. Joseph's Hospital and Medical Center's Arizona Community of Care Network (ACCN)**

Arizona Community of Care Network (ACCN) is a collaborative among diverse hospital, community organizations, government agencies, and community members. Through the collective impact model, the ACCN shares common agenda's, shared measurement systems, mutually reinforcing activities and continuous communication to solve complex issues and improve the health of Arizona residents.

The information from the key informant survey along with the key findings from the MCDPH assessment data report was presented on September 28, 2015 to the Executive Leadership Team, Community Board, and CHIN. Attendees were surveyed on the information provided in this presentation in order to further narrow down the list of significant health needs. Following the survey feedback, MCDPH provided additional presentations incorporating focus group findings and gathered final recommendations from the CHIN and ACCN, in order to solidify the recommended priorities.

### ***Data limitations and Gaps***

The data used in this report are from various reliable sources, but there are limitations to the data that need to be considered. When reviewing birth and death records some of the fields in these records are filled in based on recall. Example, a mother is asked when she began prenatal care and may have an estimate but typically not the exact date. With death records a family member assists when filling in information on the death certificate. If the individual doesn't know about an individual's personal habits (like smoking) it may not get recorded on the death certificate. With Hospital Discharge Data (HDD) for Inpatient (IP) discharges and Emergency Department (ED) visits the data is from all licensed facilities, but does not include Federal, military, and the Department of Veteran Affairs. When reviewing this data we have to consider the fact that these are those individuals that are seeking care. There are various reasons why and individual does not go to a hospital for care (like lack of money to pay) or individuals may use the ED for routine care that they could receive if they had a primary care physician. The year we evaluated for HDD used the ICD-9 code, which is different from the death certificate coding which utilizes ICD-10.

The survey data used from our state and national partners also have limitations since they are self-reported surveys. The Behavioral Risk Factor Surveillance System survey (BRFS) is a survey of adults within Maricopa County. This data could not be drilled down to each hospitals primary service area. The survey questions can be personal in nature and individuals have the option of not responding, or they may answer what they feel the best answer is, causing issues with the data. The Youth Risk Behavior survey (YRBS) is a survey of students in 8th, 10th, and 12th grades of school. The survey is done every other year and cannot be drilled down to the county level. All data from the YRBS is for the entire state. The Arizona Youth survey (AYS) is done every other year, opposite of the YRBS, and is of 8th, 10th, and 12th grade students in Arizona schools. This data can be evaluated at the county level, but not at the hospital service area.

# Prioritized Descriptions of Significant Community Health Needs

---

## ***Identifying Community Health Needs***

To be considered a health need, a health outcome or a health factor had to meet two criteria; first, existing data had to demonstrate that the primary service area had a health outcome or factor rate worse than the average Maricopa County rate, demonstrate a worsening trend when compared to Maricopa County data in recent years, or indicate an apparent health disparity; second, the health outcome or factor had to be mentioned in a substantial way in at least two primary data collection sources which were focus groups, surveys, or stakeholder meetings.

## ***Process and Criteria for Prioritization***

The process for prioritization included engagement with both internal Dignity Health stakeholders and community partners from the CHIN and ACCN (See Appendix A for list of participating organizations). The first step of the process was a comprehensive presentation by MCDPH that included an overview of the CHNA findings and key emerging health needs. Throughout the presentation, stakeholders in attendance responded to survey questions that would later be used during strategy sessions to identify health priorities. After completion of the presentation, stakeholders were given the opportunity to provide additional feedback and recommendations. The second step in the process involved review and prioritization of the key emerging health needs outlined in the MCDPH presentation. A Dignity Health Six Sigma expert led the sessions using a 4-square, priority/benefit matrix. The X axis showed the level of effort required to address a particular health need whereas the Y axis showed the benefit to the community by addressing the health need. As participants discussed each health need, consideration was given to the size of the problem, disparity and equity, known effective interventions, resource feasibility and sustainability, and community salience. Through consensus, participants made final recommendations to SJHMC for priority health needs.

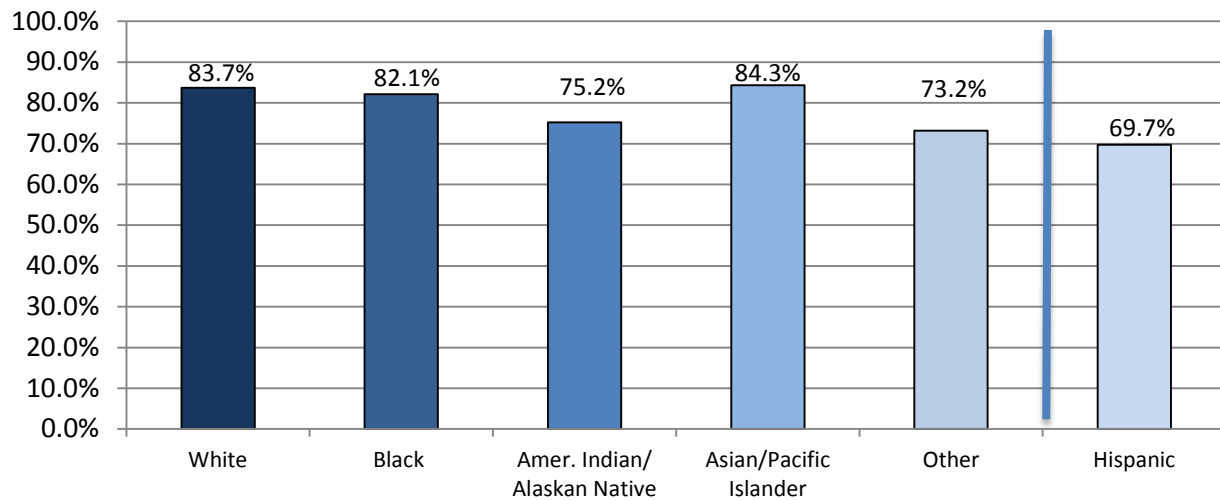
## ***Description of Prioritized Community Health Needs***

The following statements summarize each of the areas of priority for SJHMC, and are based on data and information gathered through the CHNA.

### Access to Care

Focus group participants and key informants overwhelmingly felt that access to care is an important issue for the community. Within SJHMC's primary service area, one out of every five residents lack health insurance.<sup>27</sup> According to the American Community survey (2013), the uninsured population in Maricopa County has increased over the past ten years. There are disparities experienced across members of certain racial/ethnic backgrounds, with Hispanics and American Indians being the least likely to have insurance (Graph 4).<sup>28</sup> Additionally, there is still a large portion of undocumented citizens that do not qualify for health care coverage under the Affordable Care Act (ACA).

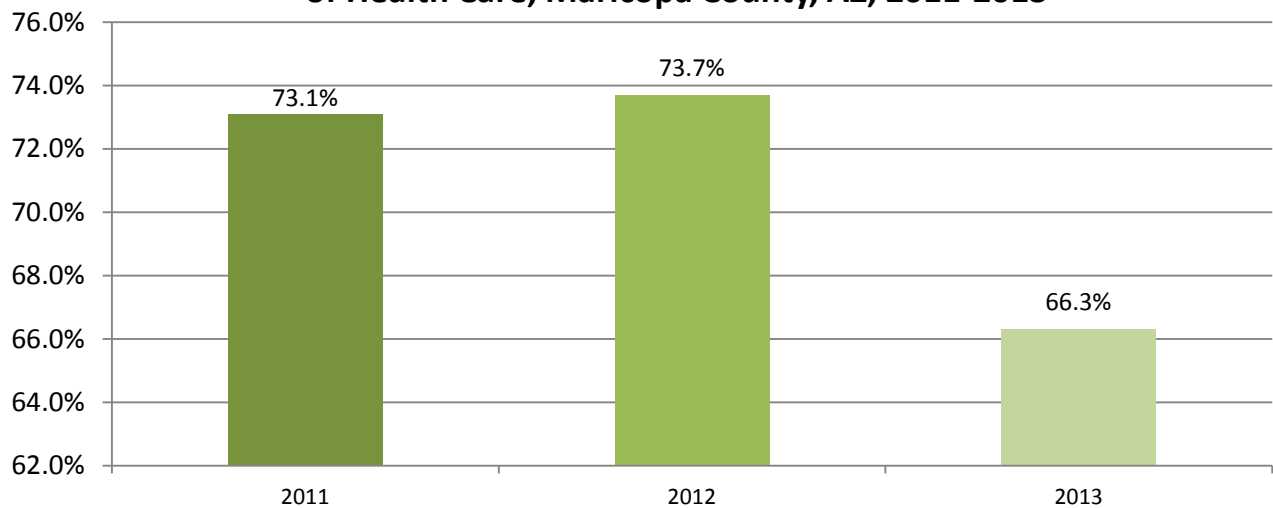
**Graph 4. Percent of Population with Health Insurance Coverage, by Race and Ethnicity, Maricopa County, AZ, 2013**



Source U.S. Census Bureau's American Community survey

Despite the increase in the ability to purchase health insurance through the federal marketplace, this does not appear to be translating to more people receiving care. The number of adults reporting they have a usual source of health care has decreased from 2011, with one out of every three Maricopa County residents saying they do not have a regular doctor they see for care (Graph 5).<sup>29</sup> Women are more likely to report having a regular source of care when compared to men.<sup>30</sup> Unfortunately, there is no data available from the last two years to measure the true impact of ACA.

**Graph 5. Percentage of Adults Who Report Having a Usual Source of Health Care, Maricopa County, AZ, 2011-2013**



Source Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System survey

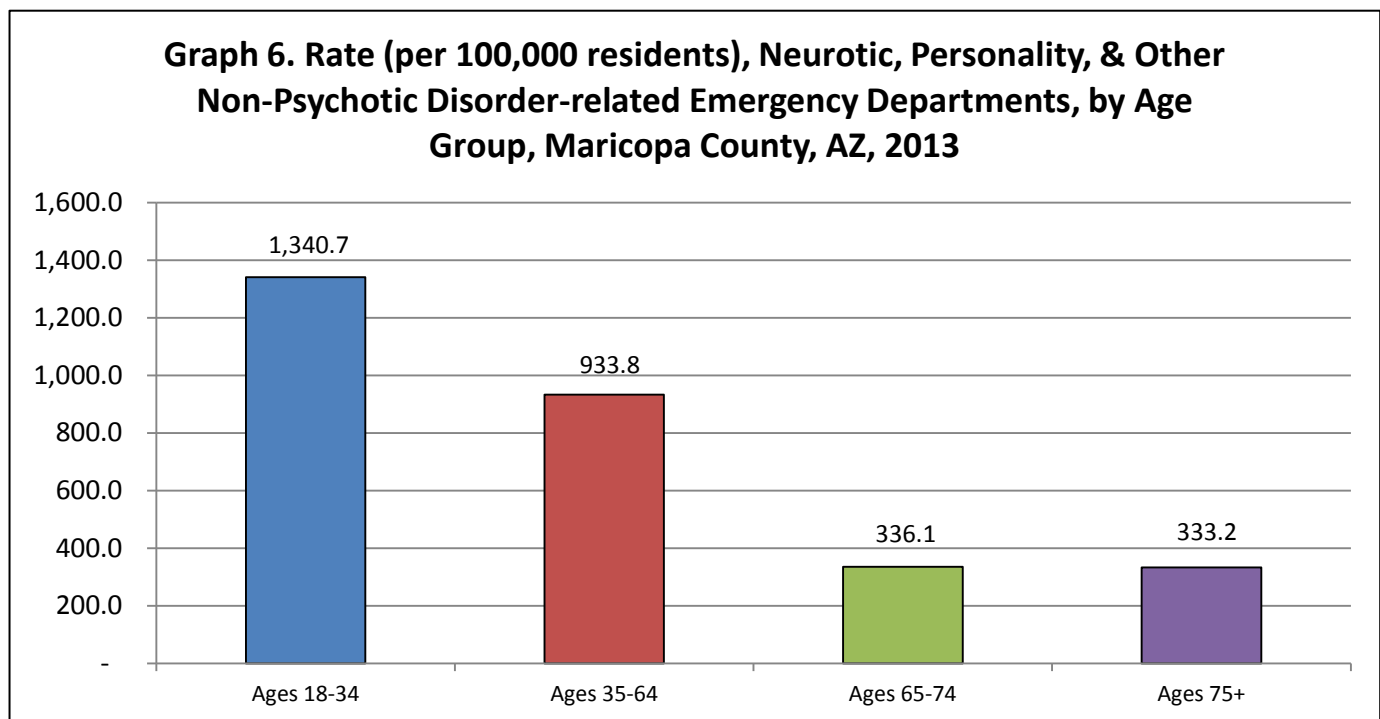
Access to care is a critical component to the health and well-being of the community members in the primary service area. Often individuals without insurance, and even those who are underinsured, experience greater difficulty readily accessing health care services, particularly preventive and maintenance health care. This can be very costly, both to the individuals and the health care system. The most frequently identified barriers to health care discussed amongst focus group participants included cost, complication of navigating the system, lack of cultural competency, and respect among healthcare providers. Focus group participants also discussed the need to educate the community and increase awareness of available resources, such as free or low cost clinics, financial aid for medical bills, and other community programs.

### Mental/Behavioral Health

Mental health was ranked as the most important health problem impacting the community by key informants. This was echoed by participants in the focus groups who felt it was among their top concerns. Mental health is among the top ten leading causes of emergency department and inpatient discharges for SJHMC's primary service area (Appendix A).<sup>31</sup>

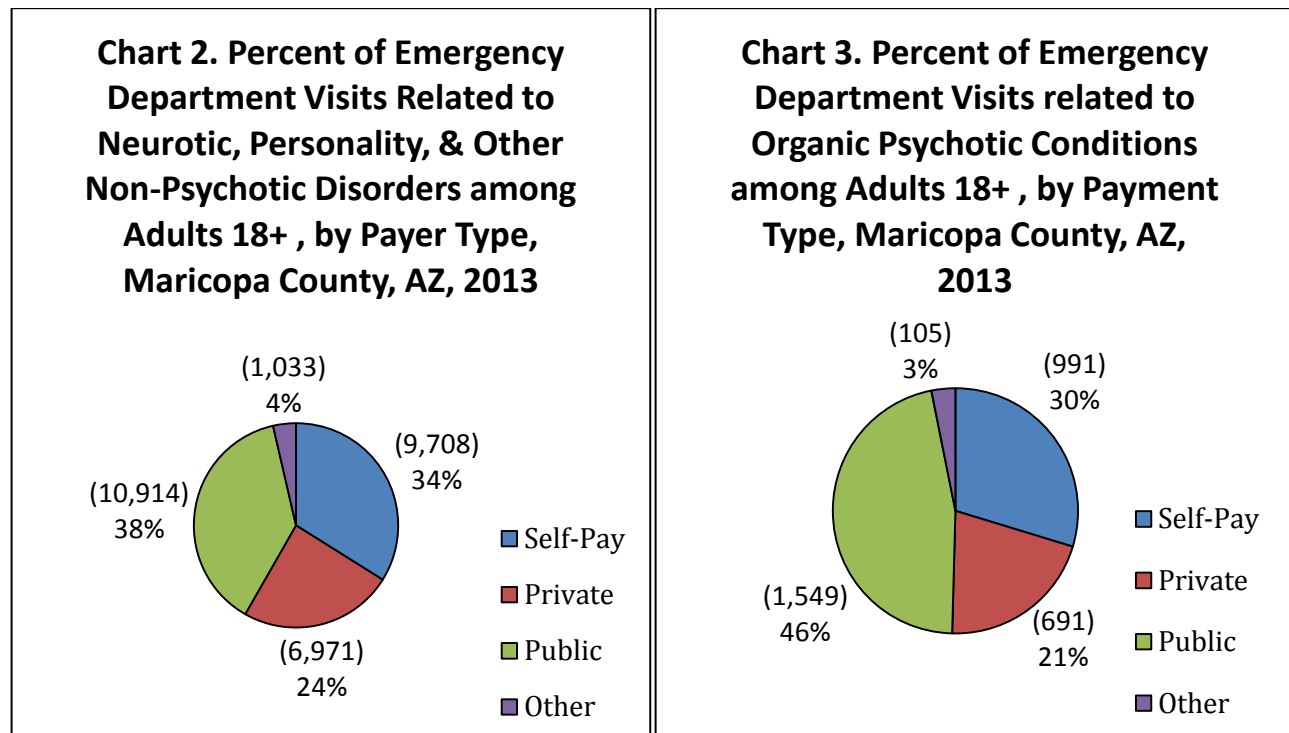
Of those adults that participated in the Behavioral Risk Factor Surveillance System survey in Maricopa County, they reported an average of three days each month where their mental health was "not good".<sup>32</sup> According to the National Institute of Mental Health, as of 2013, an estimated 43.8 million Americans over the age of 18 had a diagnosed mental disorder, and nearly 6% suffer from serious mental illness. In fact, Major Depressive Disorder is the leading cause of disability in the United States for individuals ages 15 to 44, and is more prominent in females than males.<sup>33</sup>

Adults ages 18 to 34 have the highest rate of Neurotic, Personality, & Other Non-Psychotic Disorder-related emergency department visits within Maricopa County (Graph 6).<sup>34</sup>



Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

It is important to note that a significant percentage of individuals are paying for mental health related hospital visits out of pocket which indicates a high severity of need for treatment (Charts 2 and 3).<sup>35</sup>



Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

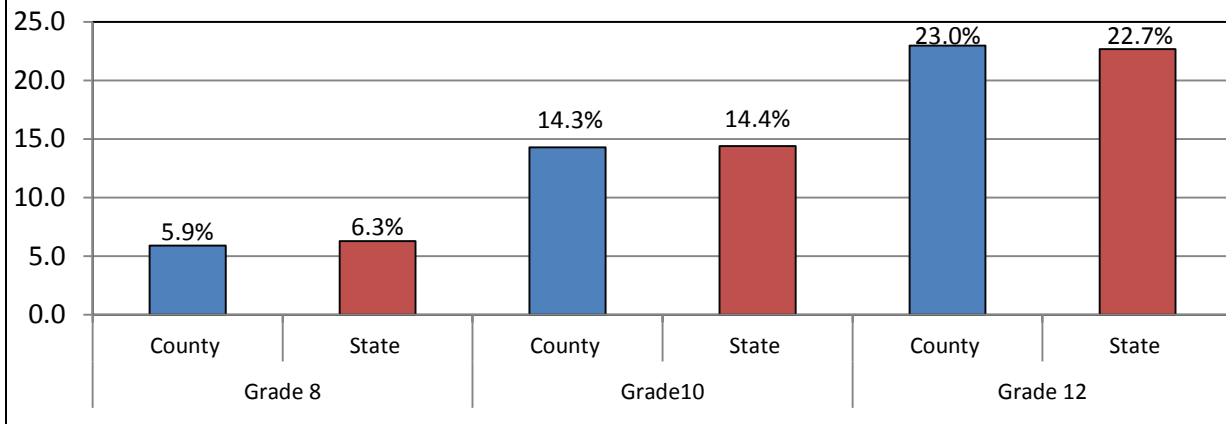
### Substance Abuse

Key informants listed alcohol and drug abuse as two of the top risky health behaviors community members are engaging in. The substances most frequently cited in the survey as being of concern included methamphetamines, heroin, prescription drugs, marijuana and, cocaine and alcohol. Additionally, substance abuse was frequently mentioned as a concern amongst focus group participants.

According to the Centers for Disease Control and Prevention, substance abuse cost our nation \$700 billion dollars annually in costs related to crime, lost productivity, and health care.<sup>36</sup> According to the Substance Abuse and Mental Health Service Administration's (SAMHSA's) National Survey on Drug Use and Health, 23.5 million persons aged 12 or older needed treatment for an illicit drug or alcohol abuse problem in 2009. Of these, only 2.6 million—11.2% of those who needed treatment—received it at a specialty facility.<sup>37</sup>

According to the Behavioral Risk Factor Surveillance System survey 15% of adults 18 years of age and older report binge drinking (defined as having 5 or more drinks for men and 4 or more drinks for women on one occasion) in the last 30 days.<sup>38</sup> Furthermore, according to the Arizona Youth survey, in 2014, 23% of high school seniors reported binge drinking in the last 2 weeks (Graph 7).<sup>39</sup> The most common substances used by youth throughout Maricopa County include alcohol, tobacco, marijuana, and prescription drugs.<sup>40</sup> For the majority of substances there has been a decrease in use with the exception of marijuana use which is increasing. This is likely due in part to the passing of medical marijuana legislation in the state of Arizona.

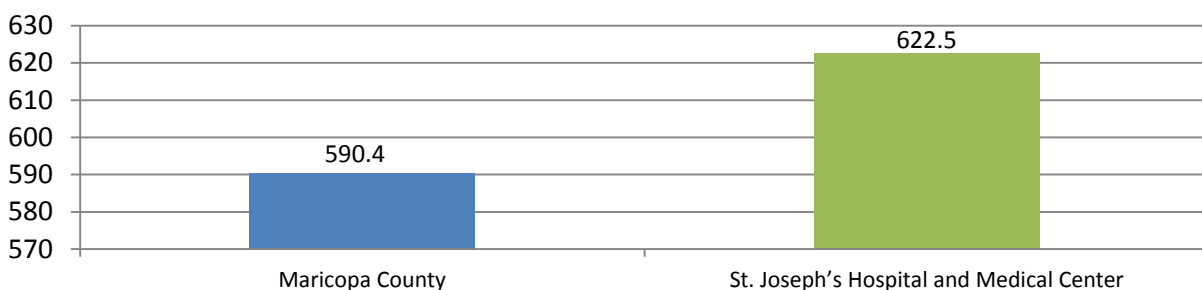
**Graph 7. Percentage of Youth Who Had 5 or More Alcoholic Drinks in a Row in the Past 2 Weeks, Maricopa County, AZ, 2013**



Source Arizona Criminal Justice Commission, Arizona Youth survey

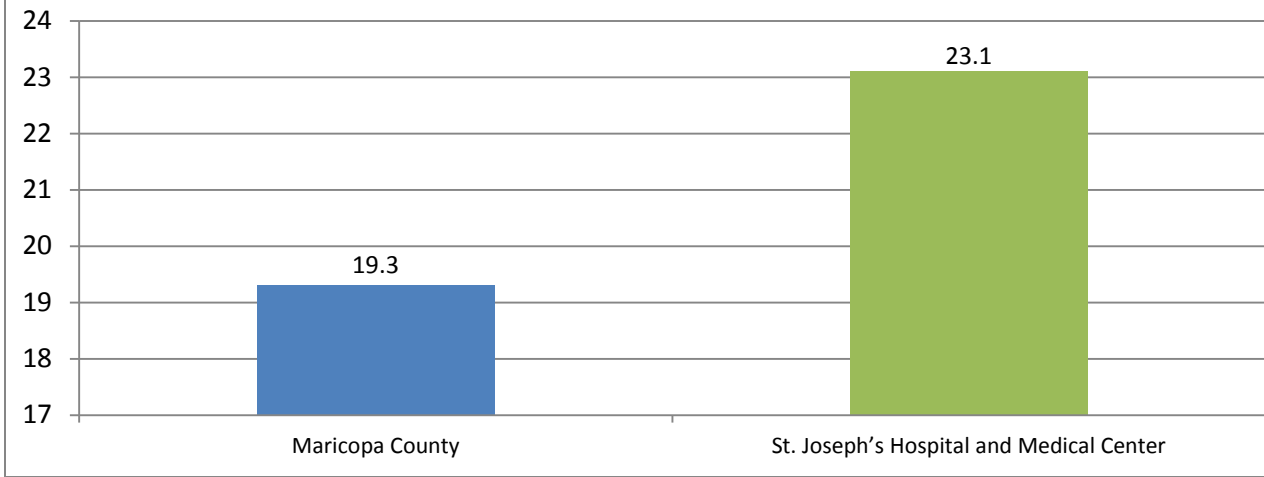
Injury and poisoning are the leading cause of emergency department visits for SJHMC's primary service area (Appendix A).<sup>41</sup> The rate of emergency department visits related to alcohol, opiates, heroin and benzodiazepines are higher than the average Maricopa County rate which indicates a potential opportunity for screening, brief intervention and referral to substance abuse treatment in the primary service area (Graphs 8-11).<sup>42</sup>

**Graph 8. Rate (per 100,000 residents), Alcohol Poisoning-related Emergency Department Visits, by location, Maricopa County, AZ, 2013**



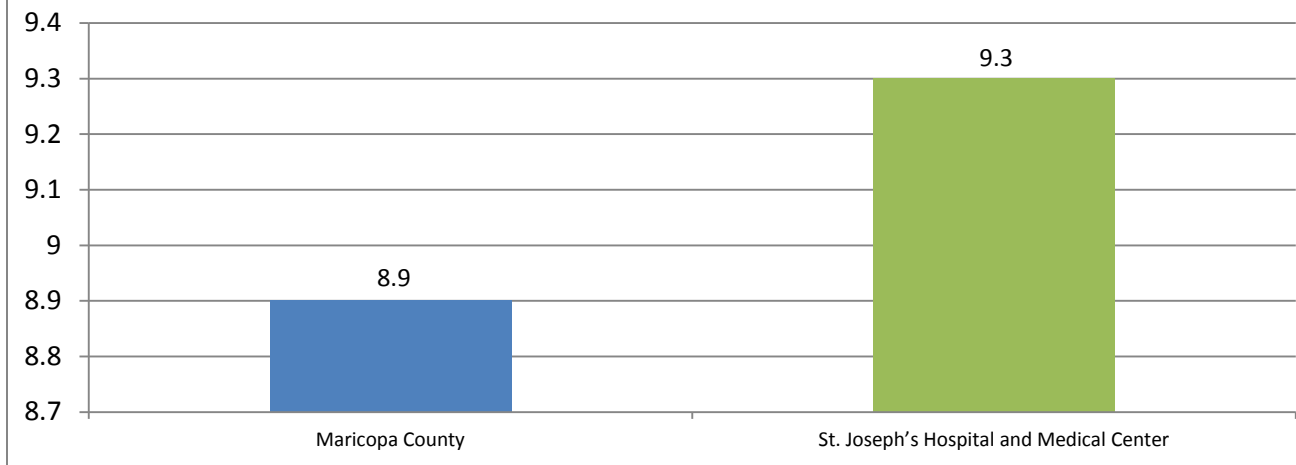
Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

**Graph 9. Rate (per 100,000 residents), Opiate Poisoning-related Emergency Department Visits, by location, Maricopa County, AZ, 2013**



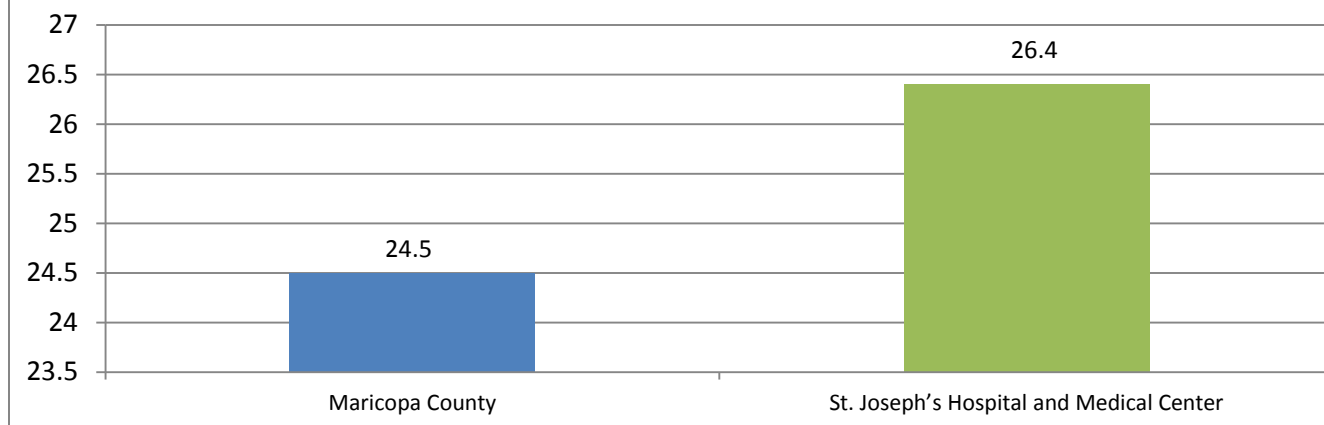
Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

**Graph 10. Rate (per 100,000 residents), Heroin Poisoning-related Emergency Department Visits, by location, Maricopa County, AZ, 2013**



Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

**Graph 11. Rate (per 100,000 residents), Benzodiazepine Poisoning-related Emergency Department Visits, by location, Maricopa County, AZ, 2013**



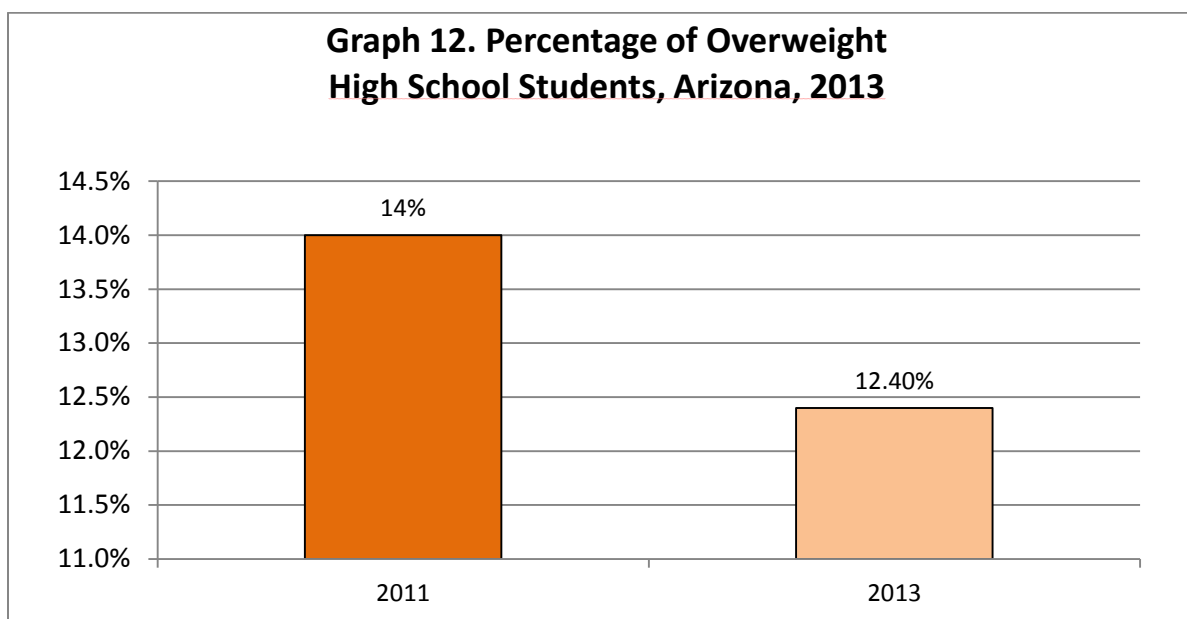
Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

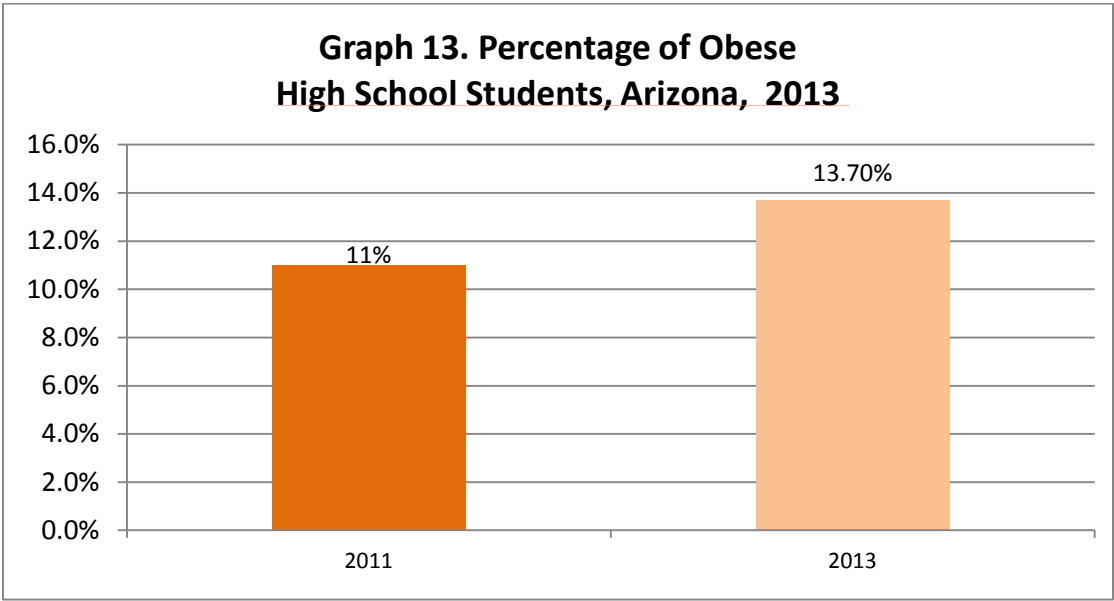
### Obesity

Key informants felt that being overweight, poor eating habits and lack of exercise were among the top five risky health behaviors community members were engaging in. The percent of obese adults is an indicator of the overall health and lifestyle of a community and can have significant impact on health care spending. Obesity increases the risk of several chronic health conditions such as Type 2 Diabetes, heart disease, cancer, hypertension, stroke, liver and gallbladder disease, respiratory problems, and osteoarthritis.

According to the 2013 Youth Risk Behavior survey, the number of overweight high school students is decreasing (Graph 12).<sup>43</sup> However, the number of high school students who report being obese is increasing. The amount of high school students in Arizona that are obese now accounts for 13.7% of students (Graph 13).<sup>44</sup>

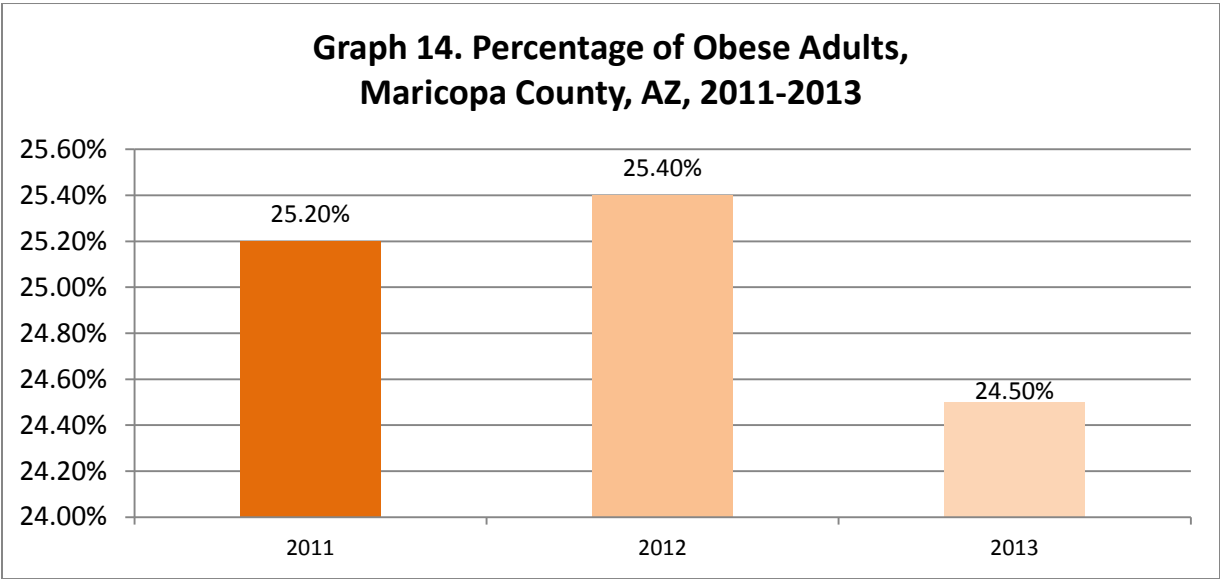
**Graph 12. Percentage of Overweight High School Students, Arizona, 2013**



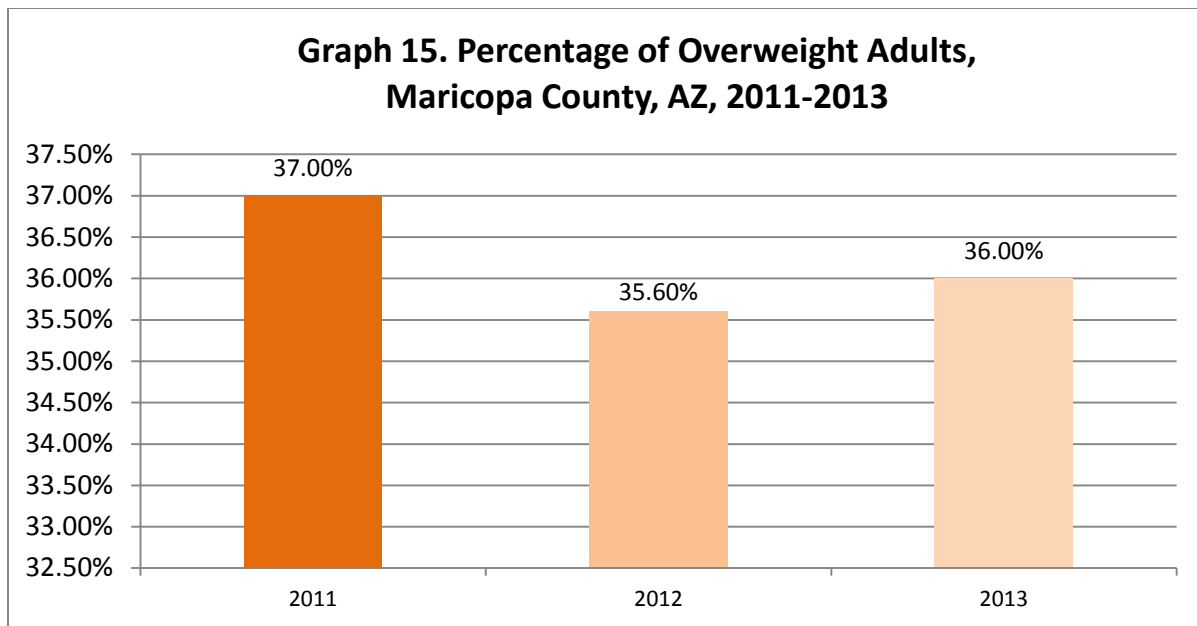


Source Centers for Disease Control and Prevention, Youth Risk Behavior survey (note that YRBS is administered every other year)

The percentage of adults in Maricopa County that report being overweight and obese on the Behavioral Risk Factor Surveillance System survey is decreasing (Graph 14-15).<sup>45</sup>

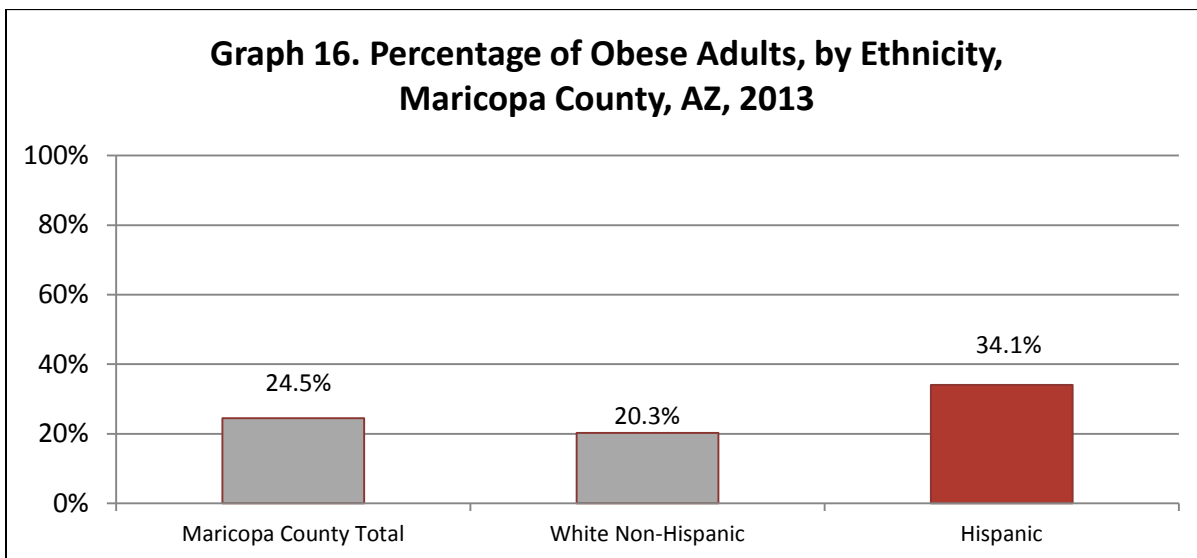


Source Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System survey



Source Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System survey

However, Hispanic residents continue to experience disparities related to obesity, and in 2013, 34.1% reported being obese (Graph 16).<sup>46</sup>



Source Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System survey

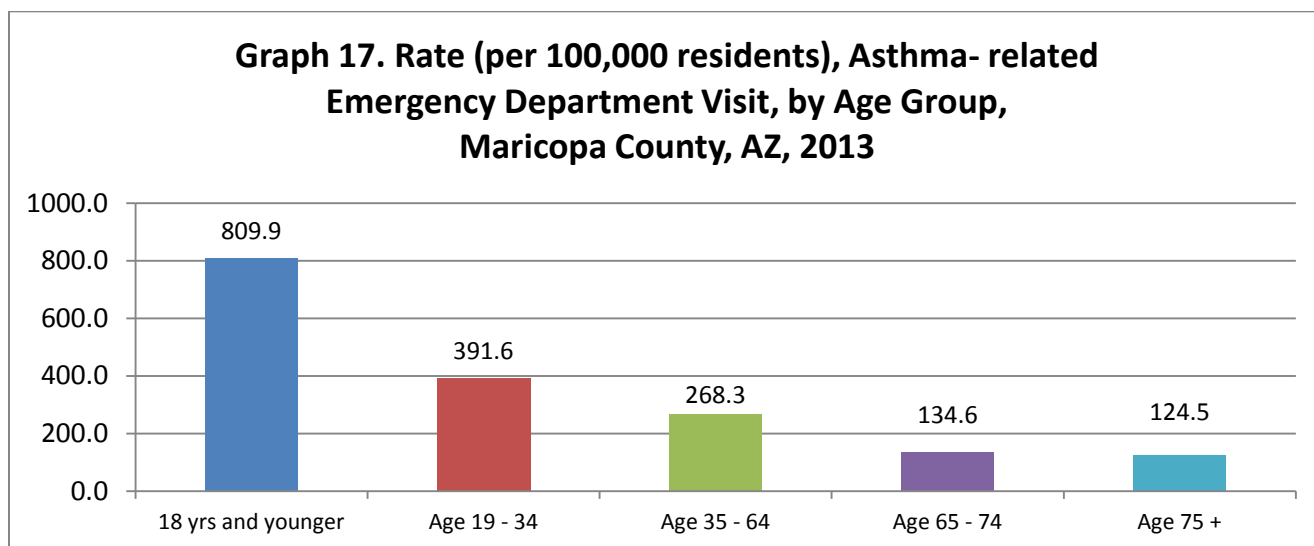
#### Respiratory Illness (i.e. Asthma, COPD, Lung Disorders)

Chronic lower respiratory conditions are the third leading cause of death for SJHMC's primary service area.<sup>47</sup> Additionally, asthma and pneumonia are among the top ten leading causes of emergency department visits.<sup>48</sup>

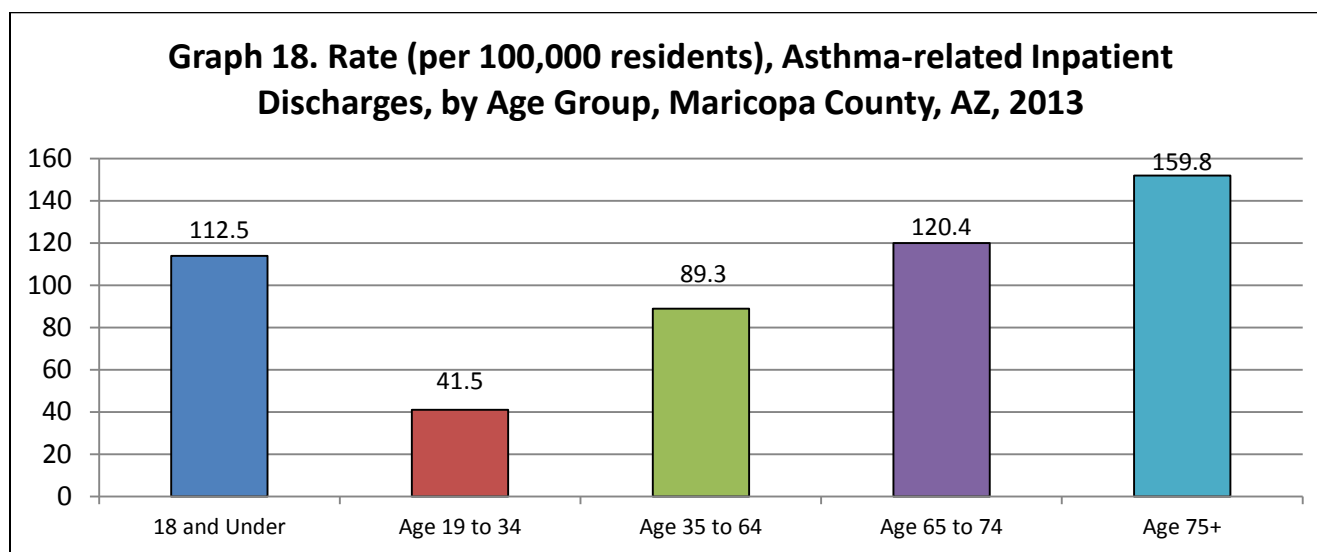
According to the Behavioral Risk Factor Surveillance System survey (2013), 14.5% of adults reported having been told they have asthma by a medical doctor at some point in their lives, and 8.6% report currently having the disease.<sup>49</sup> The difference could reflect those adults who may have had asthma as children but may have

outgrown the condition. Additionally, 6.8% of respondents reported having been told they have chronic obstructive pulmonary disorder by a medical doctor.<sup>50</sup>

Children age 18 and under have the highest rate of asthma-related emergency department visits while adults age 75 and older have the highest rate of inpatient discharges (Graphs 17-18).<sup>51</sup>



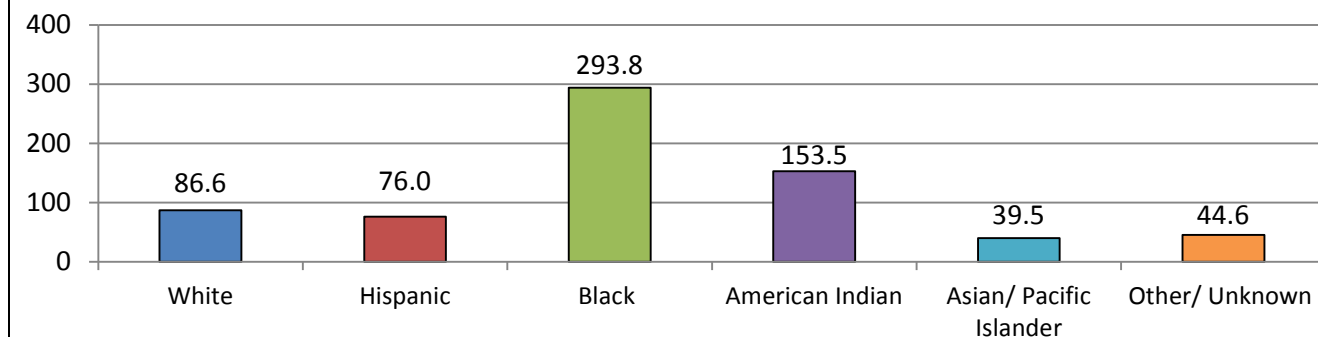
Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting



Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

White non-Hispanics and adults age 75 and older have the highest rates of death related to asthma. However, African Americans have the highest rates for emergency room visits and inpatient discharges which indicates a potential health disparity in asthma diagnoses, treatments, or preventative care (Graph 19).<sup>52</sup>

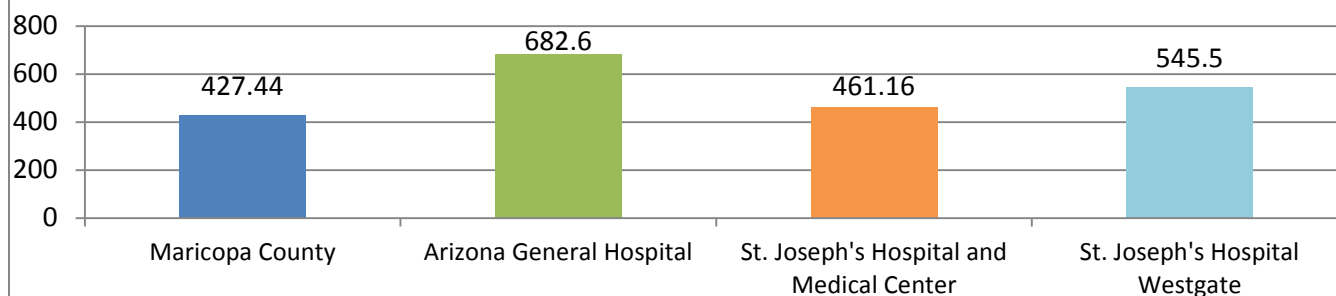
**Graph 19. Rate (per 100,000 residents), Asthma-related Inpatient Discharges, by Race and Ethnicity, Maricopa County, AZ, 2013**



Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

Within SJHMC's primary service area, the rate of emergency department visits related to asthma is higher than the average Maricopa County rate. It is also among the top three facilities with the highest rates of emergency department visits related to asthma within the Dignity Health network (Graph 20).<sup>53</sup> SJHMC, St. Joseph's Hospital Westgate and Arizona General Hospital are all located in congested areas of Maricopa County with high levels of pollution which is likely the cause of the increased rates.

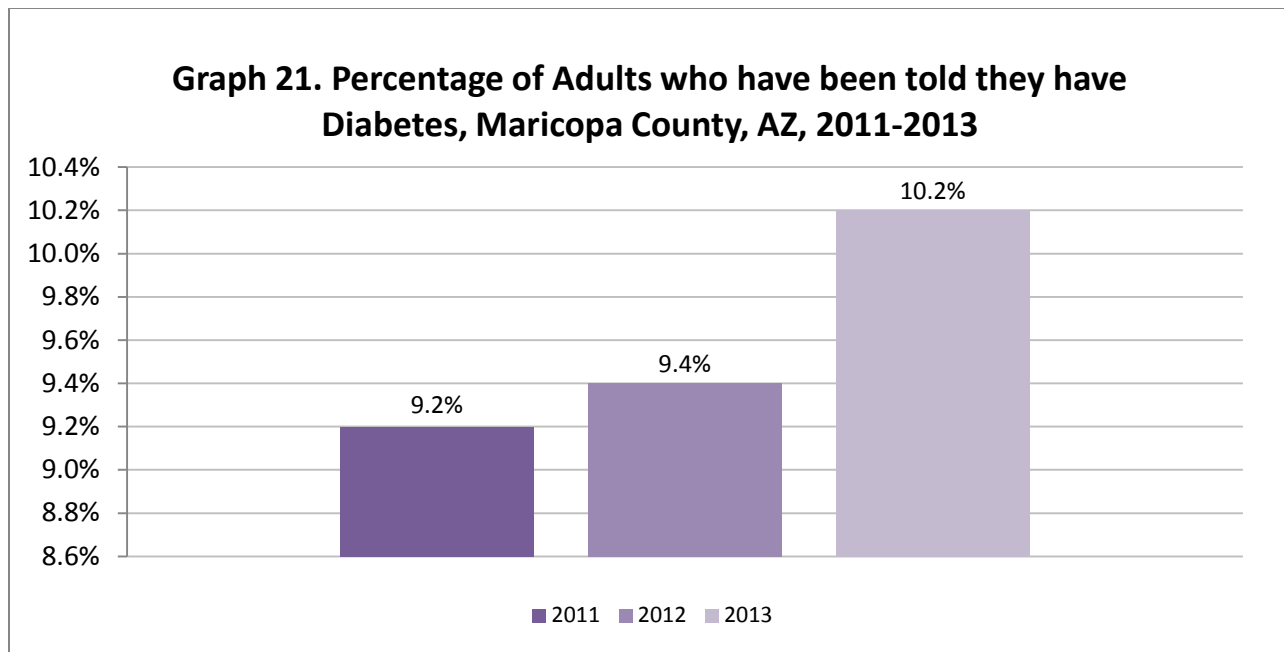
**Graph 20. Rate (per 100,000 residents), Asthma-related Emergency department visits, by location, Maricopa County, AZ, 2013**



Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

## Diabetes

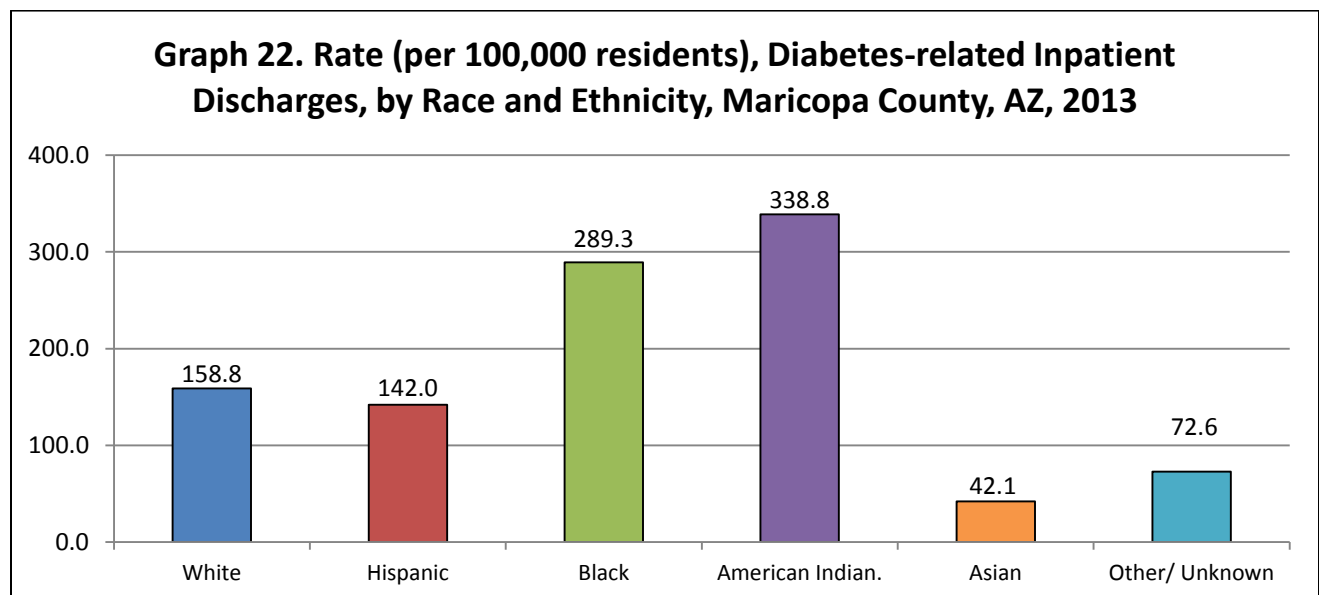
The number of deaths related to diabetes is decreasing in Maricopa County, but it is still the sixth leading cause of death in SJHMC's primary service area indicating a sustained health need (Appendix A).<sup>54</sup> The number of people reporting they have been told they have diabetes is also increasing. In 2013, 10.2% of adults responding to the Behavioral Risk Factor Surveillance System survey reported having been told they have diabetes (Graph 21).<sup>55</sup>



Source Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System survey

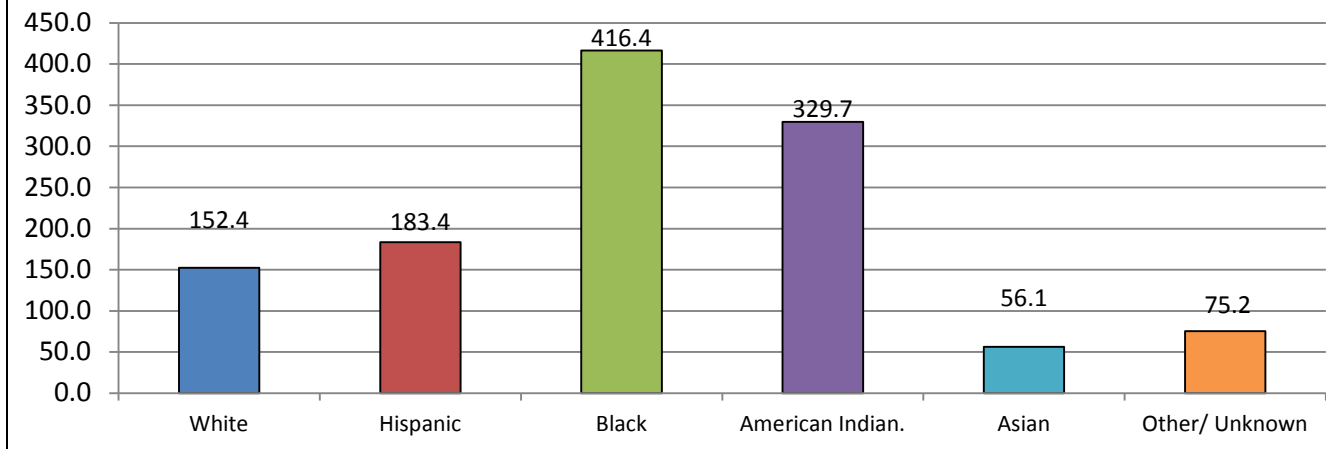
According to the American Heart Association, in 2010 19.7 million Americans over the age of 20 had physician diagnosed diabetes. An estimated 8.2 million Americans have undiagnosed diabetes. Complications of Diabetes include heart disease, stroke, high blood pressure, blindness, kidney disease, neuropathy, amputation and death.

African American and American Indian adults that participated in the focus groups identified diabetes as one of the most concerning health problems within their communities. This is supported by the rates of hospital visits for these populations within Maricopa County (Graphs 22-23).<sup>56</sup> The higher rates of inpatient discharges and emergency department visits for these populations indicates a potential health disparity in diabetes diagnoses, treatments, or preventative care.



Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

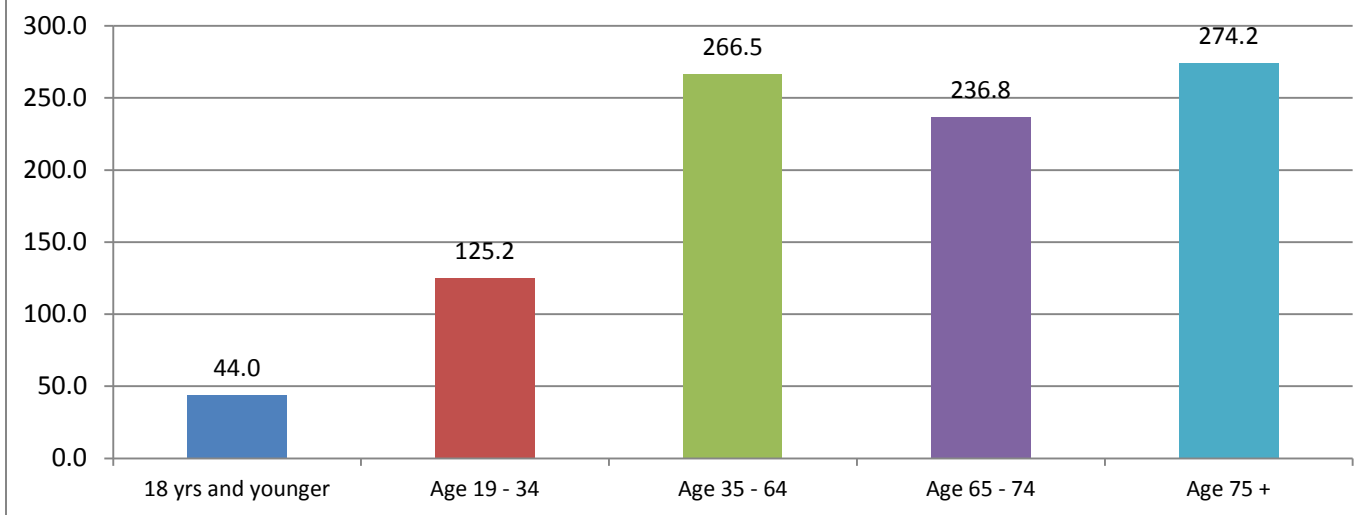
**Graph 23. Rate (per 100,000 residents), Diabetes-related Emergency Department Visits, by Race and Ethnicity, Maricopa County, AZ, 2013**



Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

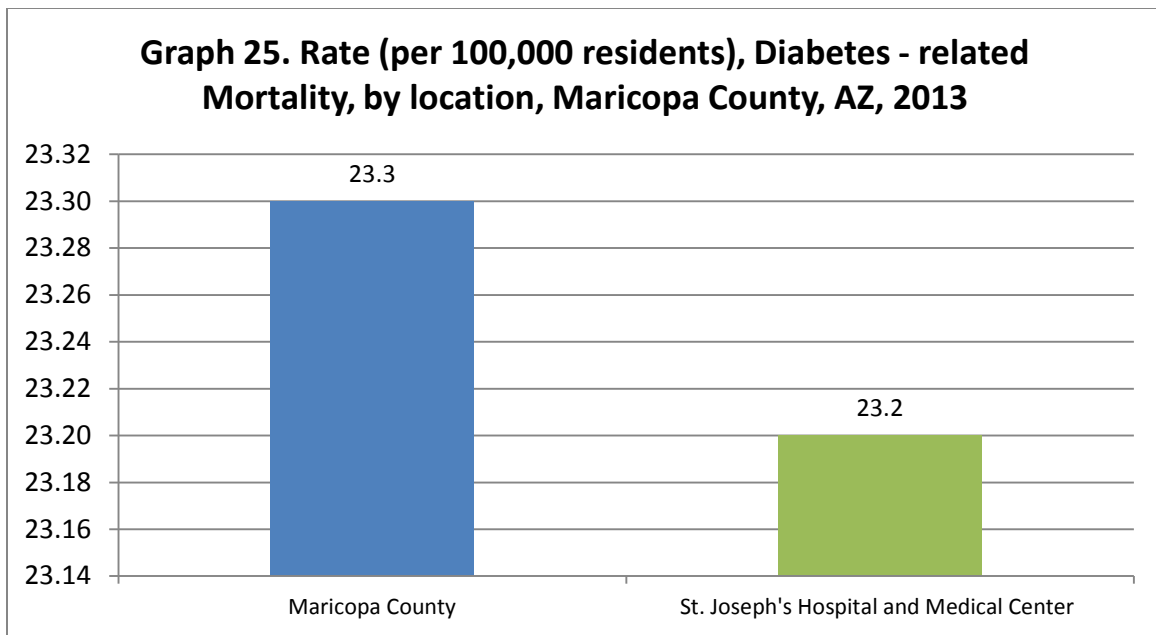
Adults age 75 and older have the highest rate of diabetes-related emergency department visits, however this is closely followed by adults ages 35-64 which indicates a need for earlier screening and prevention of diabetes (Graph 24).<sup>57</sup>

**Graph 24. Rate (per 100,000 residents), Diabetes-related Emergency Department Visit, by Age Group, Maricopa County, AZ, 2013**



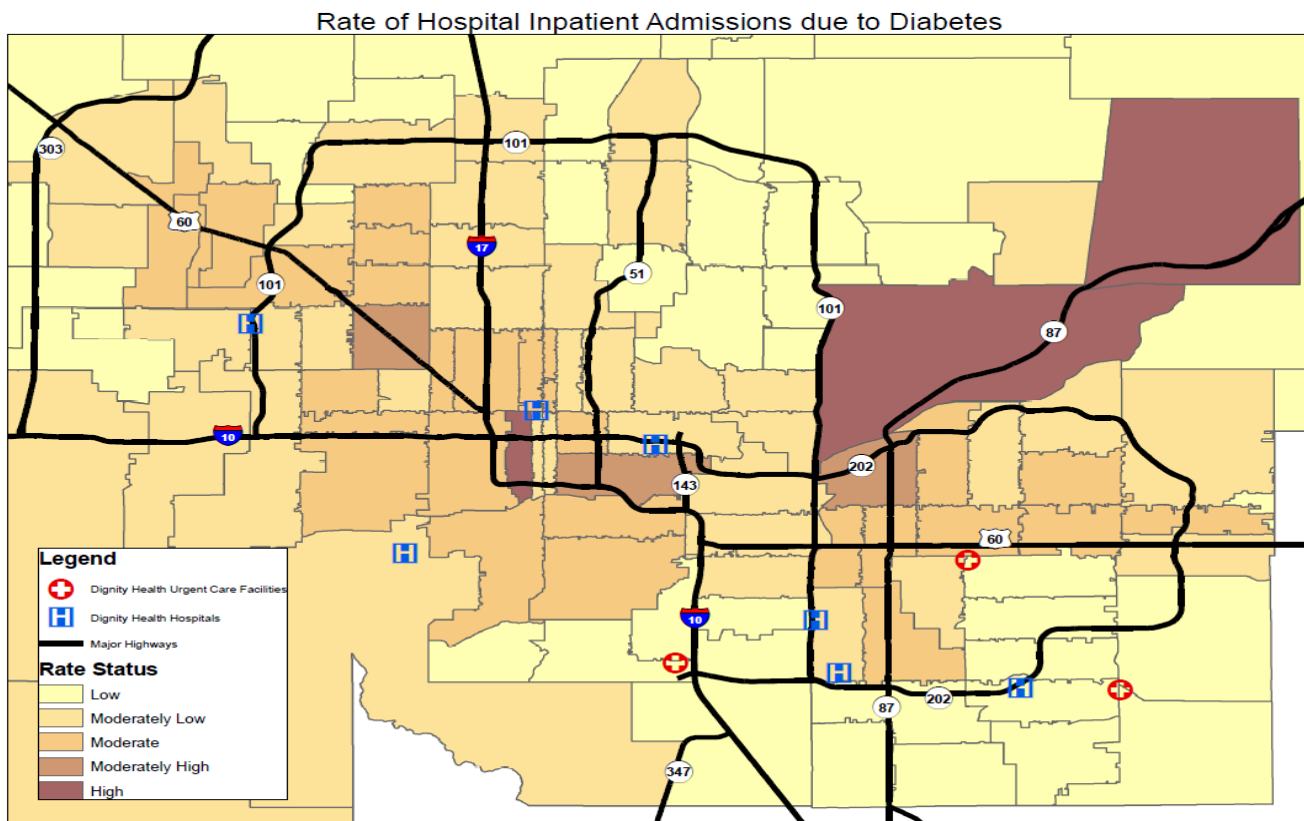
Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

The rate of diabetes-related deaths in SJHMC's primary service area is only slightly better than the average Maricopa County rate (Graph 25).<sup>58</sup> The rate is also better than the Healthy People 2020 goal of 66.6 per 100,000 individuals.



Source Arizona Department of Health Services, Vital Records and Statistics

However, the rate of diabetes-related inpatient discharges is in the moderate to high ranges in areas within SJHMC's primary service area (Map 3).<sup>59</sup>

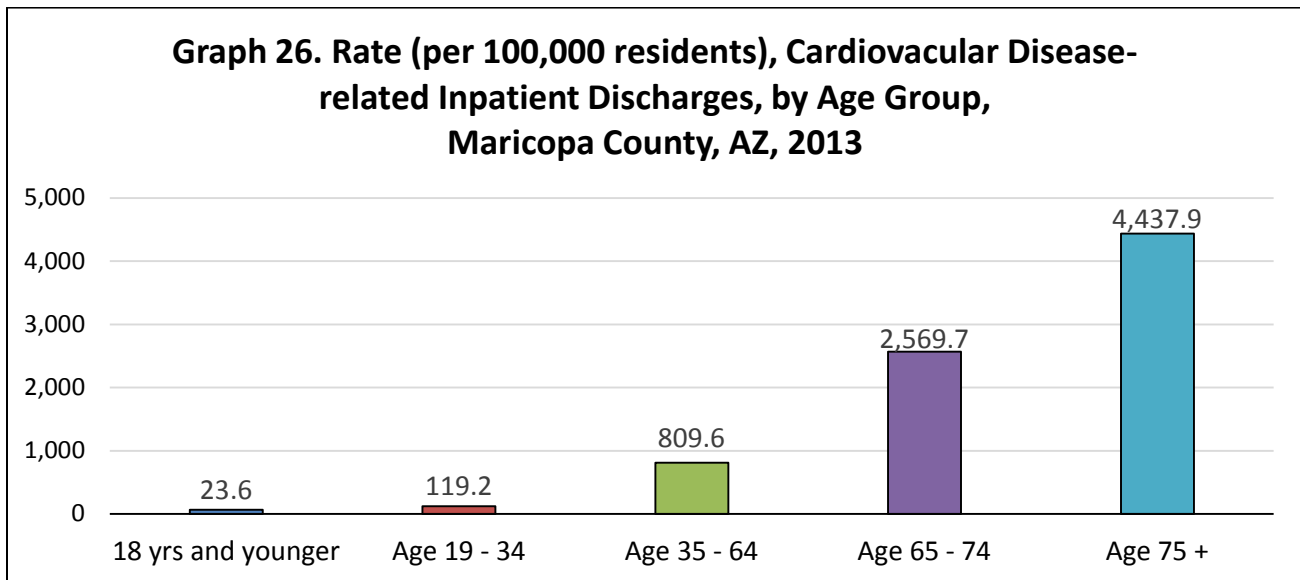


Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

## Cardiovascular Disease

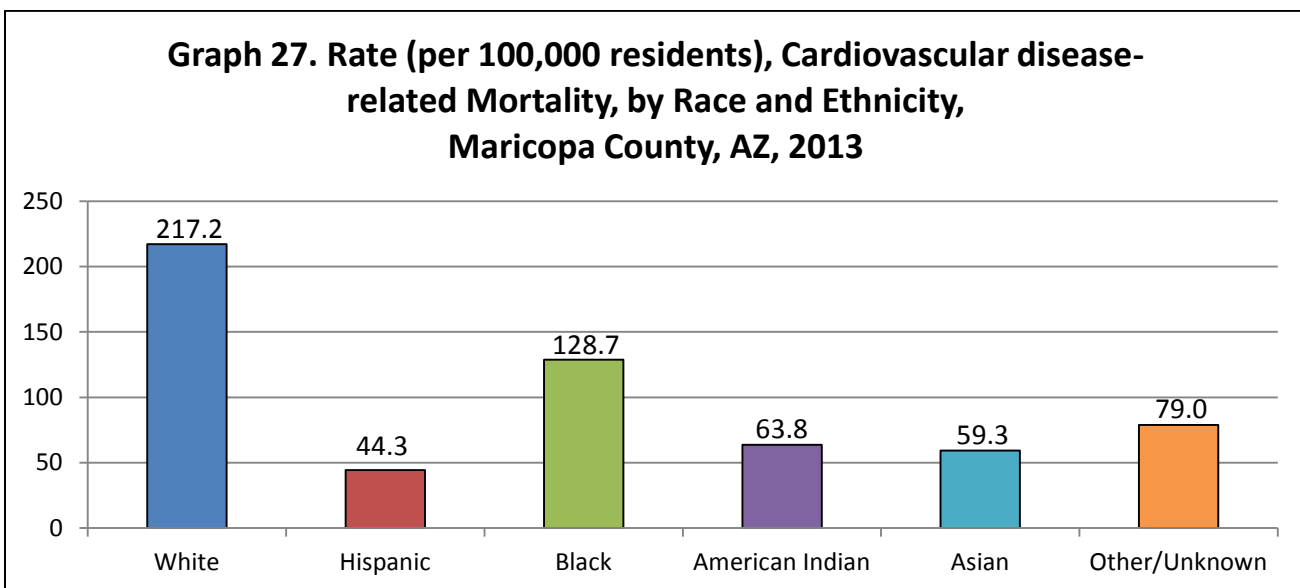
Cardiovascular disease is the second leading cause of death for Maricopa County and SJHMC's primary service area.<sup>60</sup> The primary risk factors include diabetes, overweight/obesity, poor diet, physical inactivity and excessive alcohol use. Many of these are the same risky behaviors key informants reported being concerned about for the primary service area.

Overall the number of deaths related to cardiovascular disease in Maricopa County is decreasing. However, adults age 75 and older have the highest rate of cardiovascular disease-related inpatient discharges (Graph 26).<sup>61</sup>

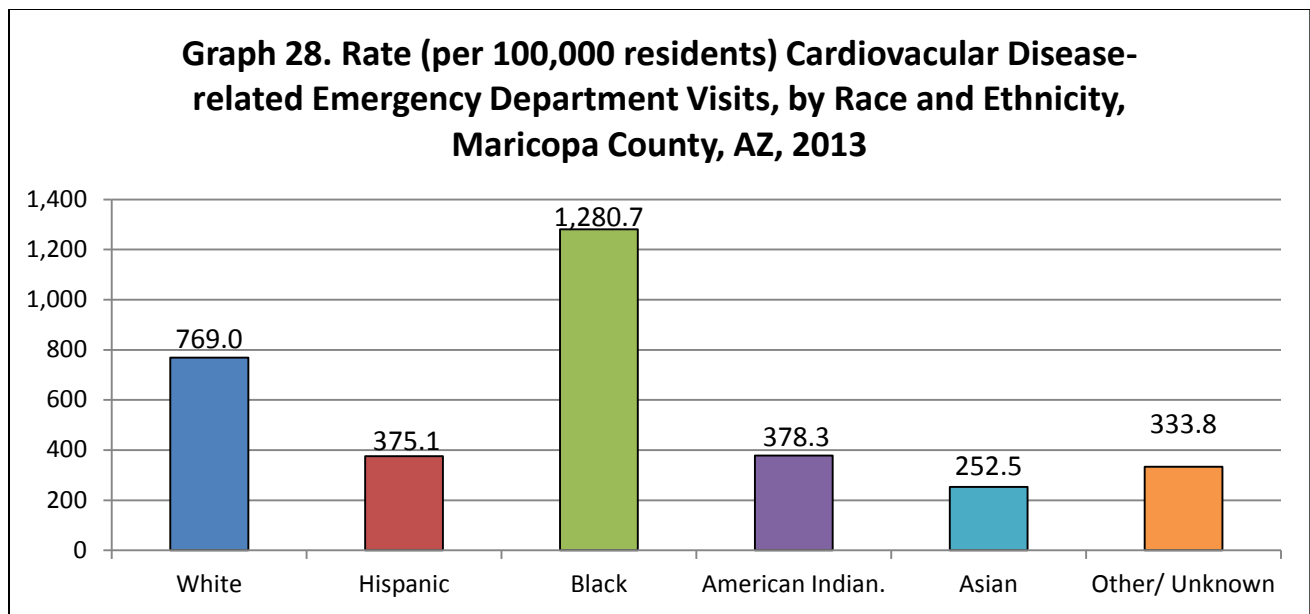


Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

Although White non-Hispanics have the highest rate of cardiovascular disease-related mortality, African Americans have the highest rate of cardiovascular disease-related emergency department visits which indicates a potential health disparity in cardiovascular disease diagnoses, treatments, or preventative care (Graphs 27-28).<sup>62</sup>

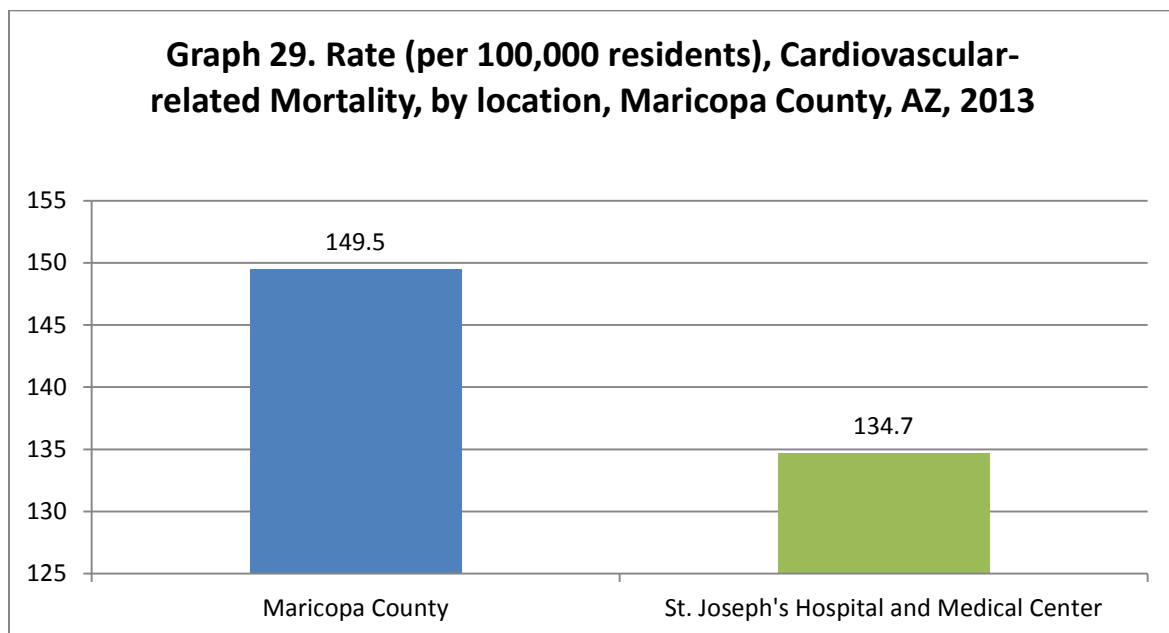


Source Arizona Department of Health Services, Vital Records and Statistics



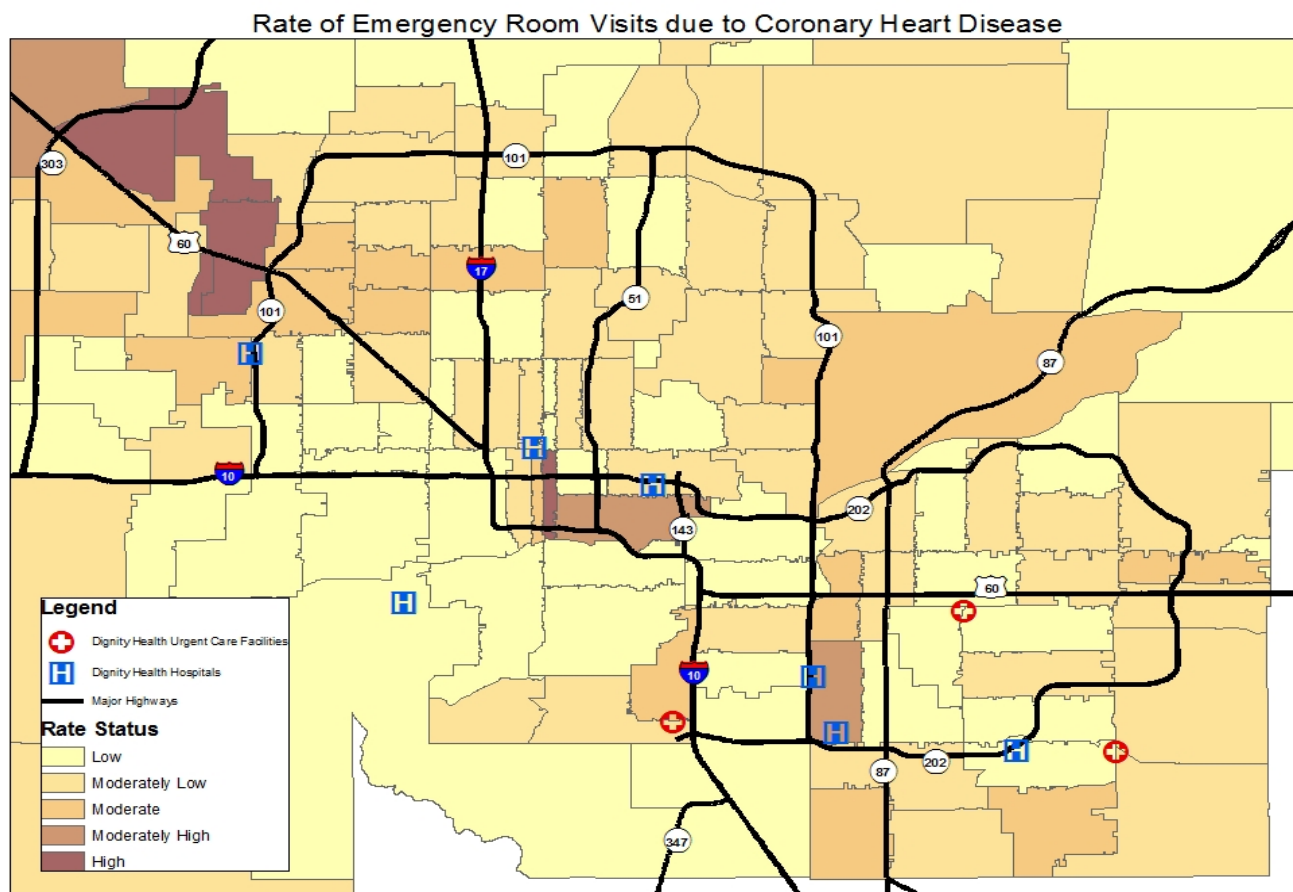
Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

The rate of deaths attributed to cardiovascular disease in SJHMC's primary service area is better than the average Maricopa County rate. However, it is worse than the Healthy People 2020 goal of 103.4 per 100,000 individuals (Graph 29).<sup>63</sup> Additionally, cardiovascular disease accounted for nearly 31,700 hospital visits in the primary service area in 2013.<sup>64</sup>



Source Arizona Department of Health Services, Vital Records and Statistics

Lastly, the rate of emergency department visits due to Coronary Heart Disease is in the moderate to high range in areas within SJHMC's primary service area (Map 4).<sup>65</sup>



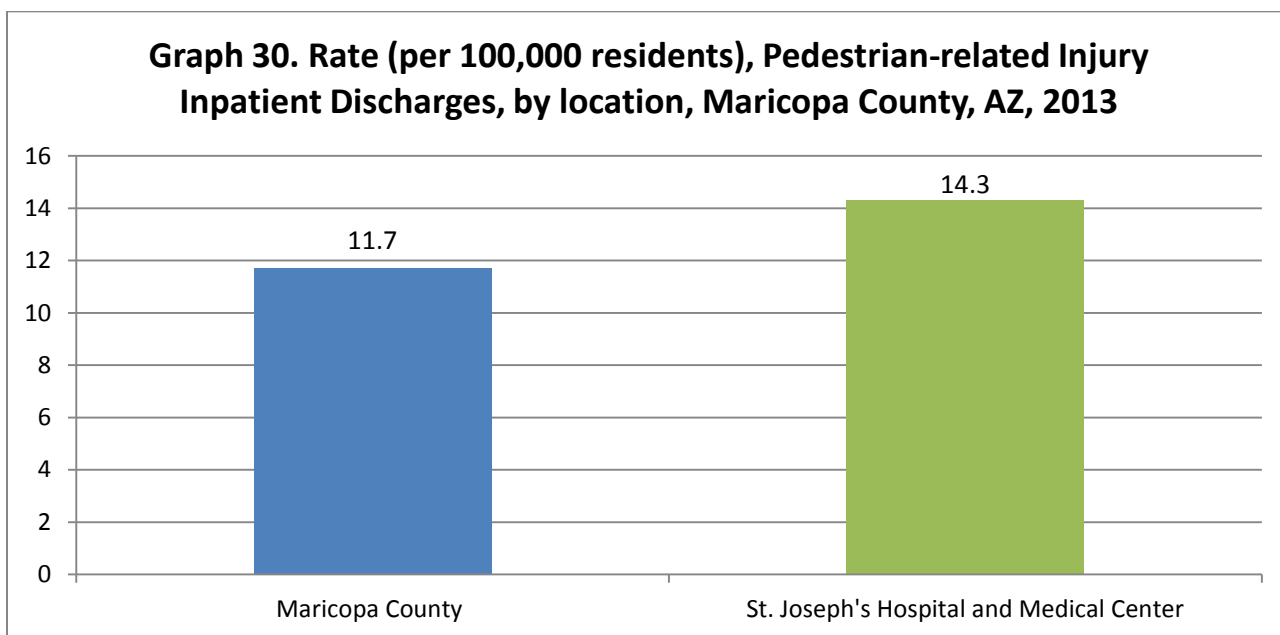
Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

## Injury

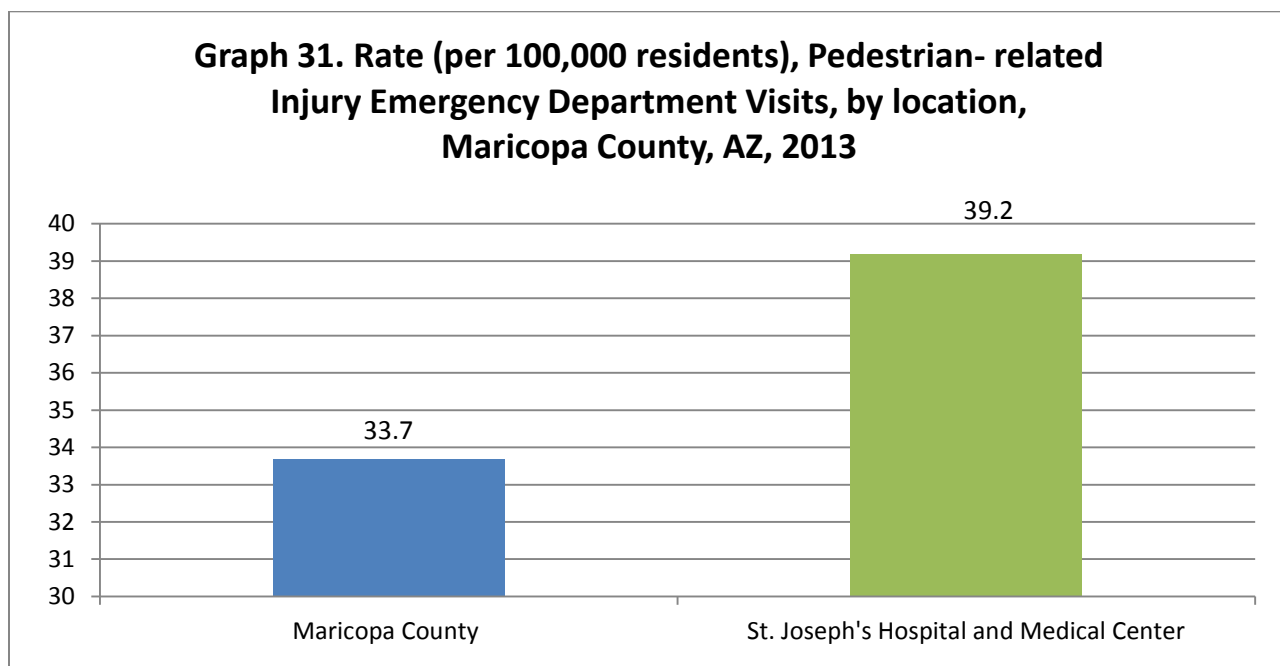
In 2013 unintentional injury was the fifth leading cause of death for SJHMC's primary service area (Appendix A).<sup>66</sup> Unintentional injuries are preventable and largely due to lifestyle choices. Nationally, nearly one-third of these deaths are due to car crashes and nearly another one-third is due to accidental poisonings. Males are more likely to suffer from an unintentional injury with the exception of falls which are more prevalent among females.<sup>67</sup> Information on hospital visits related to poisonings was presented in the substance abuse section and is a significant concern for SJHMC's primary service area.

The rate of motor vehicle accident-related inpatient discharges, emergency department visits and mortality within the primary service area are not higher than the average Maricopa County rates, and are better than the Healthy people 2020 goal of 12.4 deaths per 100,000 individuals. However, in 2013 approximately 3,000 hospital visits were attributed to motor vehicle accidents in the primary service area.<sup>68</sup>

Of major concern for SJHMC are injuries related to pedestrian accidents. SJHMC has higher rates for inpatient discharges, emergency department visits and deaths related to pedestrian injuries than the average Maricopa County rate which may be due to the increased amount of people who are walking in Phoenix neighborhoods surrounding the hospital facility (Graphs 30-32).<sup>69</sup>

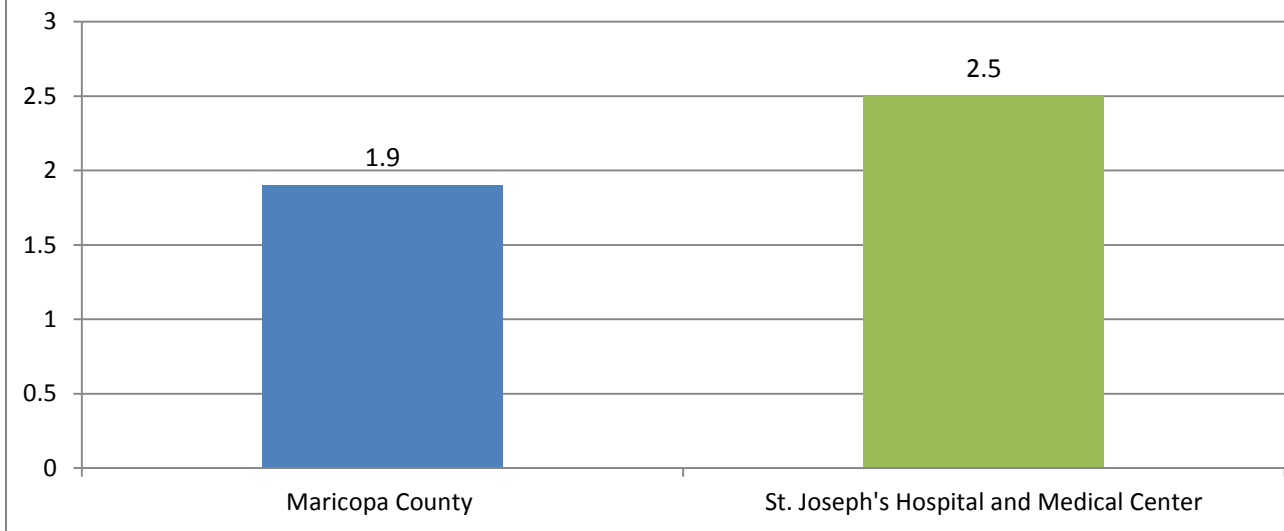


Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting



Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

**Graph 32. Rate (per 100,000 residents), Pedestrian-related Mortality, by location, Maricopa County, AZ, 2013**

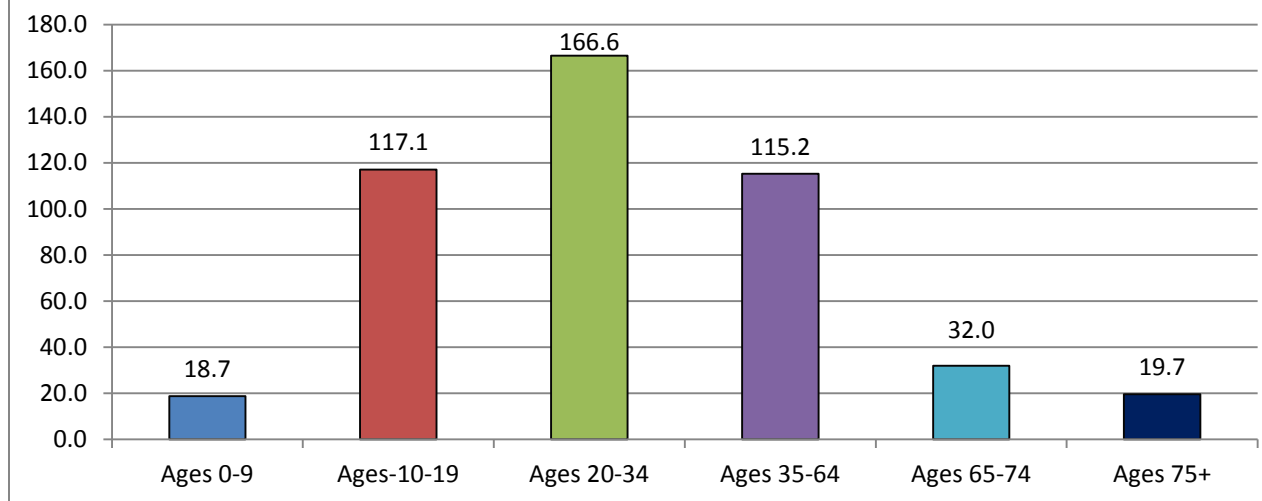


Source Arizona Department of Health Services, Vital Records and Statistics

Focus group participants reported neighborhood safety as a significant community health concern. Injuries related to interpersonal violence can be attributed to unsafe neighborhoods. The rate of assault crimes in the city of Phoenix is 366.5 per 100,000 individuals which has increased over the last five years.<sup>70</sup> Key informants felt neighborhood safety was among the top ten factors that would improve quality of life in the community.

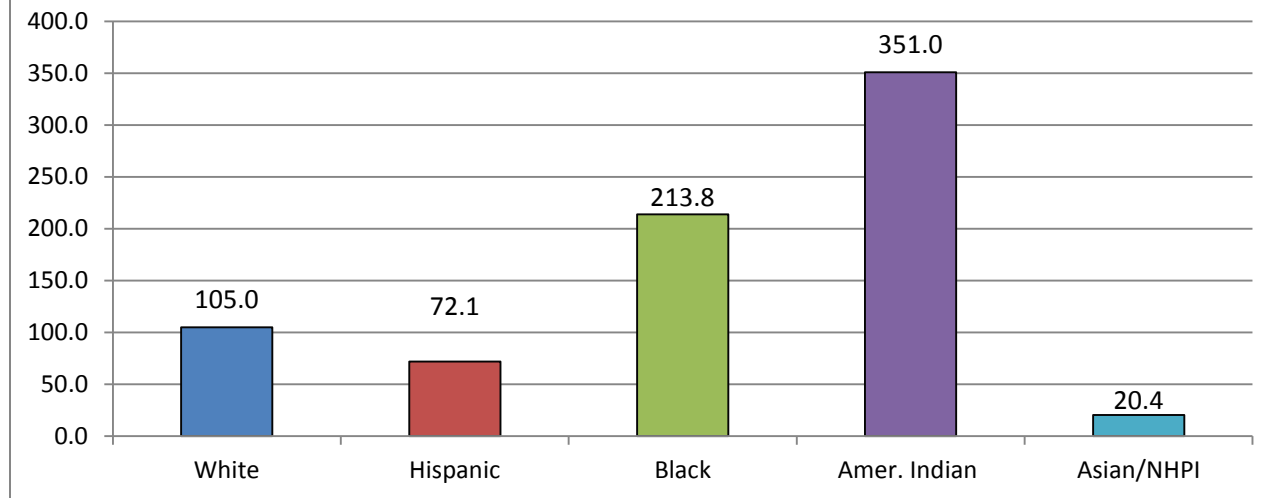
Young adults age 20-34, American Indians and African Americans are most likely to visit a hospital for reasons related to interpersonal violence (Graphs 33-34).<sup>71</sup>

**Graph 33. Rate (per 100,000 residents), Interpersonal violence-related Inpatient Discharges, by Age Group, Maricopa County, AZ, 2013**



Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

**Graph 34. Rate (per 100,000 residents), Interpersonal Violence-related Inpatient Discharges, by Race and Ethnicity, Maricopa County, AZ, 2013**



Source Arizona Department of Health Services, Health Care Institution Facility Data, Hospital Inpatient Discharge Reporting

# Resources Potentially Available to Address Needs

Resources potentially available to address identified needs include services and programs available through hospitals, government agencies, and community based organizations. Resources include access to hospital emergency and acute care services, Federally Qualified Health Centers (FQHC), food banks, homeless shelters, school-based health clinics, churches, transportation services, health enrollment navigators, free or low cost medical and dental care, and prevention-based community education. Below is a listing of some potential resources to address prioritized community health needs:

Hospitals and Hospital Systems providing emergency care, acute care, outpatient services, and community programs:

- Arizona Heart Hospital
- Banner Health
- Dignity Health
- Honor Health
- Maricopa County Integrated Health System
- Phoenix Children's Hospital
- Valley Hospital
- OASIS Hospital
- Arizona Orthopedic Surgical Hospital

Community-Based Agencies:

Organization Name	Services Provided
Ability 360	Social and health supports for individuals with disabilities
Area on Aging	Programs and support for aging population
Arizona Living Well Institute	Chronic Disease Self-Management Education
Catholic Charities Community Services	Provides social services, including behavioural health to veterans and their families, sex-trafficked survivors, victims of domestic abuse, refugees and those experiencing homelessness and the broader community
Circle the City	Medical care and respite for homeless
Clinica Adelante	Primary medical care for uninsured/underserved
Community Bridges	Supportive services for homeless
Corporate for Supporting Housing	Housing
Dignity Health Medical Group	Primary Care services – General, Internal Medicine, Specialty Care and women's health services
DUET: Partners in Health and Aging	Elderly and care giver support services, parish nurse programs
Esparanca Women's Health Center	Women's Health
Faith Community/Churches	Parish Nurse programs

Feeding Matters	Support for parents of infants and children who struggle with eating and the physicians who treat them
Foundation for Senior Living	Adult Health Services
Keogh Health Connection	Health insurance enrollment and navigation
International Rescue Committee	Refugee and Immigrant Services
Healthcare for the Homeless and Dental Clinic	Health and dental care for the homeless population
Hospice of the Valley	Palliative and Hospice Care
Lodestar Day Resource Center	Resource Center
Mission of Mercy	Primary medical care for uninsured/underserved
Mountain Park Health Center	Primary medical care for uninsured/underserved
Native American Health Center	Medical, Dental Behavioral health for urban Native Americans
Neighborhood Christian Clinic	Free and reduced health services
Parson's Family Health Center	Homeless Healthcare and Federally Qualified Health Center
Phoenix Indian Center	Support to American Indians for education and employment
Southwest Human Development	Services for children and families
St. Mary's Food Bank	Food bank
Terros Health Center	Primary medical care for uninsured/underserved
The Society of St. Vincent De Paul	Medical, dental, food, clothing, housing for underserved
Touchstone Behavioral Health	Mental Health/Behavioral Health services
United Food Bank	Food bank
Valle dal Sol	Primary healthcare services are offered for children and adults, in addition to behavioral health services.

The Health Improvement Partnership of Maricopa County (HIPMC) is a collaborative effort between MCDPH and a diverse array of public and private organizations addressing healthy eating, active living, linkages to care and tobacco-free living. The HIPMC provides a forum to share ideas and resources as well as a data-driven process to identify gaps and barriers to health improvement, especially among vulnerable populations. With more than 70 partner organizations, this is a valuable resource to help St. Joseph's Hospital and Medical Center connect to other community based organizations that are targeting many of the same health priorities.<sup>72</sup>

# Impact of Actions Taken Since Preceding CHNA

---

From fiscal year 2013 through fiscal year 2015, Dignity Health – St. Joseph’s Hospital and Medical Center provided \$517,778,426 in patient financial assistance, unreimbursed cost of Medicaid, community health improvement services, and other benefits. Including the unreimbursed cost of caring for patients covered by Medicaid, the hospital’s total community benefit expense from 2013 – 2015 was \$642,782,666.

In addition, the number of persons served through financial assistance and community health improvement services between fiscal year 2013-2015 further demonstrates the impact of Dignity Health actions taken through community benefit services. 3887 people received financial assistance and 201,074 people were served through community health services. Below is a listing of key community benefit services:

- Mohammed Ali Parkinson Center
- Maternity Outreach Mobile
- Keogh Health connections
- Barrows Neurological Institute’s Fall Prevention Program
- Barrows Neurological Institute’s Stroke Program
- Barrows Neurological Institute’s Helmet Your Head Injury Prevention Programs
- Healthier Living Chronic Disease Self-Management
- ACTIVATE – ACTIVATE Prime Transitional Care Program
- P.I.E – Project Independence and Empowerment
- Smooth Way Home
- Native American Collaborative
- HOMeVIP: Health/Home of Medically Vulnerable People

# Input Received on Most Recent CHNA and Implementation Strategy

---

St. Joseph's Hospital and Medical Center has not tracked or recorded written comments for the most recently conducted CHNA and adopted Implementation Strategy. Positive feedback on the value and benefit of the CHNA report has been received verbally by many internal and external stakeholders. In addition, many individuals and agencies have requested the CHNA report to use for grant applications, assessments, and planning. Although there have not been formal mechanisms in place to receive and track written comments in the past, a process will be in place for newly conducted CHNA's, including this report, to comply with the regulatory requirement to solicit and take into account input received from written comments.

This report is widely available to the public on the hospital's web site, and a paper copy is available for inspection upon request at St. Joseph's Hospital and Medical Center's Department of Community Health Integration.

Written comments on this report can be submitted to the St. Joseph's Hospital and Medical Center's Department of Community Health Integration, by e-mail to [CommunityHealth-SHJMC@DignityHealth.org](mailto:CommunityHealth-SHJMC@DignityHealth.org) or by phone to 602-406-2288.

# Appendix A - List of Data Sources

---

## Data Sources

- 2013 Vital Statistics data
  - Birth Certificates
  - Death Certificates
- 2013 Hospital Discharge Data (HDD)
  - Emergency Department visits (ED)
  - Inpatient discharges (IP)
- 2012 Behavioral Risk Factor Surveillance System survey (BRFSS)  
<http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
- 2013 Youth Risk Behavior Survey (YRBS)  
<https://nccd.cdc.gov/youthonline/App/Results.aspx?LID=AZB>
- 2013/14 Arizona Youth Survey (AYS)  
<http://azcjc.gov/ACJC.Web/sac/AYSReports/2014/2014%20AYS%20Maricopa%20County%20Profile%20Report.pdf>
- American Community Survey (ACS)  
<http://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/>
- Dignity Health. Community Need Index. <http://cni.chw-interactive.org/>

## Data Indicators

### Population Demographics

- Gender, Age Group, and Racial/Ethnicity in Maricopa County

### Access to Health Care

- Health Insurance Coverage Demographics in Maricopa County
- Primary Payer Type of Hospitalizations in Maricopa County

### Behavioral Health Risk Factors

- Alcohol Consumption & Drug Use in Maricopa County
- Smoking in Maricopa County
- Nutrition/Diet in Maricopa County
- Physical Activity in Maricopa County
- Obesity in Maricopa County

### Cancer Incidence and Prevention Screening

- Breast Cancer Incidence in Maricopa County
- Breast Cancer Screening in Maricopa County

- Cervical Cancer Incidence in Maricopa County
- Cervical Cancer Screening in Maricopa County
- Colorectal Cancer Incidence in Maricopa County
- Colorectal Cancer Screening in Maricopa County
- Prostate Cancer Incidence in Maricopa County
- Prostate Cancer Screening in Maricopa County

#### **Environmental Health**

- Asthma in Maricopa County

#### **Chronic Disease**

- Stroke in Maricopa County
- Cardiovascular Disease in Maricopa County
- Diabetes in Maricopa County
- Congestive Heart Failure in Maricopa County

#### **Mental Illness - Emergency Department Visits (EDV)**

- EDV due to Organic Psychotic Conditions in Maricopa County
- EDV due to Other Psychoses in Maricopa County
- EVD due to Neurotic, Personality, & Other Non-Psychotic Disorders in Maricopa County

#### **Mental Illness - Inpatient Hospitalization Discharges (IHD)**

- IHD due to Organic Psychotic Conditions in Maricopa County
- IHD due to Other Psychoses in Maricopa County
- IHD due to Neurotic, Personality, & Other Non-Psychotic Disorders in Maricopa County

#### **Injury**

- Motor Vehicle Occupant Accidents in Maricopa County
- Motorcycle Accidents in Maricopa County
- Bicycle Accidents in Maricopa County
- Pedestrian Accidents in Maricopa County
- Fall Accidents in Maricopa County
- Interpersonal Violence in Maricopa County

#### **Prevention Quality Indicator's (PQI)**

##### **Inpatient Admissions in Maricopa County**

- Chronic Obstructive Pulmonary Disease
- Bacterial Pneumonia
- Urinary Infection
- Dehydration
- Congestive Heart Failure
- Hypertension
- Asthma
- Angina
- Diabetes Short Term Complication
- Diabetes Long Term Complication
- Uncontrolled Diabetes
- Lower Extremity Amputation
- Perforated Appendix
- Prevention Quality Overall
- Prevention Quality Acute
- Prevention Quality Chronic

## Emergency Room Visits in Maricopa County

- Chronic Obstructive Pulmonary Disease
- Bacterial Pneumonia
- Urinary Infection
- Dehydration
- Congestive Heart Failure
- Hypertension
- Asthma
- Angina
- Diabetes Short Term Complication
- Diabetes Long Term Complication
- Uncontrolled Diabetes
- Lower Extremity Amputation
- Perforated Appendix
- Prevention Quality Overall
- Prevention Quality Acute
- Prevention Quality Chronic

## Indicators compared by PSA & Maricopa County

### Cancer (Death, Inpatient, Emergency Dept.)

- Colon
- Bronchus, Lung or Trachea
- Uterus, Cervix, Ovary
- Breast
- Prostate

### Chronic Disease (Death, Inpatient, Emergency Dept.)

- Diabetes
- Cardiovascular Disease
- Stroke
- Congested Heart Failure
- Asthma

### Injury (Death, Inpatient, Emergency Dept.)

- Falls (by age group)
- Motor Vehicle
- Motorcycle
- Pedestrian
- Bicycle
- Interpersonal Violence
- Alcohol Related
- Non and Dependent Opiate Use
- Opiate Poisoning
- Heroin Poisoning
- Cocaine Poisoning
- Benzodiazepine Poisoning

### Top 10 Leading Causes of Death\*

Rank	Maricopa County	St. Joseph's Hospital and Medical Center
1	Cancer	Cancer
2	Heart Disease	Heart Disease
3	Chronic Lower Respiratory	Chronic Lower Respiratory
4	Unintentional Injury	Alzheimer's
5	Alzheimer's	Unintentional Injury
6	Stroke	Stroke
7	Diabetes	Diabetes
8	Suicide	Suicide
9	Fall	Liver Disease
10	Liver Disease	Fall

### Top 10 Leading Causes for Inpatient Discharges\*

Rank	Maricopa County	St. Joseph's Hospital and Medical Center
1	Digestive System	Digestive System
2	Injury and poisoning	Injury and poisoning
3	Musculoskeletal system and connective tissue	Infectious and parasitic diseases
4	Infectious and parasitic diseases	Musculoskeletal system and connective tissue
5	Reproductive & Urinary System	Reproductive & Urinary System
6	Neoplasms	Mental disorders
7	Mental disorders	Neoplasms
8	Heart disease	Heart disease
9	Skin and subcutaneous tissue	Skin and subcutaneous tissue
10	Nervous system and sense organs	Nervous system and sense organs

## Top 10 Leading Causes for Emergency Department Visits\*

Rank	Maricopa County	SJHMC
1	Injury and poisoning	Injury and poisoning
2	Musculoskeletal system and connective tissue	Musculoskeletal system and connective tissue
3	Digestive System	Digestive System
4	Reproductive & Urinary System	Reproductive & Urinary System
5	Nervous system and sense organs	Nervous system and sense organs
6	Skin and subcutaneous tissue	Skin and subcutaneous tissue
7	Mental disorders	Mental disorders
8	Infectious and parasitic diseases	Infectious and parasitic diseases
9	Asthma	Asthma
10	Pneumonia	Pneumonia

### \*Definitions for Medical Diagnostic Codes (utilized in tables above)

Cerebrovascular Disease – Subcategory under Diseases of the Circulatory System; includes subarachnoid hemorrhage; intracerebral hemorrhage; other and unspecified intracranial hemorrhage; occlusion and stenosis of precerebral arteries; occlusion of cerebral arteries; transient cerebral ischemia; acute but ill-defined cerebrovascular disease; other and ill-defined cerebrovascular disease, and late effects of cerebrovascular disease.

Chronic Lower Respiratory – Bronchitis; simple and mucopurulent chronic bronchitis; unspecified chronic bronchitis; emphysema; other chronic obstructive pulmonary disease; asthma; bronchiectasis. Digestive System – Diseases of the oral cavity, salivary glands, jaw, esophagus, stomach and duodenum; appendicitis; hernia of abdominal cavity; non-infective enteritis and colitis, other diseases of intestines and peritoneum, other diseases of digestive system.

Fall – Subcategory under External Causes of Death titled slipping, tripping, stumbling and falls; includes fall due to ice and snow; fall on same level from slipping, tripping and stumbling; other fall on same level due to collision with another person; fall while being carried or supported by other persons; fall from non-moving wheelchair, non-motorized scooter and motorized mobility scooter; fall from bed, chair, fall other furniture, tree, cliff, fall, jump, or diving into water; fall on and from playground equipment, stairs and steps, ladder, scaffolding; fall from out of or through building or structure; other fall from one level to another; other slipping, tripping and stumbling falls; unspecified fall.

Heart Disease – Under Diseases of the Circulatory System; acute rheumatic fever; chronic rheumatic heart diseases; hypertensive heart disease; hypertensive heart and chronic kidney disease; ischemic heart diseases; pulmonary heart disease and diseases of pulmonary circulation; other forms of heart disease.

Infectious & Parasitic Diseases – Intestinal infectious disease; tuberculosis; zoonotic bacterial diseases; other bacterial diseases; HIV; poliomyelitis and other non-arthropod borne viral diseases of the central nervous system; viral diseases accompanied by exanthema; arthropod borne viral diseases; other diseases due to viruses and chlamydiae; rickettsioses and other arthropod borne diseases; syphilis and other venereal diseases; other spirochetal diseases; mycoses; helminthiasis; other infectious and parasitic diseases; late effects of infectious and parasitic diseases.

Injury & Poisoning – Fracture; dislocation; sprains and strains of joints and adjacent muscles; intracranial injury (excluding those with skull fracture); internal injury of chest, abdomen, and pelvis; open wound; injury to blood vessels; late effects of injuries, poisonings, toxic effects and other external causes; superficial injury; contusion with intact skin surface; crushing injury; effects of foreign body entering through orifice; burns; injury to nerves and spinal cord; certain traumatic complications and unspecified injuries; poisoning by drugs, medicinals and biological substances; toxic effects of substances chiefly nonmedicinal as to source; other and unspecified effects of external causes; complications of surgical and medical care not elsewhere classified.

Mental Disorders – Organic (due to a medical or physical disease) psychotic conditions; other psychoses; neurotic disorder; personality disorders; other nonpsychotic mental disorders; intellectual disabilities.

Musculoskeletal System & Connective Tissue – Arthropathies and related disorder; dorsopathies; rheumatism (excluding the back); osteopathies; chondropathies and acquired musculoskeletal deformities.

Neoplasms – Malignant neoplasms; benign neoplasms; carcinoma in situ; neoplasms of uncertain behavior and neoplasms of unspecified nature.

Nervous System & Sense Organs – Inflammatory diseases; hereditary and degenerative disease; pain; other headache syndromes; other disorders; disorders of the peripheral nervous system; disorders of the eye and adnexa; diseases of the ear and mastoid process.

Reproductive & Urinary System – Glomerular diseases; renal tubulo-interstitial diseases; acute kidney failure and chronic kidney disease; urolithiasis; other disorders of kidney and ureter; other diseases of urinary system; diseases of the male genital organs; disorders of the breast; inflammatory diseases of female pelvic organs; non-inflammatory disorders of female genital tract; intraoperative and post procedural complications and disorders of genitourinary system not elsewhere specified.

Skin & Subcutaneous Tissue – Infections; other inflammatory conditions; other diseases of skin and subcutaneous tissue.

Unintentional Injury – Any of the following injured in a transport accident: pedestrian, pedal cycle rider, motorcycle rider, occupant of three-wheeled motor vehicle, car occupant, occupant of pick-up truck or van, occupant of heavy transport vehicle, bus occupant. Other land, water, air, space, or other unspecified transport accidents. Exposure to inanimate or animate mechanical forces; accidental non-transport drowning and submersion; exposure to electric current, radiation, extreme ambient air temperature and pressure,

smoke, fire, flames, forces of nature; contact with heat and hot substances, accidental exposure to other specified or unspecified factors.

## Key Informant Survey

Total Number of Participants	152
Characteristic	Percentage of Participants
Male	22%
Female	78%
0-17	0%
18-24	1%
25-39	16%
40-54	39%
55-64	29%
65 or older	15%
American Indian/Alaskan Native	1%
Asian/Pacific Islander	1%
African American	7%
Hispanic	15%
White	76%

## Focus Groups

Total Number of Participants = 127

Date	Time	Population	Location
9/25 (Fri.)	9:30-11:30am	Older adults (65-74) [n=10]	Sun City Branch Library (16828 N 99th Ave, Sun City, AZ 85351)
9/28 (Mon.)	5:30-7:30pm	Native American adults (x2) [n=24]	Phoenix Indian Center (4520 N Central Ave #250, Phoenix, AZ 85012)
9/29 (Tues.)	5:30-7:30pm	Adults without children [n=10]	Mesa Main Library (64 E. 1 <sup>st</sup> St., Mesa, AZ 85201)
9/30 (Wed.)	6:00-8:00pm	Lesbian, Gay, Bisexual, Transgender, Questioning (LGBTQ) adults [n=6]	Phoenix Pride LGBT Center (801 N 2nd Ave, Phoenix, AZ 85003)
10/2 (Fri.)	9:00-11:00am	Adults with children under age 18 [Spanish; n=15]	Maryvale Community Center (4420 N. 51st Avenue, Phoenix, AZ, 85031)
10/2 (Fri.)	6:00-8:00pm	Low-income Adults [Spanish; n=15]	Sojourner Center (2330 E Fillmore St, Phoenix, AZ 85006)

10/4 (Sun.)	2:00-4:00pm	Hispanic/Latino adults [English; n=8]	Cesar Chavez Library (3635 W Baseline Rd, Laveen Village, AZ 85339)
10/5 (Mon.)	5:30-7:30pm	Adults with children under age 18 [n=10]	Embry Riddle Aeronautical University, Phoenix Mesa Campus (5930 S. Sossaman Rd., Ste. #102, Mesa, AZ 85212)
10/6 (Tues.)	5:30-7:30pm	Young adults (18-30) [n=10]	Pendergast Community Center (10550 W. Mariposa St., Phoenix, AZ 85037)
10/7 (Wed.)	6:00-8:00pm	African American adults [n=10]	Southwest Behavioral Health Services (4420 S. 32 <sup>nd</sup> St., Phoenix, AZ 85040)
10/8 (Thurs.)	11:30-1:30pm	LGBTQ adults [n=9]	ASU/SIRC (502 E. Monroe St., Phoenix, AZ 85004)

## Stakeholder Meetings

Organization	Title	Group
Circle the City	Director of Mission Advancement	Attended CHIN 10/15/16
Keogh Health Connections	Program Director	Attended CHIN 10/15/16
Foundation for Senior Living	Social Worker	Attended CHIN 10/15/16
Lodestar	Executive Director	Attended CHIN 10/15/16
Lodestar	Program Director	Attended CHIN 10/15/16
Maricopa County Department of Health	Performance Improvement Manager & Public Affairs Professor	Attended CHIN 10/15/16
Southwest Human Development	Program Manager	Attended CHIN 10/15/16
RightCare Foundation	CEO	Attended CHIN 10/15/16
Dignity Health	Vice President, Case Management	Attended CHIN 10/15/16
Ability360	Program Director	Attended CHIN 10/15/16
Brain Injury Alliance of Arizona	Program Manager	Attended CHIN 10/15/16
Phoenix Indian Center (PIC)	Program Director	Attended CHIN 10/15/16
Native American Community Health Center, Inc.	Development Manager	Attended CHIN 10/15/16
Adelante Healthcare	Chief Operating Officer	Attended CHIN 10/15/16
Arizona Alliance for Community Health Centers	Chief External Affairs Officer	Attended CHIN 10/15/16
Arizona Community Foundation	Philanthropic Advisor	Attended CHIN 10/15/16
Arizona Department of Health Services	Office Chief, Chronic Disease Prevention Programs, Bureau of Tobacco and Chronic Disease	Attended CHIN 10/15/16
Arizona State University	Vice Provost for Academic Partnerships, ASU	Attended CHIN 10/15/16
Catholic Charities - Phoenix Region	Sr. Programs Director	Attended CHIN 10/15/16

Esperanca	Grants Manager	Attended CHIN 10/15/16
Foundation for Senior Living	Chief Operation Officer	Attended CHIN 10/15/16
Maricopa County Department of Public Health	Manager, Office of Community Empowerment	Attended CHIN 10/15/16
Mountain Park Health Center	Grants Manager	Attended CHIN 10/15/16
PV Health Solutions	Health Consultant	Attended CHIN 10/15/16
Sack Tierney	Partner in Sacks Tierney P.A. (attorneys) Scottsdale	Attended CHIN 10/15/16
St. Joseph's Hospital and Medical Center	Nurse Practitioner. Women's Care Center	Attended CHIN 10/15/16
St. Joseph's Hospital and Medical Center	Program Coordinator	Attended CHIN 10/15/16
St. Joseph's Hospital and Medical Center	Director, Community Health	Attended CHIN 10/15/16
St. Joseph's Hospital and Medical Center	Vice President, Mission Services	Attended CHIN 10/15/16
St. Joseph's Hospital and Medical Center	Trauma Epidemiologist	Attended CHIN 10/15/16
St. Luke's Health Initiatives	Senior Policy Analyst	Attended CHIN 10/15/16
Valle del Sol	Chief of Arizona Operations	Attended CHIN 10/15/16
Virginia G. Piper Charitable Trust	Program Director	Attended CHIN 10/15/16
Arizona Orthopedic & Surgical Specialty Hospital	CFO	Attended CHNA Presentation 9/28/15
Arizona Orthopedic & Surgical Specialty Hospital	CEO	Attended CHNA Presentation 9/28/15
Bayless Healthcare Group	COO	Attended CHNA Presentation 9/28/15
Bayless Healthcare Group	CDO	Attended CHNA Presentation 9/28/15
Bayless Healthcare Group	Board Member - St. Joseph's Hospital	Attended CHNA Presentation 9/28/15
Board Developer	Board Member – East Valley	Attended CHNA Presentation 9/28/15
Corporation for Supportive Housing	Southwest Region Director	Attended CHNA Presentation 9/28/15
Dignity Health	Program Manager, Telehealth	Attended CHNA Presentation 9/28/15
Dignity Health	Executive Director - Arizona Health Collaborative	Attended CHNA Presentation 9/28/15
Dignity Health	Sr. Director Performance Excellence	Attended CHNA Presentation 9/28/15
Dignity Health	VP of External Affairs	Attended CHNA Presentation 9/28/15
Dignity Health	Executive Director of Market Development	Attended CHNA Presentation 9/28/15
Dignity Health AZ General Hospital	President & Chief Executive Officer	Attended CHNA Presentation

		9/28/15
Dignity Health Medical Group	Director of Regional Operations, Central Corridor - Surgery	Attended CHNA Presentation 9/28/15
Maricopa County Department of Public Health	Supervisor, Office of Community Empowerment	Attended CHNA Presentation 9/28/15
Sacks Tierney	Board Member - St. Joseph's Hospital	Attended CHNA Presentation 9/28/15
St. Joseph's Hospital and Medical Center	Clinical Nurse Manager	Attended CHNA Presentation 9/28/15
St. Joseph's Hospital and Medical Center	Chair of Internal Medicine	Attended CHNA Presentation 9/28/15
St. Joseph's Hospital and Medical Center	Director of Rehabilitation Services	Attended CHNA Presentation 9/28/15
St. Joseph's Hospital and Medical Center	Clinical Nurse Manager	Attended CHNA Presentation 9/28/15
St. Joseph's Hospital and Medical Center	Clinical Nurse Manager	Attended CHNA Presentation 9/28/15
St. Joseph's Hospital and Medical Center	Clinical Nurse Manager	Attended CHNA Presentation 9/28/15
St. Joseph's Hospital and Medical Center	Director, Performance Excellence	Attended CHNA Presentation 9/28/15
St. Luke's Health Initiative	Director, Strategic Community Partnerships	Attended CHNA Presentation 9/28/15
Dignity Health	VP Arizona Region	Attended CHNA Presentation 9/28/15
Maricopa County	Director of Health Services	Attended CHNA Presentation 9/28/15
St. Joseph's Hospital	Physician, Family Medicine	Attended CHNA Presentation 9/28/15
St. Joseph's Hospital and Medical Center	Physician, Internal Medicine	Attended CHNA Presentation 9/28/15
St. Joseph's Hospital and Medical Center	Chief Medical Officer	Attended CHNA Presentation 9/28/15
St. Joseph's Hospital and Medical Center	Chief Nursing Officer	Attended CHNA Presentation 9/28/15
St. Joseph's Westgate	Executive Director	Attended CHNA Presentation 9/28/15
St. Joseph's Hospital and Medical Center	President/CEO	Attended CHNA Presentation 9/28/15
Dignity Health	Executive Director of Community Health	Attended CHNA Presentation 9/28/15
St. Joseph's Hospital and Medical Center	Chief Quality Officer	Attended CHNA Presentation 9/28/15

# Appendix B – Primary Data Collection Tools

---

## CHNA Focus Group Questions

*Community = where you live, work, and play*

*Introductions: State your name and what makes you most proud of your community.*

1. What does quality of life mean to you?
2. What makes a community healthy?
3. Who are the healthy people in your community?

[Prompts]

- a. What makes them healthy?
  - b. Why are these people healthier than those who have (or experience) poor health?
4. What do you believe are the 2-3 most important issues that must be addressed to improve health and quality of life in your community?

[Prompt]

- a. What are the biggest health problems/conditions in your community?
5. What types of services or support do you (your family, your children) use to maintain your health?

[Prompt]

- a. Why do you use them?
6. Where do you get the information you need related to your (your family's, your children's) health?
7. What keeps you (your family, your children) from going to the doctor or from caring for your health?
8. What are some ideas you have to help your community get or stay healthy?
9. What else do you (your family, your children) need to maintain or improve your health?

[Prompts]

- i. Services, support or information to manage a chronic condition or change health behaviors such as smoking, eating habits, physical activity, or substance use
    - ii. Preventive services such as flu shots or immunizations
    - iii. Specialty healthcare services or providers
10. What resources does your community have that can be used to improve community health?

# Community Health Survey

Please take a minute to complete the survey below. The purpose of this instrument is to get your opinions about community health issues. In collaboration with our public health partners we plan to compile this information and use it as input for the development of Dignity healthcare's community health improvement plan.

Thank you for your time and interest in helping us to identify our most pressing problems and issues.

In this survey, "community" refers to the major area where you provide services. Please check one from the following list:

- ☐ Northeast (Scottsdale, Carefree, Fountain Hills, Cave Creek)
- ☐ Northwest (Peoria, Surprise, El Mirage, Sun City)
- ☐ Central (Phoenix, Paradise Valley)
- ☐ Central west (Glendale, Avondale, Litchfield Park)
- ☐ Central East (Tempe, Mesa)
- ☐ Southeast (Chandler, Ahwatukee, Gilbert)
- ☐ Southwest (Tolleson, Buckeye, Goodyear)

## Part I: Community Health

1. Please check the **three most important factors that you think will improve the quality of life in your community?**

**Check only three:**

- |  |  |
|--|--|
| <input type="checkbox"/> Good place to raise children                | <input type="checkbox"/> Excellent race/ethnic relations   |
| <input type="checkbox"/> Low crime / safe neighborhoods              | <input type="checkbox"/> Good jobs and healthy economy     |
| <input type="checkbox"/> Low level of child abuse                    | <input type="checkbox"/> Strong family life                |
| <input type="checkbox"/> Good schools                                | <input type="checkbox"/> Healthy behaviors and lifestyles  |
| <input type="checkbox"/> Access to health care (e.g., family doctor) | <input type="checkbox"/> Low adult death and disease rates |
| <input type="checkbox"/> Safe Parks and recreation                   | <input type="checkbox"/> Low infant deaths                 |
| <input type="checkbox"/> Clean environment                           | <input type="checkbox"/> Religious or spiritual values     |
| <input type="checkbox"/> Affordable housing                          | <input type="checkbox"/> Emergency preparedness            |
| <input type="checkbox"/> Arts and cultural events                    | <input type="checkbox"/> Access to public transportation   |
| <input type="checkbox"/> Access to Healthy Food                      | <input type="checkbox"/> Other _____                       |

2. In your opinion, what are **the three most important "health problems"** that impact your community?

**Check only three:**

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Access to Health care                                       | <input type="checkbox"/> Heart disease and stroke                        | <input type="checkbox"/> Rape / sexual assault                |
| <input type="checkbox"/> Aging problems (e.g., arthritis, hearing/vision loss, etc.) | <input type="checkbox"/> High blood pressure                             | <input type="checkbox"/> Respiratory / lung disease           |
| <input type="checkbox"/> Cancers   | <input type="checkbox"/> HIV / AIDS                                      | <input type="checkbox"/> Sexually Transmitted Diseases (STDs) |
| <input type="checkbox"/> Child abuse / neglect                                       | <input type="checkbox"/> Homicide  | <input type="checkbox"/> Suicide                              |
| <input type="checkbox"/> Drug and Alcohol abuse                                      | <input type="checkbox"/> Infant Death                                    | <input type="checkbox"/> Teenage pregnancy                    |
| <input type="checkbox"/> Dental problems   | <input type="checkbox"/> Infectious Diseases (e.g., hepatitis, TB, etc.) | <input type="checkbox"/> Other _____                          |
| <input type="checkbox"/> Diabetes  | <input type="checkbox"/> Mental health problems                          |   |
| <input type="checkbox"/> Domestic Violence   | <input type="checkbox"/> Motor vehicle crash injuries                    |   |
| <input type="checkbox"/> Firearm-related injuries                                    |  |   |

3. In the following list, what do you think are **the three most important “risky behaviors”** seen in your community?

**Check only three:**

- |   |   |
|---|---|
| <input type="checkbox"/> Alcohol abuse                          | <input type="checkbox"/> Racism   |
| <input type="checkbox"/> Being overweight                       | <input type="checkbox"/> Tobacco use  |
| <input type="checkbox"/> Dropping out of school                 | <input type="checkbox"/> Not using birth control                                |
| <input type="checkbox"/> Drug abuse                             | <input type="checkbox"/> Not using seat belts / child safety seats/bike helmets |
| <input type="checkbox"/> Lack of exercise                       | <input type="checkbox"/> Unsafe sex   |
| <input type="checkbox"/> Lack of maternity care                 | <input type="checkbox"/> Unsecured firearms                                     |
| <input type="checkbox"/> Poor eating habits                     | <input type="checkbox"/> Other _____  |
| <input type="checkbox"/> Not getting “shots” to prevent disease |   |

4. If you selected drug abuse in question 3 please specify substances of use here:

\_\_\_\_\_

5. How would you rate the overall health of your community?

☐ Very unhealthy   ☐ Unhealthy   ☐ Somewhat healthy   ☐ Healthy   ☐ Very healthy

## Part II: Demographics

Please answer questions #5-8 so we can see how different types of people feel about local health issues.

6. Zip code where you work: \_\_\_\_\_

7. Age:

- ☐ 0-17
- ☐ 18-25
- ☐ 26-39
- ☐ 40-54
- ☐ 55-64
- ☐ 65 or over

8. Sex: ☐ Male   ☐ Female

9. Ethnic group you most identify with:

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> African American | <input type="checkbox"/> Asian/Pacific Islander | <input type="checkbox"/> Hispanic/Latino |
| <input type="checkbox"/> Native American  | <input type="checkbox"/> White/Caucasian        | <input type="checkbox"/> Other: _____    |

# Appendix C –References

---

1. U.S. Census Bureau. (2013). *American Fact Finder fact sheet: Maricopa County, AZ*, Retrieved from <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>
2. Dignity Health. Community Need Index. <http://cni.chw-interactive.org/>
3. Centers for Disease Control and Prevention. (2013). *Behavioral Risk Factor Surveillance System survey: Maricopa County, AZ*, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
4. Centers for Disease Control and Prevention. (2013). *Behavioral Risk Factor Surveillance System survey: Maricopa County, AZ*, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
5. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
6. Centers for Disease Control and Prevention. (2013). *Behavioral Risk Factor Surveillance System survey: Maricopa County, AZ*, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
7. Arizona Criminal Justice Commission (2014). *Arizona Youth survey*. <http://azcjc.gov/ACJC.Web/sac/AYS.aspx>
8. Centers for Disease Control and Prevention. (2013). *Youth Risk Behavior survey: Maricopa County, AZ*. <http://www.cdc.gov/healthyyouth/data/yrbs/index.htm>
9. Centers for Disease Control and Prevention. (2013). *Behavioral Risk Factor Surveillance System survey: Maricopa County, AZ*, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
10. Arizona Administrative Code – Title 9. Health Services, Chapter 19. Department of Health Services, Vital Records and Statistics, Article 1. Administrative Organization, Duties, and Procedures. R9-19-104 Duties of local registrars; Promptly register every properly completed certificate received.
11. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
12. Centers for Disease Control and Prevention. (2013). *Behavioral Risk Factor Surveillance System survey: Maricopa County, AZ*, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
13. Arizona Administrative Code – Title 9. Health Services, Chapter 19. Department of Health Services, Vital Records and Statistics, Article 1. Administrative Organization, Duties, and Procedures. R9-19-104 Duties of local registrars; Promptly register every properly completed certificate received.
14. Centers for Disease Control and Prevention. (2013). *Behavioral Risk Factor Surveillance System survey: Maricopa County, AZ*, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
15. Arizona Administrative Code – Title 9. Health Services, Chapter 19. Department of Health Services, Vital Records and Statistics, Article 1. Administrative Organization, Duties, and Procedures. R9-19-104 Duties of local registrars; Promptly register every properly completed certificate received.

16. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
17. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
18. Arizona Administrative Code – Title 9. Health Services, Chapter 19. Department of Health Services, Vital Records and Statistics, Article 1. Administrative Organization, Duties, and Procedures. R9-19-104 Duties of local registrars; Promptly register every properly completed certificate received.
19. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
20. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
21. Health Improvement Partnership of Maricopa County. <http://www.hipmcsummit.org/index.php>
22. Arizona Department of Health Services. Arizona Medically Underserved Areas. Retrieved from <http://www.azdhs.gov/hsd/shortage/azmua.htm>
23. Dignity Health. Community Need Index. <http://cni.chw-interactive.org/>
24. Kindig, D., & Stoddart G. (2003). What is population health? *American Journal of Public Health*. 93, 380-383.
25. Evans, R. G., & Stoddart, G. L. (1990). Producing health, consuming health care. *Social Science and Medicine*, 31, 1347-1363.
26. Boothe, Sinha, Bohm, & Yoon (2013). Community health assessment for population health improvement; resource of most frequently recommended health outcomes and determinants. Centers for Disease Control and Prevention (U.S.), Office of Surveillance, Epidemiology, and Laboratory Services.
27. U.S. Census Bureau. (2013). *American Fact Finder fact sheet*: Maricopa County, AZ, Retrieved from <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>
28. U.S. Census Bureau. (2013). *American Fact Finder fact sheet*: Maricopa County, AZ, Retrieved from <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>
29. Centers for Disease Control and Prevention (2013). *Behavioral Risk Factor Surveillance System survey*: Maricopa County, AZ, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
30. Centers for Disease Control and Prevention. (2013). *Behavioral Risk Factor Surveillance System survey*: Maricopa County, AZ, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
31. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
32. County Health Rankings and Roadmaps. (2011). Poor Mental Health days: Maricopa County, Retrieved from <http://www.countyhealthrankings.org/app/arizona/2013/measure/outcomes/42/description>

33. National Institute of Mental Health. (2013). Any Mental Illness Among Adults. Retrieved from <http://www.nimh.nih.gov/health/statistics/prevalence/any-mental-illness-ami-among-adults.shtml>
34. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
35. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
36. Centers for Disease Control and Prevention. Excessive Drinking Costs U.S. \$223.5 Billion. [www.cdc.gov/features/alcoholconsumption/](http://www.cdc.gov/features/alcoholconsumption/). Updated April 17, 2014. Accessed March 9, 2015.
37. NSDUH (formerly known as the National Household Survey on Drug Abuse) is an annual survey of Americans aged 12 and older conducted by the Substance Abuse and Mental Health Services Administration, Department of Health and Human Services
38. Centers for Disease Control and Prevention. (2013). *Behavioral Risk Factor Surveillance System survey: Maricopa County, AZ*, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
39. Arizona Criminal Justice Commission (2014). *Arizona Youth survey*. Maricopa County. Retrieved from <http://azcjc.gov/ACJC.Web/sac/AYS.aspx>
40. Arizona Criminal Justice Commission (2014). *Arizona Youth survey*. Maricopa County. Retrieved from <http://azcjc.gov/ACJC.Web/sac/AYS.aspx>
41. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
42. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
43. Centers for Disease Control and Prevention. (2013). *Youth Risk Behavior survey: Maricopa County, AZ*. <http://www.cdc.gov/healthyyouth/data/yrbs/index.htm>
44. Centers for Disease Control and Prevention. (2013). *Youth Risk Behavior survey: Maricopa County, AZ*. <http://www.cdc.gov/healthyyouth/data/yrbs/index.htm>
45. Centers for Disease Control and Prevention. (2013). *Behavioral Risk Factor Surveillance System survey: Maricopa County, AZ*, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
46. Centers for Disease Control and Prevention. (2013). *Behavioral Risk Factor Surveillance System survey: Maricopa County, AZ*, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
47. Arizona Administrative Code – Title 9. Health Services, Chapter 19. Department of Health Services, Vital Records and Statistics, Article 1. Administrative Organization, Duties, and Procedures. R9-19-104 Duties of local registrars; Promptly register every properly completed certificate received.
48. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.

49. Centers for Disease Control and Prevention. (2013). *Behavioral Risk Factor Surveillance System survey*: Maricopa County, AZ, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
50. Centers for Disease Control and Prevention. (2013). *Behavioral Risk Factor Surveillance System survey*: Maricopa County, AZ, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
51. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
52. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
53. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
54. Arizona Administrative Code – Title 9. Health Services, Chapter 19. Department of Health Services, Vital Records and Statistics, Article 1. Administrative Organization, Duties, and Procedures. R9-19-104 Duties of local registrars; Promptly register every properly completed certificate received.
55. Centers for Disease Control and Prevention. (2013). *Behavioral Risk Factor Surveillance System survey*: Maricopa County, AZ, Retrieved from <http://www.maricopa.gov/PublicHealth/Services/EPI/pdf/hsr/2013BRFSS.pdf>
56. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
57. Arizona Administrative Code – Title 9. Health Services, Chapter 19. Department of Health Services, Vital Records and Statistics, Article 1. Administrative Organization, Duties, and Procedures. R9-19-104 Duties of local registrars; Promptly register every properly completed certificate received.
58. Arizona Administrative Code – Title 9. Health Services, Chapter 19. Department of Health Services, Vital Records and Statistics, Article 1. Administrative Organization, Duties, and Procedures. R9-19-104 Duties of local registrars; Promptly register every properly completed certificate received.
59. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
60. Arizona Administrative Code – Title 9. Health Services, Chapter 19. Department of Health Services, Vital Records and Statistics, Article 1. Administrative Organization, Duties, and Procedures. R9-19-104 Duties of local registrars; Promptly register every properly completed certificate received.
61. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
62. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-

- 402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
63. Arizona Administrative Code – Title 9. Health Services, Chapter 19. Department of Health Services, Vital Records and Statistics, Article 1. Administrative Organization, Duties, and Procedures. R9-19-104 Duties of local registrars; Promptly register every properly completed certificate received.
64. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
65. Arizona Administrative Code – Title 9. Health Services, Chapter 19. Department of Health Services, Vital Records and Statistics, Article 1. Administrative Organization, Duties, and Procedures. R9-19-104 Duties of local registrars; Promptly register every properly completed certificate received.
66. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
67. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
68. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
69. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
70. Phoenix, AZ Crime and Crime Rate. (2013). USA.com. Retrieved from <http://www.usa.com/glendale-az-crime-and-crime-rate.htm>
71. Arizona Administrative Code (A.A.R.) Title 9. Health Services, Chapter 11. Department of Health Services, Health Care Institution Facility Data, Article 4. Hospital Inpatient Discharge Reporting (R9-11-402) and Article 5. Emergency Department Discharge Reporting (R9-11-502) requires all hospitals to submit their data to ADHS.
72. Health Improvement Partnership of Maricopa County. <http://www.hipmcs Summit.org/index.php>