



# Recommendations for Maricopa County Health Assessment

**Final Report**

June 29, 2012

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**Recommendations for Maricopa County Health Assessment**

**Table of Contents**

**1. Summary of Recommendations.....1-1**

**2. Social Determinants of Health .....2-4**

2.1 Assessing Social Determinants of Health.....2-4

2.2 Social Determinants of Health in Maricopa County .....2-4

2.2.1 Low Crime / Safe Neighborhoods .....2-5

2.2.2 Access to Health Care.....2-5

**3. Chronic Disease.....3-6**

3.1 Cancer .....3-6

3.2 Heart Disease and Stroke.....3-6

3.3 Diabetes.....3-7

3.4 Overweight and Obesity .....3-7

**4. Maternal and Child Health.....4-8**

4.1 Maternal Mortality .....4-8

4.2 Infant Mortality.....4-8

4.3 Prenatal Care.....4-8

4.4 Low Birthweight .....4-9

4.5 Teenage Pregnancy .....4-9

**5. Behavioral Health .....5-10**

5.1 Mental Health Disorders.....5-10

5.2 Suicide.....5-10

**6. Substance Abuse.....6-11**

6.1 Drug Abuse.....6-11

6.2 Alcohol Abuse .....6-11

**7. Child Abuse/Neglect, Violence and Injury .....7-12**

7.1 Domestic and Sexual Violence .....7-12

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7.2	Injury .....	7-12
<b>8.</b>	<b>STDs, HIV / AIDS, and other Infectious Diseases.....</b>	<b>8-13</b>
8.1	HIV / AIDS.....	8-13
8.2	Sexually transmitted diseases .....	8-13
8.3	Infectious Diseases.....	8-13
8.3.1	Immunization Status .....	8-13
<b>9.</b>	<b>References .....</b>	<b>9-14</b>

## 1. Summary of Recommendations

This document provides a summary of the areas of importance for Maricopa County that were identified through a review of the county's epidemiologic indicators and qualitative data from the community interviews and focus groups. Specifically, we examined data from local, state and national sources to provide appropriate comparisons:

- Racial and Ethnic Approaches to Community Health (REACH) Community Survey;
- Maricopa County Department of Public Health (MCDPH) staff survey;
- Maricopa County Health Status Report 2001 – 2010;
- Focus group reports;
- Other relevant data sources (e.g. BRFSS, Healthy People 2010, Kids Count, County Health Rankings, and the US Census).

Our recommendations are prioritized based on the following criteria:

- The top three most important issues identified by the community;
- Conditions that were responsible for the highest number of years of potential life lost (YPLL); inpatient hospital days; and emergency room visits;
- Prevalence and trends over a 10 year period from 2001 through 2010;
- Existence of health disparities by race/ethnic subgroups.

Using these criteria, the group of issues outlined below emerged as priorities for Maricopa County. We are recommending the seven priority areas summarized in Table 1; this document provides additional information on each priority area. It is important to note that within Maricopa County, these conditions vary, sometimes significantly, by race/ethnicity. Some conditions may be declining throughout the county and/or state, but may still be an issue for one or a few demographic groups. In addition, while the county and/or state may be doing better than the US on an issue or a specific condition, they may not have met the HP2010 objective. Finally, given the racial/ethnic inequities, one can argue for the inclusion of the reduction and / or elimination of disparities as a priority issue.

Our findings are consistent with those of the United Health Foundation, which ranked Arizona as 29<sup>th</sup> overall out of the 50 states; with a rank of 29 for determinants and 27 for outcomes. America Health Ranking© is based on a comprehensive review of a state's overall health based on the combination of individual measures derived from four groups of health determinants (*behaviors, clinical care, community and environment and public and health policy*) and health outcomes. Although the health ranking for Arizona went up by two from 31 in 2010 to 29 in 2011, the state's ranking on *public and health policies* ranged from 38 for immunization coverage for children ages 10 to 35months, to 43 for percent of residents without health insurance and 45 for public health funding of only \$46 per person. The state of Vermont ranked number one on public health funding at \$244 per person<sup>1</sup>.

As shown in Table 1, social determinants of health were identified as the number one priority by community residents. Although it was not explicitly stated, poverty is in fact the major underlying cause of the determinants residents identified as indicated by their response to this question on the REACH Community Survey: "*On a monthly basis, do you have enough money to pay for essentials such as food, clothing, housing and medicine?*" Only 40 percent of all respondents were always able to pay for these essentials; 48 percent could do so sometimes and 12 percent could never afford to pay for these essentials. African Americans and American Indians were less likely to be able to pay for

these essentials. A higher proportion (25% vs. 21%) of the population in Arizona was below 100 percent of the Federal Poverty Level (FPL) in 2009-2010 compared with the United States population; and the median income for the state was also lower than the nation's at (US\$47,093 vs. \$50,022) <sup>ii</sup>.

Access to health care was ranked as the number one priority by the Maricopa County Department of Public Health (MCDPH) staff. Although 88 percent of the county's residents had *any kind of health care coverage* in 2010, residents of Hispanic origin were significantly less likely to be covered compared with non-Hispanic white residents (69% vs. 92%). During the period 2009-2010, 26 percent of Arizonians were Medicaid beneficiaries and 19 percent were uninsured. Currently only pregnant women, parents with dependent children and the disabled at varying levels of the FPL are eligible for Medicaid; however, with the implementation of the Affordable Care Act (ACA), Medicaid will be extended to uninsured citizens and legal residents with incomes up to 138% FPL in 2014.

Under the ACA, insurance companies will be prevented from denying coverage to residents with pre-existing conditions, funding for Arizona's 129 Community Health Centers (CHCs) and for the construction of new CHCs will be increased, and incentives will be provided for health professionals to work in underserved areas (where 16% of Arizona's population lives) <sup>iii</sup>. Since June 2011, 59,563 young adults in Arizona gained insurance coverage under the ACA requirement that children age 26 years and under may keep their parents' insurance coverage <sup>iv</sup>. The Kaiser Family Foundation estimates that 61 percent of currently uninsured women in Arizona are potentially eligible for Medicaid in 2014. In Fiscal year 2011-12, Arizona has implemented a number of cost containment measures that will reduce provider payments, reduce enrollee benefits, cut eligibility and not only increase copayments but also add new mandatory copayments for services received under Medicaid such as prescriptions, doctor visits, and non-emergency use of the emergency room for adults without children, medical expense deduction program and transitional medical assistance <sup>v</sup>.

With the recent passage of the Affordable Care Act (ACA), the U.S. has turned its attention to improving the quality of health care while simultaneously decreasing cost <sup>vi</sup>. The Institute for Healthcare Improvement's (IHI) Triple Aim provides a broader framework of linked goals that will support the transition to a high-value health care system and facilitate realignment. Thus, the Triple Aim, defined as improving the experience of care, improving the health of populations, and reducing per capita costs of health care provides a framework for transformation. In order to meet the goals related to population health, health care systems will need to work with community and public health systems <sup>vii</sup>.

Maricopa County Health Department should consider forming partnerships with health care providers, hospitals, insurers and health care delivery systems in order to align clinical priorities within these systems with community health and public health priorities in the community in order to improve the individual health of individuals in the health systems as well as the health of the population in the county. These partnerships are critical to improve health outcomes since only 10 percent of health outcomes are due to the medical care system and 50 percent are due to health behaviors <sup>viii</sup>. Interventions in multiple sectors, including social media and health communication, are needed to change risky health behaviors and address social determinants of health that are related to overall health status and health inequities <sup>ix, x</sup>. Given the high priority of the social determinants, it will be important that strategies for addressing these health conditions and issues focus on the social and economic factors that impact the quality of life of Maricopa County residents; including adequate funding for public and health policies.

**Table 1: Summary of Priority Health Issues/Conditions Identified by Maricopa County Residents and MCDHP Staff**

Priority Area	Maricopa County	AZ	US	HP 2010	<sup>1</sup> Disparity	Race/Ethnic Group
<b>Social Determinants of Health</b>						
Low crime/neighborhood safety: Death rate per 100,000 residents from firearms	12.8		10	4.1	√	AI/AN, AA
Access to health care: % residents with any kind of health care coverage	87.8	83.8	82.2		√	Hispanic
<b>Chronic Diseases</b>						
Cancer: Age-Adjusted Death Rate per 100,000	146.8		173.6	159.9		
Heart Disease: Age-Adjusted Death Rates per 100,000	138		179.8			
Diabetes: Age-Adjusted Death Rates per 100,000	18.7	20.9	46		√	Hispanic
Overweight: % of residents	41.8	38.3	35		√	White
Obesity: % of residents	22.9	25.9	26.9	15%	√	Hispanic
<b>Maternal and Child Health</b>						
Maternal mortality per 100,000 live births	16.6	7.6	12.7	3.3		
Infant mortality per 1,000 live births	5.7	5.9	6.4	4.5	√	AA, Hispanic
Prenatal care: % of residents	76.1	78		90	√	AA, AI, Hispanic
Low birth weight: % of live births	7.1	7.1	8.2	5	√	AA, Asian
Teenage pregnancy: % of live births	9.7	11.7	9.9		√	AA, AI, Hispanic
<b>Behavioral Health</b>						
<b>Mental Health</b>						
Mental health disorders: % of residents	16					
Suicide: death rate per 100,000	14.5		11.7	5		
<b>Substance Abuse</b>						
Drug abuse: death rate per 100,000	16		12.1	1	√	AI, White
Alcohol abuse: percent of residents who binge drink	14.8	14	15.1	13.4	√	AI, Hispanic
<b>Child Abuse/Neglect, Violence &amp; Injury</b>						
Domestic / sexual violence: % of residents	11 / 6.6					
Injury: Age-Adjusted Death Rate per 100,000 residents from unintentional injury	41.2	43.1	37.1	17.5	√	AA, Hispanic
<b>Sexually Transmitted Diseases, including HIV/AIDS and Other Infectious Diseases</b>						
HIV/AIDS: Age-Adjusted Death Rate per 100,000	1.8		3	.73	√	AA, AI, Hispanic
Sexually Transmitted Diseases: rate per 100,000	531.3				√	AA, AI, Hispanic
Infectious Diseases: death rate per 100,000 from Tuberculosis	.3					

<sup>1</sup> If Disparity is not checked, that indicates that we did not have data to determine whether or not a disparity exists.

## 2. Social Determinants of Health

### 2.1 Assessing Social Determinants of Health

In a 2011 report, the Institute of Medicine (IOM) cautions that many social and environmental factors are not routinely measured in a standardized way, and thus trends or disparities may not be recognized.<sup>xi</sup> The IOM recommends that the U.S. Department of Health and Human Services begin reporting annually on social and environmental factors that “*influence the health of the population as a means of helping the public better understand the factors that shape their well-being.*”<sup>xii</sup>

The social environment, including socioeconomic stratification, social networks and support, discrimination, education, food access, physical environments, etc., exerts a profound impact on the health of individuals and communities. It is within this context that the results of the Maricopa Racial and Ethnic Approaches to Community Health (REACH) Community Survey were interpreted to identify the social factors/determinants that were most important to Maricopa County residents.

### 2.2 Social Determinants of Health in Maricopa County

Results from the REACH Community Survey indicated that important factors that can improve the quality of life in one’s community include:

- “Low crime / safe neighborhoods”;
- “Good place to raise children”;
- “Good jobs and healthy economy”;
- “Good schools”;
- “Affordable housing”.

Each racial / ethnic subgroup mentioned some combination of these factors as the top three most important factors that improve the quality of life. When data from this Community Survey was combined with an MCDPH staff survey, “access to health care (e.g. family doctor)” was indicated as another important factor that improves quality of life. Access to health care was also ranked as the most important health problem in the community by the MCDPH staff, but it was ranked as only the 11<sup>th</sup> most important problem in the community survey.

Results from the REACH Community Survey indicated that 47 percent of respondents rated their community as somewhat healthy, and 40 percent rated their own personal health as somewhat healthy. Compared with all other racial/ethnic groups, a higher percentage of Asian Americans rated both their communities (51%) and themselves (51%) as healthy. American Indians, on the other hand, mostly rated their community as somewhat unhealthy (47%) or unhealthy (38%), and themselves as somewhat unhealthy (52%). The community as a whole, and each racial/ethnic subgroup, rated their own personal health as better than or equal to the community’s health.

On average, 50 percent of respondents sometimes felt proud to be living in their community. The majority (93%) of residents of all racial/ethnic groups were *sometimes or always* proud to live in their communities. Similarly, 52 percent of respondents on average reported *sometimes* feeling a sense of responsibility to improve their community’s health status. A higher percentage of African American (93%), American Indian (93%), and Hispanic (92%) of residents *sometimes or always* felt a sense of responsibility to improve their community’s health status compared with Asian Americans (90%).

Socioeconomic factors also have a critical impact on health, as they determine whether individuals and families have the means to meet basic needs and afford necessities. Results from the REACH Community Survey indicated that on average, 88 percent of residents responded *always* (40%), or *sometimes* (48%) to the question “*On a monthly basis, do you have enough money to pay for essentials such as food, clothing, housing and medicine?*” A higher percentage of African American (21%) and American Indian (12%) residents were, however, more likely to respond *never* to this question, meaning that these subpopulations are more often unable to afford these essentials compared with the other race/ethnic groups. Among Hispanic residents, 9% could never afford these essentials; and similarly for 5% of Asian Americans.

### 2.2.1 Low Crime / Safe Neighborhoods

Data on neighborhood factors provide insight into the quality of life in Maricopa County communities. In 2010, approximately 92.3% of adults in Maricopa County felt safe in their neighborhoods all or most of the time. However, only 79.5% of Black or African American residents felt safe in their neighborhoods all or most of the time. Indicators of neighborhood crime reveal the following:

- The age-adjusted death rate per 100,000 residents from firearms in Maricopa County is 12.8, compared to 10 for the U.S. and the Healthy People 2010 goal of 4.1. This rate has fluctuated over the ten year period but declined overall from 16.5 per 100,000 in 2001 to 12.8 per 100,000 in 2010. Between 2009 (11.8) and 2010 (12.7), however, an increase has been observed.
- The age-adjusted death rate per 100,000 residents from homicide in Maricopa County is 5.8, compared to 5.5 for the U.S. and the Healthy People 2010 goal of 3. The Homicide rates among American Indian (21.5) and African American (14.5) residents are significantly higher than the rate for white residents (3.3). The homicide rate has fluctuated, but overall decreased overall from 10.5 per 100,000 residents in 2001 to 5.7 per 100,000 residents in 2010.

In 2010, approximately 79 percent of adults in Maricopa County lived in a supportive neighborhood, although Latino / Hispanic (64.9%) and American Indian or Alaska Native (53.7%) residents were less likely than average to live in a supportive neighborhood.

Approximately 82 percent of Maricopa County residents live within walking distance of a park, playground or public space, although this percentage is lower (76%) for residents whose income is equal to or less than 200% of the FPL.

### 2.2.2 Access to Health Care

In 2010, approximately 11 percent of Maricopa County residents could not see a doctor in the last 12 months when they needed to because of cost. Hispanic (25.9%) residents were significantly more likely than non-Hispanic white residents (7.6%) to go without needed care.

About 88 percent of Maricopa County residents have any kind of health care coverage, although there is a significant difference in health care coverage between non-Hispanic white (91.8%) and Hispanic (69.2%) residents. The percentage of Maricopa County residents who have any kind of coverage is slightly higher than the Arizona (83.8%<sup>xiii</sup>) and U.S. (82.2%<sup>xiv</sup>) percentages.

- Between 2006 and 2010, the percentage of Maricopa County residents who were insured increased, as did the percentage who had a usual source of health care. From 2006 to 2009, the percentage of residents who could not afford needed health care increased, but in 2010 the percentage dropped from 14.4 percent (2009) to 11.2 percent (2010).

### 3. Chronic Disease

Combined results from the REACH Community Survey and the MCDPH survey indicated that chronic diseases are important health problems for Maricopa County communities. Chronic diseases/issues that were ranked highly include: overweight / obesity, diabetes, heart disease and stroke, cancers, and high blood pressure. In focus groups conducted with three subgroups, LGBT, low socio-economic status, and senior populations, obesity also emerged as an important health problem. In the REACH Community Survey, “*lack of exercise*” and “*poor eating habits*” ranked as the third and fourth most important “*risky behaviors*” for the community as a whole (the MCDPH staff did not complete this survey question).

It is important to note that overweight and obesity has been shown to increase risk for other chronic diseases including diabetes, cardiovascular disease, hypertension, and cancer.<sup>xv</sup> Thus, the relationship among chronic diseases may also be considered when assessing/identifying priority health problems.

The top two leading causes of death in Maricopa County for every year from 2001 to 2010 have been cancer and heart disease. Heart disease was the leading cause of death from 2001- 2008, and cancer the leading cause of death from 2009 to 2010 (2001-2008: heart disease was #1 and cancer #2; 2009 – 2010: cancer was #1 and heart disease #2). In addition, cancer is among the top five conditions with the highest number of years of potential life lost:

1. Cancer (51,334 years)
2. Unintentional Injuries (36,855 years) – see details under child abuse/neglect, violence & injury
3. Diseases of the Circulatory System (31,959 years)
  - a. Heart Disease = 23,831 years
  - b. Stroke = 5,207 years
4. Pregnancy and Early life (19,407 years) – see details under MCH
5. Suicide (17,101 years) – see details under mental health/substance abuse

#### 3.1 Cancer

The age-adjusted death rate in Maricopa County from all cancer is 146.8 per 100,000, which is lower than both the U.S. rate (173.6) and the Healthy People 2010 goal (159.9). Approximately three percent (2.6%) of Maricopa County residents have reported being diagnosed with prostate cancer and two percent (1.8%) have been diagnosed with emphysema.

The crude death rate per 100,000 Maricopa County residents for specific types of cancer is highest for “lung” (37.9), followed by “other cancer” (37.1), “prostate” (14.5), “uterine & ovarian” (13.5), and “colon” (13.1). The crude death rate per 100,000 residents from lung cancer is highest for white residents (57.1), compared to black (19.2), Asian (17.8), Hispanic (8.1), and American Indian (3.4) residents. The crude death rate per 100,000 Maricopa County residents for “All Cancer” as underlying cause of death has fluctuated, but overall decreased from 156.6 per 100,000 in 2001 to 144.3 per 100,000 in 2010.

#### 3.2 Heart Disease and Stroke

The age-adjusted death rate from heart disease for Maricopa County residents is 138 per 100,000, compared to 179.8 for the U.S. Between 2006 and 2010, rates of heart attack and stroke in Maricopa County have fluctuated slightly but remained relatively stable.

- Approximately five percent (4.5%) of Maricopa County residents have been diagnosed as having had a heart attack, compared to five percent (4.6%) for the state of Arizona<sup>xvi</sup> and four percent (4.2%) for the U.S.<sup>xvii</sup>
- Approximately 3.6 percent of Maricopa County residents have been diagnosed as having coronary artery disease, compared to 4.1 percent for the state of Arizona<sup>xviii</sup> and 4.1 percent for the U.S.<sup>xix</sup>
- Approximately 2.7 percent of Maricopa County residents have been diagnosed with stroke, compared to 3.2 percent for the state of Arizona<sup>xx</sup> and 2.7% for the U.S.<sup>xxi</sup>

The prevalence of hypertension in Maricopa County has increased slightly from 23.1 percent in 2007 to 24.5 percent in 2009.

### 3.3 Diabetes

Less than 10 percent of Maricopa County residents were diagnosed with diabetes by a provider. Diabetics were more likely to be female (8.7%), age 55 years and older, and of Hispanic origin (12.7%). Rates of diabetes in Maricopa County decreased between 2006 and 2008, but increased between 2008 and 2010.

- The rate of diabetes in Maricopa County is similar to the rate in Arizona (9%) and the U.S. (8.7%).
- The age-adjusted death rate from diabetes for Maricopa County is 18.7 per 100,000 persons; this rate is lower than the rate for the U.S. (20.9) and the Healthy People 2010 goal (46/100,000).

### 3.4 Overweight and Obesity

Over 20 percent (22.9%) of Maricopa County residents reported being obese and over 40 percent overweight (41.8%) based on self-reported height and weight. Overweight residents were more likely to be male, non-Hispanic white and between 35 and 44 years of age, while obese residents were more likely to be male, 55 to 64 years of age and of Hispanic origin. Rates of obesity in Maricopa County have fluctuated, but remained relatively stable, from 2006 to 2010.

- Rates of obesity in Maricopa County are lower than rates of obesity in Arizona and the U.S., but higher than the Healthy People 2010 goal of 15 percent. The percentage of overweight residents in Maricopa County is higher than the percentage of overweight residents in Arizona and the U.S.
  - Over 25 percent (25.9%) of Arizona residents reported being obese and over 35 percent overweight (38.3%) based on self-reported height and weight. Overweight Arizona residents were more likely to be male, non-Hispanic white and above 65 years of age, while obese residents were more likely to be female, 45 to 54 years of age and of Hispanic origin.<sup>xxii</sup>
  - Over 25 percent (26.9%) of U.S. residents reported being obese and over 35 percent overweight (36.2%) based on self-reported height and weight. Overweight U.S. residents were more likely to be male, Hispanic and above 65 years of age, while obese residents were more likely to be male, 55 to 64 years of age and of black.<sup>xxiii</sup>

## 4. Maternal and Child Health

Combined results from the REACH Community Survey and the MCDPH survey also identified important maternal and child health problems. Teenage pregnancy was ranked highly: the MCDPH ranked teenage pregnancy as the 5<sup>th</sup> most important “health problem,” while the community ranked it as the 9<sup>th</sup> most important problem (Hispanic residents ranked it 3<sup>rd</sup> and American Indian residents ranked it 4<sup>th</sup>). Although infant deaths were not ranked highly, data revealed that they are an important health problem for Maricopa County. Additionally, other maternal and child health indicators (maternal mortality, prenatal care and low birthweight) are important issues for Maricopa County, but were not included in these surveys.

As indicated under chronic diseases, pregnancy and early life ranked fourth in terms of years of potential life lost, and pregnancy, childbirth and newborns accounted for the highest number (114,521) of inpatient stay in 2010 and close to 30 thousand (29,707) emergency department visits. Using our criteria, the priority of MCH conditions are outlined below:

### 4.1 Maternal Mortality

The maternal mortality rate (per 100,000 live births) in Maricopa County is 16.6. This rate is higher than the Arizona rate (7.6), the U.S. rate (12.73), and significantly higher than the Healthy People 2010 goal (3.3). The maternal mortality rate in Maricopa County increased significantly from 6.9 per 100,000 live births in 2009 to 16.6 per 100,000 live births in 2010.

### 4.2 Infant Mortality

The infant mortality rate (per 1,000 live births) in Maricopa County is 5.7, compared to 5.9 for the state of Arizona and 6.4 for the U.S. The infant mortality rate (IMR) is still higher than the Healthy People 2010 goal of 4.5; and Hispanic (6.7) and Black (10.9) infants have a significant higher mortality rate compared to white infants. Despite some fluctuations, the IMR has declined between 2001 (6.7) and 2010 (5.7).

- Maternal risk factors for infant mortality include age, race/ethnicity and level of education.
- Mortality is highest among infants who are born too small (low birth weight) or too soon (premature). Over the 10 year period, IMR was highest among very low birth weight (<1500 grams) and low birth weight infants (<2500grams).
- The neonatal (<= 28 days) mortality rate (3.7/1000 live births) was higher than the post-neonatal (>28 days) mortality rate (2.0/1000); and for each demographic group, except for American Indians where it was the same (3.2/1000)

### 4.3 Prenatal Care

Approximately 76 percent of Maricopa County mothers receive adequate prenatal care.<sup>2</sup> This is lower than the percentage for Arizona (78%), and also lower than the Healthy People 2010 goal of

<sup>2</sup> Adequate prenatal care is based on the Adequacy of Prenatal Care Utilization Index (APCUI). This index considers both the timing of prenatal care initiation and the number of visits after care was initiated, comparing the number of actual visits to the number of visits recommended by the American College of Obstetricians and Gynecologists. This index does not describe the quality of the care or adjust for maternal risk factors. Only singleton (the birth of one baby rather than twins, triplets, or other multiple births) births are shown in these tables because twins and higher order births are typically higher risk pregnancies, and the index is not appropriate for summarizing their prenatal care usage.

ensuring that 90 percent of births are to mothers who received prenatal care beginning in the first trimester.<sup>xxiv</sup>

- Compared with white mothers (83.1%), the percentage of Hispanic (69.7%), Black (72.2%), and American Indian (60.7%) mothers are significantly less likely to receive adequate prenatal care.
- The percentage of mothers receiving adequate prenatal care has fluctuated, and has increased from 73.5 percent in 2001 to 76.1 percent in 2010. This percentage has been steadily increasing since 2006.

#### 4.4 Low Birthweight

Seven percent (7.1%) of live births Maricopa County are low birth weight births; the same as for Arizona (7.1%). Although this is lower than the U.S. percentage (8.2%), it is higher than the Healthy People 2010 goal of 5 percent.

- Compared to white infants (6.6%), a significantly higher percentage of Black (11.7%) and Asian (8.2%) infants are low birthweight births.
- The percentage of low birthweight births has decreased, with a few fluctuations, between 2001 (8.0%) and 2010 (7.1%).

#### 4.5 Teenage Pregnancy

Approximately 10 percent (9.7%) of live births in Maricopa County are births to teen mothers (ages 15 – 19 years old), compared to 12 percent (11.7%) of births in Arizona and 10 percent (9.9%) of births in the U.S. The percent of live births to teen mothers is significantly higher for Hispanic (14.9%), Black (12.3%) and American Indian (13.4%) mothers compared with white mothers (5.2%). Births to teen mothers has fluctuated but generally decreased between 2001 and 2010, and has decreased every year between 2006 and 2010.

- This decline in Maricopa County mirrors US teenage birth rates, which reached a historic low of 39.1 births per 1,000 teenagers 15-19 years old and experienced an overall decline of 8 percent between 2007 and 2009.<sup>xxv, xxvi</sup>
- Similar declines were observed in Maricopa County and also the state of Arizona during the same time period (2007-2009) where birth rates for teens (15-19 years) in Maricopa County declined by 21 percent from 61.8 to 48.5 per 1000 compared with 17 percent for the state of Arizona from 59.5 to 49.1 per 1,000 live births.

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a) Inadequate: Prenatal care began after the fourth month of pregnancy or less than 50% of the expected prenatal care visits were attended  
b) Intermediate: Prenatal care began before the fourth month and 50 to 70% of the expected visits were attended  
c) Adequate: Prenatal care began prior to the fourth month and 80-109% of expected visits were attended  
d) Adequate plus: Prenatal care began prior to the fourth month of pregnancy and 110% or more of the expected visits were attended

## 5. Behavioral Health

Combined results from the REACH Community Survey and the MCDPH survey indicated that mental health problems are an important issue in Maricopa County. Although community survey respondents ranked “mental health problems” in the mid-range for importance, the MCDPH respondents ranked mental health problems as the 4<sup>th</sup> most important health problem in the community. Mental health issues also emerged as an important health problem in results from six Maricopa County focus groups with three subpopulation groups (LGBT, low socio-economic status, and seniors).

### 5.1 Mental Health Disorders

Sixteen percent of Maricopa County residents had a Mental Health scale 1-3 diagnosis in 2010.

- Black or African American residents had the highest percentage (22.7%) of Mental Health scale 1-3 diagnoses.
- The rate of emergency department visits per 100,000 Maricopa County residents caused by mental disorders has increased from 2006 (580.5) to 2010 (831.0).

Approximately 81 percent of Maricopa residents reported that they usually or always have emotional support; on average, a higher percentage of females (82.2%), non-Hispanic whites (84.7%) and residents ages 45-54 (82.7%) reported that they usually or always had emotional support. This percentage is similar to the percentage of Arizona residents (80.5%) who usually or always get the social and emotional support they need.<sup>xxvii</sup>

A similar pattern was observed among residents who reported having anxiety (13.4%) or depressive (17.4%) disorders – mainly females, between the ages of 45 and 54 years and non-Hispanic white residents reported having anxiety and depressive disorders.

### 5.2 Suicide

As previously mentioned under chronic diseases, suicide is among the top five contributors to the years of potential life lost (17,101). In 2010, the crude suicide death rate per 100,000 residents was highest among those age 75 – 84 (26.3) and age 85+ (27.1). In 2010, the crude suicide death rate was also higher for males (22.7) compared to females (6.2). The age-adjusted suicide death rate per 100,000 residents in Maricopa County is 14.5, compared to a rate of 11.7 for the U.S. and a Healthy People 2010 goal of 5.

- The suicide rates for Hispanic (5.2), African American (5.6), American Indian (4.2) and Asian (7.1) populations were significantly lower than the suicide rate for white populations (18.9).
- The suicide rate in Maricopa County has increased between 2001 (9.8) and 2010 (14.4).

## 6. Substance Abuse

In the REACH Community Survey, “drug abuse” and “alcohol abuse” were among the top three most important “risky behaviors” for the community as a whole, and for each racial / ethnic population (the MCDPH staff did not complete this survey question).

### 6.1 Drug Abuse

The age-adjusted drug-induced death rates for Maricopa County are 16 per 100,000 residents, compared to 12.1 for the US and the Healthy People 2010 goal of 1. This rate has fluctuated, but increased overall from 10.5 per 100,000 residents in 2001 to 15.8 per 100,000 residents in 2010.

- The drug-induced death rate is highest for American Indian (20.2) and white residents (19.9), and lowest for Asian (1.8) residents.

### 6.2 Alcohol Abuse

Approximately 15 percent (14.8%) of Maricopa County residents report binge drinking compared to 14 percent of Arizona residents,<sup>xxviii</sup> 15.1 percent of U.S. residents,<sup>xxix</sup> and the Healthy People 2010 goal of 13.4 percent for adults ages 18 years and over. In Maricopa County, this behavior was more likely to be reported by males, between ages 18 and 34 years, and residents of Hispanic origin.

Approximately 4.6 percent of Maricopa County residents report heavy drinking, compared to 5.5 percent of Arizona residents<sup>xxx</sup> and 5 percent of U.S. residents.<sup>xxxi</sup> In Maricopa County, heavy drinkers of alcohol tended to be females (6.2%), ages 45 years and older and of non-Hispanic origin. Both of these percentages (for binge drinking and heavy drinking) have fluctuated, but overall decreased slightly, between 2006 and 2010.

The age-adjusted alcohol-induced death rates for Maricopa County are 11.5 per 100,000 residents, compared to 7.3 for the US.

- The alcohol-induced death rate for American Indian residents is 105.8, which is significantly higher than the rate for white residents (11.1).
- This alcohol-induced death rate has fluctuated, but generally increased, from 2001 (6.7) to 2010 (11.7).

## 7. Child Abuse/Neglect, Violence and Injury

Combined results from the REACH Community Survey and the MCDPH survey indicate that child abuse / neglect and domestic violence are important health problems. Both were ranked highly (7<sup>th</sup> or above) by MCDPH staff and community survey respondents, with one exception: Asian American community survey respondents ranked child abuse / neglect as only the 10<sup>th</sup> most important problem.

Motor vehicle and firearm-related injuries were generally ranked in the mid-range in the REACH and MCDPH surveys. However, data shows that injuries are an important issue for Maricopa County.

### 7.1 Domestic and Sexual Violence

Approximately 11 percent of Maricopa county residents have ever experience domestic violence and approximately 6.6 percent have ever experience sexual violence.

### 7.2 Injury

Unintentional injury is the second highest ranked condition with the most years of potential life lost (36,855 years) in Maricopa County. The age adjusted death rate per 100,000 residents in Maricopa County from unintentional injuries in 2010 was 41.2. This rate is slightly lower than the rate for Arizona (43.1), but higher than the rate for the U.S. (37.1) and the Healthy People 2010 goal (17.5).

Injury and poisonings accounted for the second highest cause of emergency department visits in Maricopa County in 2010, with a crude rate of 6,381.5 per 100,000 residents. This rate is lower than average for Hispanic (5,804.2) and Asian (2,995.0) residents, but higher than average for Black (10,004.5) and American Indian (7,510.3) residents.

## 8. STDs, HIV / AIDS, and other Infectious Diseases

Sexually transmitted diseases, infectious diseases, and HIV / AIDS were generally ranked in the mid-range of importance in the surveys. However, compared to other racial / ethnic sub-groups, African American ranked HIV/AIDS as a more important problem (9<sup>th</sup>), and Asian Americans ranked infectious diseases as a more important problem (8<sup>th</sup>). HIV/AIDS issues also emerged as an important health problem in results from six Maricopa County focus groups with three subpopulations (LGBT, low socio-economic status, and seniors).

### 8.1 HIV / AIDS

The age-adjusted death rate from AIDS and HIV in Maricopa County is approximately 1.8 per 100,000 residents, compared to 3 for the U.S. and the Healthy People 2010 goal of 0.73. This rate has fluctuated, but overall decreased, from 3.1 per 100,000 residents in 2001 to 1.8 per 100,000 residents in 2010.

- The HIV/AIDS disease rate per 100,000 residents is 16. The rate for Hispanic (16.1), African American (44), and American Indian (50.7) residents is statistically significantly higher than the rate for white (13.4) residents.
- Approximately 35 percent (35.7%) of Maricopa County residents reported ever having a HIV Test.

### 8.2 Sexually transmitted diseases

The total sexually transmitted disease rate per 100,000 Maricopa County residents is 531.3. The rate for Hispanic (93.5), African American (388.8), and American Indian (450.7) residents is significantly higher than the rate for white (49.7) residents.

Between 2001 and 2010, Maricopa County STD rates per 100,000 residents have fluctuated. Rates of genital herpes have remained relatively stable since 2001 (25.7), though this rate increased between 2009 (18.2) and 2010 (29.6). Rates of Gonorrhea have decreased from 2001 (88.9) to 2010 (60.0). Rates of primary and secondary syphilis have remained relatively stable (2010 rate – 4.2). Rates of all other types of syphilis have generally decreased from 2001 (27.0) to 2010 (12.4). Rates of chlamydia have generally increased from 2001 (282.2) to 2010 (409.1). STD rates tend to be highest among residents between the ages of 15 and 34.

### 8.3 Infectious Diseases

The crude death rate per 100,000 residents from Tuberculosis in Maricopa County has fluctuated, but overall remained stable between 2001 (0.3) and 2010 (0.3).

#### 8.3.1 Immunization Status

Immunization status of adults ages 18 years and over in Maricopa County was under 50 percent for yearly influenza (36.4%), pneumonia (29.9%), and shingles (8.5%); however, females had higher rates than males for all immunizations. Non-Hispanic white and/or older (65 years or more) residents of Maricopa County were more likely to be immunized in 2010 compared with all other demographic groups.

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