Health and Wellness for all Arizonans

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MISSION:
To improve the health and wellness of people and communities in Arizona

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Foreword

The Arizona Department of Health Services (ADHS) has prepared this report on the health status of Arizona women to highlight its commitment to the health and wellness of all Arizonans throughout the lifespan and its focus on prevention. It is the intention that the data contained in this report will serve as a baseline and that, in future reports, we will see progress toward creating a healthier Arizona.
Introduction

How does the population of Arizona women compare to the U.S. taken as a whole? As can be seen in this report on the status of women’s health:

- There are proportionately more females age 15-39 and age 60-79 in Arizona.
- Arizona women age 18 and older have lower levels of education.
- Arizona women who are working full-time, year-round have lower incomes and proportionately more live in poverty.

On many of the health indicators included in this report, Arizona women look remarkably similar to U.S. women. That is both good and bad news. It is encouraging that the percentage of women reporting good to excellent health was 83% for Arizona women and 84% for U.S. women. On the other hand, well over half of Arizona women (57%) and U.S. women (56%) were overweight or obese. There are a few differences, as well—for example, Arizona women have a higher rate of unintentional injuries and a higher suicide rate than their counterparts throughout the country.

Another key consideration is disparities that exist within the population of Arizona women. Often, the concept of disparity is applied to variation by race or ethnicity. There are other variables that relate to health, as well—including but not limited to gender, education, income, insurance status, disability, sexual identity, location, and more. Healthy People 2020 defines a health disparity as “a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage.” Healthy People 2020 is also embracing the parallel concept of health equity, which is defined as the “attainment of the highest level of health for all people.”

Where reliable data were available, health-related indicators included in this report have been provided by age, race/ethnicity, education, and income. See Appendix 1 for more information on the data sources used in this report. There are some notable differences by age and race/ethnicity, but the big story is education and income. Many of the health-related indicators trend up or down, whichever is the desirable direction, as education and/or income increase. Examples include at least some of the indicators related to access to health care and utilization of preventive health services, general health status, chronic diseases, healthy weight, mental health, nutrition, oral health, physical activity, reproductive health, and smoking.

Improving health status is not a simple undertaking. Interrelated factors include genetics, individual behavior, availability of and access to quality health services, the environment, literacy, policies, and more. But data can provide a starting point for action. We hope that you will find this report useful as an aid to future action.

Characteristics of Arizona Women
According to the 2010 Census, there were 2,550,938 females age 15 and older living in Arizona. Over 59% of them live in Maricopa County.
Compared to the U.S. population, the Arizona population has proportionately more females age 15-39 and more females age 60-79.

Of the females age 15 and older:

- 4% are American Indian or Alaskan Native
- 3% are Asian or Pacific Islander
- 3% are Black or African American
- 26% are Hispanic or Latina
- 63% are White

The largest proportion (35%) of Arizona females age 25 and older have had some college or hold an associate's degree; however, 15% have not graduated from high school (or an equivalent). The divide is more apparent among females age 18 to 24. In this age group, 44% have had some college or hold an associate's degree, while 18% have not graduated from high school (or an equivalent).
Nearly half (47%) of Arizona women age 15 and older are married.

The largest percentage of Arizona women who are working full-time, year-round earned between $25,000-$49,999 in 2009 (46%). Another 29% earned less than $25,000.

Many lived in poverty—17% had income less than the Federal Poverty Level in 2009; nearly half of those had income that was less than 50% of the Federal Poverty Level. A total of 23% had income less than 125% of the Federal Poverty Level.
Wellness
Wellness

Body weight, physical activity, and nutrition are all strongly related to good health. Healthy People 2020 goals include: 1) promoting health and reducing chronic disease risk through the consumption of healthful diets and the achievement and maintenance of healthy body weights, and 2) improving health, fitness, and quality of life through daily physical activity.¹

**Body Weight:** An adult who has a Body Mass Index (BMI) between 25 and 29.9 is considered overweight. If the BMI is 30 or higher, the individual is considered to be obese. Over half (57%) of Arizona women age 18 and older are overweight or obese, compared to 56% of U.S. women.

In Arizona, the percentage increases from 27% after age 24 and stays above half throughout the remaining lifespan.

There are differences depending on the demographics. Hispanic/Latina women are most likely to be overweight or obese (70%), followed by non-Hispanic American Indian women (64%), whereas fewer non-Hispanic White women (53%) and women of other races and ethnicities (53%) fall into these categories.

Those who have not graduated from high school are most likely to be overweight or obese (77%), followed by those who attended college or technical school (61%) and those who are high school graduates (59%). Those who graduated from college or technical school had the lowest percentage (48%).

There is disparity based on income, as well. A higher percentage of lower income women are overweight or obese than are women with higher incomes. Among those with an annual income less than $20,000, the percentage is 66%; among those with an annual income from $20,000 up to $50,000, 60%; and among those with an annual income of $50,000 or more, 52%.
Physical Activity: In 2010, most Arizona women (78%) reported engaging in some physical activity in the month prior to being surveyed, compared to 74% of U.S. women. It should be noted that “some physical activity in the month” is far less than the recommended level of physical activity for adult women.

There was some variation by age group, with the largest percentage reporting physical activity being women under age 35—age 18-24, 84%; age 25-34, 86%; age 35-44, 81%; age 45-64, 78%; and age 65 and older, 70%.

There was also some variation by race/ethnicity—non-Hispanic American Indian women, 84%; women of other races/ethnicities, 83%; non-Hispanic White women, 79%; and Hispanic/Latina women, 72%. ²

The major disparities were related to education and income. Among college or technical school graduates, 88% reported some physical activity, while only 57% of those who had not graduated from high school did.

Similarly, 87% of those whose annual income was $50,000 or more per year reported physical activity, compared to 65% of those with an annual income less than $20,000.

²Races/ethnicities for which there are low numbers in the survey data are included in the category “other races and ethnicities”; this includes Asian/Pacific Islander and African American/Black women.
**Healthful Diet:** In 2010, slightly more than a quarter of Arizona women (28%) reported consuming fruits and vegetables five or more times per day, compared to 27% of U.S. women.

There was some variation by age group, with the largest percentage reporting consuming fruits and vegetables five or more times per day being women age 65 and older (35%) and women age 25-34 (32%), followed by women age 45-64 (29%) and those age 35-44 (24%).

With regard to race/ethnicity, non-Hispanic White women (31%) had the highest percentage reporting consumption of fruits and vegetables five or more times per day, followed by non-Hispanic American Indian women (27%) and Hispanic/Latina women (22%).

A large disparity was related to education level of the respondent. Among college or technical school graduates, 37% reported consumption of fruits and vegetables five or more times per day, while only 17% of those who were not high school graduates did.

There was some variation by income, with 33% of those in the highest annual income bracket ($50,000 or more) reporting consumption of fruits and vegetables five or more times per day compared to 25% of those with an annual income less than $20,000 and 26% of those with an annual income of $20,000 up to $50,000.
General Health Status
Self-assessed health status is a measure of how a person views his or her own health—excellent, very good, good, fair, or poor. This measure is one of the indicators of general health status that Healthy People 2020 will be monitoring throughout this decade to assess the health status of the U.S. population.¹

In 2010, 83% of Arizona women age 18 and older rated their health as good to excellent, compared to 84% of U.S. women.

There was some variation by age, with younger women assessing their health to be better than did older women. The percentage of women age 18-24 and age 25-34 who rated their health as good to excellent was the same—92%. The percentage then declined for each subsequent age group—84% for women age 35-44; 80% for women age 45-64; and 78% for women age 65 and older.

There were somewhat greater variation in self-assessment of health by race/ethnicity. Over 80% of women in all racial/ethnic groups except Hispanic/Latina women assessed their health to be good to excellent. The highest percentage of those assessing their health to be good to excellent was seen among non-Hispanic American Indian women (88%) and the lowest among Hispanic/Latina women (68%).

The biggest disparities were seen when responses were sorted by education and income. Self-assessment of good to excellent health increased as educational attainment and income increased. Some 92% of women who are college or technical school graduates rated their health as good to excellent, while only 47% of those who had not graduated from college did so.

The variation was even greater when responses were sorted by income—94% of women with an annual income of $50,000 or more rated their health as good to excellent, while on 54% of those with an annual income of less than $20,000 did.
**Leading Causes of Death:** The leading causes of death in 2010 varied by age, with unintentional injury, suicide, and malignant neoplasms in the top three for women age 15-44. For woman age 45-64, the leading causes of death were: malignant neoplasms, diseases of the heart, and unintentional injuries. For women age 65 and older, the leading causes were diseases of the heart, malignant neoplasms, and Alzheimer’s Disease.

<table>
<thead>
<tr>
<th>Top 3 Leading Causes of Death by Age, Arizona 2010</th>
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<tr>
<td><strong>15-19 Years</strong></td>
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<td>Unintentional Injury</td>
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<td>Suicide</td>
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<td>Malignant Neoplasms</td>
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<td><strong>20-44 Years</strong></td>
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<td><strong>45-64 Years</strong></td>
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<tr>
<td>Malignant Neoplasms</td>
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<td>Diseases of the Heart</td>
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<td><strong>65+ Years</strong></td>
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<td>Malignant Neoplasms</td>
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<td>Alzheimer's Disease</td>
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Access to Health Care
Improved access to quality, comprehensive health care services is one of the Healthy People 2020 goals and “is important for the achievement of health equity and for increasing the quality of a healthy life for everyone.”\(^1\)

**Healthcare Coverage:** In 2010, 87\% of Arizona women age 18 and older reported that they had some form of healthcare coverage, including health insurance, prepaid plans, or government plans. This is the same percentage as that for all U.S. women. There is some variation by age, with fewer younger women reporting health care coverage—78\% of women age 18-24 and 79\% of women age 25-34. The percentage rises for women age 35-44 (84\%) and age 45-64 (86\%), with most women age 65 and older having coverage (99\%).

A larger percentage of non-Hispanic White women (92%) reported having some form of healthcare coverage than did any other racial/ethnic group. Hispanic/Latina women had the lowest percentage—70%.

The biggest disparities were seen when responses were sorted by education and income. In both cases, percentage of the population increased as educational attainment and income increased. The highest percentage was found among women who are college or technical school graduates (94%) and the lowest percentage was found among women who had not graduated from high school (70%).

With respect to income, the highest percentage was found among women with an annual income of $50,000 or more (95%) and the lowest percentage was found among women with an annual income of less than $20,000 (72%).
**Barriers to Visiting a Doctor:** In 2010, 16% of Arizona women age 18-24 reported that they could not visit a doctor because of cost in the prior year. This was the same percentage as for all U.S. women.

There was a notable variation by age. The highest percentage was seen among the youngest women; 30% of women age 18-24 reported that they were unable to see a doctor due to the cost, compared to only 5% of women age 65 and older.

Hispanic/Latina women (32%) had the highest percentage reporting that they were unable to see a doctor due to the cost. All other racial/ethnic groups had percentages of 15% or less.
There were large disparities related to education and income, with the percentage of those reporting that they were unable to see a doctor due to cost falling as educational attainment and incomes increased. Among those who had not graduated from high school, 37% reported being unable to see a doctor due to the cost, while only 9% of those who were college or technical school graduates reported this.

Similarly, 37% of those with an annual income of less than $20,000 reported being unable to see a doctor due to the cost, while only 7% of those with an annual income of $50,000 or more reported this.
Mental Health
Mental Health

Mental health has an impact on personal well-being, family and interpersonal relationships, and the ability to contribute to community or society. It is defined as a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and cope with challenges. Healthy People 2020 includes a goal of improving the mental health of people in the U.S. through prevention and by ensuring access to appropriate, quality mental health services.¹

In 2010, 13% of Arizona women age 18 and older reported frequent mental distress (defined as 14 or more mentally unhealthy days in the past 30 days), compared to 12% of U.S. women. Data were only available by large age blocks (age 18-44 and age 45 and older) and no disparity was noted based on available data.

There was some variation by race/ethnicity, with Hispanic/Latina women being the most likely to report frequent mental distress (15%), compared to non-Hispanic White women (13%), and non-Hispanic American Indian women (10%).

The largest disparities related to education and income, with both showing decreases in reported frequent mental distress as education and income increased. Among women who had graduated from high school, 27% reported frequent mental distress, while only 7% of those who had graduated from college or technical school did so.

Among women who had an annual income of less than $20,000, 31% reported frequent mental distress, while only 6% of those with an annual income of $50,000 or more reported this.
Oral Health

Oral health is central to a person’s overall health and well-being. As noted in Healthy People 2020, good oral health improves a person’s ability to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions to show feelings and emotions. Oral diseases ranging from cavities to oral cancer cause pain and disability. Healthy People 2020 includes a goal to prevent and control oral and craniofacial diseases, conditions, and injuries, and to improve access to preventive services and dental care.¹

Visit to a Dental Clinic: In 2010, 71% of Arizona women age 18 and older reported that they visited a dental clinic for any reason in the prior year, compared to 72% of U.S. women.

There was some variation by age, with the highest percentages found among women age 45-64 and women age 65 and older—72% for each cohort. The percentage was somewhat lower for other age groups.

There was variation by race/ethnicity, with Hispanic/Latina women reporting the lowest percentage (54%) and non-Hispanic White women the highest (76%).

Responses also varied by education and income and percentages increased with both educational attainment and income level. Among women who had not graduated from high school, 48% reported a visit to a dental clinic in the past year, while 82% of those who were college or technical graduates said they had visited a dental clinic. Only 45% of women with an annual income of less than $20,000 reported having visited a dental clinic, while 84% of those with an annual income of $50,000 or more did.
Extraction of Permanent Teeth: In 2010, 44% of Arizona women age 18 and older reported that they had had one or more permanent teeth extracted because of tooth decay or gum disease (excluding other reasons such as injury or orthodontics). This compares to 45% for all U.S. women.

The percentage rises with age, from 7% among women age 18-24 to 68% for women age 65 and older. There is a sizable increase from age 25-34 (22%) to age 35-44 (46%).

Variations by race/ethnicity are evident, as well, with the highest percentage reporting tooth extractions found among non-Hispanic American Indian women (62%) and the lowest among non-Hispanic White women (43%).
Tooth extractions are more likely among those with lower levels of education and lower incomes. Among women who have not graduated from high school, 69% reported one or more permanent tooth extractions due to tooth decay or gum disease, while only 28% of women who had graduated from college or technical school did so. Among those with an annual income of less than $20,000, the percentage was 64%, while it was 32% for those with an annual income of $50,000 or more.
Unintentional Injuries and Violence
Injury, both from unintentional and intentional causes, is a major public health concern. As noted in Healthy People 2020, in addition to their immediate health consequences, injuries contribute to premature death, disability, poor mental health, high medical costs, and lost productivity. Hence, there is a Healthy People 2020 goal to prevent unintentional injuries and violence and to reduce their consequences.¹

**Mortality Rate of Injury Related Deaths:** In 2010, for Arizona women age 15 and older, the mortality rate (deaths per 100,000) due to unintentional injuries was 41.6, compared to 34.0 for U.S. women.

The mortality rate (deaths per 100,000) due to unintentional injuries was 9.3 for females age 15-19, 22.4 for females age 20-44, 36.6 for females age 45-64, and 106.6 for females age 65 and older.

In 2010, for Arizona women age 15 and older, the mortality rate (deaths per 100,000) due to intentional self-harm (suicide) was 8.7, compared to 5.9 for U.S. women.

The mortality rate (deaths per 100,000) due to intentional self-harm (suicide) was 5.3 for females age 15-19, 6.8 for females age 20-44, 13.7 for females age 45-64, and 6.0 for females age 65 and older.

In 2010, for Arizona women age 15 and older, the mortality rate (deaths per 100,000) due to assault (homicide) was 2.6, compared to 2.7 for U.S. women.

The mortality rate (deaths per 100,000) due to assault (homicide) was 0.89 for females age 15-19, 3.5 for females age 20-44, 2.8 for females age 45-64, and 1.2 for females age 65 and older.

Mortality Rate for Injury Related Deaths per 100,000 Women Age 15+, Arizona 2010 and U.S. 2007

- Accident (unintentional injury) 41.6 (Arizona) vs. 34.0 (U.S.)
- Intentional self-harm (suicide) 8.7 (Arizona) vs. 5.9 (U.S.)
- Assault (homicide) 2.6 (Arizona) vs. 2.7 (U.S.)

*Data are unadjusted for distribution of age differences in the AZ and US populations

Mortality Rate for Injury Related Deaths per 100,000 Women Age 15-19, Arizona 2010

- Accident (unintentional injury) 9.3
- Intentional self-harm (suicide) 5.3
- Assault (homicide) 0.89

Mortality Rate for Injury Related Deaths per 100,000 Women Age 45-64, Arizona 2010

- Accident (unintentional injury) 36.6
- Intentional self-harm (suicide) 13.7
- Assault (homicide) 2.8


*Data are unadjusted for distribution of age differences in the AZ and US populations
Injury Related Emergency Room Visits and Inpatient Discharges: Many injury incidents do not result in death. As an indicator of non-fatal events, two measures can be used. The first measure is injury-related non-fatal emergency room visits. In 2009, there were 166,793 incidents reported in Arizona for women age 15 and older. Of these, nearly half (45%) occurred to women age 20-44, followed by women age 45-64 (25%), women age 65 and older (20%), and women age 15-19 (10%).

The second measure is injury related inpatient discharges. In 2009, there were 80,737 inpatient discharges reported for women age 15 and older. Of these, well over half (64%) were for women age 65 and older. Of the others, 21% were for women age 45-64, 13% for women age 20-44, and 2% for women age 15-19.
**Falls:** Falls are a major cause of injury in older women. Looking at non-fatal emergency room visits and non-fatal inpatient discharges, it can be seen that the rate escalates with age. In 2010, the rate of non-fatal emergency room visits due to falls was 16.4 per 1,000 women age 55-64; 22.4 for women age 65-74; 42.5 for women age 75-84; and 83.0 for women age 85 and older. The rate of non-fatal inpatient hospitalizations due to falls was 2.9 per 1,000 women age 55-64; 6.0 for women age 65-74; 18.6 for women age 75-84; and 46.2 for women age 85 and older.

**Violence:** In 2010, 18% of Arizona women age 18 and older reported ever having been physically abused by an intimate partner. Among non-Hispanic White women, the percentage was 19% and among non-White or Hispanic/Latina women it was 16%. Unlike many of the other indicators included in this report, the percentage does not track with education. In this case, while the lowest percentage is found among women who have graduated from college or technical school (11%), the highest rate is among high school graduates (23%), not those with less than a high school education (14%). The percentage is lowest among those with the highest annual income ($50,000 or more) (14%) and highest among those with the lowest annual income (less than $20,000) (30%); 22% of those with an annual income of $20,000 to less than $50,000 reported physical abuse.
When asked if someone had ever had sex with them after they said “no” or without their consent, 12% said yes. The percentage was higher among non-Hispanic White women (14%) than it was for non-White or Hispanic/Latina women (8%). The variation in the percentage reporting that this had happened to them did not track directly with education. On this indicator, the lowest percentage was found among women who were not high school graduates (9%), while the highest percentage was found among women who had attended but not graduated from college or technical school (14%). With regard to income, the highest percentage (17%) was found among those with middle incomes of $20,000 to less than $50,000, followed by those with incomes of less than $20,000 (15%). The lowest rate was among women with an annual income of $50,000 or more (10%).

Source: Arizona BRFSS, 2010
Preventive Health Care
Preventive Health Care

Preventive health care includes routine visits to a healthcare provider and related screenings. Seeking preventive health care relates to at least two Healthy People 2020 goals—to improve the health and well-being of women, infants, children, and families and to reduce the number of new cancer cases, as well as the illness, disability, and death caused by cancer. Furthermore, Healthy People 2020 underscores the importance of healthy mothers to the health of the next generation. Preventive health care plays a significant role. ¹

In 2010, 71% of Arizona women age 18 and older reported having visited a doctor for a routine check-up within the last 12 months, compared to 73% of U.S. women. For 15% of Arizona women, their last routine check-up was two or more years ago, compared to 14% for U.S. women.

**Pap Tests:** In 2010, 82% of Arizona women reported that they had had a Pap Test within the past three years. There was variation by age.

The age cohort with the largest percentage having the Pap Test was women age 25-34 (91%). The lowest percentages were for women age 65 and older (62%), followed by women age 18-24 (65%).

There was some variation by race/ethnicity, with the highest percentage having the Pap Test found among Non-Hispanic White women and Hispanic/Latina women—both 83%. Non-Hispanic American Indian women had a lower percentage (71%), as did women of other races/ethnicities (73%).
There was some variation by education and income, as well. The highest percentage of those reporting having had a Pap Test in the past three years was found among college or technical school graduates (88%) and the lowest among women who had not graduated from high school (72%), followed closely by those who had graduated from high school (73%).

When sorted by annual income, the highest percentage was found among those reporting incomes of $50,000 or more (93%) and the lowest among those reporting incomes of less than $20,000 (79%).

**Mammograms**: In 2010, 74% of Arizona women reported that they had had a mammogram within the past two years, compared to 76% for U.S. women.

There was some variation by age—ranging from a high of 77% for both women age 50-59 and 60-69 to a low of 68% for women age 40-49.
There was considerable variation among women of different races/ethnicities. Over three-fourths of Hispanic/Latina (77%) and non-Hispanic White (76%) women reported having had a mammogram within the past two years, compared to only 44% of non-Hispanic American Indian women and 54% of women of other races/ethnicities.

As with many of the indicators, the percentage of women reporting that they had had a mammogram within the past two years rose with both education and income. With respect to education, the percentage increased from a low of 65% among women who had not graduated from high school to a high of 80% among women who had graduated from college or technical school.

With respect to income, the percentage increased from a low of 61% among women who had an annual income of less than $20,000 to a high of 80% among women who had an annual income of $50,000 or more.
Sexually Transmitted Diseases
Sexually transmitted diseases include more than 25 infectious organisms that are transmitted primarily through sexual activity. STDs remain a significant public health problem in the U.S., despite being largely preventable. STDs may cause harmful, often irreversible, and costly clinical complications, such as reproductive health problems, fetal and perinatal health problems, and cancer. Because of the health consequences of STDs, Healthy People 2020 includes a goal of promoting healthy sexual behaviors, strengthening community capacity, and increasing access to quality services to prevent STDs and their complications.¹

Data are available on chlamydia, gonorrhea, and genital herpes among Arizona women age 15 and older. In 2009, the rate of chlamydia per 100,000 women ranged from a low of 18 for women age 45 and older to a high of 3,158 for women age 20-24. There was a steep decline from the age 20-24 cohort to the age 25-29 cohort, whose rate was 1,223.

Similarly, the rate of gonorrhea per 100,000 women ranged from a low of 2 for women age 45 and older to a high of 241 for women age 20-24. There was a steep decline from the age 20-24 cohort to the age 25-29 cohort, whose rate was 98.

The rate of genital herpes per 100,000 women ranged from a low of 9 for women 45 and older to a high of 48 for women age 20-24. The rate did not fall with each subsequent age group, like it did for chlamydia and gonorrhea, but generally trended downward.

Human Immunodeficiency Virus (HIV)

Healthy People 2020 highlights the fact that HIV is a preventable disease. It is noted that people who get tested for HIV and learn that they are infected can make significant behavior changes to improve their health and reduce the risk of transmitting HIV to their sex or drug-using partners. The national focus is on reducing the number of people who become infected, increasing access to care, improving health outcomes for those living with HIV, and reducing disparities. Correspondingly, Healthy People 2020 includes a goal to prevent HIV infections and its related illness and death.²

In 2009, the rate of HIV prevalence of 379 per 100,000 non-Hispanic Black/African American women was more than six times higher than it was among any other racial/ethnic group. The rate for non-Hispanic American Indian women was 58; for Hispanic/Latina women, 52; for non-Hispanic White women, 43; and for Asian/Pacific Islander women, 35.

A similar trend is seen for emergent cases of HIV. The rate per 100,000 women for the period 2005-2009 was 24 for non-Hispanic Black/African American women, and 5 or under for all other races/ethnicities.
Reproductive Health
Reproductive Health

Improving the health and well-being of mothers and women who will become mothers is critical to the health of the current and future generations. Thinking about health and adopting healthy behaviors needs to start way before pregnancy; hence, the focused attention on “preconception” health today. Preconception health starts at birth and continues through the childbearing years. It encompasses healthy eating, physical activity, mental health, healthy and safe behavior, preventive health care, attention to health conditions when they arise, and more.

As noted in Healthy People 2020, pregnancy can provide an opportunity to identify existing health risks and to prevent future health problems for women and their children, including hypertension, heart disease, diabetes, depression, genetic conditions, sexually transmitted diseases, tobacco and other substance abuse, inadequate nutrition, and unhealthy weight. Accordingly, Health People 2020 includes the goal of improving the health and well-being of women, as well as infants, children, and families.¹

**Births:** Total number of births to Arizona women increased each year from 1999-2007, but then began to decline. The percentage decrease in 2008 was 3.4%; in 2009, 6.7%; and in 2010, 6.0%.

The 2010 decline was most pronounced among Hispanic/Latina women, when it dropped by 10.5%.

Despite the decline, 39.4% of the births in that year were to Hispanic/Latina mothers, second only to births to non-Hispanic White women, 44.5%.
**Interpregnancy Interval**: Time between pregnancies is a factor in women’s health. In 2010, women younger than age 18 were those most likely to have had a subsequent pregnancy less than 18 months after the previous pregnancy (81%), followed by women age 18-24 (53%). The percentage dropped to 36% for women age 25-34 and to 29% for women age 35 years and older. There was some variation by race/ethnicity, but it was not great.

American Indian women were most likely to have had an interpregnancy interval of less than 18 months (44%), while Hispanic/Latina women were least likely (35%). The percentage was the same for those with less than a high school education as it was for women with a high school education or more (39%). Variation by insurance status was minimal, although the highest percentage was among women covered by the Indian Health Service (44%); all other payment options (Medicaid, private insurance, and self-payment) were the same (39%).
**Use of Contraception:** In 2010, 79% of Arizona women reported using contraception with their partner to keep from getting pregnant. The highest percentage was found among the youngest women, age 18-24 (89%), followed by women age 25-34 (82%) and women age 35-44 (76%). There was some variation by race/ethnicity, with non-Hispanic White women being most likely to be using contraception (84%), followed by Hispanic/Latina women (75%), and other races/ethnicities (70%). The most common methods used were birth control pills (24%) and having had their tubes tied (23%).

There was variation when educational level is considered. The lowest percentage of contraception use was found among women who were not high school graduates (63%). It was higher among women with higher levels of educational attainment (79-83%). Correspondingly, the percentage was the lowest for those with an annual income of less than $20,000 (66%); rose to 78% for those with an annual income of $20,000 to less than $50,000; and was highest for those with an annual income of $50,000 or more.
**Folic Acid:** Taking a multivitamin or supplement containing folic acid prior to pregnancy is a key contributor to the health of infants born to the mother. In 2010, 51% of Arizona women age 18-44 reported that they were taking folic acid. There were variations by age—31% for women age 18-24, 59% for women age 25-34, and 51% for women age 35-44. There was a sizable difference when the responses are sorted by race/ethnicity—66% of non-Hispanic White women reported taking folic acid, whereas 34% of non-White or Hispanic/Latina women did so.

There were also sizable differences related to education and income. Approximately one-third (33%) of women whose highest level of education was high school graduate reported taking folic acid, whereas 58% of those with more education did so. Those with the lowest annual income (less than $20,000) had the lowest percentage reporting that they were taking folic acid (37%), compared to 44% for women with an annual income of $20,000 up to $50,000 and to 65% for women with an annual income of $50,000 or more.
Teen Pregnancy: In 2010, the teen pregnancy rate in Arizona was 25.6 per 1,000 females age 15-17 and 80.8 for females age 18-19. For both groups combined, the rate was 48.3 per 1,000 females age 15-19. This represented a drop from 2009.

Preterm Infants: In 2008, 12.9% of infants were born preterm, compared to 12.3% for the U.S. The highest percentage was for late preterm births (34 to less than 37 weeks) (7.2%), followed by very preterm (less than 31 weeks) (1.4%) and moderate preterm (32-33 weeks)(1.1%). There was some variation by the age of the mother, with the higher percentages seen among women age 35 and older (12.1%) and women less than age 18 and the lower percentages seen among women age 18-24 (8.8%) and women age 25-34 (9.4%). There was some variation by race/ethnicity, with the higher percentages of preterm infants seen among Black/African American mothers (12.2%) and American Indian mothers (10.5%) and the lower percentages seen among Asian/Pacific Islander, Hispanic/Latina, and non-Hispanic White mothers (9.9-9.0%).
In 2010, the percentage of preterm births among those covered by Medicaid was 9.9% and for those covered by private insurance it was 9.4%. This compared to 7.8% for those covered by Indian Health Service and 7.9% for those who were self-pay.

**Breastfeeding:** Breastfeeding is a contributing factor to infant health. In 2008, 78.3% of Arizona infants were reported to have been ever breastfed, compared to 74.6% for the U.S. Over one-third (36.1%) were exclusively breastfeeding at three months and 12.3% were exclusively breastfeeding at six months.
Risk Behaviors
Tobacco use includes smoking cigarettes and cigars, exposure to secondhand smoke, and use of smokeless tobacco products. As reported in Healthy People 2020, tobacco use causes cancer, heart disease, lung diseases, premature births, low birth weight, stillbirth, and infant death. Secondhand smoke exposure causes heart disease and lung cancer in adults and many serious health conditions in infants and children. Healthy People 2020 includes a goal to reduce illness, disability, and death related to tobacco use and secondhand smoke exposure.¹

**Tobacco Use:** In 2010, 14% of women age 18 and older were current smokers, compared to 16% of U.S. women.

The percentage varies with age, with the highest percentage found among women age 18-24 (24%) and the lowest among women age 65 and older. (7%).

There is some variation in the percentage of current smokers by race/ethnicity. In 2010, 18% of non-Hispanic American Indian women were current smokers, compared to 10% of Hispanic/Latina women. Women who had not graduated from high school and women whose highest level of educational attainment was high school graduation were the most likely to be current smokers, at 19% and 20%, respectively. The percentage dropped to 8% for women who were college or technical school graduates.

The percentage of current smokers declined as annual income increased. The highest percentage was found among women with an annual income of less than $20,000 (23%) and the lowest among women with an annual income of $50,000 or more (97%).
In 2010, the percentage of mothers reporting having smoked during pregnancy ranged from a high of 5.9% among women age 20-24 and the lowest among women age 35-44 (3.8%).

When sorted by race/ethnicity, the highest percentage was found among non-Hispanic White women (7.5%), followed by Black/African American women (6.9%). The lowest percentage was found among Asian/Pacific Islander and Hispanic/Latina women (both were 1.7%). Among those with a high school education or less, the percentage was 6.4%, while among those who had attended or graduated from college or technical school, it was 2.8%.

When sorted by insurance status, it can be seen that the largest percentage of current smokers was found among mothers covered by AHCCCS (6.8%) and the lowest among mothers covered by Indian Health Service (1.9%) and private insurance (2.1%).
Substance Use/Abuse: Substance abuse impacts individuals, families, and communities. As noted in Healthy People 2020, substance abuse significantly contributes to costly social, physical, mental, and public health problems, including teenage pregnancy, HIV, sexually transmitted diseases, domestic violence, child abuse, motor vehicle crashes, physical fights, crime, homicide, and suicide. Because of the importance of this issue, Healthy People 2020 includes a goal to reduce substance abuse to protect the health, safety, and quality of life for all, especially children.

Data on substance abuse among Arizona women is limited; however, some state-level data related to use of alcohol is available. In 2010, 47% of Arizona women age 18 and older reported having had at least one drink of alcohol in the past 30 days, compared to 48% for U.S. women. There is some variation in use of alcohol by age, ranging from 40% of women age 18-24 and 41% of women age 65 and older to 51% for women age 35-44. Among women age 25-34, the percentage was 43% and among women age 45-64 it was 49%.

There was greater variation by race/ethnicity, with non-Hispanic White women being most likely to use alcohol (53%) and non-Hispanic American Indian women being the least likely (19%).
Unlike many of the other indicators in this report, use of alcohol increased with both education and income. Among women who were college or technical school graduates, 60% reported having at least one drink of alcohol in the past 30 days. The percentage dropped to 20% for women who had not graduated from high school.

Among women with an annual income of $50,000 or more, the percentage was 64%, compared to 26% for women with an annual income of less than $20,000.

In 2010, 6% of Arizona women reported having four or more drinks on one occasion (binge drinking), compared to 10% of U.S. women. Higher percentages were seen among women under 45 (12%), Hispanic/Latina women (11%), women who had a high school education or more (8-9%), and women with an annual income of $50,000 or more (11%).
Chronic Diseases and Conditions
Chronic Diseases and Conditions

Healthy People 2020 addresses a broad range of chronic diseases and other health conditions that affect the U.S. population, including women. These include: arthritis, osteoporosis, chronic back conditions, cancer, chronic kidney disease, dementias, diabetes, hearing and other sensory or communication disorders, heart diseases and stroke, respiratory diseases, and vision-related conditions. There are goals addressing each of these diseases and conditions, focusing on preventing and/or reducing complications, illnesses, disability, and/or death.¹

Data are available on Arizona women for several of these diseases/conditions and contributing factors.

**Asthma:** In 2009, 11% of Arizona women age 18 and older reported being told by a doctor or other health professional that they had asthma, compared to 12% of U.S. women. Women of all ages were impacted by asthma, ranging from a high of 14% among women age 45-64 to a low of 11% among women age 35-44. Non-Hispanic White women had the highest percentage (15%), followed by Hispanic/Latina women (11%), non-Hispanic American Indian women (8%), and women of other races and ethnicities (6%). There was variation by educational level, but the variation did not track directly with level of education. The highest percentage was found among women who were not high school graduates (15%), while the lowest was found among women whose highest level of educational attainment was high school (11%).

It appears that there is some correlation with income. Women most likely to report having asthma had an annual income of less than $20,000 (16%), followed by those with incomes of $20,000 to less than $50,000; the lowest percentage was found among women with an annual income of $50,000 or more (10%).

**Cancer:** In 2008, 12,810 Arizona women age 15 and older had breast cancer. Of these, 82% were non-Hispanic White women; 10% were Hispanic/Latina women; 2% were Black/African American women; 2% were American Indian women; 2% were Asian/Pacific Islander women; and 2% were other races/ethnicities.

In 2008, 223 Arizona women age 15 and older had cervical cancer. Of these, 69% were non-Hispanic White women; 18% were Hispanic/Latina women; 5% were Black/African American women; 4% were American Indian women; 2% were Asian/Pacific Islander women; and 1% were other races/ethnicities.
Chronic Obstructive Pulmonary Disease (COPD): In 2010, 9% of Arizona women age 18 and older reported that they had been told by a doctor or other health professional that they had COPD. The percentage was higher among women age 45 and older (10%) than it was among women age 18-44 (6%). It was higher among non-Hispanic White women (10%) than it was among Hispanic/Latina women (6%).

The variation did not track directly with education level, but it did trend downward with income level, from a high of 14% among women with an annual income of less than $20,000 to a low of 6% among women with an annual income of $50,000 or more.
Diabetes: In 2010, 9% of Arizona women age 18 and older reported that they had been told by a doctor or other health professional that they had diabetes, compared to 8% of U.S. women. The percentage was higher among non-White or Hispanic women (12%) than among non-Hispanic White women (8%).

The percentage decreased as educational level and income increased. While 22% of women who had not graduated from high school reported having diabetes, only 4% of those who had graduated from college or technical school did. Among those with an annual income less than $20,000, 16% reported having diabetes, while 6% of those with an annual income of $50,000 or more did.
Heart and Cerebrovascular Diseases: In 2010, 4.6 per 100,000 women age 20-44 died as a result of heart disease. The rate rises with age to 55.9 for women age 45-64 and to 804.8 for women age 65 and older. The mortality rate due to cerebrovascular diseases was 1.5 per 100,000 for women age 20-44. It, too, rises with age to 10.9 for women age 45-64 and to 229.9 for women age 65 and older.
In 2010, 3.0% of Arizona women age 18 and older reported that they had been told by a doctor or other health professional that they had coronary heart disease, compared to 3.2% of U.S. women. A slightly higher percentage, 3.5%, had been told they had had a heart attack, compared to 2.9% of U.S. women. When asked about stroke, 3.1% of Arizona women said they had had a stroke, compared to 2.9% of U.S. women.

High cholesterol was reported by 37% of Arizona women in 2009, compared to 36% for U.S. women. The percentage increased with each successive age group, ranging from a low among women age 18-34 (10%) to a high among women age 65 and older (55%). There was some variation by race/ethnicity, with the highest percentage found among non-Hispanic White women (39%) and the lowest among non-Hispanic American Indian women (21%). There were no consistent disparities based on educational level or income level, although those with the most education and the highest incomes had the lowest percentages.
In 2009, 24% of Arizona women reported that they had high blood pressure, compared to 28% of U.S. women. As with high cholesterol, the percentage increased with age, ranging from a low among women age 18-34 (6%) to a high among women age 65 and older (52%). The percentage was in the same range (25-29%) for all races/ethnicities except Hispanic/Latina women, for whom the percentage was 14%. There were no consistent disparities based on educational level or income level, although those with the most education and the highest incomes had the lowest percentages.
Resources

WELLNESS

Arizona Department of Health Services/Bureau of Nutrition and Physical Activity
http://www.azdhs.gov/phs/bnp/index.htm

Arizona Nutrition Network
www.eatwellbewell.org

BMI Calculator
http://www.cdc.gov/healthyweight/assessing/bmi/

Bright Futures for Women’s Health
http://www.hrsa.gov/womenshealth

Centers for Disease Control and Prevention
http://www.cdc.gov/nccdphp/dnpa/physical/importance/index.htm

Healthy Recipes
http://www.fruitsandveggiesmatter.gov
http://www.fruitsandveggiesmorematters.org

It’s Your Health
http://www.hc-sc.gc.ca/iyh-vsv/life-vie/shs-ps_e.html

NetWellness Consumer Health Information
http://www.netwellness.org/

United States Department of Agriculture Food Guidelines
www.choosemyplate.gov

United States Department of Agriculture
www.mypyramid.gov

U.S. National Physical Activity Campaign
www.letsmove.gov
ACCESS TO HEALTH CARE

Arizona Department of Health Services/Bureau of Healthy Systems Development
http://www.azdhs.gov/hsd/sfs_provider.htm

Arizona Health Care Cost Containment System

U.S. Department of Health and Human Services/ Healthy Resources and Service Administration., Community Health Center locator
http://findahealthcenter.hrsa.gov/Search_HCC.aspx

WellCare Foundation Phoenix for single mothers with children
http://www.wellcarefoundation.org/

MENTAL HEALTH

American Academy of Family Physicians
http://familydoctor.org/online/famdocen/home/women/mental/443.html

Arizona Department of Health Services, Division of Behavioral Health Services
http://www.azdhs.gov/bhs/

HRSA Information Center at 1-888-ASK-HRSA

HRSA Maternal Stress
http://mchb.hrsa.gov/pregnancyandbeyond/depression/help.htm

HRSA Women’s Health and Wellness

National Institute of Mental Health

ORAL HEALTH

Academy of General Dentistry
http://www.knowyourteeth.com/

Arizona Department of Health Services, Bureau of Women’s and Children’s Health, Office of Oral Health list of low cost dental clinics
http://www.azdhs.gov/cfhs/ooh/pdf/Low_Cost_Reduced_Fee_Dental_Clinics.pdf

Centers for Disease Control and Prevention, Division of Oral Health
http://www.cdc.gov/oralhealth/
UNINTENTIONAL INJURIES AND VIOLENCE

National 24 hour Domestic Violence Hotline at 1-800-799-7233 or 1-800-787-3224 (TTY for the Deaf)

National Domestic Violence
http://www.ndvh.org

National Sexual Assault Hotline (RAINN) at (800) 656-HOPE (4673)

Sexual Assault Prevention and Education Program
http://www.azrapeprevention.org

PREVENTIVE HEALTH CARE

Arizona Department of Health Services, Well Woman Health Check, Breast and Cervical Cancer Screening
http://www.wellwomanhealthcheck.org/

Preventive Services Covered by Medicare
www.medicare.gov

SEXUALLY TRANSMITTED DISEASES

Arizona Department of Health Services, Office of HIV, STD and Hepatitis Services
http://www.azdhs.gov/phs/hvstdhpc/index.htm

REPRODUCTIVE HEALTH

Arizona Department of Health Services, Bureau of Women’s and Children’s Health

Arizona Family Health Partnership
www.ArizonaFamilyHealth.org

Centers for Disease Prevention and Control
http://www.cdc.gov/ncbddd/preconception/QandA.htm

March of Dimes
http://www.marchofdimes.com

National Institutes of Health
http://www.nichd.nih.gov/health/topics/preconception_care.cfm

National Organization on Fetal Alcohol Syndrome
http://www.nofas.org

Text4baby
http://www.text4baby.org

The Pregnancy and Breastfeeding Hotline at 1-800-833-4642
RISK BEHAVIORS

ASHLINE toll-free at 1-800-55-66-222
http://www.ashline.org/

Arizona Department of Health Services, Tobacco Education and Prevention Program
http://www.tobaccofreearizona.com/

U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration’s National Drug and Alcohol Treatment at 1-800-662-HELP (1-800-662-4357)

CHRONIC DISEASES AND CONDITIONS

American Diabetes Association
www.diabetes.org

American Heart Association
http://www.americanheart.org

Arizona Department of Health Services, Bureau of Tobacco and Chronic Disease
http://www.chronicdiseasearizona.com/

OTHER

Advancing Awareness of National Partnership for Action (NPA) to Eliminate Health Disparities
http://www.minorityhealth.hhs.gov/

Arizona Department of Health Services
www.azdhs.gov

Arizona Department of Health Services, Bureau of Women’s and Children’s Health (ADSH/BWCH)
http://www.azdhs.gov/phs/owch/index.htm

Arizona Health Disparities Center
www.azminorityhealth.gov

Arizona Women, Infant & Children (WIC) Program
www.azwic.gov

U.S. Women’s Health Resources
www.womenshealth.gov
www.girlshealth.gov
http://mchb.hrsa.gov/womenshealth/resources.html
Data Sources and Limitations

Various data sources were used in this report to show a snapshot of the health status of women aged 15 years and older in Arizona. When possible, a national comparison was made to show where Arizona stands in relationship to the United States (U.S.). Some data sources were limited to the household population and exclude the population living in institutions or group quarters. Also, no data were available for non-respondents of health surveys; therefore, some indicators might be underestimates of the true incidence or prevalence of health risks in the population. The most recent available data were used including the U.S. Census 2010 population denominators for calculating rates.

BRFSS
The Behavioral Risk Factor Surveillance System (BRFSS) is an annual random, digit-dial telephone survey of non-institutionalized adults 18 years or older living in the U.S. The Arizona Department of Health Services (ADHS) has participated in BRFSS since 1982, through a cooperative agreement with Centers for Disease Control and Prevention (CDC). Respondents are randomly selected using methods designed to obtain a representative sample of the state. BRFSS collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. The data are collected only from individuals who have telephones in their homes and in may underestimate prevalence for indicators with small sample sizes. Data are unavailable from those who refused to complete the survey and important differences may exist in these populations.

Birth Certificate Data
Arizona uses the 1989 U.S. Standard Birth Certificate. All births to residents of Arizona are captured in the data. Limitations of these data include incorrect data entry and data missing across certain fields. Additionally, a majority of states use the 2003 Revised U.S. Standard Birth Certificate that includes data unavailable in the 1989 Certificate.
Hospital Discharge Data
Inpatient hospitalization and emergency department visit data were compiled from the 2010 Arizona Hospital Discharge Database. This database contains information from private, acute-care facilities in the state of Arizona, and does not include visits to federal facilities, such as Veterans’ Affairs Hospitals, Indian Health Services facilities or state licensed psychiatric hospitals. An inpatient discharge occurs when a person who was admitted to a hospital leaves that hospital. A person who has been hospitalized more than once in a given calendar year will be counted multiple times as a discharge and included more than once in the hospital inpatient discharge data set. The inpatient and emergency department data are mutually exclusive. All discharges are for the residents of Arizona. Both are encounter databases that lack unique identifiers, thus duplicate cases influence rates of health outcomes that are derived from the Hospital Discharge data.

Death Certificate Data
Arizona uses the 2003 U.S. Standard Death Certificate. All deaths of Arizona residents are captured in the data. Limitations of these data include incorrect data entry and data missing across certain fields.

Sexually Transmitted Diseases and HIV/AIDS
State statutes and administrative rules require that Arizona county health departments investigate and report new cases of designated sexually transmitted disease (STD). Statutes and administrative rules mandate that these designated STDs be reported by health care providers to the counties and by laboratories to the state. The passive surveillance of STDs means that underreporting of incident cases is a limitation of these data.

United States Decennial Census 2010
Population denominators for Arizona residents, used to calculate rates were obtained from the 2010 United States Decennial Census. For the 2010 Decennial Census, 74% of households in the United States and 69% of Arizona households filled out and mailed back their 2010 Census questionnaire.