

## HEALTH STATUS

Analysis of women's health status enables health professionals and policymakers to determine the impact of past and current health interventions and the need for new programs. Studying trends in health status can help to identify new issues as they emerge.

In this section, health status indicators related to health behaviors, morbidity, and mortality are presented. New topics include chronic obstructive pulmonary disease (COPD) and reproductive and gynecologic disorders. For the first time in the databook, analyses of fast food and sugar-sweetened beverage consumption, prediabetes, leading causes of death by age, and intimate partner violence by sexual orientation are presented. In addition, special pages are devoted to summarizing the characteristics and health of immigrant women, women served by community health centers, and lesbian and bisexual women. The data throughout this section are displayed by various characteristics including sex, age, race and ethnicity, education, and income.



## PHYSICAL ACTIVITY

Regular physical activity is critical for people of all ages to achieve and maintain a healthy body weight, prevent chronic disease, and promote psychological well-being. In older adults, physical activity also helps to prevent falls and improve cognitive functioning.<sup>1</sup> The 2008 Physical Activity Guidelines for Americans recommend that for substantial health benefits, adults should engage in at least 2½ hours per week of moderate intensity (e.g., brisk walking or gardening) or 1¼ hours per week of vigorous-intensity aerobic physical activity (e.g., jogging or kick-boxing), or an equivalent combination of both, plus muscle-strengthening activities on at least 2 days per week. Additional health ben-

efits are gained by engaging in physical activity beyond this amount.<sup>1</sup>

In 2009–2011, 16.6 percent of women met the recommendations for both adequate aerobic and muscle-strengthening activity, compared to 24.0 percent of men (data not shown). Muscle-strengthening activities provide additional benefits to those of aerobic exercise, such as increased bone strength<sup>1</sup>; however, women were much less likely to meet recommended levels of muscle-strengthening activity as compared to aerobic activity (19.8 versus 43.9 percent, respectively).

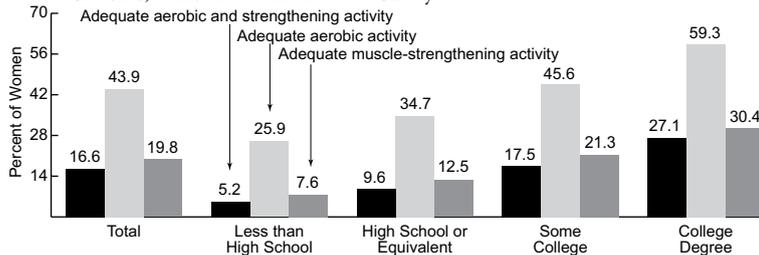
Physical activity varied by education and race and ethnicity. Compared to women with less than a high school diploma, women with a college degree were more than twice as likely to meet aero-

bic activity guidelines (59.3 versus 25.9 percent, respectively) and four times as likely to meet muscle-strengthening guidelines (30.4 versus 7.6 percent, respectively). Non-Hispanic White women and non-Hispanic women of multiple races were generally more likely to report adequate levels of aerobic activity and muscle-strengthening activity than women of other race and ethnic groups. For example, about 23 percent of non-Hispanic White and non-Hispanic women of multiple races reported adequate levels of muscle-strengthening activity compared to 15 percent or less among women of other races and ethnicities.

While not everyone may have access to fitness facilities, communities can promote physical activity through designs that include sidewalks, crosswalks, bike lanes, walking trails, and parks.<sup>1</sup>

### Adequate Physical Activity\* Among Women Aged 18 and Older, by Educational Attainment and Activity Type, 2009–2011

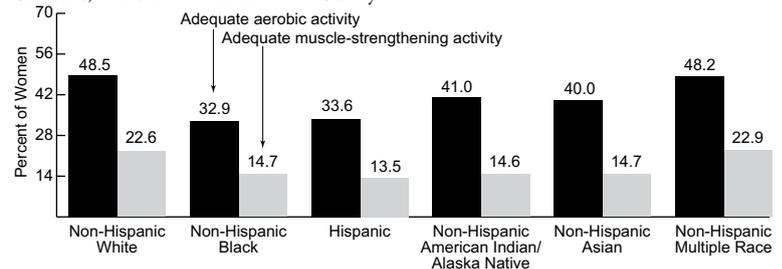
Source II.1: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\*Adequate aerobic activity is defined as 2.5 hours per week of moderate-intensity activity or 1.25 hours per week of vigorous-intensity activity, or an equivalent combination of both; adequate muscle-strengthening activity is defined as performing muscle-strengthening activities, such as lifting weights or calisthenics, on 2 or more days per week; all estimates are age-adjusted.

### Adequate Physical Activity\* Among Women Aged 18 and Older, by Race/Ethnicity\*\* and Activity Type, 2009–2011

Source II.1: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\*Adequate aerobic activity is defined as 2.5 hours per week of moderate-intensity activity or 1.25 hours per week of vigorous-intensity activity, or an equivalent combination of both; adequate muscle-strengthening activity is defined as performing muscle-strengthening activities, such as lifting weights or calisthenics, on 2 or more days per week; all estimates are age-adjusted. \*\*The sample of Native Hawaiian/Other Pacific Islanders was too small to produce reliable results.

## NUTRITION

The 2010 Dietary Guidelines for Americans recommends eating a variety of nutrient-dense foods while not exceeding caloric needs.<sup>2</sup> Nutrient-dense foods include fruits, vegetables, whole grains, lean meats and poultry, eggs, beans, and peas. Studies have shown that people who frequently eat fast foods are less likely to consume these nutrient-dense foods and more likely to be obese.<sup>3</sup>

In 2007–2010, based on two non-consecutive 24-hour dietary recalls, 43.2 percent of women reported that they had consumed fast food compared to 49.8 percent of men. On average, however, both women and men who ate fast food consumed roughly one fourth of their

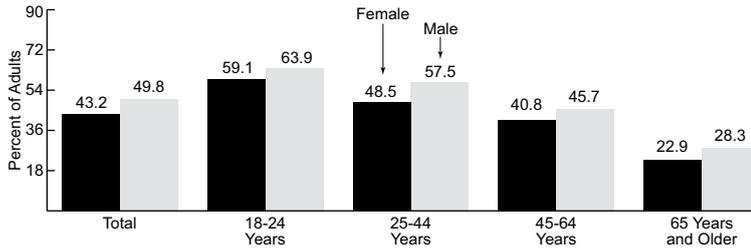
total daily calories from such items (data not shown). Fast food consumption decreased with age. For example, 59.1 percent of women aged 18–24 years reported fast food consumption which declined to 22.9 percent among women aged 65 and older. Over half of non-Hispanic Black women consumed fast food (55.5 percent), followed by 47.8 percent of Mexican American women, and 41.4 percent of non-Hispanic White women (data not shown).

In addition to fast food, it is recommended that adults limit their intake of sugar-sweetened beverages, such as non-diet soda, flavored water, energy drinks, and sports drinks, because these items provide excess calories with little nutritional value<sup>2</sup> and have been associated with

an increased risk of obesity and diabetes.<sup>4</sup> In 2007–2010, men were more likely than women to have consumed sugar-sweetened beverages (57.2 and 48.5 percent, respectively). Sugar-drink consumption varied by household income. For example, about 60 percent of women with household incomes of less than 200 percent of poverty consumed sugar drinks compared to 36.3 percent of women with incomes of 400 percent or more of poverty. With respect to race and ethnicity, sugar-drink consumption ranged from 43.2 percent among non-Hispanic White women to 66.1 percent among non-Hispanic Black women (data not shown). For data on fruit and vegetable consumption, see *Women's Health USA 2012*.

### Fast Food Consumption\* Among Adults Aged 18 and Older, by Age and Sex, 2007–2010

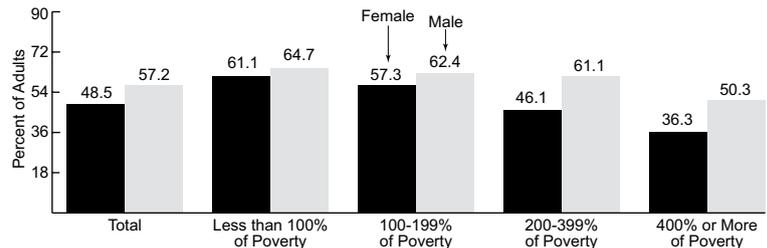
Source II.2: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey



\*Estimates are based on two non-consecutive 24-hour dietary recalls; fast food includes foods with the source of food coded as "restaurant fast food/pizza;" total estimates are age-adjusted.

### Sugar-Sweetened Beverage Consumption\* Among Adults Aged 18 and Older, by Poverty Level and Sex,\*\* 2007–2010

Source II.2: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey



\*Estimates are based on two non-consecutive 24-hour dietary recalls; sugar drinks include fruit drinks, sodas, energy drinks, sports drinks, and sweetened bottled waters and do not include diet drinks, 100% fruit juice, sweetened teas, and flavored milks; all estimates are age-adjusted. \*\*Poverty level, defined by the U.S. Census Bureau, was \$22,314 for a family of four in 2010.

## ALCOHOL USE

Ethyl alcohol is an intoxicating ingredient found in beer, wine, and liquor which is produced by the fermentation of yeast, sugars, and starches. While moderate alcohol consumption may have some health benefits<sup>2</sup> – depending, in part, on the characteristics of the person consuming the alcohol – excessive drinking can lead to many adverse health and social consequences including injury, violence, risky sexual behavior, alcoholism, unemployment, liver diseases, and various cancers.<sup>5</sup> Women tend to face alcohol-related problems at a lower drinking level than men due to differences in body size and other biological factors.<sup>6</sup> Women who binge drink are also at greater risk of unintended pregnancy, which tends to delay pregnancy recognition and

increase fetal alcohol exposure and risk of fetal alcohol spectrum disorders.<sup>7</sup>

The Centers for Disease Control and Prevention defines binge drinking as consuming four or more drinks on a single occasion for women and five or more drinks on a single occasion for men (usually over the course of about 2 hours).<sup>2</sup> Heavy drinking is defined as consuming on average more than one drink per day for women and two drinks per day for men.

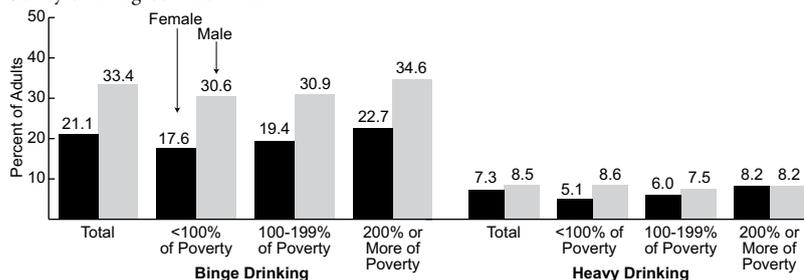
In 2009–2011, men were more likely than women to report both binge drinking (33.4 versus 21.1 percent, respectively) and heavy drinking (8.5 versus 7.3 percent, respectively) in the past 30 days. However, among women, heavy drinking increased with household income, and at incomes of 200 percent or more of the poverty

level women and men were equally likely to drink heavily (8.2 percent). Binge drinking tended to increase with income for both women and men.

Binge and heavy drinking also varied significantly by age and race/ethnicity. Nearly 38 percent of women aged 18–25 years reported binge drinking in the past month compared to 6.2 percent of women aged 65 and older. Heavy drinking was also more common among women aged 18–25 years (11.4 percent) and decreased to less than 7 percent among women aged 35 and older. With respect to race and ethnicity, past-month binge drinking ranged from 9.0 percent among non-Hispanic Asian women to about 25 percent among non-Hispanic White and non-Hispanic Native Hawaiian/Other Pacific Islander women (data not shown).

### Past-Month Binge and Heavy Drinking\* Among Adults Aged 18 and Older, by Poverty Level\*\* and Sex, 2009–2011

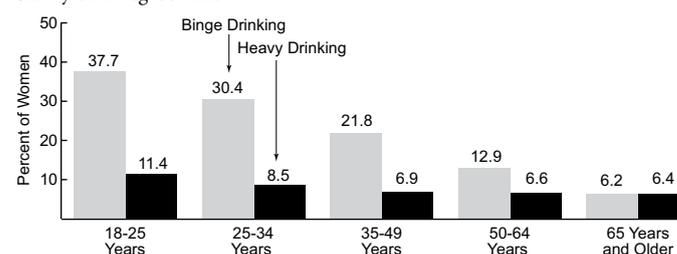
Source II.3: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health



\*Binge drinking indicates drinking four or more drinks on a single occasion for women and five or more drinks on a single occasion for men usually over the course of about 2 hours. Heavy drinking indicates consumption of more than one drink per day on average for women and two drinks per day on average for men. All estimates are age-adjusted. \*\*Poverty level, defined by the U.S. Census Bureau, was \$23,021 for a family of four in 2011.

### Past-Month Binge and Heavy Drinking\* Among Women Aged 18 and Older, by Age, 2009–2011

Source II.3: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health



\*Binge drinking indicates drinking four or more drinks on a single occasion for women and five or more drinks on a single occasion for men usually over the course of about 2 hours. Heavy drinking indicates consumption of more than one drink per day on average for women and two drinks per day on average for men.

## CIGARETTE SMOKING

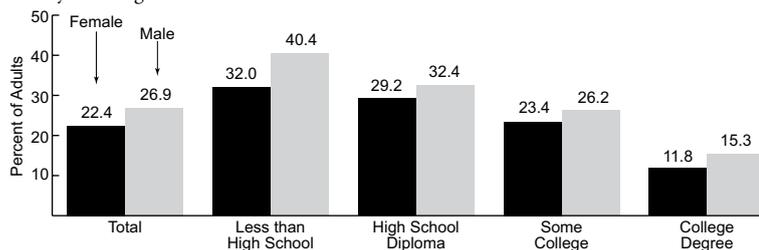
According to the U.S. Surgeon General, smoking damages every organ in the human body.<sup>8</sup> Cigarette smoke contains toxic ingredients that prevent red blood cells from carrying a full load of oxygen, impair genes that control the growth of cells, and bind to the airways of smokers. This contributes to numerous chronic illnesses, including several types of cancers, chronic obstructive pulmonary disease (COPD), cardiovascular disease, reduced bone density and fertility, and premature death.<sup>8</sup> Due to its high prevalence and wide-ranging health consequences, smoking is the single largest cause of preventable death and disease for both men and women in the United States, accounting for an estimated 443,000 premature deaths

annually.<sup>9</sup> In 2009–2011, women aged 18 and older were less likely than men to report cigarette smoking in the past month (22.4 versus 26.9 percent, respectively). For both men and women, smoking was more common among those with lower levels of educational attainment. For example, 32.0 percent of women and 40.4 percent of men without a high school diploma smoked in the past month, compared to 11.8 percent of women and 15.3 percent of men with a college degree. Smoking also varied by race and ethnicity. Among women, smoking prevalence ranged from 6.9 percent among non-Hispanic Asians to 33.9 percent among non-Hispanic American Indian/Alaska Natives (data not shown).

Quitting smoking has major and immediate health benefits, including reducing the risk of diseases caused by smoking and improving overall health.<sup>8</sup> In 2009–2011, 8 to 9 percent of women and men who had ever smoked daily and smoked in the previous 3 years had not smoked in the past year. For both women and men, the proportion of adults who quit smoking varied by educational attainment. For example, women with college degrees were almost twice as likely to have quit smoking as women who did not finish high school (12.2 versus 6.2 percent, respectively). The Affordable Care Act required new, private insurance plans to cover tobacco cessation treatment and counseling without cost-sharing in 2010 and will require the same for plans in the health insurance marketplaces in 2014.<sup>10</sup>

### Past-Month Cigarette Smoking\* Among Adults Aged 18 and Older, by Educational Attainment and Sex, 2009–2011

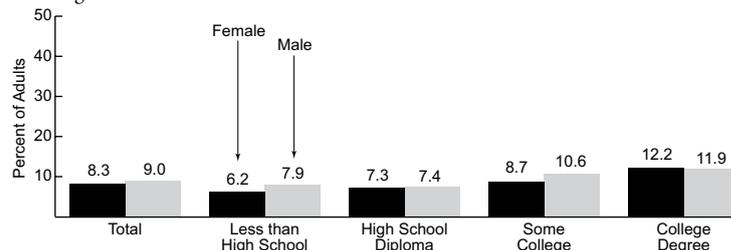
Source II.3: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health



\*All estimates are age-adjusted.

### Past-Year Smoking Cessation\* Among Adults Aged 18 and Older, by Educational Attainment Level and Sex, 2009–2011

Source II.3: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health



\*Defined as the proportion of adults who did not smoke in the past year among those who ever smoked daily at some point in their lives and smoked in the past 3 years; excludes adults who started smoking in the past year. All estimates are age-adjusted.

### ILLICIT DRUG USE

Illicit drug use is associated with serious health and social consequences, including addiction and drug-induced death, impaired cognitive functioning, kidney and liver damage, infections—including HIV and hepatitis—decreased productivity, and family disintegration.<sup>11,12</sup> Federally illicit drugs include marijuana, cocaine, heroin, hallucinogens, inhalants, and non-medical use of prescription-type psychotherapeutic drugs, such as pain relievers, stimulants, and sedatives.<sup>11</sup> Poisoning deaths, most of which are drug-related, are rising with abuse of prescription pain relievers and have

surpassed motor vehicle accidents as the leading cause of fatal injury in the United States.<sup>13</sup>

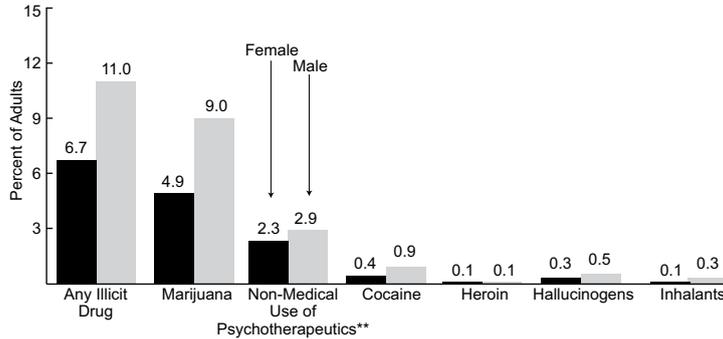
In 2009–2011, 6.7 percent of women aged 18 years and older reported using an illicit drug within the past month, compared to 11.0 percent of adult men. The most commonly used drugs among both women and men were marijuana (4.9 and 9.0 percent, respectively) and non-medical use of psychotherapeutic drugs (2.3 and 2.9 percent, respectively). Fewer than 1 percent of women and men reported using cocaine, heroin, hallucinogens, or inhalants.

Illicit drug use varied greatly by age and race and ethnicity. Among women, for example,

17.2 percent of those aged 18–25 years reported using an illicit drug in the past month compared to less than 5 percent of women aged 50 years and older (data not shown). Non-Hispanic Asian women and Hispanic women were less likely than women of all other racial and ethnic groups to report using illicit drugs in the past month (2.2 and 4.7 percent, respectively). Illicit drug use was more common among non-Hispanic women of multiple race (9.1 percent) and non-Hispanic White women (7.5 percent) than among non-Hispanic Black women (6.7 percent); no other racial and ethnic differences were significant.

#### Past-Month Use of Illicit Drugs\* Among Adults Aged 18 and Older, by Drug Type and Sex, 2009–2011

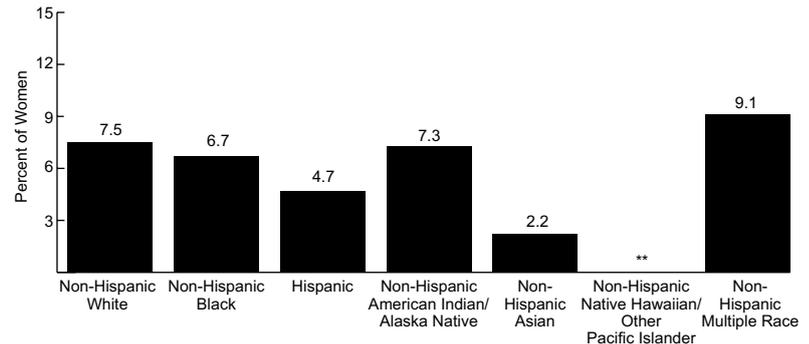
Source II.3: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health



\*Includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, and any prescription-type psychotherapeutic drugs used for non-medical purposes; all estimates are age-adjusted. \*\*Includes prescription-type pain relievers, tranquilizers, stimulants, and sedatives, but not over-the-counter drugs.

#### Past-Month Use of Any Illicit Drug\* Among Women Aged 18 and Older, by Race/Ethnicity, 2009–2011

Source II.3: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health



\*Includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, and any prescription-type psychotherapeutic drugs used for non-medical purposes; all estimates are age-adjusted. \*\*Estimate does not meet the standards of reliability or precision.

## LIFE EXPECTANCY

Based on preliminary data, the overall life expectancy of a baby born in 2011 was 78.7 years (data not shown); this varied, however, by sex and race and ethnicity. A baby girl born in the United States in 2011 could expect to live 81.1 years, 4.8 years longer than a male baby, whose life expectancy would be 76.3 years. Females had longer life expectancies than males within every race and ethnic group, ranging from an advantage of 4.7 years among non-Hispanic Whites to 6.2 years among non-Hispanic Blacks. A variety of social and biological factors may explain the female longevity advantage, including better health and health-care seeking behaviors and cardiovascular benefits of estrogen.<sup>14</sup>

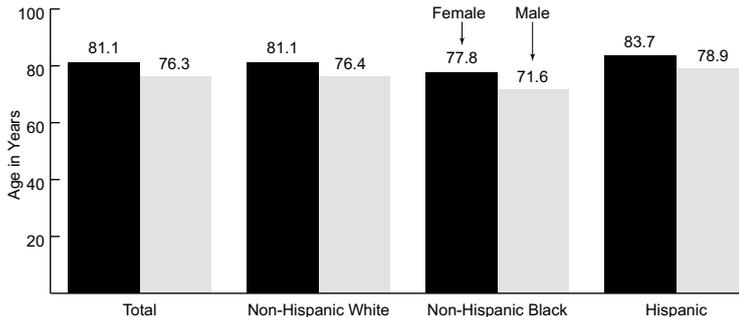
Non-Hispanic Blacks had the lowest life expectancy for both females and males (77.8 and 71.6 years, respectively), while Hispanics had the longest life expectancy for both females and males (83.7 and 78.9 years, respectively). The lower mortality rates of the Hispanic population, despite greater levels of socioeconomic disadvantage, known as the Hispanic paradox, may be due to more favorable health among those who are able to immigrate from their home countries, as well as the possibility that they may return to those countries to die and are not counted in mortality statistics.<sup>15</sup> Life expectancy data are not reported for Asian, Native Hawaiian and other Pacific Islander, and American Indian/Alaska Native populations due to known

issues of under-reporting on death certificates.

Life expectancy has increased since 1970 for both females and males. Between 1970 and 2011, female life expectancy increased by 6.4 years from 74.7 to 81.1 years (8.6 percent), while male life expectancy increased by 9.2 years from 67.1 to 76.3 years (13.7 percent). Between 1970 and 2011, the greater gains in life expectancy for males than females have led to reduced disparities by sex, shrinking from a differential of 7.6 to 4.8 years. Of concern, however, is that female mortality rates have recently increased in over 40 percent of U.S. counties whereas the same was true for male mortality rates in only 3.4 percent of counties.<sup>16</sup>

### Life Expectancy at Birth, by Race/Ethnicity\* and Sex, 2011\*\*

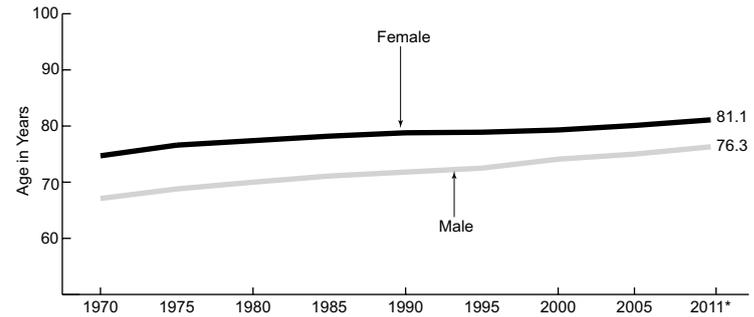
Source II.4: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



\*Data for American Indian/Alaska Natives, Asians, and Native Hawaiian/Other Pacific Islanders were not available. \*\*Data are preliminary.

### Life Expectancy at Birth, by Sex, 1970–2011\*

Source II.5: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



\*Data are preliminary.

## LEADING CAUSES OF DEATH

In 2010, there were 1,219,545 deaths of women aged 18 and older in the United States. Of these deaths, nearly half were attributable to heart disease and cancer, which were responsible for 23.8 and 22.4 percent of deaths, respectively. Men had a similar relative burden of death due to heart disease (25.4 percent) and cancer (24.8 percent) but unintentional injury was the third leading cause of death (6.0 percent of deaths) for men compared to the sixth leading cause for women (3.5 percent of deaths). Women, however, had a greater relative burden of mortality from stroke, which was the third leading cause of death compared to the fifth leading cause for men. Following chronic lower respiratory diseases, Alzheimer's disease was the fifth leading cause of death for women but was ranked eighth for men (data for men not shown).

Leading causes of death vary greatly by age. While cancer and heart disease were prominent causes of death among women of all ages, unintentional injury was the leading cause of death among women aged 18–44 years and the third leading cause for those aged 45–64 years, compared to the ninth leading cause for women aged 65 and older. Intentional injuries, suicide and homicide, were the fourth and fifth leading causes of death, respectively, for women aged 18–44 years. HIV and pregnancy complications were the ninth and tenth leading causes of death

for younger women aged 18–44 but were not within the top ten causes for other age groups. Liver disease was also represented within the top ten causes of death only among women younger than 65. Conversely, Alzheimer's disease and flu and pneumonia were leading causes of death unique to women aged 65 and older. (For differences in leading causes of death by race and

ethnicity, see *Women's Health USA 2012*.)

Between 2000 and 2010, four causes of death increased in relative burden: chronic lower respiratory diseases (5.1 to 6.0 percent of deaths), Alzheimer's disease (2.9 to 4.8 percent of deaths), unintentional injury (2.6 to 3.5 percent of deaths), and kidney disease (1.6 to 2.1 percent of deaths; data from 2000 not shown).

### Ten Leading Causes of Death Among Women Aged 18 and Older, by Age, 2010

Source II.6: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

Rank	Total	18-44 Years	45-64 Years	65 Years and Older
1	Heart Disease (23.8%)	Unintentional Injury (24.0%)	Cancer (38.3%)	Heart Disease (25.9%)
2	Cancer (22.4%)	Cancer (19.5%)	Heart Disease (16.2%)	Cancer (19.4%)
3	Stroke (6.3%)	Heart Disease (9.8%)	Unintentional Injury (5.7%)	Stroke (7.0%)
4	Chronic Lower Respiratory Disease (6.0%)	Suicide (7.1%)	Chronic Lower Respiratory Disease (4.8%)	Chronic Lower Respiratory Disease (6.4%)
5	Alzheimer's Disease (4.8%)	Homicide (3.9%)	Stroke (3.7%)	Alzheimer's Disease (5.9%)
6	Unintentional Injury (3.5%)	Stroke (2.6%)	Diabetes (3.4%)	Diabetes (2.6%)
7	Diabetes (2.8%)	Diabetes (2.3%)	Liver Disease (2.9%)	Flu & Pneumonia (2.4%)
8	Flu & Pneumonia (2.2%)	Liver Disease (2.2%)	Suicide (1.9%)	Kidney Disease (2.2%)
9	Kidney Disease (2.1%)	HIV (2.0%)	Septicemia (1.7%)	Unintentional Injury (2.1%)
10	Septicemia (1.5%)	Pregnancy Complications (1.6%)	Kidney Disease (1.6%)	Septicemia (1.5%)

## HEALTH-RELATED QUALITY OF LIFE

Health-related quality of life encompasses multiple aspects of health and can be measured in different ways, including self-reported health status and the number of days in the past month that a person felt that either their physical or mental health was not good.<sup>17</sup>

In 2012, 51.4 percent of women reported being in excellent or very good health, while 31.1 percent reported being in good health and 17.5 percent reported being in fair or poor health. Self-reported health status was similar among men and women but varied greatly with age and educational attainment. Over half of young women aged 18–34 years reported being in ex-

cellent or very good health (57.3 percent), compared to 40.4 percent of women aged 65 and older. Conversely, only 10.8 percent of women aged 18–34 years reported fair or poor health, compared to 25.9 percent of women aged 65 years or older. Self-reported health status improved with increasing levels of education. Less than one-quarter of women without a high school diploma reported excellent or very good health (23.4 percent), compared to 69.6 percent of women with a college degree (data not shown).

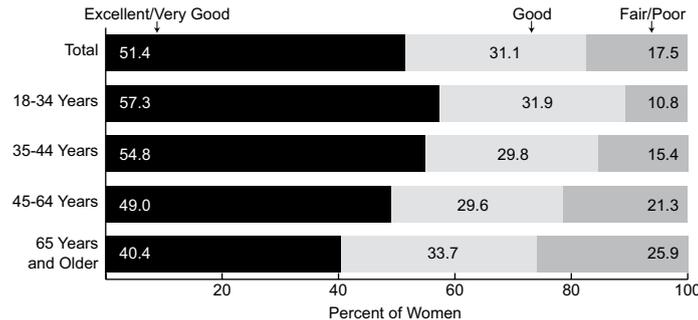
In 2012, women reported more physically and mentally unhealthy days than men. Women reported an average of 4.2 days of poor physical health, compared to 3.6 days per month for men. Similarly, women reported an average of 4.5

mentally unhealthy days, while men reported an average of 3.3 days per month (data not shown).

For both physically and mentally unhealthy days, non-Hispanic American Indian/Alaska Native women and non-Hispanic women of multiple races reported the highest average numbers of unhealthy days in the past month, with 6.1 and 5.9 physically unhealthy days, respectively; and 6.7 and 6.2 mentally unhealthy days, respectively. Non-Hispanic Asian women and non-Hispanic Native Hawaiian/Pacific Islander women reported the lowest number of physically and mentally unhealthy days on average (2.5 and 2.6 physically unhealthy days, respectively; and 2.7 and 3.7 mentally unhealthy days, respectively).

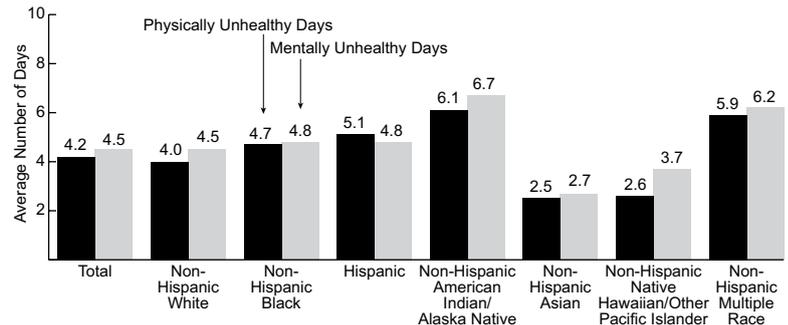
### Self-Reported Health\* Among Women Aged 18 and Older, by Age, 2012

Source II.7: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System



### Average Number of Physically and Mentally Unhealthy Days\* in Past Month Among Women Aged 18 and Older, by Race/Ethnicity, 2012

Source II.7: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System



\*Total estimates are age-adjusted.

\*Self-reported number of days in past 30 days that physical or mental health was not good; all estimates are age-adjusted.

## ACTIVITY LIMITATIONS

Activity limitations can be defined by whether a person is able to perform physical tasks (e.g., walking up 10 steps, standing for 2 hours, carrying a ten pound object) or engage in social activities and recreation (e.g., going shopping, visiting friends, sewing, reading) without the assistance of another person or using special equipment.<sup>18</sup> In 2009–2011, 34.6 percent of adults reported being limited in their ability to perform one or more of these common activities (data not shown). Women were more likely than men to report being limited in their activities (38.3 versus 30.6 percent, respectively).

The percentage of adults reporting activity

limitations increases with age. For example, 19.3 percent of those aged 18–34 years reported activity limitations compared to 28.1 percent of women aged 35–44 years, 47.6 percent of 45- to 64-year-olds, and 70.0 percent of women aged 65 years and older (data not shown).

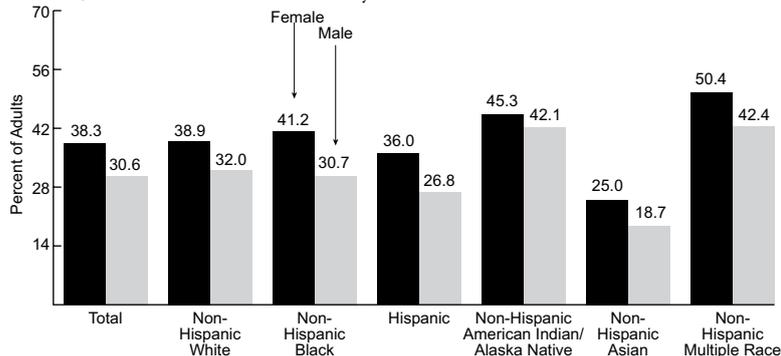
The prevalence of activity limitations also varied by poverty level and race and ethnicity. Over half (50.5 percent) of women living in households with incomes less than 100 percent of poverty reported activity limitations compared to 30.5 percent of women living in households with incomes of 400 percent or more of poverty (data not shown). With respect to race and ethnicity, activity limitations affected about 40 percent or

more of non-Hispanic White (38.9 percent), non-Hispanic Black (41.2 percent), and non-Hispanic American Indian/Alaska Native women (45.3 percent) compared to one-quarter of non-Hispanic Asian women and slightly more than one-third of Hispanic women (36.0 percent).

In 2009–2011, the most commonly reported causes of activity limitations were back or neck problems and arthritis (29.1 and 27.5 percent, respectively), followed by depression, anxiety, or emotional problems (11.0 percent), bone or joint injury (10.2 percent), and weight problems (7.7 percent). Vision and hearing problems were reported to cause limitations in 2.5 and 1.0 percent of women with activity limitations, respectively.

### Adults Aged 18 and Older with Activity Limitations,\* by Race/Ethnicity\*\* and Sex, 2009–2011

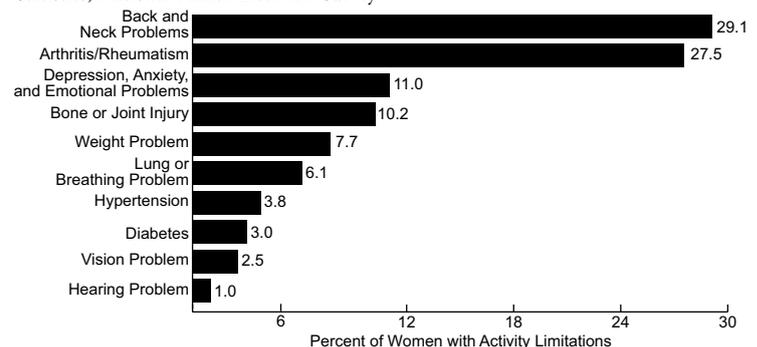
Source II.1: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\*Activity limitations are defined as having difficulty performing certain physical, social, or recreational activities without the assistance of another person or using special equipment; all estimates are age-adjusted. \*\*The sample of Native Hawaiian/Other Pacific Islanders was too small to produce reliable results.

### Selected Activity Limiting Conditions Among Women Aged 18 and Older with Activity Limitations,\* 2009–2011

Source II.1: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\*Activity limitations are defined as having difficulty performing certain physical, social, or recreational activities without the assistance of another person or using special equipment; all estimates are age-adjusted.

## ARTHRITIS

Arthritis is the most common cause of disability and activity limitations among U.S. adults.<sup>19</sup> Arthritis comprises more than 100 different diseases that affect areas in or around the joints. The most common type is osteoarthritis, which is a degenerative joint disease that causes pain and loss of movement in areas such as the knees, hips, hands and spine.<sup>20</sup> Treatment for osteoarthritis focuses on relieving symptoms and there is no known cure for this condition. Types of arthritis that primarily affect women include lupus, fibromyalgia, and rheumatoid arthritis, which is the most serious and disabling type of arthritis.<sup>21</sup>

In 2009–2011, 22.1 percent of adults in the United States reported that they had ever been

diagnosed with arthritis (data not shown). Arthritis was more common among women than men (24.7 versus 19.1 percent, respectively) and increased greatly with age. For example, among women, 5.4 percent of those aged 18–34 years had ever been diagnosed with arthritis, compared to 15.3 percent of 35- to 44-year-olds, 34.1 percent of those aged 45–64 years, and 55.7 percent of women aged 65 years and older (data not shown).

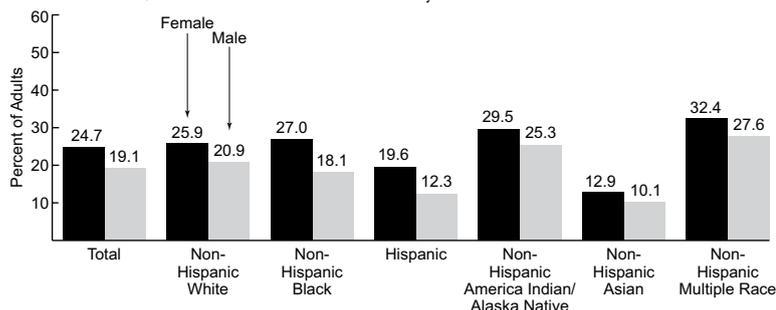
Arthritis prevalence also varied by race and ethnicity. In 2009–2011, more than one-quarter of non-Hispanic White, non-Hispanic Black, non-Hispanic American Indian/Alaska Native, and non-Hispanic women of multiple races reported having been diagnosed with ar-

thritis (25.9, 27.0, 29.5 and 32.4 percent, respectively), compared to 19.6 percent of Hispanic women and 12.9 percent of non-Hispanic Asian women. Hispanic and non-Hispanic Asians also had the lowest arthritis prevalence among men.

Obesity has been associated with the onset and progression of osteoarthritis.<sup>20</sup> In 2009–2011, nearly one-third of obese adults and one-fifth of overweight adults had been diagnosed with arthritis, compared to 17.3 percent of adults who were neither overweight nor obese. An arthritis diagnosis was reported by 33.4 percent of obese women, compared to 19.0 percent of women who were neither overweight nor obese.

### Adults Aged 18 and Older with Arthritis,\* by Race/Ethnicity\*\* and Sex, 2009–2011

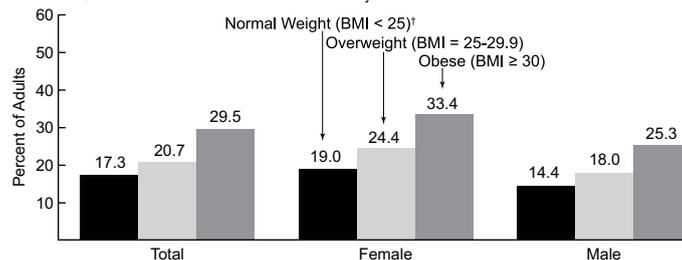
Source II.1: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\*Reported a health professional has ever told them they have arthritis; all estimates are age-adjusted.  
 \*\*The sample of Native Hawaiian/Other Pacific Islanders was too small to produce reliable results.

### Adults Aged 18 and Older with Arthritis,\* by Sex and Weight Status,\*\* 2009–2011

Source II.1: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\*Reported a health professional has ever told them they have arthritis; all estimates are age-adjusted. \*\*Body Mass Index (BMI) is a ratio of weight to height. †Includes underweight.

## OVERWEIGHT AND OBESITY

Overweight and obesity are associated with an increased risk of numerous diseases and conditions, including high blood pressure, Type 2 diabetes, cardiovascular and liver diseases, arthritis, certain types of cancer, and reproductive health risks.<sup>22</sup> As a result, annual medical costs for people who are obese have been estimated to be \$1,429, or 42 percent, higher than people of normal weight, aggregating to a total of \$147 billion.<sup>22</sup> Overweight and obesity are measured by Body Mass Index (BMI), which is a ratio of weight to height. In 2009–2010, the majority of women were overweight or obese (63.4 percent); this includes 27.9 percent who were classified as overweight (BMI of 25.0–29.9) and 35.5 percent who were classified as obese (BMI of 30.0 or more). Compared with women, men were equally likely to be obese but more likely to be overweight (34.6 and 38.1 percent, respectively; data not shown).

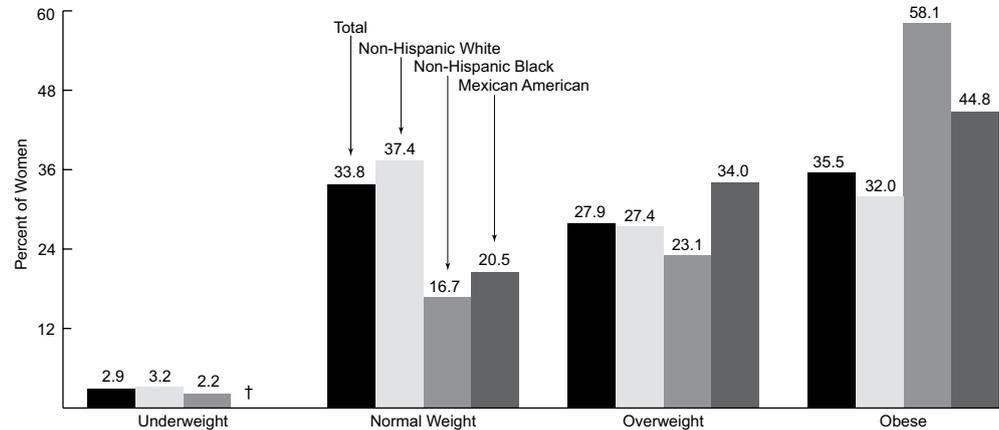
Less than 3 percent of women were underweight in 2009–2010 (BMI <18.5). With the exception of the underweight category, weight status varied greatly by race and ethnicity. About 37 percent of non-Hispanic White women were of normal weight (BMI 18.5–24.9) compared with only 16.7 percent of non-Hispanic Black women and 20.5 percent of Mexican American women. Most of this racial and ethnic variation in normal weight is explained by differences in

obesity rates. Non-Hispanic Black and Mexican American women had the highest rates of obesity (58.1 and 44.8 percent, respectively), compared with 32.0 percent of non-Hispanic White women. Obesity has increased significantly over the past decade for non-Hispanic Black and Mexican American women, contributing to widening health disparities.<sup>23</sup> Higher obesity rates have also been reported among American Indian/Alaska Native and Native Hawaiian/Other Pacific Islander women, while lower rates have been reported among Asian women.<sup>24</sup>

Obesity also varied by age and income. Obesity rates increased with age from 25.8 percent of women aged 18–24 years to about 40 percent of women aged 45 and older in 2009–2010. With respect to income, 45.3 percent of women living in households with incomes below the poverty level were obese, compared to 29.1 percent of women with a household income of 300 percent or more of poverty (data not shown). Community strategies that can help to prevent obesity include efforts to improve access to healthy foods and safe places for physical activity.<sup>25</sup>

### Women Aged 18 and Older, by Weight Status\* and Race/Ethnicity,\*\* 2009–2010

Source II.8: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey



\*Underweight is defined as having a Body Mass Index (BMI) of less than 18.5; normal weight is defined as having a BMI between 18.5 and 24.9; overweight is defined as having a BMI between 25.0 and 29.9; obesity is defined as having a BMI of 30.0 or more. Percentages may not add to totals due to rounding; all estimates are age-adjusted. \*\*The sample of American Indian/Alaska Natives, Asians, Native Hawaiian/Other Pacific Islanders, and persons of multiple race was too small to produce reliable results. †Estimate did not meet the standards of reliability or precision.

## DIABETES

Diabetes mellitus is a chronic condition characterized by high blood sugar and is among the leading causes of death in the United States.<sup>26</sup> Complications of diabetes are serious and may include blindness, kidney damage, heart disease, stroke, nervous system disease, and amputation. The main types of diabetes are Type 1, Type 2, and gestational (diabetes occurring or first recognized during pregnancy). Type 1 diabetes is usually diagnosed in children and young adults. Type 2 diabetes accounts for 90 to 95 percent of all diabetes cases, with risk factors that include obesity, physical inactivity, a family history of the disease, and gestational diabetes.

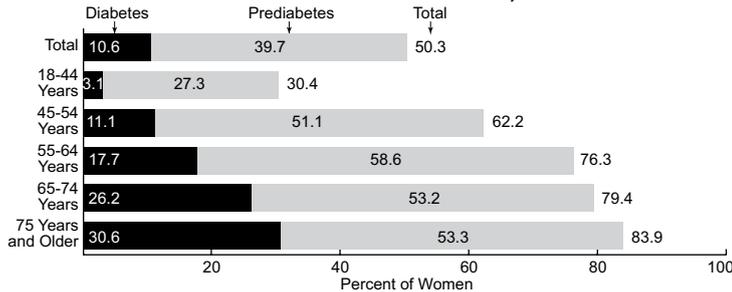
In 2007–2010, 13 million women (10.6 percent) tested positive for diabetes and another 48 million women (39.7 percent) had prediabetes, where blood glucose levels were higher than normal but not high enough to be called diabetes. Those with prediabetes are more likely to develop Type 2 diabetes, heart disease, and stroke.<sup>27</sup> Overall, diabetes was slightly more common in men (13.6 percent; not shown) and increased greatly with age: from 3.1 percent among women aged 18–44 years to 30.6 percent among women aged 75 years and older. Diabetes prevalence also varied by race and ethnicity. Non-Hispanic White women were least likely to have diabetes (8.9 percent) compared to non-Hispanic Black (16.5 percent), and Mexican American women

(16.9 percent; data not shown). Other minority groups have also been shown to have higher rates of diabetes.<sup>26</sup>

Diabetes can be successfully managed through diet modification, physical activity, glucose monitoring, and medication.<sup>26</sup> Diagnosis is critical to develop a treatment plan and prevent serious complications. Among women who tested positive for diabetes, only 41.8 percent reported having been told by a health professional that they had diabetes. Non-Hispanic Black women with diabetes were more likely than non-Hispanic White women with diabetes to have been diagnosed and therefore to be aware of their condition (63.4 versus 34.9 percent).

### Diabetes and Prediabetes Among Women Aged 18 and Older,\* by Age, 2007–2010

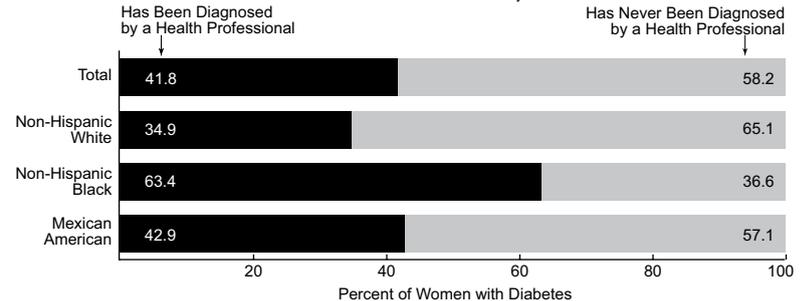
Source II.2: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey



\*Diabetes determined by Fasting Plasma Glucose (FPG) test  $\geq 126$  mg/dL, glycohemoglobin A1C test  $\geq 6.5\%$ , or 2-hour oral glucose tolerance test  $\geq 200$  mg/dL; Prediabetes determined by Fasting Plasma Glucose (FPG) test 100–125mg/dL, glycohemoglobin A1C test 5.7–6.4%, or 2-hour oral glucose test 140–199 mg/dL; total estimate is age-adjusted.

### Diagnosis Status Among Women Aged 18 and Older Who Have Diabetes,\* by Race/Ethnicity, 2007–2010

Source II.2: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey



\*Report of whether or not a health professional has ever told them they have diabetes among those who tested positive on a Fasting Plasma Glucose (FPG) test, glycohemoglobin A1C test, or 2-hour oral glucose test; all estimates are age-adjusted.

## HIGH BLOOD PRESSURE

High blood pressure, or hypertension, is a risk factor for heart disease and stroke, which are leading causes of death in the United States (see *Heart Disease and Stroke*). It is defined as a systolic blood pressure (during heartbeats) of 140 mmHg or higher, a diastolic blood pressure (between heartbeats) of 90 mmHg or higher, or current use of blood pressure-lowering medication.

In 2009–2010, 27.5 percent of women were identified as having high blood pressure. This includes 15.6 percent of women with controlled hypertension, who had a normal blood pressure measurement and reported using blood pressure-lowering medication, and 11.9 percent with uncontrolled hypertension, who had a high blood

pressure measurement with or without the use of medication. Although men were similarly affected by hypertension overall (29.3 percent), they were more likely to have uncontrolled hypertension (14.9 percent; data not shown). In addition to medication, high blood pressure can also be controlled by losing excess body weight, participating in regular physical activity, adopting a healthy diet with lower sodium and higher potassium intake, avoiding tobacco smoke, and managing stress.<sup>28</sup>

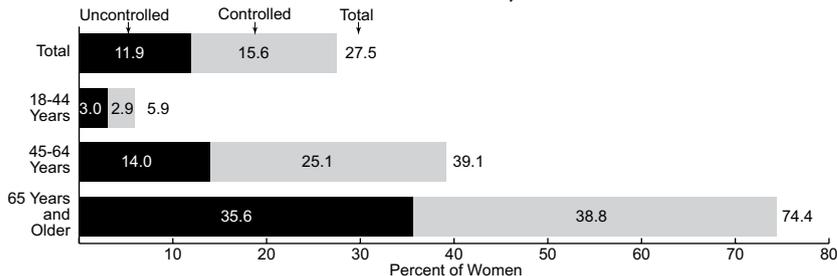
High blood pressure increases greatly with age, affecting only 5.9 percent of women aged 18–44 but rising to 39.1 percent among those aged 45–64 years and occurring among nearly three in four women aged 65 and older (74.4 percent).

Hypertension also varies by race and ethnicity. Over 40 percent of non-Hispanic Black women had hypertension in 2009–2010, compared to about 25 percent of non-Hispanic White and Hispanic women (data not shown).

It has been estimated that every 10 percent increase in hypertension treatment could prevent 14,000 deaths per year.<sup>29</sup> However, 44.8 percent of women identified as having uncontrolled hypertension in 2009–2010 reported that they had never received a diagnosis from a health care professional. More than half of younger women aged 18–44 years with uncontrolled hypertension were undiagnosed (56.6 percent) compared to 36.2 percent of those aged 45–64 years and 31.7 percent of those aged 65 years and older.

### High Blood Pressure Among Women Aged 18 and Older,\* by Age, 2009–2010

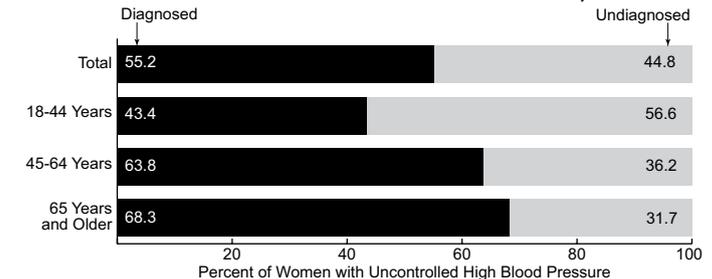
Source II.8: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey



\*Includes a measured systolic pressure (during heartbeats) of  $\geq 140$  mmHg or a diastolic blood pressure (between heartbeats)  $\geq 90$  mmHg (uncontrolled hypertension, with or without blood pressure-lowering medication) and normal blood pressure ( $\leq 140/90$  mmHg) with reported current medication use (controlled hypertension); percentages may not add to totals due to rounding; total estimates are age-adjusted.

### Diagnosis Status\* Among Women Aged 18 and Older with Uncontrolled High Blood Pressure,\*\* by Age, 2009–2010

Source II.8: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey



\*Reported whether they had ever been told by a health professional that they have high blood pressure; total estimates are age-adjusted. \*\*Includes a measured systolic pressure (during heartbeats) of  $\geq 140$  mmHg or a diastolic blood pressure (between heartbeats)  $\geq 90$  mmHg.

## HEART DISEASE AND STROKE

Heart disease and stroke are the most common forms of cardiovascular disease<sup>30</sup> and are the first and third leading causes of death for women in the United States (see *Leading Causes of Death*). It is estimated that nearly one-fourth of all cardiovascular deaths are preventable through lifestyle modifications and medications, such as aspirin, when appropriate.<sup>31</sup>

Risk factors for both heart disease and stroke include high blood pressure and cholesterol, diabetes, excess weight, physical inactivity, age, smoking, and family history. Stroke involves blocked blood flow to the brain whereas heart disease involves reduced blood flow to the heart, which can result in a heart attack. Chest pain

is a common heart attack symptom; however, women are more likely than men to have other symptoms, such as shortness of breath, nausea and vomiting, and back or jaw pain.<sup>32</sup> Stroke symptoms can include numbness, headache, dizziness, confusion, trouble speaking, and blurred vision.<sup>32</sup>

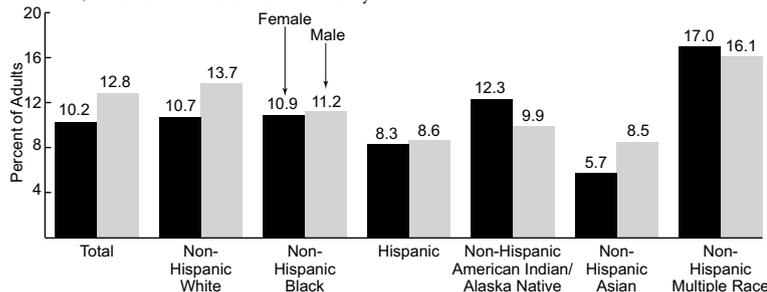
In 2009–2011, men were slightly more likely than women to report having been diagnosed with heart disease (12.8 versus 10.2 percent, respectively). Non-Hispanic Asian and Hispanic women were less likely to have been diagnosed with heart disease (5.7 and 8.3 percent, respectively) than women of other race and ethnic groups. Heart disease increases with age and was reported by one in five women aged 65–74

years and one in three women aged 75 years and older (data not shown).

In 2009–2011, 2.6 percent of both women and men reported that they had ever been diagnosed with a stroke. Among women and men, the likelihood of having had a stroke was higher among those with lower household income. For example, 4.5 percent of women with household incomes below the poverty level reported having a stroke, compared to 1.8 percent of those with household incomes of 400 percent or more of poverty. Similar to heart disease, stroke also increases with age and was reported by 6.1 percent of women aged 65–74 years old and 10.9 percent of women aged 75 years and older (data not shown).

### Heart Disease\* Among Adults Aged 18 and Older, by Race/Ethnicity\*\* and Sex, 2009–2011

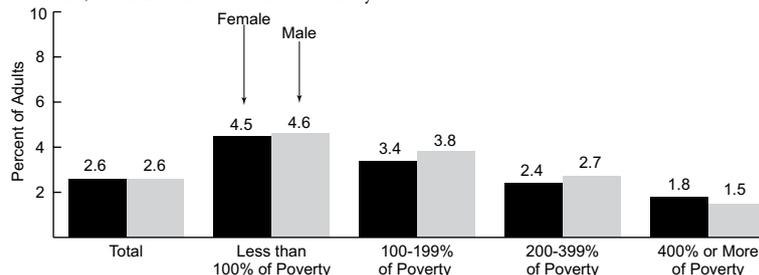
Source II.1: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\*Reported a health professional had ever told them that they had coronary heart disease, angina pectoris, heart attack, or any other heart condition or disease; all estimates are age-adjusted. \*\*The sample of Native Hawaiian/Other Pacific Islanders was too small to produce reliable results.

### Stroke\* Among Adults Aged 18 and Older, by Poverty Level\*\* and Sex, 2009–2011

Source II.1: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\*Reported a health professional had ever told them that they had a stroke; estimates are age-adjusted. \*\*Poverty level, defined by the U.S. Census Bureau, was \$23,021 for a family of four in 2011.

## CANCER

Cancer is the second leading cause of death among adults overall, and is the leading cause of death among women between the ages of 35 and 84.<sup>33</sup> In 2010, 711,113 new cancer cases were diagnosed among females and 273,706 females died of cancer. Lung and bronchial cancer was the leading cause of cancer death among females, accounting for 70,550 deaths (26 percent of all cancer deaths), followed by breast cancer, which was responsible for 40,996 deaths (15 percent of deaths). Colorectal cancer, pancreatic cancer, and ovarian cancer were also major causes of cancer

deaths among females, accounting for an additional 57,733 deaths combined.

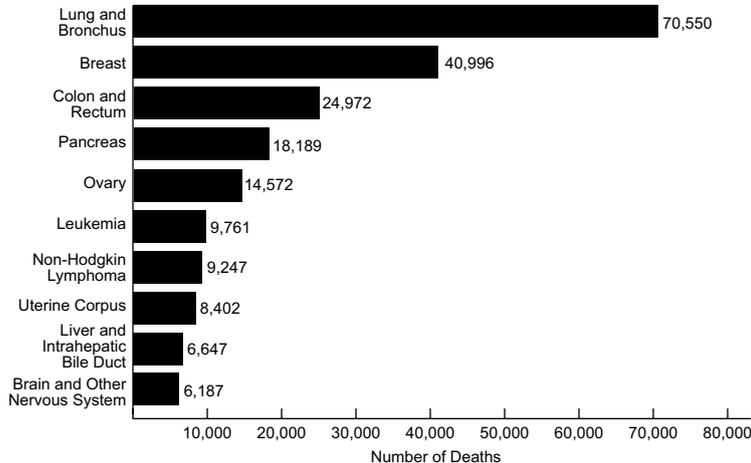
Due to the varying survival rates for different types of cancer, the most common causes of death from cancer are not always the most common types of cancer. For instance, although lung and bronchial cancer causes the greatest number of deaths, breast cancer is more commonly diagnosed among females. In 2010, invasive breast cancer occurred among 118.7 per 100,000 females, whereas lung and bronchus cancer occurred in only 52.4 per 100,000. Other types of cancer that are commonly diagnosed but are not

among the top 10 causes of cancer death include thyroid, melanoma, and cervical cancer.

An estimated 70 percent of cancer cases are attributable to behavioral and environmental risk factors, such as smoking, obesity, and physical inactivity.<sup>34</sup> Vaccines are also available to help prevent hepatitis B and human papillomavirus (HPV) which can cause liver and cervical cancer, respectively. Recommended screening can help detect several forms of cancer in early, more treatable stages, including breast, colorectal, and cervical cancer, and is shown to reduce mortality.<sup>35</sup>

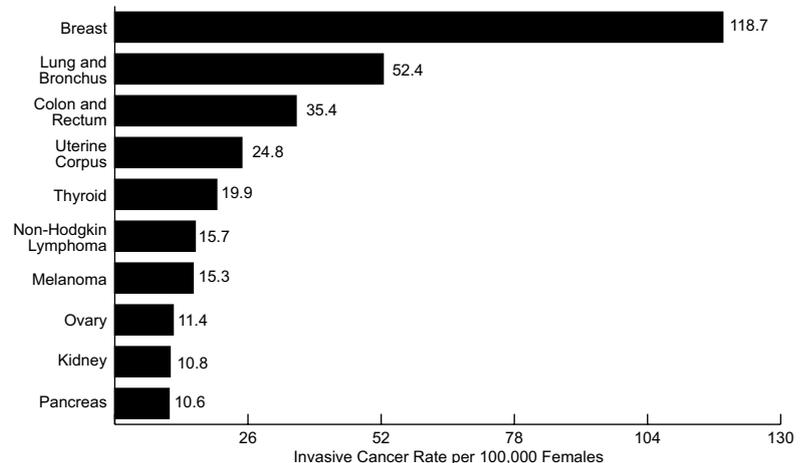
### Leading Causes of Cancer Deaths Among Females (All Ages), by Site, 2010

Source II.9: Centers for Disease Control and Prevention



### Age-Adjusted Invasive Cancer Incidence Rates per 100,000 Females (All Ages), by Site, 2010

Source II.9: National Cancer Institute



## CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis, is an irreversible, progressive disease that impairs breathing.<sup>36</sup> Symptoms include coughing, phlegm production, wheezing, shortness of breath, and tightness in the chest. The leading risk factor for COPD is cigarette smoking, however other contributors include exposure to lung irritants, such as chemicals, pollution, and dust, and genetic factors.<sup>37</sup> Chronic lower respiratory disease, which includes both COPD and asthma, was the fourth leading cause of death in 2010 among U.S. women aged 18 years and older (see *Leading Causes of Death*).

In 2009–2011, 5.4 percent of U.S. adults reported a diagnosis of COPD (data not shown). Women were more likely than men to report COPD (6.4 versus 4.3 percent, respectively). Among both men and women, COPD is more common among older age groups. For example, among women, the prevalence of COPD was highest among those aged 65–74 years (11.2 percent) and 75 years or older (10.4 percent) compared to 4.0 percent among women aged 18–44 years.

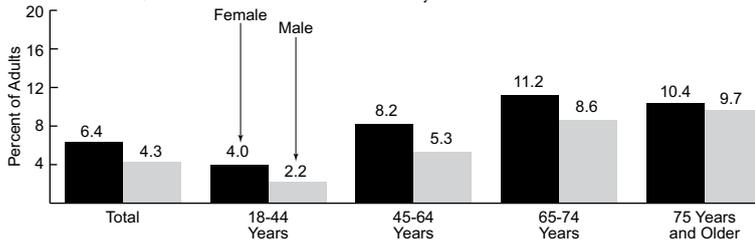
COPD prevalence also varied by race and ethnicity and poverty level. Among women, COPD was most common among non-Hispanic American Indian/Alaska Natives and non-Hispanic women of multiple races (8.6 and 9.9 percent, respectively), followed by non-

Hispanic White women (7.0 percent), non-Hispanic Black women (6.1 percent), and Hispanic women (4.9 percent). COPD was least common among non-Hispanic Asian women (2.6 percent). With regard to income, women with household incomes less than 100 percent of poverty were more than twice as likely to report a COPD diagnosis as compared to those with incomes of 400 percent or more of poverty (10.1 versus 4.6 percent, respectively; data not shown).

While there is no cure, treatment for COPD begins with smoking cessation for those who smoke.<sup>38</sup> Additional therapies to control symptoms and slow disease progression may include medication, oxygen therapy, pulmonary rehabilitation, and surgery.

### Chronic Obstructive Pulmonary Disease\* Among Adults Aged 18 and Older, by Age and Sex, 2009–2011

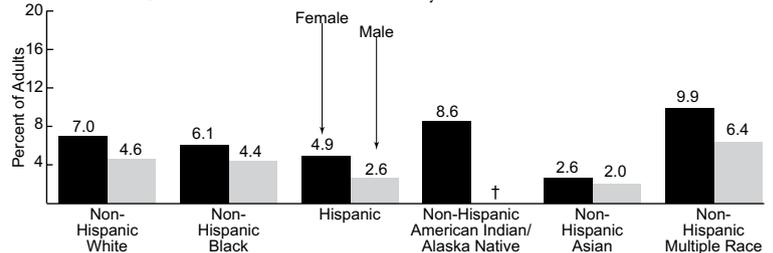
Source II.1: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\*Reported ever being diagnosed by a doctor or other health professional with emphysema or being diagnosed with chronic bronchitis in the past twelve months; total estimates are age-adjusted.

### Chronic Obstructive Pulmonary Disease\* Among Adults Aged 18 and Older, by Race/Ethnicity\*\* and Sex, 2009–2011

Source II.1: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\*Reported ever being diagnosed by a doctor or other health professional with emphysema or being diagnosed with chronic bronchitis in the past twelve months; all estimates are age-adjusted. \*\*The sample of non-Hispanic Native Hawaiian/Other Pacific Islanders was too small to produce reliable results.

†Estimate does not meet the standards of reliability or precision.

## MENTAL ILLNESS

Overall, mental illness affects both women and men equally, and about half of all Americans will meet the criteria for a diagnosable mental disorder over the course of their lives.<sup>39</sup> However, specific types of mental disorders vary by sex. For instance, women are more likely than men to experience an anxiety or mood disorder, such as depression, while men are more likely to experience an impulse-control or substance use disorder.

A major depressive episode (MDE) is defined as a period of 2 weeks or longer during which an individual experiences either depressed mood or loss of interest or pleasure in daily activities and at least four other symptoms that reflect a change

in functioning, such as problems with sleep or eating.<sup>2</sup> In 2009–2011, an estimated 9.9 million women aged 18 years and older, comprising 8.5 percent of that population, reported experiencing an MDE in the past year, compared to 5.5 million, or 4.9 percent of, men.

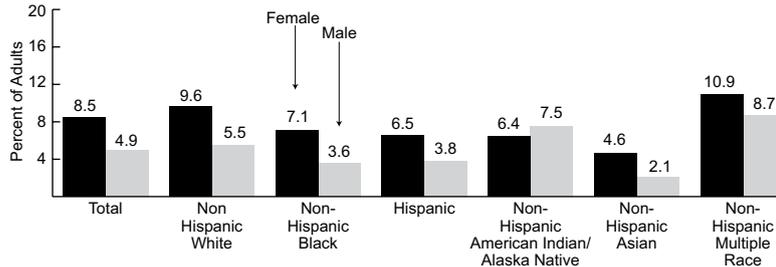
The prevalence of past-year MDE varied by race and ethnicity. Among women, for example, non-Hispanic White and non-Hispanic multiracial women were most likely to report experiencing past year MDE (9.6 and 10.9 percent, respectively), while non-Hispanic Asian women were least likely to do so (4.6 percent). Past-year MDE was also more common among women below retirement age, affecting 9 to 11 percent of women under age 65, compared to

2.7 percent of women aged 65 and older (data not shown).

Although women were more likely than men to experience a past-year MDE, men were nearly twice as likely as women to experience a past-year substance use disorder (11.9 versus 6.0 percent, respectively). Substance use disorder encompasses both abuse and dependence on alcohol or illicit drugs.<sup>40</sup> Women who experienced past year MDE were three times as likely to report a substance use disorder than those who did not (15.8 versus 5.0 percent, respectively), while men who experienced a past-year MDE were nearly 2.5 times as likely as their non-affected counterparts to report a substance use disorder (26.3 versus 11.1 percent, respectively).

### Past-Year Major Depressive Episode\* Among Adults Aged 18 and Older, by Race/Ethnicity\*\* and Sex, 2009–2011

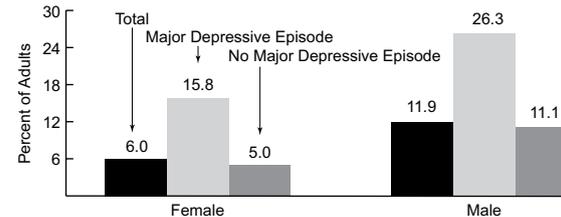
Source II.3: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health



\*A past-year major depressive episode is defined as a period of 2 weeks or longer during which there is either depressed mood or loss of interest or pleasure and at least four other symptoms that reflect a change in functioning, such as problems with sleep and eating; all estimates are age-adjusted. \*\*The sample of non-Hispanic Native Hawaiian/Other Pacific Islanders was too small to produce reliable results.

### Past-Year Substance Use Disorder,\* by Sex and Past-Year Major Depressive Episode,\*\* 2009–2011

Source II.3: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health



\*Past-year substance use disorder defined as abuse or dependence on alcohol or illicit drugs; abuse relates to social problems due to substance use, such as problems with work, family, or the law; dependence relates to health and emotional problems, such as tolerance or withdrawal; all estimates are age-adjusted. \*\*Past year major depressive episode is defined as a period of 2 weeks or longer during which there is either depressed mood or loss of interest or pleasure and at least four other symptoms that reflect a change in functioning, such as problems with sleep and eating.

## INTIMATE PARTNER VIOLENCE

Intimate partner violence (IPV) has been defined as physical violence, sexual violence, threats of physical or sexual violence, and psychological aggression by a current or former spouse or dating partner. IPV can occur among heterosexual and same-sex couples and does not require sexual intimacy.<sup>41</sup> In 2010, 35.6 percent of adult women aged 18 years and older, or 42.4 million women, reported having experienced rape, physical violence, and/or stalking by an intimate partner in their lifetime while nearly one-half (48.4 percent) reported having experienced psychological aggression.<sup>42</sup>

The prevalence of IPV varies by sexual orientation. In 2010, bisexual women (56.9 percent) were more likely than either lesbians (40.4 percent) or heterosexual women (32.3 percent) to report any lifetime experience of physical IPV, including slapping, pushing, or shoving and severe acts such as being beaten, burned, or choked.

Among women who reported experiencing physical violence, more than half of bisexual women (55.1 percent) reported having ever been slapped, pushed, or shoved by an intimate partner, compared to 36.3 percent of lesbian women and 29.8 percent of heterosexual women. Bisexual women were also more likely to report having experienced severe physical violence, such as having been choked or beaten (49.3 percent) than

lesbian (29.4 percent) or heterosexual women (23.6 percent; data not shown).

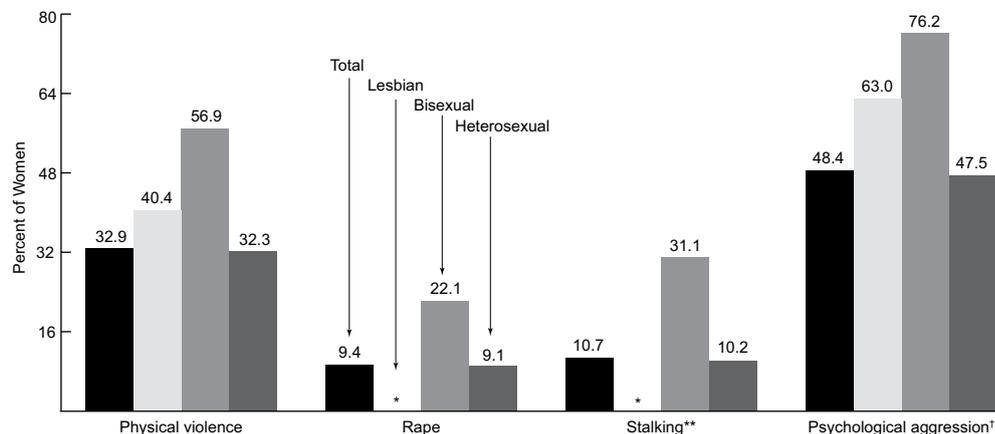
Lifetime experience of rape by an intimate partner was reported by approximately 1 in 5 bisexual women and 1 in 10 heterosexual women. Stalking, defined as a pattern of harassing or threatening tactics that is both unwanted and causes fear or safety concerns for the victim, was also more common among bisexual women than heterosexual women (31.1 versus 10.7 percent, respectively). Estimates of rape and stalking for lesbians were not reliable.

Finally, both bisexual and lesbian women reported higher rates of lifetime psychological aggression (such as name calling, humiliation, or coercion) by an intimate partner than heterosexual women (76.2, 63.0, and 47.5 percent, respectively).

Among bisexual women who experienced rape, physical violence, and/or stalking by an intimate partner, approximately 90 percent reported only male perpetrators. Among lesbian survivors of IPV, 67.4 percent reported only female perpetrators (data not shown).

### Lifetime Prevalence of Intimate Partner Violence Among Women Aged 18 and Older, by Type of Violence and Sexual Orientation, 2010

Source II.10: Centers for Disease Control and Prevention, National Intimate Partner and Sexual Violence Survey



\*Estimate does not meet the standards of reliability or precision. \*\*Includes harassing or threatening tactics that are unwanted and cause fear or safety concerns. †Includes expressive aggression (such as name calling, insulting, or humiliating an intimate partner), and coercive control, which includes behaviors that are intended to monitor and control or threaten an intimate partner.

## SEXUALLY TRANSMITTED INFECTIONS AND HIV/AIDS

Sexually transmitted infections (STIs) are considered a hidden epidemic because symptoms are often absent and the causes are not openly discussed. Yet there are nearly 20 million new STIs in the United States each year at an annual health care cost of nearly 16 billion dollars.<sup>43</sup> Untreated STIs can increase the likelihood of contracting another STI, such as HIV, and can lead to various reproductive problems and certain types of cancers, such as those caused by human papillomavirus (HPV) and hepatitis.<sup>44</sup> Safer sex practices, HPV and hepatitis vaccination, and screening and treatment can help reduce the burden of STIs.

States require reporting of new chlamydia,

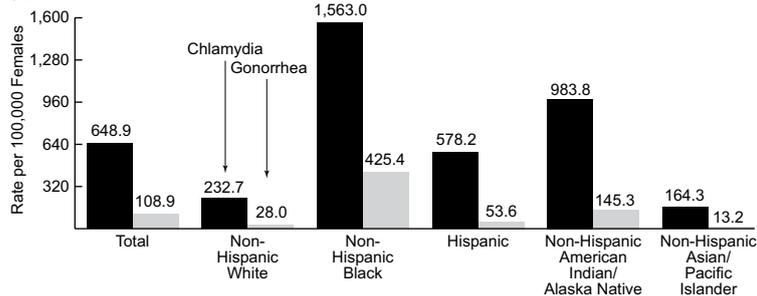
gonorrhea, syphilis, and HIV cases and data are shared with the Centers for Disease Control and Prevention. Reported STI rates among females vary by age, as well as race and ethnicity. Rates are highest among adolescents and young adults: in 2011, over 70 percent of all chlamydia and gonorrhea cases in females occurred among those under 25 years of age (data not shown). With the exception of non-Hispanic Asian/Pacific Islanders, minority females had higher STI rates than non-Hispanic White females. For example, compared with non-Hispanic White females, the chlamydia rate was 6.7 times as high for non-Hispanic Black females, 4.2 times as high for non-Hispanic American Indian/Alaska Native females, and 2.5 times as high for Hispanic females.

HIV and AIDS disproportionately affect men

who have sex with men; however, a substantial proportion of HIV/AIDS diagnoses occur among women, and particularly Black women. In 2011, females accounted for 20.8 percent of estimated new HIV cases, of which nearly two-thirds were non-Hispanic Black females (data not shown). New HIV diagnosis rates for non-Hispanic Black females were 20 times the rate for non-Hispanic White females (40.0 versus 2.0 cases per 100,000 females), and were also higher for Hispanic, non-Hispanic American Indian/Alaska Native, and non-Hispanic females of multiple races (7.9, 5.5, and 7.5 cases per 100,000 females, respectively). Early detection of HIV infection is critical in preventing transmission of the virus to others and receiving treatment that can prevent progression to AIDS.

### Rates of Chlamydia and Gonorrhea Among Females (All Ages), by Race/Ethnicity,\* 2011

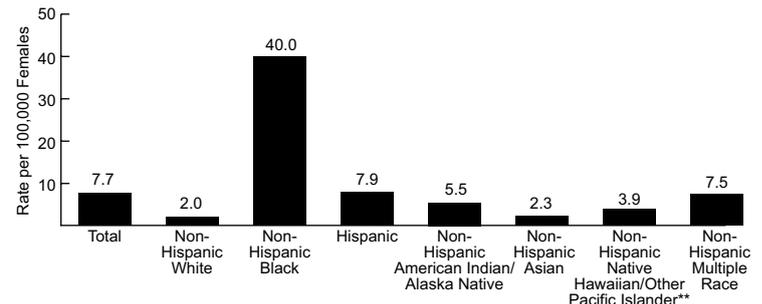
Source II.11: Centers for Disease Control and Prevention, Sexually Transmitted Disease Surveillance



\*Separate data for Asians, Native Hawaiians, and Other Pacific Islanders were not available.

### Estimated Rates of New HIV Cases\* Among Females Aged 13 and Older, by Race/Ethnicity, 2011

Source II.12: Centers for Disease Control and Prevention, HIV Surveillance Report



\*Estimated rates are adjusted for reporting delays but not incomplete reporting.

\*\*Interpret with caution; estimated rate is based on fewer than 10 cases.

## REPRODUCTIVE AND GYNECOLOGIC DISORDERS

Reproductive and gynecologic disorders include conditions that affect female external and internal organs along the reproductive tract. Some disorders like dysmenorrhea (menstrual pain) and vulvodynia (vulvar pain) cause discomfort that may interfere with normal activity, while others may also affect reproductive functioning and fertility, such as endometriosis, uterine fibroids, and ovarian cysts.

Endometriosis is a condition in which the tissue of the uterine lining grows outside of the uterus, often onto the ovaries, fallopian tubes, or other abdominal organs.<sup>45</sup> Uterine fibroids are muscular tumors that grow in the uterine wall.<sup>46</sup> Both conditions can cause pelvic pain and heavy menstrual bleeding. Endometriosis in particular

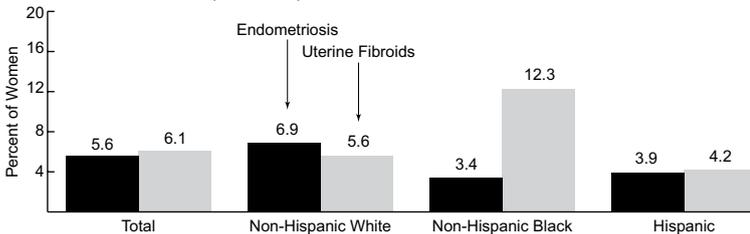
can cause fertility problems, while fibroids may complicate pregnancies and increase the likelihood of cesarean delivery. In 2006–2010, 5.6 and 6.1 percent of women aged 15–44 years reported that they had ever been diagnosed with endometriosis and uterine fibroids, respectively. The prevalence of both conditions increase with age and is highest among women aged 35–44 years: 10.1 and 13.0 percent of women in that age group had reported ever being diagnosed with endometriosis and uterine fibroids, respectively (data not shown). There are also racial and ethnic differences, with endometriosis being more common among non-Hispanic White women (6.9 percent) and uterine fibroids being more common for non-Hispanic Black women (12.3 percent). Although most cases of fibroids and endometriosis can be treated with pain or

hormonal medication and certain surgeries, these two conditions are the most common reasons for hysterectomy—the removal of the uterus.<sup>47</sup>

Infertility, defined as not getting pregnant within 12 months of having unprotected sex with the same partner, affected 5.8 percent of married or cohabiting women aged 15–44 years in 2006–2010 (data not shown). This figure is higher among women who have not already had a birth (14.0 percent), and increases with age from 7.3 percent of nulliparous women aged 15–24 years to 29.6 percent of those aged 40–44 years. In addition to age-related reductions in the quality and quantity of eggs, other conditions that affect fertility also increase with age, including endometriosis, obesity, and polycystic ovary syndrome which impairs ovulation.<sup>48</sup>

### Diagnosed Endometriosis and Uterine Fibroids Among Women Aged 15–44,\* by Race/Ethnicity,\*\* 2006–2010

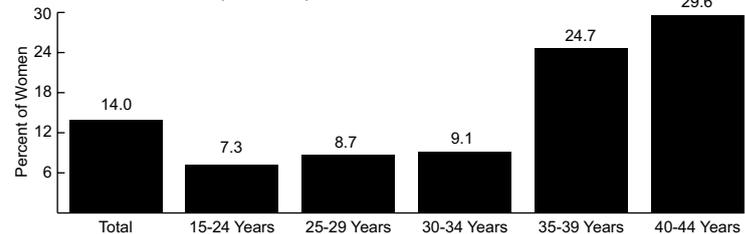
Source II.13: Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of Family Growth



\*Reported ever being diagnosed with endometriosis or uterine fibroids; all estimates are age-adjusted.  
 \*\*The sample of Asians, American Indian/Alaska Natives and Native Hawaiian/Other Pacific Islanders was too small to produce reliable results.

### Infertility\* Among Married or Cohabiting Women Aged 15–44 Without a Previous Birth, by Age, 2006–2010

Source II.14: Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of Family Growth



\*Infertility is defined as not getting pregnant within 12 months of having unprotected sex with the same partner.

## OSTEOPOROSIS

Osteoporosis is a bone weakness characterized by low bone density with symptoms that generally occur only after the disease is advanced.<sup>49</sup> Bone fractures are the most common consequence; others include loss of height, stooped posture, and back and neck pain from spinal fractures. Risk of osteoporosis is much higher among women than men and increases with age. In 2007–2010, an estimated 10 million women (9.0 percent) and 1.3 million men (1.3 percent) reported having been diagnosed with osteoporosis (data not shown). More than one in four women aged 65 and older reported having been diagnosed with osteoporosis (27.4 percent). Non-Hispanic White and Mexican American women aged 65 and older were more likely to have been diagnosed with osteoporosis than non-Hispanic

Black women of the same age (29.0 and 27.3 percent versus 12.9 percent, respectively). Asian women have also been shown to be at higher risk of osteoporosis.<sup>49</sup>

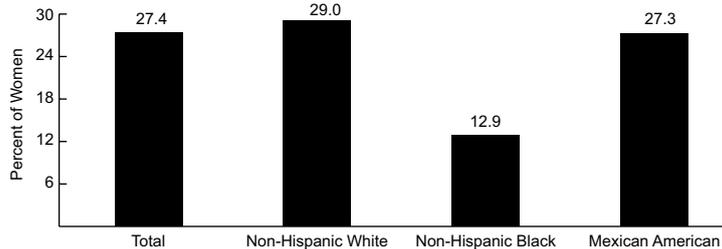
Getting the recommended amounts of calcium, vitamin D, and regular weight-bearing physical activity (such as walking), are critical in building peak bone mass in adolescence, maintaining bone health in adulthood, and slowing bone loss at older ages.<sup>49,50</sup> To promote early diagnosis of osteoporosis and the prevention of complications, bone density tests are recommended for all women aged 65 and older and younger women who have a risk factor, including low weight, parental history of hip fracture, smoking, and daily alcohol use.<sup>51</sup>

Bone fractures among the elderly most commonly occur among those with osteoporosis

and can have devastating consequences. For example, 1 in every 5 hip fracture patients dies within a year of their injury.<sup>50</sup> Falls are a common direct cause of osteoporosis-related fracture and are the leading cause of injury—both fatal and nonfatal—among adults aged 65 and older. In 2011, there were 2.4 million unintentional nonfatal fall injuries treated in emergency departments among adults aged 65 and older (data not shown). The rate of nonfatal fall injury was higher among women than men and increased with age. Among both women and men, the rate of nonfatal fall injury was about five times higher among those aged 85 and older than those aged 65–69. Fall prevention efforts can include muscle strengthening, home hazard assessments and modifications, and avoiding sedative medications that may impair balance and coordination.<sup>50</sup>

### Diagnosed Osteoporosis\* Among Women Aged 65 and Older, by Race/Ethnicity,\*\* 2007–2010

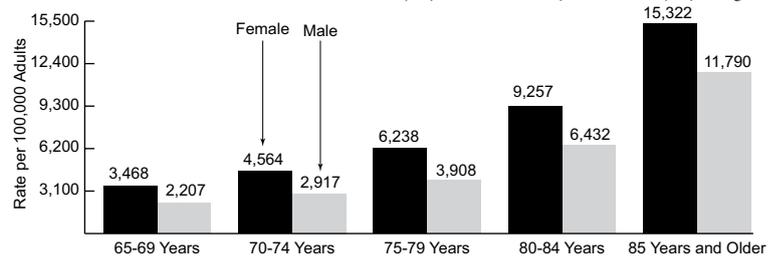
Source II.2: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey



\*Reported a health professional had ever told them they had osteoporosis. \*\*The sample of American Indian/Alaska Natives, Asians, Native Hawaiian/Other Pacific Islanders, and persons of multiple race was too small to produce reliable results.

### Nonfatal Unintentional Injury Due to Falls\* per 100,000 Adults Aged 65 and Older, by Age and Sex, 2011

Source II.6: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, National Electronic Injury Surveillance System, All Injury Program



\*Treated in hospital emergency departments.

## ALZHEIMER'S DISEASE

Alzheimer's disease is the most common form of dementia accounting for an estimated 60 to 90 percent of all dementia cases.<sup>52</sup> Early signs include difficulty remembering names and completing familiar tasks, with later disease progression leading to disorientation, personality changes, and difficulty speaking, swallowing, and walking. Although the risk for Alzheimer's disease increases with age, it is not a normal part of aging. Risk factors include a family history, head trauma or traumatic brain injury, and cardiovascular disease risk factors such as high cholesterol, hypertension, diabetes, smoking, and physical inactivity.

In 2013, 5 million or 11 percent of U.S. adults aged 65 and older are estimated to have Alzheimer's disease and another 200,000 below age 65 are thought to have early-onset Alzheimer's. Due to the aging of the population, the number of adults

aged 65 and older with Alzheimer's disease is expected to triple by 2050.<sup>52</sup> Women constitute 3.2 million, or nearly two-thirds, of adults aged 65 and older with Alzheimer's.

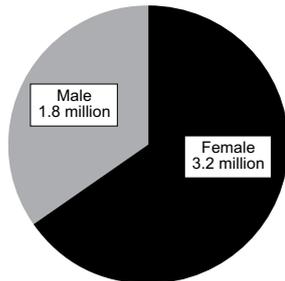
Alzheimer's disease is the fifth leading cause of death among men and women aged 65 and older.<sup>52</sup> Severe dementia causes complications, such as immobility and swallowing disorders, that can lead to death due to malnutrition and infections like pneumonia. Between 2000 and 2010, the age-adjusted rate of death due to Alzheimer's for those aged 65 and older has increased by about 40 percent, from 141.2 to 196.9 deaths per 100,000 people. The increase was similar for both women and men and may reflect an increase in recognition of this disease as an underlying cause of death.<sup>52</sup> In 2010, the age-adjusted death rate for women aged 65 and older was 30 percent higher than that of their male counter-

parts (214.3 versus 164.8 deaths per 100,000). The greater rates of Alzheimer's prevalence and mortality among women are related to their longer life expectancy rather than an increased sex-specific risk of disease.<sup>52</sup>

Not only are women more likely than men to have Alzheimer's, they are also more likely to be caregivers for someone with Alzheimer's—exacting a substantial toll of emotional and physical stress. Of the 15.4 million Americans who provide unpaid care for a person with Alzheimer's or another dementia, an estimated 70 percent are women.<sup>52</sup> Given the large and increasing burden of Alzheimer's disease, advances in prevention, early diagnosis, and treatment are greatly needed. In 2011, a new diagnostic category of "preclinical Alzheimer's disease" was developed to aid research for early detection and treatment prior to the onset of symptoms.<sup>52</sup>

### Adults Aged 65 and Older with Alzheimer's Disease,\* by Sex, 2013

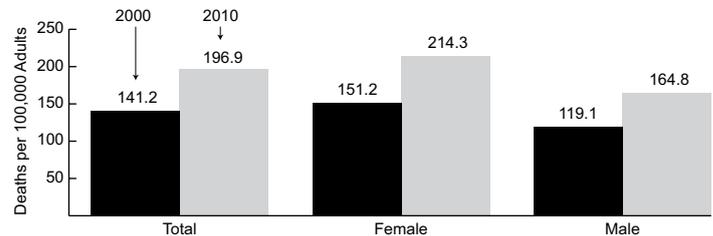
Source II.15: Alzheimer's Association, Alzheimer's Disease Facts and Figures



\*Estimates are based on the Chicago Health and Aging Project incidence rates converted to prevalence estimates and applied to population projections; assumes the same proportion female as from 2010.

### Age-Adjusted Alzheimer's Disease Death Rates\* Among Adults Aged 65 and Older, by Sex, 2000 and 2010

Source II.16: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



\*Deaths with Alzheimer's disease listed as underlying cause.

## INJURY

Injury is a major cause of morbidity and mortality, particularly among the young and the elderly. Injury includes unintentional accidents as well as intentional violence inflicted by the self or others. Injury prevention can include education, home hazard assessment and modification, as well as laws and regulations, such as seat belt and gun laws, sobriety checkpoints, and prescription drug monitoring systems.

In 2011, there were 25.6 million nonfatal injuries among persons aged 15 and over, resulting in emergency department visits, of which 12.1 million, or 47 percent, were to females.<sup>53</sup> There were 9,496 nonfatal injuries per 100,000 females compared to 11,205 per 100,000 males. Although men had higher rates of nonfatal un-

intentional and assault injury than women, women had higher rates of injury due to self-harm (222 versus 163 per 100,000).

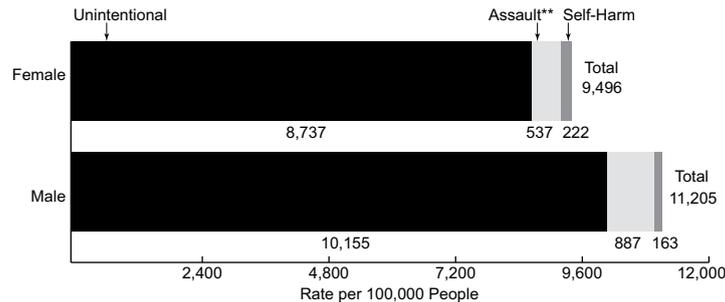
More than 90 percent of nonfatal injuries treated in an emergency department were unintentional for both males and females. Unintentional falls were the leading cause of nonfatal injury for women in every age group with the exception of 15–19 year olds for whom being struck by or against an object was the leading cause (data not shown). Unintentional injury rates due to falls increase with age (see *Osteoporosis*).

Injuries are the most common cause of death among both women and men aged 15–44.<sup>33</sup> In 2010, over 56,000, or 41.3 per 100,000, females aged 15 and over died due to injury. Un-

intentional injury deaths were most common (31.2 per 100,000), followed by suicide and homicide (6.3 and 2.5 per 100,000 females; data not shown). Although men have higher rates of fatal injury (101.1 per 100,000), females have experienced substantially greater increases in fatal injury rates over the past decade (18.0 versus 5.5 percent; data for men not shown). Between 2000 and 2010, motor vehicle traffic death rates declined while poisoning death rates more than doubled to become the leading mechanism of fatal injury, with the majority caused by drugs and specifically prescription painkillers.<sup>54</sup> Women are more likely to have chronic pain and may be more vulnerable to prescription painkiller dependency.<sup>55</sup> Fatal injury rates due to falls also increased over the past decade.

### Nonfatal Injury\* Rates Among Persons Aged 15 and Older, by Intent and Sex, 2011

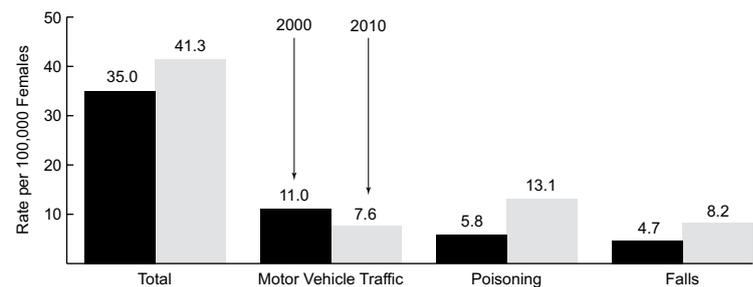
Source II.6: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, National Electronic Injury Surveillance System – All Injury Program



\*Injuries resulting in emergency department visits; all rates are age-adjusted. \*\*Includes injuries sustained during legal intervention (e.g., police pursuit and restraint).

### Fatal Injury Rates Among Females Aged 15 and Older, by Selected Mechanism, 2000 and 2010\*

Source II.6: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



\*All rates are age-adjusted.

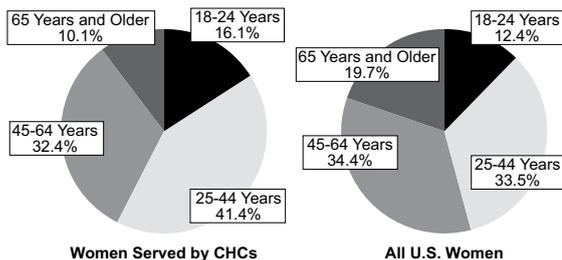
## WOMEN SERVED BY COMMUNITY HEALTH CENTERS

Administered by the Health Resources and Services Administration's Bureau of Primary Health Care, Community Health Centers (CHCs) are a nationwide network of clinics that provide comprehensive primary care services, regardless of the ability to pay.<sup>56</sup> Some health centers also target services to specific populations, such as homeless persons and migrant workers.

In 2012, Federally-supported CHCs served 21.1 million people, of whom 9.0 million were adult women aged 18 and older. Women served by CHCs tend to be younger than the general population. More than half of women (57.5 percent) served by CHCs were of reproductive age

### Women Aged 18 and Older Served by Community Health Centers Compared to All U.S. Women, by Age, 2012

Source II.17: Health Resources and Services Administration, Bureau of Primary Health Care, Uniform Data System and U.S. Census Bureau, Annual Estimates of the Resident Population



(18–44 years) compared to 45.9 percent of all women nationally.

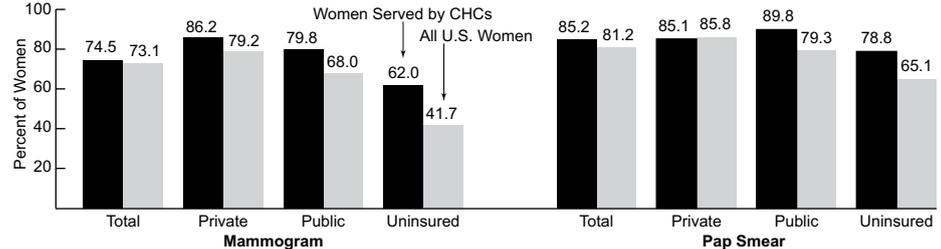
In 2012, 92.6 percent of CHC patients had incomes at or below 200 percent of poverty, 61.6 percent were racial or ethnic minorities, 36.0 percent were uninsured, and 40.8 percent were Medicaid insured.<sup>57</sup> As a critical access point for the uninsured, CHCs will be pivotal to the success of the Affordable Care Act in helping to enroll and care for newly insured patients and continuing to serve those who may remain uninsured, including immigrants and low-income individuals in States that do not expand Medicaid.<sup>58</sup>

CHCs have a 45-year record of providing high-quality care that has helped to reduce health disparities.<sup>59</sup> Despite serving a low-income,

mostly uninsured or publicly insured population, rates of recommended breast and cervical cancer screening among women seen at CHCs are similar to national averages for all women. In 2009, 74.5 and 85.2 percent of female CHC patients reported having received recommended breast and cervical cancer screenings, respectively, similar to 73.1 and 81.2 percent of all U.S. women. Moreover, women who were either publicly insured or uninsured and seen at CHCs were more likely to have received screenings than comparable women nationally. For example, fewer than half of uninsured women received recommended mammography screening (41.7 percent) compared to 3 out of 5 uninsured women seen at CHCs (62.0 percent).

### Receipt of Recommended Breast and Cervical Cancer Screening\* Among Women Served by Community Health Centers Compared to All U.S. Women, by Health Insurance Coverage,\*\* 2009

Sources II.18: Health Resources and Services Administration, Bureau of Primary Health Care, Community Health Center Patient Survey and Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\*Based on U.S. Preventive Services Task Force recommendations of biennial mammography for women aged 50–74 years and a Pap smear every three years for women aged 21–65 years; CHC data are from the 2009 CHC Patient Survey; U.S. data are from the 2008/2010 National Health Interview Survey. \*\*Private coverage includes persons with any private insurance, either alone or in combination with public coverage; public includes those covered only by government programs such as Medicaid, Medicare, military plans, and state-sponsored health plans.

## IMMIGRANT WOMEN

In 2011, 19.3 million women, representing 15.8 percent of all women residing in the United States, were immigrants, defined as foreign-born and not a U.S. citizen at birth. About half of immigrant women had become naturalized U.S. citizens, with the remaining half of non-citizens comprising legal permanent residents, temporary residents (e.g., foreign students), humanitarian migrants (e.g., refugees), and undocumented migrants. Over half of all U.S. immigrants are from Latin America (53.1 percent), followed by Asia (28.2 percent) and Europe (12.1 percent; data not shown).<sup>60</sup> Immigrants tend to be younger and have lower levels of education and income than the general U.S. population, despite having higher levels of labor force participation.<sup>60</sup>

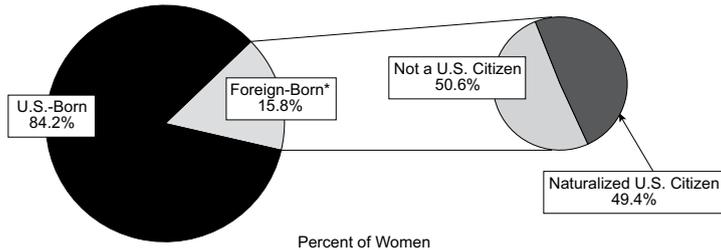
Although immigrants tend to be healthier than U.S.-born populations, perhaps due to culturally-protective behaviors, this advantage erodes with length of U.S. residence<sup>61</sup> and may be hastened by barriers to health care, including limited health insurance access, lower income, and language barriers.<sup>62</sup> In 2011, nearly one in three foreign-born women were uninsured (29.4 percent) compared to 13.9 percent of U.S.-born women. Immigrant women were also nearly twice as likely as U.S.-born women to lack a usual source of care (19.9 versus 11.3 percent, respectively). Among immigrant women, non-citizens were most likely to be uninsured (41.1 percent) and have no usual source of care (25.6 percent). These barriers to care may translate into lower utilization of preventive services. In 2011,

immigrant women were less likely than their U.S.-born counterparts to have received recommended vaccinations for HPV (15.2 versus 32.6 percent, respectively) and pneumococcal disease (45.4 versus 67.4 percent, respectively), which protect against cervical cancer and an infection that may cause pneumonia and other life-threatening complications. Non-citizen immigrant women were less likely than those with citizenship to have received pneumococcal vaccination.

Citizens and legal immigrants without health insurance may gain coverage options through Medicaid expansions and health insurance marketplaces as part of the Affordable Care Act, while community health centers will continue to be critical providers of high-quality, culturally-competent care for those who lack coverage (see *Women Served by Community Health Centers*).<sup>63</sup>

### Women Aged 18 and Older, by Nativity and Citizenship Status, 2011

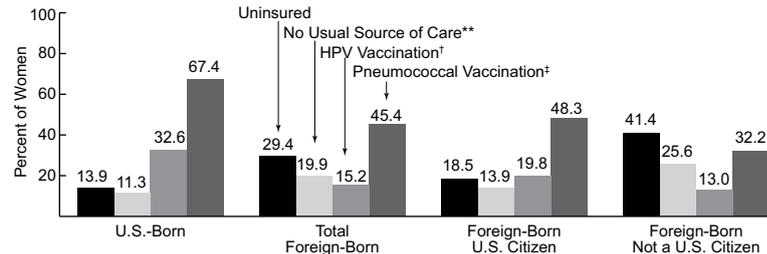
Source II.19: U.S. Census Bureau, American Community Survey



\*Includes those born in another country and not a U.S. citizen at birth; naturalized citizens are those that have applied and been granted citizenship through a test and interviews; non-citizens include legal permanent residents, temporary residents (e.g. foreign students), humanitarian migrants (e.g. refugees), and undocumented migrants.

### Selected Health Care Indicators for Women Aged 18 and Older,\* by Nativity and Citizenship Status, 2011

Source II.20: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



\*Estimates of uninsured and no usual source of care are age-adjusted. \*\*Defined as having a place where one usually receives care when sick, excluding emergency departments. †Aged 18-26 years; received at least one dose. ‡Aged 65 years and older.

## LESBIAN AND BISEXUAL WOMEN

Lesbian and bisexual women have been shown to be at increased risk for adverse health outcomes, including overweight and obesity, poor mental health, substance abuse, violence, and barriers to optimal health care resulting from social and economic inequities.<sup>64,65</sup> Although frequently referred to as part of a larger group of sexual minorities, including gay men and transgender individuals, the health status and needs of lesbian and bisexual women are shaped by a range of factors including sexual identity and behavior, as well as traditional sociodemographic factors, like age, education, and race and ethnicity. The terms “lesbian” and “bisexual” are used to define women according to their sexual orientation which can reflect sexual identity, behavior, or attraction;<sup>66</sup> on this page the terms lesbian and bisexual refer to women’s self-reported sexual identity.<sup>67</sup>

In 2006–2010, 1.2 percent of women aged 18–44 years self-identified as homosexual, gay, or lesbian and 3.9 percent self-identified as bisexual. The proportion of women who reported any same-sex sexual behavior, however, was substantially higher at 14.2 percent, while 16.5 percent of women in this age group reported some degree of same-sex attraction (data not shown).

Among reproductive-aged women in 2006–2010, differences were observed for several health

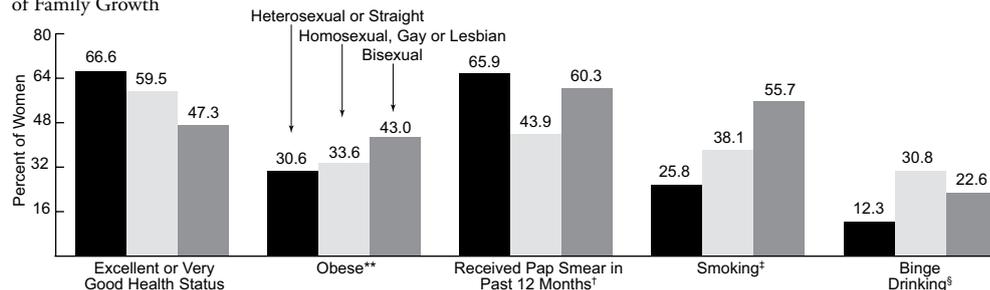
indicators by sexual identity. Bisexual women were less likely than heterosexual women to report being in excellent or very good health (47.3 versus 66.6 percent, respectively) and more likely to be obese (43.0 versus 30.6 percent, respectively); no significant differences were observed between lesbian and heterosexual women for either indicator. Conversely, while 65.9 percent of heterosexual and 60.3 percent of bisexual women received a Pap smear in the past 12 months, only 43.9 percent of lesbians reported receiving this service. Both lesbian and bisexual women, however, were more likely than heterosexual women to report smoking, with over half of bisexual women reporting this health risk behavior (55.7 percent), compared to 38.1 percent of lesbian women and 25.8 percent of heterosexual women.

Similarly, 30.8 percent of lesbians and 22.6 percent of bisexual women reported binge drinking (defined as consuming 5 or more drinks within a couple of hours at least once a month on average during the past year), compared to 12.3 percent of heterosexual women.

A recent report from the Institute of Medicine concluded that to better understand and meet the unique needs of lesbian, gay, bisexual and transgender people, more data are needed in several priority areas: demographics, social influences, health care inequalities, and transgender-specific health needs.<sup>66</sup> The U.S. Department of Health and Human Services is working to increase the number of federally-funded health and demographic surveys that collect and report data on sexual orientation and gender identity.<sup>68</sup>

### Selected Health Indicators Among Women Aged 18–44 Years, by Sexual Identity, 2006–2010\*

Source II.13: Centers for Disease Control and Prevention, National Center for Health Statistics, National Survey of Family Growth



\*Estimates are age-adjusted. \*\*Based on Body Mass Index (BMI), a number calculated from a person’s weight and height. Obese is defined as a BMI of 30.0 or higher. †Calculated for females aged 20–44 years. ‡Smoked at least one cigarette per day on average in the past year.

§Defined as consuming 5 or more drinks within a couple of hours at least once a month on average in the past year.