LIFE EXPECTANCY

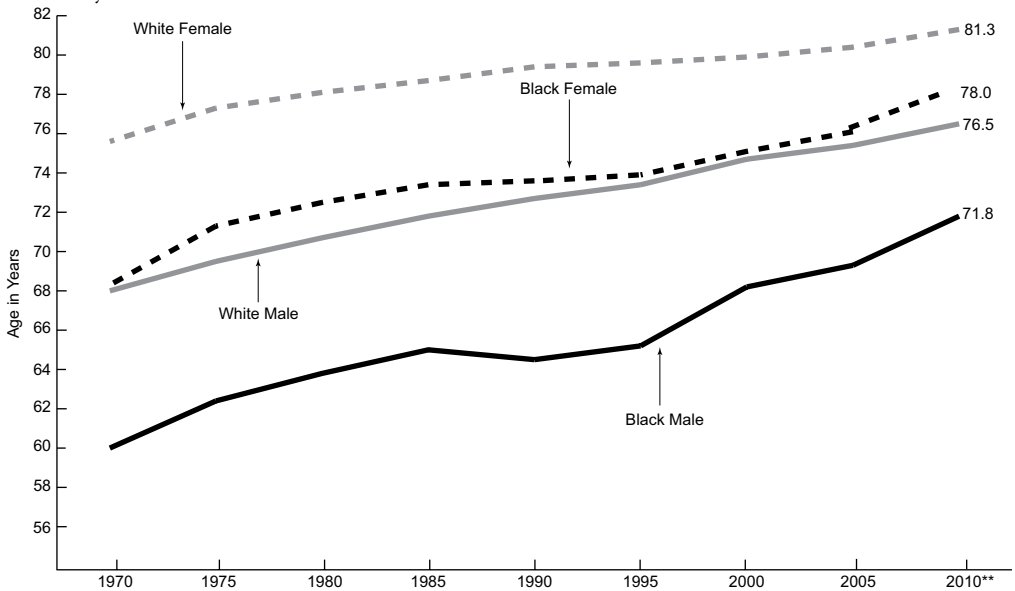
In 2010, the overall life expectancy of a baby born was 78.7 years (data not shown); this varied, however, by sex and race. A baby girl born in the United States in 2010 could expect to live 81.0 years, 4.8 years longer than a male baby, whose life expectancy would be 76.2 years (data not shown). The differential between male and female life expectancy was greater among Blacks than Whites. Black males born in 2010 could expect to live 71.8 years, 6.2 years fewer than Black females (78.0 years). The difference between White males and females was 4.8 years, with life expectancies at birth of 76.5 and 81.3 years, respectively. White females could expect to live 3.3 years longer than Black females.

Life expectancy has increased since 1970 for males and females in both racial groups. Between 1970 and 2010, White males' life expectancy increased from 68.0 to 76.5 years (12.5 percent), while White females' life expectancy increased from 75.6 to 81.3 years (7.5 percent). During the same period, the life expectancy for Black males increased from 60.0 to 71.8 years (19.7 percent), while life expectancy increased from 68.3 to 78.0 years (14.2 percent) for Black females. Between 1970 and 2010, the greater gains in life expectancy for males than females and for Blacks than Whites have led to reduced disparities by sex and race.

Life expectancy among the Hispanic population has been reported only recently. In 2010, reported life expectancy by sex and race/ethnicity was highest for Hispanic females (83.8 years), followed by non-Hispanic White females (81.1 years), Hispanic males (78.5 years), non-Hispanic Black females (77.7 years), non-Hispanic White males (76.4 years), and non-Hispanic Black males (71.4 years, data not shown).[13] 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 at Birth, by Race* and Sex, 1970–2010

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



*Both racial categories include Hispanics.

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 malignant neoplasms (cancer), which were responsible for 23.8 and 22.4 percent of deaths, respectively. The next two leading causes of death were cerebrovascular diseases (stroke), which accounted for 6.3 percent of deaths, and chronic lower respiratory diseases, which accounted for 6.0 percent.

Heart disease was the leading cause of death for non-Hispanic White and non-Hispanic Black women, while cancer was the leading cause among all other racial and ethnic groups. One of the most noticeable differences in leading causes of death by race and ethnicity is that diabetes mellitus was a more prominent cause of death among minority women than non-Hispanic White women. Diabetes was the fourth leading cause of death among women of all racial and ethnic groups except non-Hispanic White women, for whom it ranked as the eighth leading cause. Conversely, chronic lower respiratory disease was a more prominent cause of death among non-Hispanic White women, ranking third for non-Hispanic White women versus sixth or higher for other racial and ethnic groups. Nephritis, or kidney inflammation, was the fifth leading cause of death among non-Hispanic Black women, but ranked eighth or ninth among women of other races and ethnicities.

Hypertension was the tenth leading cause among non-Hispanic Black and non-Hispanic Asian/Pacific Islander women, accounting for 2.1 and 2.0 percent of deaths, respectively. Also noteworthy is that non-Hispanic American Indian/Alaska Native women experienced a higher proportion of deaths due to unintentional injury (7.5 percent; third leading cause of death) and liver disease (5.3 percent; fifth leading cause of death) than women of other racial and ethnic groups. Liver disease was also the tenth leading cause of death among Hispanic women, accounting for 2.1 percent of deaths (data not shown).

Ten Leading Causes of Death Among Women Aged 18 and Older, by Race/Ethnicity, 2010

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

	Total	Non-Hispanic White	Non-Hispanic Black	Hispanic	Non-Hispanic American Indian/Alaska Native	Non-Hispanic Asian/Pacific Islander
Cause of Death	**% (Rank)**	**% (Rank)**	**% (Rank)**	**% (Rank)**	**% (Rank)**	**% (Rank)**
Heart Disease	23.8 (1)	23.8 (1)	24.8 (1)	22.0 (2)	17.2 (2)	21.7 (2)
Malignant Neoplasms (cancer)	22.4 (2)	22.0 (2)	23.3 (2)	23.6 (1)	20.0 (1)	28.8 (1)
Cerebrovascular Diseases (stroke)	6.3 (3)	6.2 (4)	6.6 (3)	6.3 (3)	4.4 (7)	8.7 (3)
Chronic Lower Respiratory Diseases	6.0 (4)	6.6 (3)	3.0 (6)	3.2 (7)	5.3 (6)	2.4 (8)
Alzheimer's Disease	4.8 (5)	5.2 (5)	2.7 (7)	3.7 (6)	2.5 (9)	3.1 (6)
Unintentional Injury	3.5 (6)	3.6 (6)	2.6 (8)	4.1 (5)	7.5 (3)	3.2 (5)
Diabetes Mellitus	2.8 (7)	2.3 (8)	4.7 (4)	5.2 (4)	6.3 (4)	3.7 (4)
Influenza and Pneumonia	2.2 (8)	2.2 (7)	(N/A)	2.3 (9)	2.2 (10)	3.0 (7)
Nephritis (kidney inflammation)	2.1 (9)	1.9 (9)	3.5 (5)	2.5 (8)	2.7 (8)	2.4 (9)
Septicemia (blood poisoning)	1.5 (10)	1.4 (10)	2.4 (9)	(N/A)	(N/A)	(N/A)

N/A = not in the top 10 leading causes of death for this racial/ethnic group.

HEALTH-RELATED QUALITY OF LIFE

Health-related quality of life encompasses multiple aspects of health and is often 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.[14]

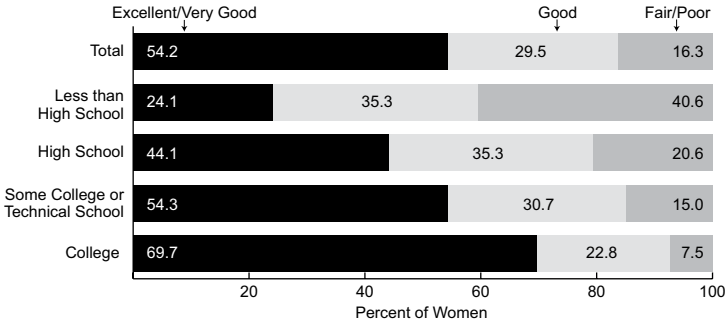
In 2010, 54.2 percent of women reported being in excellent or very good health, while 29.5 percent reported being in good health and 16.3 percent reported being in fair or poor health. Self-reported health status was similar among men and women but varied greatly by age, education, and race and ethnicity. About 60 percent of women aged 18–34 years reported excellent or very good health compared to 39.4 percent of women aged 65 and older (data not shown). Nearly 70 percent of women with a college degree reported excellent or very good health compared to less than one-quarter of women without a high school diploma. Conversely, fair or poor health was only reported by 7.5 percent of women with a college degree compared to 40.6 percent of women of who had not finished high school.

With regard to race and ethnicity, fair or poor health was more likely to be reported among Hispanic (29.5 percent), non-Hispanic American Indian/Alaska Native (26.0 percent), non-Hispanic Black (23.2 percent), and non-Hispanic Native Hawaiian/Other Pacific Islander women (20.8 percent) compared to non-Hispanic White and non-Hispanic Asian women (12.9 and 12.7 percent, respectively; data not shown).

In 2010, women reported more physically and mentally unhealthy days than men. Women reported an average of 3.9 days of poor physical health, compared to 3.3 days per month for men. Similarly, women reported an average of 4.1 mentally unhealthy days, while men reported an average of 3.0 days per month (data for men not shown). While physically unhealthy days per month consistently increased with age, mentally unhealthy days decreased at age 65 and older. For example, on average, women aged 18–34 years reported only 2.5 physically unhealthy days per month but 4.4 mentally unhealthy days, whereas women aged 65 and older reported 5.7 physically unhealthy days per month but only 2.6 mentally unhealthy days.

Self-Reported Health* Among Women Aged 18 and Older, by Level of Education, 2010

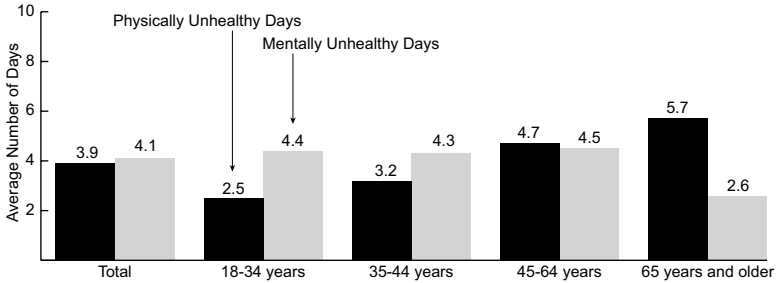
Source II.7: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System



*Estimates are age-adjusted.

Average Number of Physically and Mentally Unhealthy Days* in Past Month Among Women Aged 18 and Older, by Age, 2010

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



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

ACTIVITY LIMITATIONS

Activity limitations are defined in different ways. One common definition is 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.[15] In 2008–2010, 33.6 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 (37.5 versus 29.3 percent, respectively).

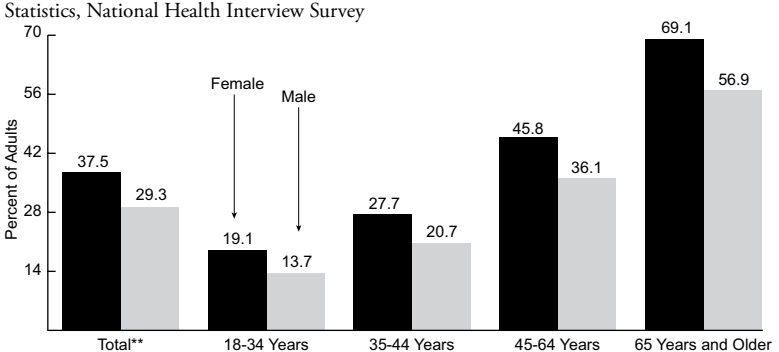
The percentage of adults reporting activity limitations increased with age for both women and men. Among women, for example, only 19.1 percent of women aged 18–34 years reported activity limitations, compared to 27.7 percent of women aged 35–44 years, 45.8 percent of women aged 45–64 years, and 69.1 percent of women aged 65 years and older.

The prevalence of activity limitations also varied with poverty level and educational attainment. For example, over half (50.2 percent) of women living in households with incomes less than 100 percent of poverty reported activity limitations compared to 29.8 percent of women living in households with incomes of 400 percent or more of poverty. Similarly, 47.1 percent of women with less than a high school education reported activity limitations compared to 28.5 percent of women with a college degree or higher (data not shown).

In 2008–2010, the most commonly reported conditions among women with activity limitations were back or neck problems and arthritis (28.0 and 27.7 percent, respectively), followed by depression, anxiety, or emotional problems (11.1 percent), bone or joint injuries (9.7 percent), and weight problems (8.0 percent). Vision and hearing problems were reported to cause limitations in 2.6 and 0.9 percent of women with activity limitations, respectively.

Adults Aged 18 and Older with Activity Limitations,* by Age and Sex, 2008–2010

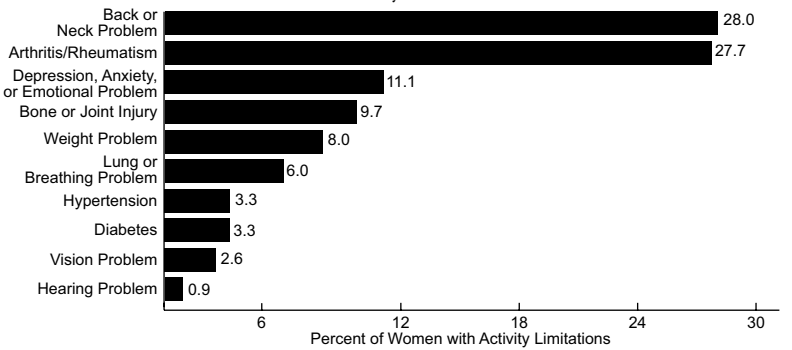
Source II.8: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



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

Women Aged 18 and Older with Activity Limitations,* by Selected Conditions, 2008–2010

Source II.8: 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; estimates are age-adjusted.*

ARTHRITIS

Arthritis is the leading cause of disability and activity limitations among U.S. adults. Arthritis comprises more than 100 different diseases that affect areas in or around the joints.[16] The most common type is osteoarthritis, which is a degenerative joint disease that causes pain and loss of movement due to deterioration in the cartilage covering the ends of bones in the joints. Types of arthritis that primarily affect women include lupus arthritis, fibromyalgia, and rheumatoid arthritis, which is the most serious and disabling type of arthritis.[17]

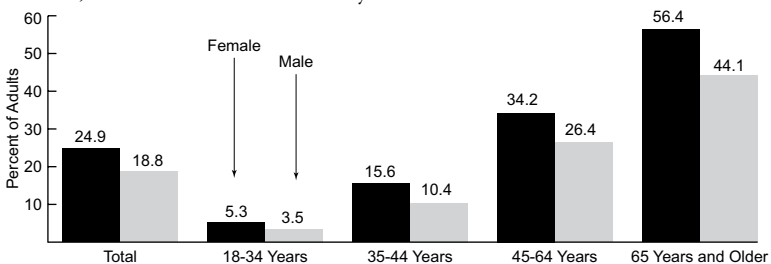
In 2008–2010, 22.0 percent of adults in the United States reported that they had ever been diagnosed with arthritis; representing nearly 52 million adults (data not shown). Arthritis was more common among women than men (24.9 versus 18.8 percent, respectively). The proportion of adults with arthritis increases dramatically with age for both sexes. Only 5.3 percent of women aged 18–34 years had ever been diagnosed with arthritis, compared to 15.6 percent of 35- to 44-year-olds, 34.2 percent of those aged 45–64 years, and 56.4 percent of women aged 65 years and older. Similarly, only 3.5 percent of men aged 18–34 years had ever been diagnosed with arthritis, compared to 44.1 percent of those aged 65 years and older.

Among women, arthritis prevalence varied significantly by race and ethnicity. More than one-quarter of non-Hispanic American Indian/Alaska Native, non-Hispanic Black, non-Hispanic White, and women of multiple races reported having been diagnosed with arthritis (26.9, 26.7, 26.2, and 31.4 percent, respectively), compared to 13.3 percent of non-Hispanic Asian women and 19.6 percent of Hispanic women (data not shown).

Obesity has been associated with the onset and progression of osteoarthritis.[16] In 2008–2010, nearly one-third of obese adults and one-fifth of overweight adults had been diagnosed with arthritis, compared to 17.4 percent of adults who were neither overweight nor obese. Among women, having been diagnosed with arthritis was reported by 33.6 percent of obese women, compared to 19.3 percent of women who were neither overweight nor obese.

Adults Aged 18 and Older with Arthritis,* by Age and Sex, 2008–2010

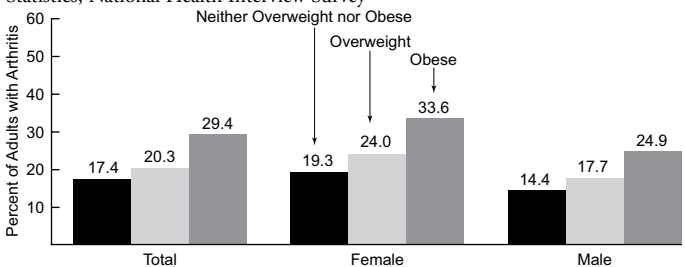
Source II.8: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



*Reported a health professional has ever told them they have arthritis; total estimates are age-adjusted.

Adults Aged 18 and Older with Arthritis,* by Sex and Weight Status, 2008–2010**

Source II.8: 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; estimates are age-adjusted. **Body Mass Index (BMI) is a ratio of weight to height. Neither overweight nor obese is defined as having a BMI of less than 25.0; overweight is defined as having a BMI between 25.0 and 29.9; and obese is defined as having a BMI of 30.0 or more.

OVERWEIGHT AND OBESITY

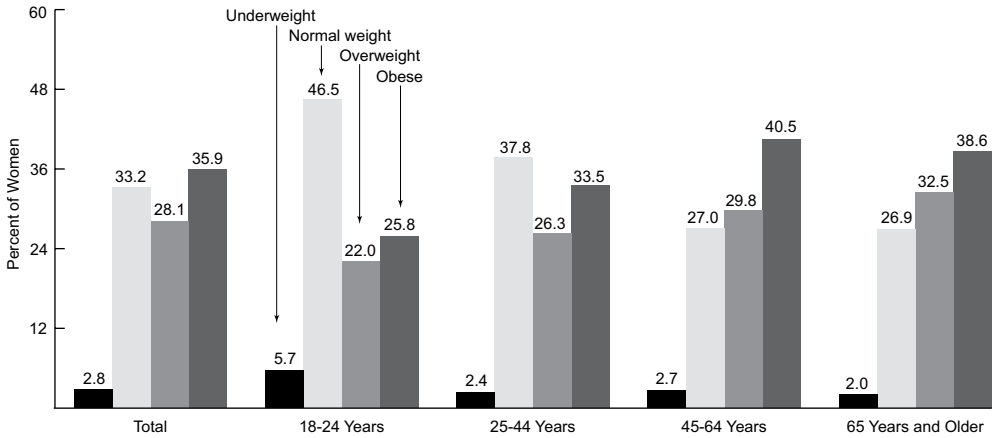
Overweight and obesity are associated with an increased risk of numerous diseases and conditions, including high blood pressure, Type 2 diabetes, heart disease, stroke, arthritis, certain types of cancer, and reproductive health risks.[18] As a result, annual medical costs for people who are obese have been estimated to be $1,429, or 42 percent, higher than people of normal weight, aggregating to a total of $147 billion.[18] Measurements of overweight and obesity are based on Body Mass Index (BMI), which is a ratio of weight to height. In 2009–2010, more than two-thirds of adults were overweight or obese (68.3 percent); this includes 33.0 percent who were classified as overweight (BMI of 25.0–29.9) and 35.3 percent of adults who were classified as obese (BMI of 30.0 or more; data not shown).

In 2009–2010, women were less likely than men to be overweight (28.1 versus 38.3 percent, respectively), but equally as likely to be obese (approximately 35 percent; data for men not shown). Weight status varied by age among both women and men, although the prevalence of obesity increased markedly for both sexes after age 25. Among women, obesity was most prevalent among those aged 45–64 and 65 years and older (40.5 and 38.6 percent, respectively) compared to one-third of those aged 25–44 years and one-quarter of women aged 18–24 years. While overall, less than 2 percent of adults were underweight (BMI of 18.5 or less; data not shown), 5.7 percent of women aged 18–24 years met this criteria in 2009–2010.

Obesity also varies by poverty, as well as race and ethnicity. In 2009–2010, 43.6 percent of women living in households with incomes below the poverty level were obese, compared to 30.5 percent of women with a household income of 300 percent or more of poverty. Non-Hispanic Black and Mexican American women were also significantly more likely to be obese than non-Hispanic White women (58.0 and 44.0 versus 33.1 percent, respectively; data not shown). In contrast to non-Hispanic White women, non-Hispanic Black and Mexican American women have experienced significant increases in obesity over the last decade.[19] Higher obesity rates have also been reported among non-Hispanic American Indian/Alaska Native women while lower rates have been reported for non-Hispanic Asian women.[20] Community strategies that can help to prevent obesity include efforts to improve access to healthy foods, parks, and recreational facilities.[21]

Weight Status* Among Women Aged 18 and Older, by Age, 2009–2010

Source II.9: 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.

DIABETES

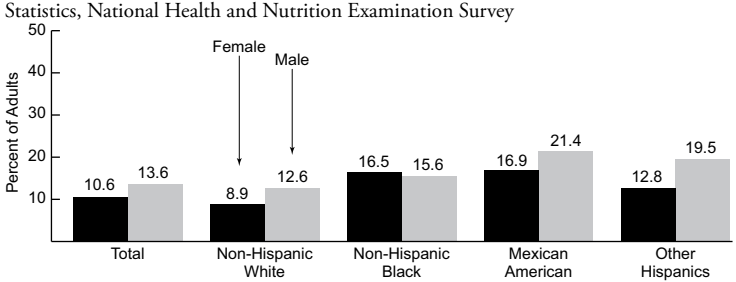
Diabetes mellitus is a chronic condition characterized by high blood sugar and is among the leading causes of death in the United States.[22] Complications of diabetes are serious and may include blindness, kidney damage, heart disease, stroke, nervous system disease, and amputation. The main types of 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 and has risk factors that include autoimmune, genetic, and environmental factors. 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, 28 million or 12.0 percent of adults were found to have diabetes (tested positive for the condition on a fasting plasma glucose test, glycohemoglobin A1C test, or 2-hour oral glucose test; data not shown). Overall, diabetes was slightly more common in men than women (13.6 versus 10.6 percent, respectively) and was also higher for racial and ethnic minority groups than among non-Hispanic Whites. Among women, for example, non-Hispanic White women were least likely to have diabetes (8.9 percent) compared to non-Hispanic Black (16.5 percent), Mexican American (16.9 percent), and Other Hispanic women (12.8 percent). Diabetes prevalence increases greatly with age from 3.1 percent of women aged 18–44 years to 30.6 percent among women aged 75 years and older, and was also more common for women with less than a high school education compared to those who had graduated from college (15.6 versus 5.8 percent, respectively; data not shown).

Diabetes can be successfully managed through diet modification, physical activity, glucose monitoring, and medication.[22] Diagnosis is critical to develop a treatment plan and prevent serious complications. Among women who were found to have diabetes, only about half (49.4 percent) reported having been told by a health professional that they had diabetes. Non-Hispanic Black women were more likely than non-Hispanic White and Mexican American women to have ever been told by a health professional that they have diabetes (70.6 versus 40.5 and 54.0 percent, respectively).

Diabetes* Among Adults Aged 18 and Older, by Race/Ethnicity and Sex, 2007–2010**

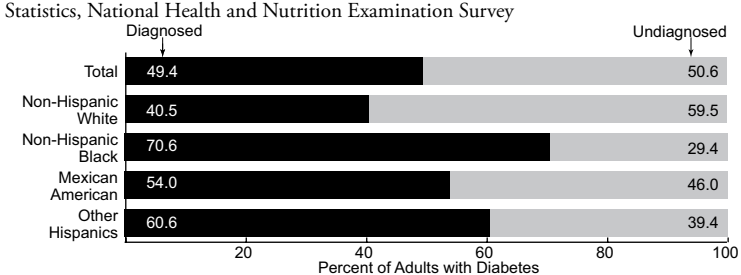
Source II.10: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey



**Tested positive on a Fasting Plasma Glucose (FPG) test, glycohemoglobin A1C test, or 2-hour oral glucose test; estimates are age-adjusted. **The samples of American Indian/Alaska Native, Asian, Native Hawaiian/Pacific Islander, and persons of multiple race were too small to produce reliable results.*

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

Source II.10: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey



**Reported a health professional has ever told them they have diabetes. **Tested positive on a Fasting Plasma Glucose (FPG) test, glycohemoglobin A1C test, or 2-hour oral glucose test. †The samples of American Indian/Alaska Native, Asian, Native Hawaiian/Pacific Islander, and persons of multiple races were too small to produce reliable results.*

HIGH BLOOD PRESSURE

High blood pressure, or hypertension, is a risk factor for heart disease and stroke, which are among the 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.

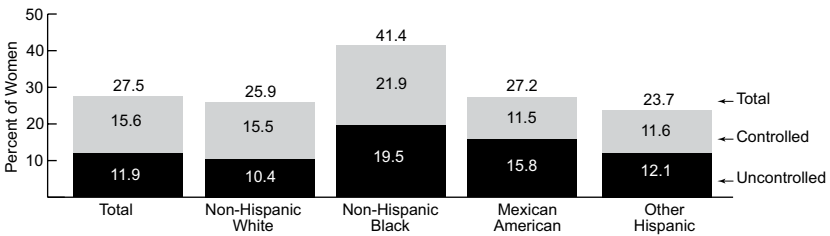
In 2007–2010, 27.5 percent of women were identified as having high blood pressure. This includes 15.6 percent of women with controlled hypertension, who had a normal blood pressure measurement and reported using blood pressure-lowering medication, and 11.9 percent with uncontrolled hypertension, who had a high blood pressure measurement with or without the use of medication. In addition to medication, high blood pressure can also be controlled by losing excess body weight, participating in regular physical activity, avoiding tobacco smoke, and adopting a healthy diet with lower sodium and higher potassium intake.[23]

The prevalence of hypertension does not vary by sex, but increases with age, affecting approximately 3 out of 4 women aged 65 and older in 2007–2010 (74.4 percent; data not shown). Hypertension also varies by race and ethnicity. Over 40 percent of non-Hispanic Black women had hypertension compared to about 25 percent of non-Hispanic White, Mexican American, and Other Hispanic women. However, both non-Hispanic Black and Mexican American women were more likely to have uncontrolled hypertension than non-Hispanic White women (19.5 and 15.8 versus 10.4 percent; respectively).

Hypertension presents a unique public health challenge because many of those affected are unaware of their condition.[24] Among women with uncontrolled hypertension, 44.8 percent had not been previously diagnosed by a health care professional. About half of non-Hispanic White and Mexican American women with uncontrolled hypertension had not been diagnosed (52.5 and 47.9 percent, respectively), compared to only about one-third of non-Hispanic Black women (32.2 percent).

High Blood Pressure Among Women Aged 18 and Older,* by Race/Ethnicity,** 2007–2010

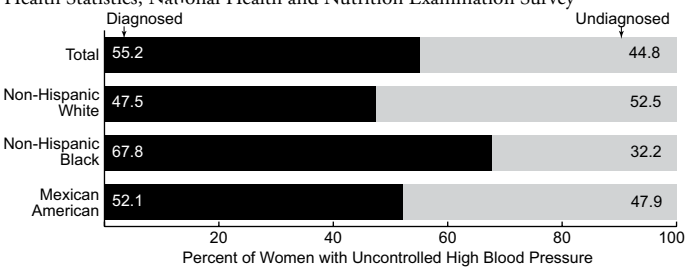
Source II.10: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey



*Includes a measured systolic pressure (during heartbeats) of ≥140mmHg or a diastolic blood pressure (between heartbeats) ≥90mmHg (uncontrolled hypertension, with or without blood pressure-lowering medication) and normal blood pressure (≤140/90mmHg) with reported current medication use (controlled hypertension); percentages may not add to totals due to rounding; estimates are age-adjusted. **The samples of American Indian/Alaska Native, Asian, Native Hawaiian/Pacific Islander, and persons of multiple race were too small to produce reliable results.

Diagnosis Status* Among Women Aged 18 and Older with Uncontrolled High Blood Pressure,** by Race/Ethnicity,† 2007–2010

Source II.10: 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; estimates are age-adjusted. **Includes a measured systolic pressure (during heartbeats) of ≥140mmHg or a diastolic blood pressure (between heartbeats) ≥90mmHg. †The samples of Other Hispanics, American Indian/Alaska Native, Asian, Native Hawaiian/Pacific Islander, and persons of multiple race were too small to produce reliable results.

HEART DISEASE AND STROKE

Cardiovascular disease is the abnormal functioning of the heart and blood vessels. Heart disease and stroke are the most common forms of cardiovascular disease and are the first and third leading causes of death for both men and women in the United States.[25] Risk factors for both include high blood pressure and cholesterol, excess weight, physical inactivity, age, 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.[26] Stroke symptoms can include numbness, headache, dizziness, confusion, trouble speaking, and blurred vision.[26]

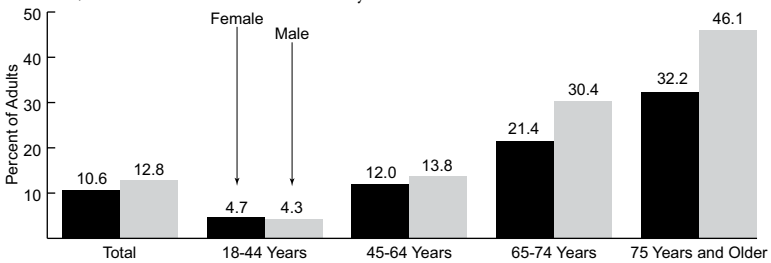
In 2008–2010, 11.8 percent of adults reported a diagnosis of heart disease (data not shown). Overall, men were slightly more likely to have been diagnosed with heart disease (12.8 versus 10.6 percent, respectively). Heart disease increases with age; among women, heart disease ranged from 4.7 percent of those aged 18–44 years to 32.2 percent of those aged 75 and older. As age increases, men are substantially more likely than women to have heart disease. Almost half (46.1 percent) of all men aged 75 and older have been diagnosed with heart disease.

In 2008–2010, similar percentages of women and men reported that they had ever been diagnosed with a stroke (2.6 and 2.7 percent, respectively). Among both women and men, the proportion of persons ever having had a stroke was generally higher among non-Hispanic Blacks. For example, 4.1 percent of non-Hispanic Black women had reported having a stroke compared to 2.5 percent of non-Hispanic White women and 2.6 percent of Hispanic women. Non-Hispanic Asian women were least likely to report having had a stroke (1.1 percent).

For reasons that are poorly understood, 42 percent of women will die within a year of having a heart attack compared to 24 percent of men.[27] There is evidence that women diagnosed with cardiovascular disease are less likely than men to receive certain treatments that have been reported to improve outcomes, and women may also be more likely to have other chronic conditions.[27]

Heart Disease* Among Adults Aged 18 and Older, by Age and Sex, 2008–2010

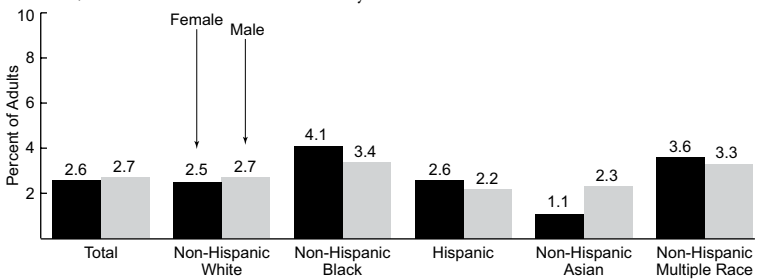
Source II.8: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



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; total estimates are age-adjusted.

Stroke* Among Adults Aged 18 and Older, by Race/Ethnicity and Sex, 2008–2010**

Source II.8: 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.
***The sample of American Indian/Alaska Natives and Native Hawaiian/Pacific Islanders was too small to produce reliable results.*

CANCER

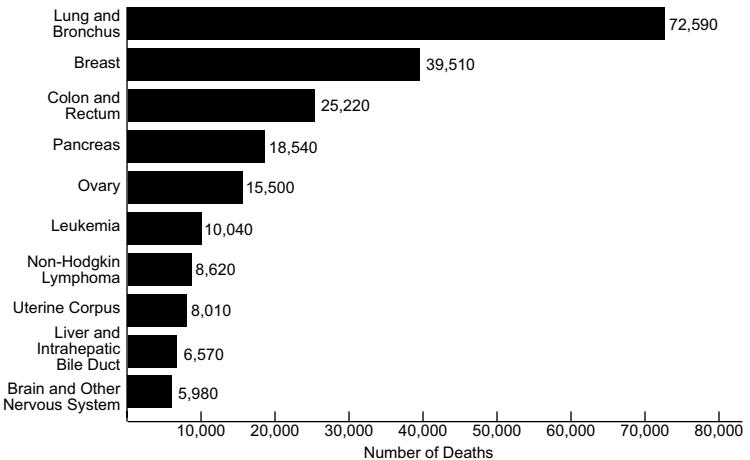
Cancer is the second leading cause of death for both men and women. It is estimated that 790,740 new cancer cases will be diagnosed among females and more than 275,000 females will die of cancer in 2012.[28] Based on prior years, lung and bronchus cancer is expected to be the leading cause of cancer death among females, accounting for 72,590 deaths (26 percent of all cancer deaths), followed by breast cancer, which will be responsible for 39,510 (14 percent of deaths). Colorectal cancer, pancreatic cancer, and ovarian cancer will also be major causes of cancer deaths among females, accounting for an additional 59,260 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 bronchus cancer causes the greatest number of deaths, breast cancer is more commonly diagnosed among females. In 2008, invasive breast cancer occurred among 121.9 per 100,000 females, whereas lung and bronchus cancer occurred in only 54.5 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.

Racial and ethnic disparities in cancer incidence may be explained by differences in behavioral risk factors, such as smoking, heavy alcohol consumption, obesity, poor nutrition, and physical inactivity that are largely a product of socioeconomic differences.[28] Racial and ethnic disparities in cancer death rates tend to be even greater because they are a function of differences in incidence, as well as stage at diagnosis, treatment, and patient survival, which are greatly influenced by health care access and quality.

Leading Causes of Cancer Deaths Among Females (All Ages), by Site, 2012 Estimates

Source II.11: American Cancer Society



Age-Adjusted Invasive Cancer Incidence Rates per 100,000 Females (All Ages), by Site and Race/Ethnicity, 2008

Source II.12: Centers for Disease Control and Prevention and National Cancer Institute

Type of Cancer	Total (Rank)	White*	Black*	Hispanic†	American Indian/Alaska Native*†	Asian/ Pacific Islander*†
Breast	121.9 (1)	122.6	118.0	92.8	65.6	87.9
Lung and Bronchus	54.5 (2)	56.2	49.4	26.4	38.9	26.8
Colon and Rectum	38.7 (3)	37.6	46.0	31.5	27.3	31.1
Uterine Corpus	24.4 (4)	24.8	22.6	20.4	14.2	16.6
Thyroid	18.6 (5)	19.4	11.2	18.1	9.4	19.4
Non-Hodgkin Lymphoma	15.9 (6)	16.3	10.9	14.9	10.2	11.0
Melanoma	15.1 (7)	17.2	0.9	4.1	3.5	1.0
Ovary	12.2 (8)	12.6	9.3	11.2	9.0	9.2
Kidney	11.1 (9)	11.1	12.5	11.1	11.3	5.1
Pancreas	10.5 (10)	10.1	13.9	10.0	6.8	7.9

**May include Hispanics. †Estimates should be interpreted with caution.*

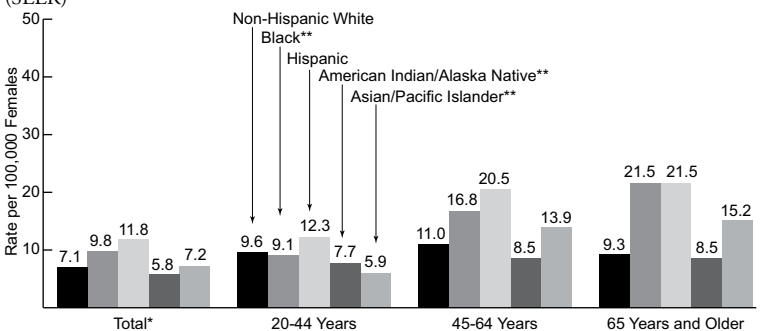
Recommended screening can help detect several forms of cancer in early, more treatable stages, including breast, colorectal, and cervical cancer, and is shown to reduce mortality.[28] Vaccines are also available to help prevent hepatitis B and human papillomavirus (HPV) which can cause liver and cervical cancer, respectively. The Affordable Care Act of 2010 requires health insurance plans to cover recommended preventive services, including cancer screenings and vaccinations, free-of-charge to beneficiaries.[29]

In 2005–2009, cervical cancer incidence rates ranged from 5.8 per 100,000 American Indian/Alaska Native females to 11.8 per 100,000 Hispanic females. For Black, Hispanic, and Asian/Pacific Islander females, cervical cancer incidence increased with age, which may indicate a lack of early screening and treatment that can prevent invasive cancer from developing. The Pap test, a cervical cell examination, is recommended every 3 years for women aged 21–65 years to screen for precancerous lesions and cervical cancer.[30] Precancerous lesions and early, localized invasive cervical cancer are highly treatable; however, about half of invasive cervical cancer cases are not detected in the early, localized stage.[28]

Breast cancer is the most common cancer in women but is also highly treatable when diagnosed early; 99 percent of women will survive 5 years after a breast cancer diagnosis in the early, localized stage. Mammography screening is recommended every other year for women aged 50–74 years.[30] In 2005–2009, the proportion of breast cancer cases detected in the early, localized stage ranged from 54.5 percent among Black women to 65.2 percent among non-Hispanic White women. Disparities in early detection, as well as stage-specific survival, contribute to overall survival differences by race and ethnicity. In 2004–2008, more than 90 percent of non-Hispanic White and Asian/Pacific Islander women survived 5 years after breast cancer diagnosis, compared to about 80 percent of Black and American Indian/Alaska Native women (data not shown).

Invasive Cervical Cancer Incidence Among Females, by Race/Ethnicity and Age, 2005–2009*

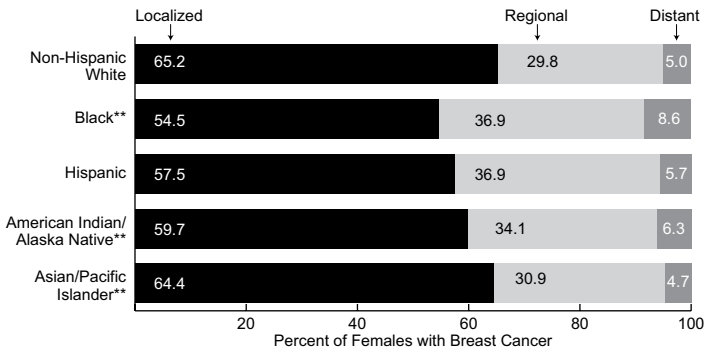
Source II.13: National Cancer Institute, Surveillance, Epidemiology, and End Results (SEER)



*All rates are age-adjusted; total includes females of all ages. **May include Hispanics.

Stage* at Breast Cancer Diagnosis Among Females, by Race/Ethnicity, 2005–2009

Source II.13: National Cancer Institute, Surveillance, Epidemiology, and End Results (SEER)



*Localized cancer is limited to the organ in which it began (no evidence of spread); regional cancer has spread beyond the primary site; distant cancer has spread to distant organs or lymph nodes; percentages may not total to 100 due to rounding. **May include Hispanics.

ASTHMA

Asthma is a chronic inflammatory disorder of the airways characterized by episodes of wheezing, chest tightness, shortness of breath, and coughing. This disorder may be aggravated by allergens, environmental tobacco smoke and air pollution, poor housing conditions (mold, cockroaches, and dust mites), infections of the respiratory tract, and exercise.[31] However, by taking certain precautions, persons with asthma may be able to effectively manage this disorder and participate in daily activities.

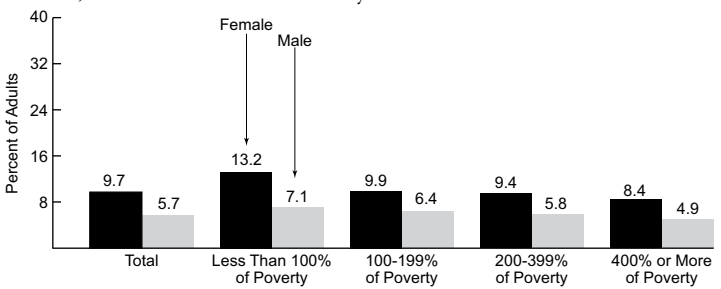
In 2008–2010, women were more likely to have asthma than men (9.7 versus 5.7 percent, respectively); this was true at all income levels and for all racial and ethnic groups. Among women, asthma prevalence decreased as income increased: 13.2 percent of women with household incomes below 100 percent of poverty reported having asthma, while 8.4 percent of women with incomes of 400 percent or more of poverty did so. Non-Hispanic American Indian/Alaska Native and non-Hispanic women of multiple races were most likely to have asthma (19.2 and 17.9 percent, respectively), while non-Hispanic Asian and Hispanic women were least likely to have asthma (5.6 and 7.6 percent, respectively; data not shown).

A visit to the emergency room due to an asthma attack may indicate that asthma is not being effectively controlled or treated. In 2008–2010, 22.7 percent of women with an asthma attack in the past year sought emergency care for their condition. The proportion of women suffering an asthma attack who visited the emergency room varies with race and ethnicity, as well as household income. With regard to race and ethnicity, non-Hispanic Black and women of multiple races were most likely to have visited an emergency room (39.0 and 36.3 percent, respectively), while non-Hispanic White women were the least likely to have done so (17.4 percent).

The likelihood of women with asthma visiting an emergency room decreases as household income increases: nearly one-third of women with household incomes below 100 percent of poverty visited an emergency room in the past year (32.8 percent), compared to 17.5 percent of those with incomes of 400 percent or more of poverty (data not shown).

Asthma* Among Adults Aged 18 and Older, by Poverty Status and Sex, 2008–2010**

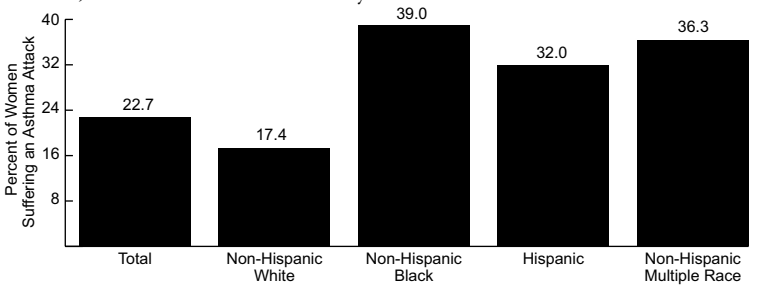
Source II.8: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



*Reported that (1) a health professional has ever told them that they have asthma, and (2) they still have asthma. **Poverty level, defined by the U.S. Census Bureau, was $22,314 for a family of four in 2010.

Emergency Room Visits Among Women Suffering an Asthma Attack* in the Past Year, by Race/Ethnicity, 2008–2010**

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



*Reported that (1) a health professional has ever told them that they have asthma, and (2) they had an asthma attack in the past year. **The sample of Native Hawaiian/Pacific Islanders, non-Hispanic American Indian/Alaska Native, and non-Hispanic Asians was too small to produce reliable results.

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 tracking systems.

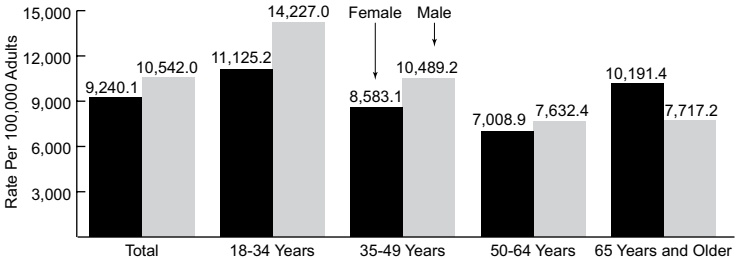
In 2010, there were 23.2 million non-fatal injuries among adults aged 18 and over, resulting in emergency department visits, of which 11.2 million or 48 percent were to women (data not shown). At younger ages, men were more likely than women to visit the emergency department for a non-fatal injury. This pattern was reversed, however, for those aged 65 and older, among whom the rate of emergency department use for non-fatal injuries was 10,191.4 per 100,000 women and 7,717.2 per 100,000 men. More than 90 percent of non-fatal injuries treated in an emergency department were unintentional (data not shown). Although falls are the leading cause of non-fatal injury in every adult age group, they are more prominent at older ages.[32] Being struck by or against an object, motor vehicle crashes, and overexertion are more prominent mechanisms of non-fatal injury at younger ages.

Injuries are the leading cause of death among both men and women aged 18–34. In 2010, men were twice as likely to die of injury as women (102.2 versus 45.9 per 100,000 population; data not shown). Fatal injury rates also vary greatly by race and ethnicity. Among women, injury death rates from all causes were highest for non-Hispanic American Indian/Alaska Native women and lowest for Hispanic and non-Hispanic Asian/Pacific Islander women (71.7, 20.7, and 17.5 deaths per 100,000, respectively). Poisoning recently surpassed motor vehicle traffic as the leading mechanism of fatal injury, with the majority caused by drugs.[33]

With regard to violent deaths, suicide was more common than homicide among women of most racial and ethnic groups, with the exception of non-Hispanic Black women. Non-Hispanic Black women had the highest rate of homicide and lowest rate of suicide among all racial and ethnic groups (6.0 and 2.3 deaths per 100,000, respectively).

Non-Fatal Injury* Among Adults Aged 18 and Older, By Age and Sex, 2010

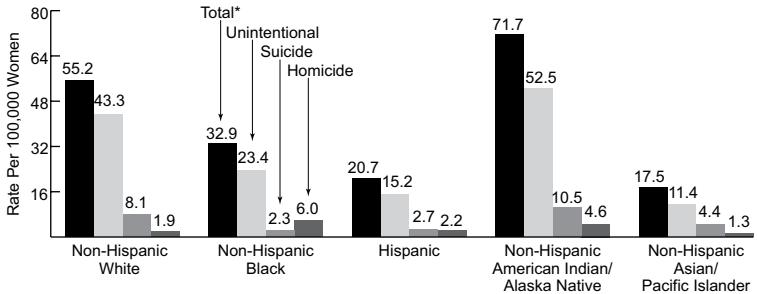
Source II.6: Centers for Disease Control and Prevention, National Center for Injury Prevention & Control, National Electronic Injury Surveillance System – All Injury Program



*Non-fatal injuries resulting in an emergency department visit.

Fatal Injury Among Women Aged 18 and Older, by Intent of Injury and Race/Ethnicity, 2010

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



*Includes listed categories in addition to undetermined intent and injury from legal intervention (e.g., police pursuit).

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.[34] However, types of mental disorders vary with sex. 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.

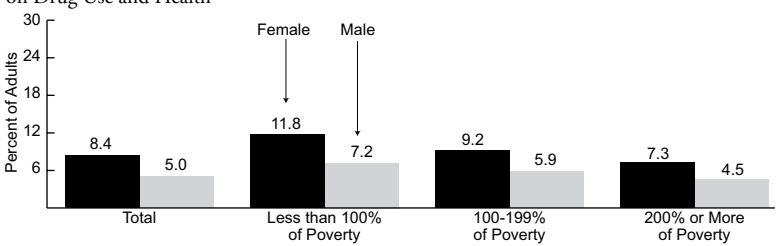
A major depressive episode (MDE) is defined according to the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) as a period of 2 weeks or longer during which there is either depressed mood or loss of interest or pleasure and at least four other symptoms that reflect a change in functioning, such as problems with sleep, eating, energy, concentration, and self-image. In 2009–2010, an estimated 9.8 million women aged 18 years and older, comprising 8.4 percent of that population, reported experiencing an MDE in the past year, compared to 5.5 million or 5.0 percent of men.

Among both men and women, MDE was reported more frequently among those with lower incomes. For example, 11.8 percent of women and 7.2 percent of men with household incomes below 100 percent of poverty experienced past-year MDE, compared to 7.3 percent of women and 4.5 percent of men with incomes of 200 percent or more of poverty.

Although women were more likely than men to experience a past-year MDE, men were twice as likely as women to experience a past-year substance use disorder (12.6 versus 5.8 percent, respectively). Substance use disorder, as defined by the DSM-IV, encompasses both abuse and dependence on alcohol or illicit drugs; abuse relates to social problems with work, family, or the law due to substance use and dependence relates to health and emotional problems, such as tolerance or withdrawal. Women who experienced a past-year MDE were nearly four times as likely to report a substance use disorder than those who did not (17.5 versus 4.8 percent, respectively), while men who experienced a past-year MDE were 2.5 times as likely as their non-affected counterparts to report a substance use disorder (29.4 percent versus 11.7 percent, respectively).

Past Year Major Depressive Episode* Among Adults Aged 18 and Older, by Poverty Status and Sex, 2009–2010**

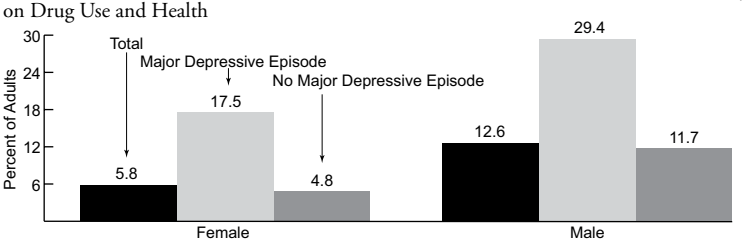
Source II.3: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health



**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, eating, energy, concentration, and self-image. **Poverty level, defined by the U.S. Census Bureau, was $22,314 for a family of four in 2010; adults aged 18-22 years living in college dormitories were excluded from poverty determinations.*

Past Year Substance Use Disorder,* by Sex and Past Year Major Depressive Episode, 2009–2010**

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



**Substance use disorder is 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. **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, eating, energy, concentration, and self-image.*

ADVERSE CHILDHOOD EXPERIENCES

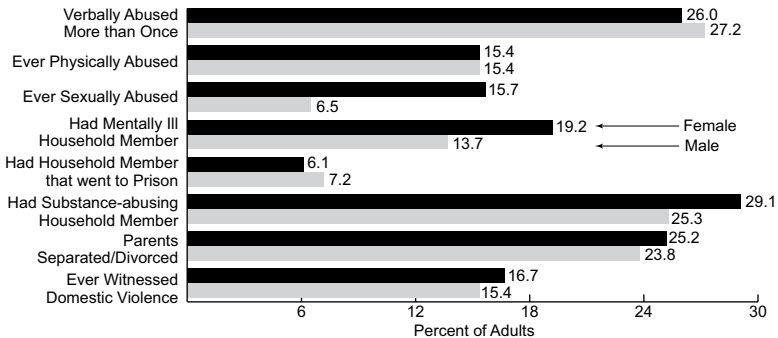
Adverse childhood experiences include verbal, physical, and sexual abuse, as well as forms of family dysfunction such as having a substance-abusing household member or witnessing domestic violence.[35] Exposure to these types of traumatic experiences early in life has been associated with many mental and physical health problems throughout the lifespan, including substance abuse, depression, cardiovascular disease, and premature death.[36,37]

In 2009–2010 among a 7-State reporting area, more than one-in-four women (26.0 percent) reported that they had been verbally abused as a child on more than one occasion—defined as being sworn at, insulted or put down by a parent or adult in the home—and about 15 percent reported that they had ever been physically or sexually abused as a child (15.4 and 15.7 percent, respectively). Types of childhood family dysfunction among women ranged from 6.1 percent who reported that a household member had gone to prison to more than a quarter who had a substance-abusing household member (29.1 percent) or whose parents separated or divorced (25.2 percent). Compared to men, women were more than twice as likely to have experienced sexual abuse (15.7 versus 6.5 percent, respectively) and were also more likely to report having had a mentally ill or substance-abusing household member.

The likelihood of negative health outcomes later in life increases with the number of adverse childhood experiences.[37] Among the 7-State reporting area in 2009–2010, 9.6 percent of women reported having five or more adverse experiences in childhood. Women with less than a high school education were most likely to have reported five or more adverse childhood experiences (17.0 percent) while college-educated women were least likely to have endured five or more adverse childhood experiences (6.5 percent).

Adverse Childhood Experiences* Among Adults Aged 18 and Older in 7 States, By Type and Sex, 2009–2010**

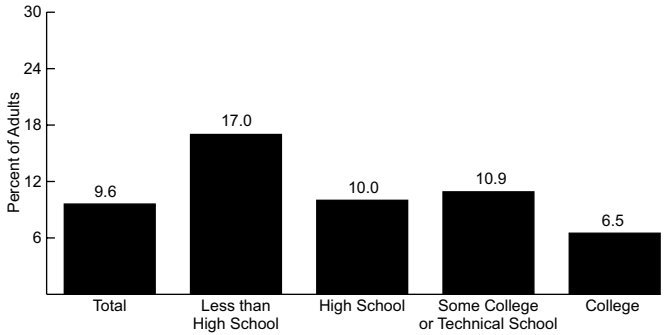
Source II.14: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System



*Report of adverse experiences that occurred prior to 18 years of age; physical abuse did not include spanking. **Arkansas and Louisiana contributed data in 2009 and DC, Hawaii, Nevada, Vermont, and Wisconsin contributed data in 2010.*

Five or More Adverse Childhood Experiences* Among Women Aged 18 and Older in 7 States, By Education Level, 2009–2010**

Source II.14: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System



*Report of five or more types of adverse experiences that occurred prior to 18 years of age (types listed in previous figure). **Arkansas and Louisiana contributed data in 2009 and DC, Hawaii, Nevada, Vermont, and Wisconsin contributed data in 2010.*

VIOLENCE AGAINST WOMEN: INTIMATE PARTNER VIOLENCE

Intimate partner violence (IPV) has been defined as physical violence, sexual violence, threats of physical or sexual violence, stalking and psychological aggression by a current or former intimate partner. IPV can occur among heterosexual or same-sex couples and does not require sexual intimacy.[38,39] 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 6 percent reported at least one of these experiences in the past 12 months.

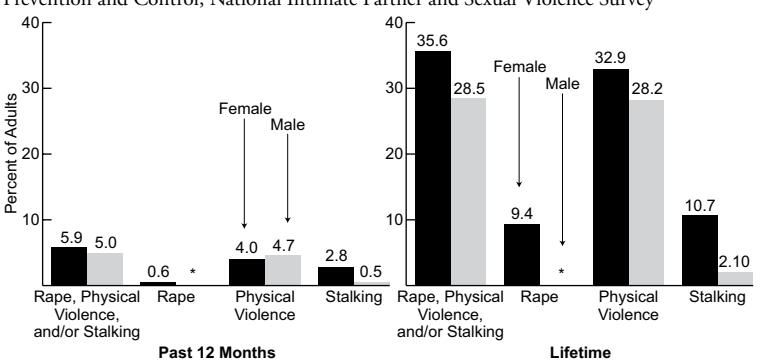
Of these forms of IPV, lifetime experience of physical violence was most commonly reported by women (32.9 percent), followed by stalking (10.7 percent), and rape (9.4 percent). While rape and stalking were less commonly reported among men, 28.5 percent of adult men reported having experienced any IPV in their lifetime.

Psychological aggression is a common form of IPV experienced by nearly half of all women and men during their lifetime. Women who experienced psychological aggression reported being called names (64.3 percent), insulted or humiliated (58.0 percent), witnessing anger by their intimate partner that seemed dangerous (57.9 percent), and facing demands to know where she was and what she was doing (61.7 percent). In addition, 8.6 percent of women reported that an intimate partner tried to get them pregnant when they did not want to or refused to use a condom (data not shown).

IPV has been associated with a range of both short- and long-term health and social consequences.[40] Among women who have experienced IPV, 80.8 percent reported at least one IPV-related impact, such as injury, symptoms of post-traumatic stress disorder (PTSD), or missing work or school. The most commonly reported impacts were fearfulness (72.2 percent), PTSD symptoms (62.6 percent), and concern for safety (62.3 percent).

Past Year and Lifetime Prevalence of Rape, Physical Violence, and Stalking by an Intimate Partner Among Adults Aged 18 and Older, by Sex, 2010

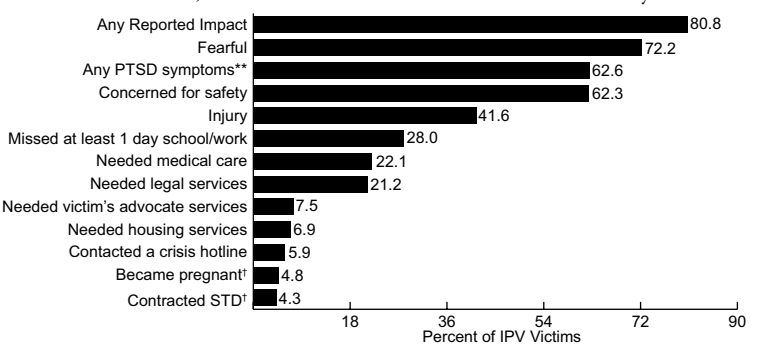
Source II.15: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, National Intimate Partner and Sexual Violence Survey



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

Impacts of Intimate Partner Violence Among Female Victims Aged 18 and Older,* 2010

Source II.15: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, National Intimate Partner and Sexual Violence Survey



*Includes rape, physical violence and/or stalking by an intimate partner. **Includes nightmares; tried not to think about or avoided being reminded of; felt constantly on guard, watchful, or easily startled; felt numb or detached. †Asked only of those who reported rape by an intimate partner.

VIOLENCE AGAINST WOMEN: SEXUAL VIOLENCE

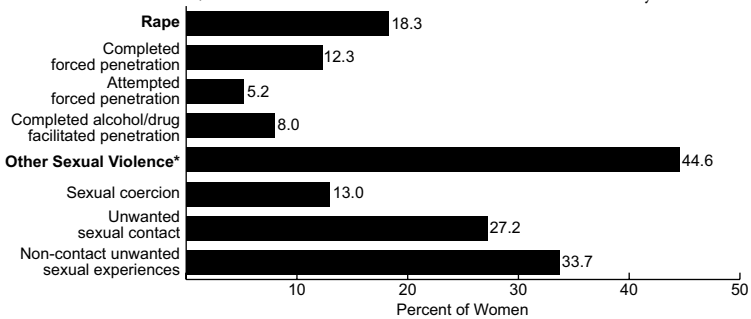
Sexual violence includes rape, sexual coercion, and unwanted sexual experiences, regardless of whether the perpetrator was an intimate partner, acquaintance, or stranger.[38] In 2010, nearly one-fifth (18.3 percent), or 21 million U.S. women reported having been raped in their lifetime while 1.1 percent, or 1.3 million experienced rape in the past year. More than three-quarters of female victims of rape were first raped before the age of 25 years (data not shown). Less than 1.5 percent of men reported having been raped in their lifetime (data not shown).

Lifetime experience of sexual victimization other than rape was reported by 53 million or 44.6 percent of women in 2010. This includes non-contact unwanted sexual experiences, such as someone harassing or exposing themselves without physical contact, which was reported by 33.7 percent of women, and unwanted sexual contact, such as unwanted fondling, reported by 27.2 percent of women. Sexual coercion, defined as unwanted sexual penetration that occurs after non-physical pressure such as repeated demands for sex, was also reported by 13.0 percent of women. Nearly one-quarter of men reported having experienced sexual victimization other than rape in their lifetime (data not shown).

The prevalence of rape and other forms of sexual violence reported by women vary by race and ethnicity. Non-Hispanic women of multiple races and non-Hispanic American Indian/Alaska Native women were most likely to report having experienced rape at some point in their lifetime (33.5 and 26.9 percent, respectively), while Hispanic and non-Hispanic White women were least likely (14.6 and 18.8 percent, respectively). Nearly 60 percent of non-Hispanic women of multiple races reported having experienced some form of sexual violence other than rape in their lifetime as did 40–50 percent of non-Hispanic White, non-Hispanic Black and non-Hispanic American Indian/Alaska Native women.

Lifetime Prevalence of Rape and Other Forms of Sexual Violence Among Women Aged 18 and Older, 2010

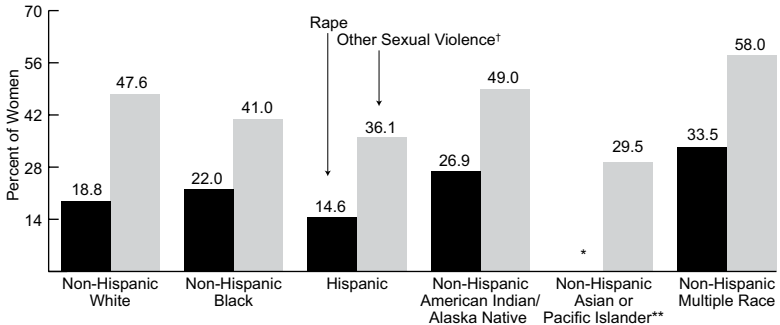
Source II.15: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, National Intimate Partner and Sexual Violence Survey



*Includes sexual coercion, unwanted sexual contact, and non-contact unwanted sexual experiences.

Lifetime Prevalence of Rape and Other Forms of Sexual Violence Among Women Aged 18 and Older, by Race/Ethnicity, 2010

Source II.15: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, National Intimate Partner and Sexual Violence Survey



*Estimate does not meet the standard of reliability; relative standard error >30% or cell size ≤ 20. **Separate estimates were not available for Asian and Native Hawaiian and Other Pacific Islanders. †Includes sexual coercion, unwanted sexual contact, and non-contact unwanted sexual experiences.*

SEXUALLY TRANSMITTED INFECTIONS

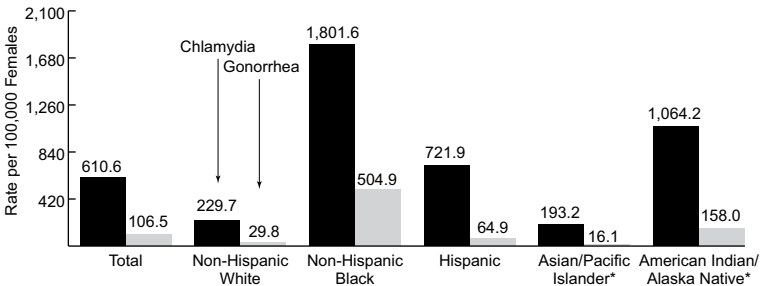
Sexually transmitted infections (STIs) are considered a hidden epidemic because symptoms are often absent and the causes are not openly discussed. Yet there are approximately 19 million new STI cases in the United States each year at an annual health care cost of nearly 17 billion dollars.[41] Active infections can increase the likelihood of contracting another STI, such as HIV, and untreated STIs can lead to pelvic inflammatory disease, infertility, and adverse pregnancy outcomes. Safer sex practices, screening, and treatment can help reduce the burden of STIs.

The Centers for Disease Control and Prevention requires State and local reporting of new chlamydia, gonorrhea, syphilis, and HIV cases (see page on HIV/AIDS). Reported STI rates among females vary by age and race and ethnicity. Rates are highest among adolescents and young adults; over 70 percent of all chlamydia and gonorrhea cases in females occurred among those under 25 years of age in 2010 (data not shown). With the exception of 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 7.8 times higher for non-Hispanic Black females, 4.6 times higher for American Indian/Alaska Native females, and 3.1 times higher for Hispanic females. The syphilis rate was also highest among non-Hispanic Black females (7.5 versus 0.3 per 100,000 non-Hispanic White females; data not shown).

Although chlamydia, gonorrhea, and syphilis can be cured with appropriate antibiotics, viral STIs, such as HIV, human papillomavirus (HPV), and herpes cannot be cured but can be monitored and managed to prevent symptoms and disease progression.[12] Herpes Simplex Virus Type 2 (HSV-2) is an infection that causes genital herpes and can lead to blindness, neonatal infections, and increased risk for HIV. Herpes Simplex Virus Type 1 (HSV-1) can also cause genital herpes, but it is more commonly associated with sores around the mouth, and recurring symptoms are less common than with HSV-2.[42] Overall, 59.2 percent of women aged 18–49 years tested positive for HSV-1 and 22.0 percent tested positive for HSV-2 in 2009–2010. The prevalence of both HSV-1 and HSV-2 increased with age.

Rates of Chlamydia and Gonorrhea Among Females (All Ages), by Race/Ethnicity, 2010

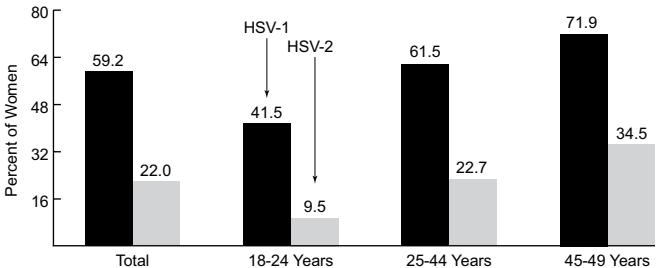
Source II.16: Centers for Disease Control and Prevention, Sexually Transmitted Disease Surveillance



*May include Hispanics.

HSV-1 and HSV-2 Infection Among Women, by Age, 2009–2010

Source II.9: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey



HIV/AIDS

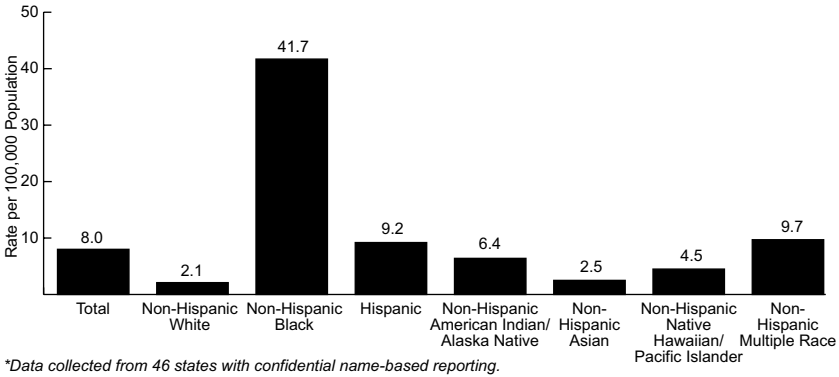
Acquired immunodeficiency syndrome (AIDS) is the final stage of infection with the human immunodeficiency virus (HIV), which destroys or disables the cells that are responsible for fighting infection. AIDS is diagnosed when HIV has weakened the immune system enough that the body has difficulty fighting infections.[43] HIV is predominantly transmitted through sexual contact and injection drug use. While HIV and AIDS disproportionately affect men who have sex with men, a notable proportion of HIV/AIDS diagnoses occur among women and particularly minority women. In 2010, adolescent and adult females accounted for 21.3 percent of new HIV diagnoses at ages 13 and older, with a rate of 8.0 cases per 100,000 females. The rate of new diagnoses among males was 31.4 per 100,000 (data not shown).[44]

Rates of new HIV cases among adolescent and adult females vary dramatically by race and ethnicity. HIV disproportionately affects non-Hispanic Black females at a rate that is nearly twenty times higher than among non-Hispanic White females (41.7 versus 2.1 cases per 100,000 females, respectively). Non-Hispanic Black females accounted for two-thirds of all new HIV diagnoses among females.[44] New HIV diagnoses are also elevated among Hispanic, non-Hispanic American Indian/Alaska Native, and non-Hispanic females of multiple races (9.2, 6.4, and 9.7 cases per 100,000 females, respectively).

Early detection of HIV infection is critical in preventing transmission of the virus to others, and persons aware of their HIV infection can benefit from advances in medicine that may significantly prolong their lives. Early entry to care can also produce significant cost savings for medical treatment.[45] Despite these individual and societal benefits, a sizeable proportion of people identified as HIV-positive receive an AIDS diagnosis simultaneously or within a year of HIV diagnosis. In 2009, 30.3 percent of HIV-positive females received an AIDS diagnosis within 12 months of their HIV diagnosis, which was slightly less than for males (33.1 percent, all ages included).

Estimated Rates of New HIV Cases Reported Among Females Aged 13 and Older, by Race/Ethnicity, 2010*

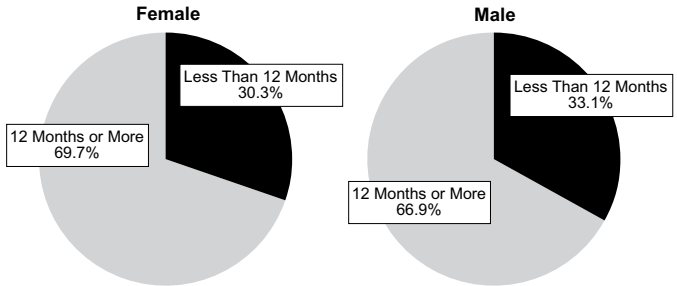
Source II.17: Centers for Disease Control and Prevention, HIV Surveillance Report



*Data collected from 46 states with confidential name-based reporting.

Time to an AIDS Diagnosis After a Diagnosis of HIV Infection (All Ages), by Sex, 2009*

Source II.17: Centers for Disease Control and Prevention, HIV Surveillance Report



*Data collected from 46 states with confidential name-based reporting.

OSTEOPOROSIS

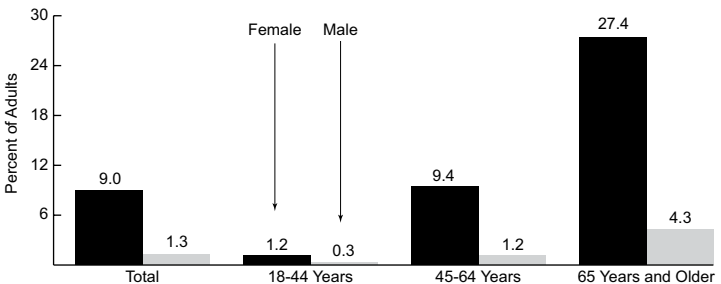
Osteoporosis is a bone weakness characterized by low bone density with symptoms that generally occur only after the disease is advanced.[46] Bone fractures are the most common consequence; others include loss of height, stooped posture, and back and neck pain from spinal fractures. Risk of osteoporosis increases with age and is much more common among women than men. In 2007–2010, an estimated 10 million women (9.0 percent) and 1.3 million men (1.3 percent) had osteoporosis. More than one in four women aged 65 and older had been diagnosed with osteoporosis, compared with 4.3 percent of men. Osteoporosis also varied significantly by race and ethnicity. About 30 percent of non-Hispanic White and Hispanic women aged 65 and older reported that they had been diagnosed with osteoporosis, compared to 12.9 percent of non-Hispanic Black women of the same age (data not shown).

Osteoporosis may be prevented and treated by getting the recommended amounts of calcium and vitamin D, by engaging in regular weight-bearing physical activity (such as walking), and by taking prescription medication when appropriate.[46,47] To promote early diagnosis 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.[48]

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 die within a year of their injury.[47] 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 2010, 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.[47]

Diagnosed Osteoporosis* Among Adults Aged 18 and Older, By Age and Sex, 2007–2010

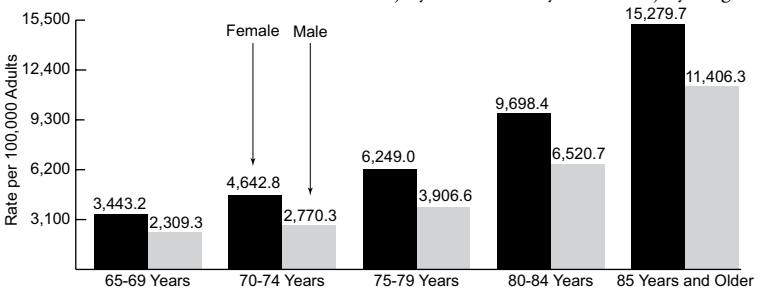
Source II.10: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey



*Reported a health professional had ever told them they had osteoporosis.

Nonfatal Unintentional Injury Due to Falls* per 100,000 Adults Aged 65 and Older, by Age and Sex, 2010

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.[49] 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.

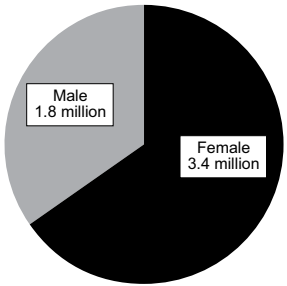
In 2012, 5.2 million or 13 percent of U.S. adults aged 65 and older are estimated to have Alzheimer's disease and another 200,000 below age 65 are thought to have early-onset Alzheimer's. Due to the aging of the population, the number of adults aged 65 and older with Alzheimer's disease is expected to triple by 2050.[49] Women constitute 3.4 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.[1] Severe dementia causes complications, such as immobility and swallowing disorders, that can lead to death. In 2010, 205.2 per 100,000 or nearly 83,000 adults aged 65 and older, about 70 percent of whom were women, died of Alzheimer's. The risk of death due to Alzheimer's increases greatly with age, ranging from 19.8 deaths per 100,000 for those aged 65–74 years to 987.1 deaths per 100,000 for those aged 85 and older. Overall, women are about 75 percent more likely than men to die of Alzheimer's disease (257.6 versus 144.0 deaths per 100,000 adults aged 65 and older). 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.[49]

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 nearly 15 million Americans who provide unpaid care for a person with Alzheimer's or another dementia, about 70 percent are women.[49] 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.[49]

Adults Aged 65 and Older with Alzheimer's Disease,* By Sex, 2012

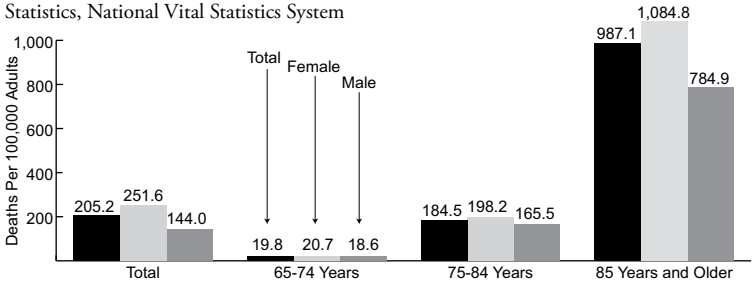
Source II.18: Alzheimer's Association, Alzheimer's Disease Facts and Figures



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 in 2010.

Deaths Due to Alzheimer's Disease* per 100,000 Adults Aged 65 and Older, By Age and Sex, 2010

Source II.19: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



Deaths with Alzheimer's disease listed as underlying cause.

SLEEP HEALTH

Just like good nutrition and physical activity, adequate sleep is vital to healthy functioning and well-being. Inadequate sleep increases the likelihood of occupational errors and motor vehicle accidents and is also linked to various chronic conditions including diabetes, obesity, cardiovascular disease, and depression.[50] In addition to competing demands and insufficient time for sleep, conditions such as insomnia and sleep apnea (sleep-disordered breathing) can also contribute to poor sleep quality.[51]

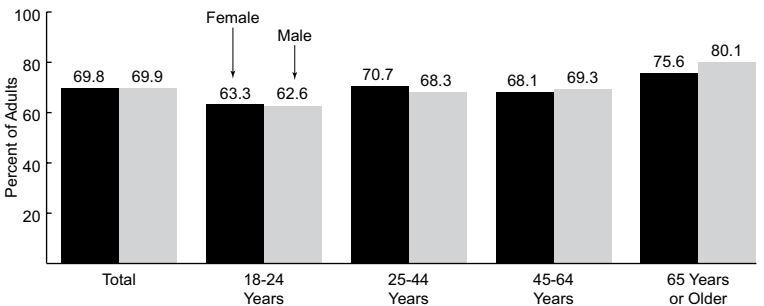
The National Sleep Foundation recommends that adults get 7–9 hours of sleep per day.[52] In 2008–2010, about 70 percent of women and men reported getting an adequate amount of sleep, defined as 8 or more hours for persons aged 18–21 years of age and 7 or more hours for those aged 22 years or older. Among both women and men, the probability of getting adequate sleep generally increased with age for both women and men and was highest among those aged 65 years and older (75.6 and 80.1 percent, respectively). By contrast, only about 63 percent of young adults aged 18–24 years reported getting an adequate amount of sleep.

Among women, single mothers were least likely to report getting adequate hours of sleep (60.1 percent), followed by single women without children (67.1 percent). Women who were married or cohabitating without children and those in two-parent families were more likely to get a sufficient amount of sleep (76.1 and 72.1 percent, respectively).

Adequate sleep also varied by poverty status and race and ethnicity. Fewer than two-thirds (64.4 percent) of women living in households with incomes below the poverty level had sufficient hours of sleep, compared to nearly three-quarters of women living in households with incomes of 400 percent or more of poverty (73.4 percent; data not shown). With respect to race and ethnicity, non-Hispanic Black women were less likely than women of other racial and ethnic groups to get adequate hours of sleep (62.8 percent compared to about 70 percent of other women; data not shown).

Adequate Sleep* Among Adults Aged 18 and Older, by Age and Sex, 2008–2010

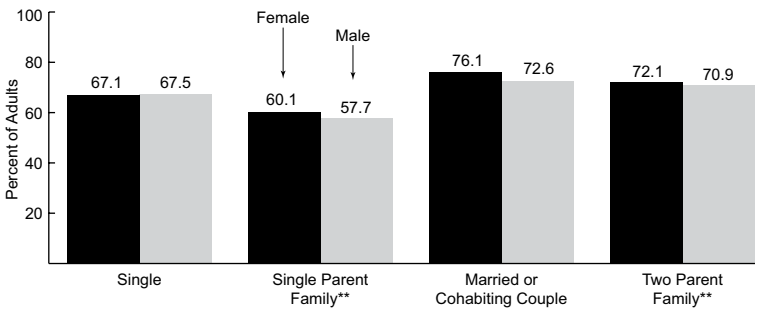
Source II.8: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey



*Defined as reporting an average of 8 or more hours of sleep per day for persons aged 18-21 years and 7 or more hours for persons aged 22 years and older; total estimates are age-adjusted.

Adequate Sleep* Among Adults Aged 18 and Older, by Family Structure and Sex, 2008–2010

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



*Defined as reporting an average of 8 or more hours of sleep per day for persons aged 18-21 years and 7 or more hours for persons aged 22 years and older; estimates are age-adjusted. **Includes at least one child under 18 years of age.