

Health Risks and Behaviors

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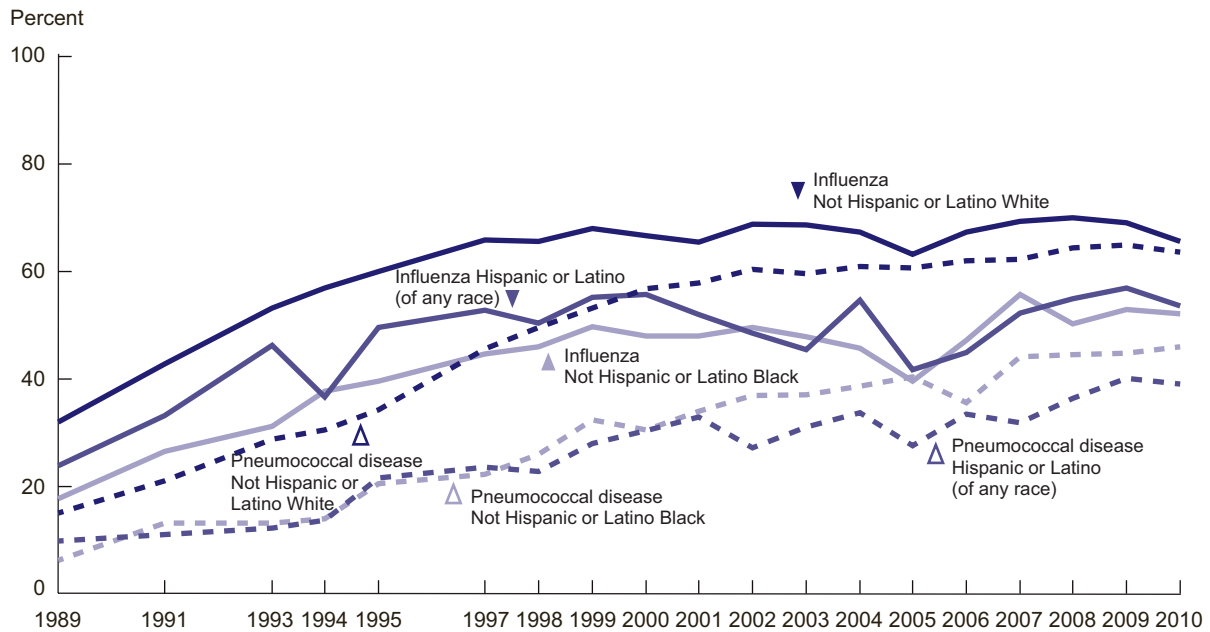
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INDICATOR 21 Vaccinations

Vaccinations against influenza and pneumococcal disease are recommended for older Americans, who are at increased risk for complications from these diseases compared with younger individuals.^{13–16} Influenza vaccinations are given annually, and pneumococcal vaccinations are usually given once in a lifetime. The costs associated with these vaccinations are covered under Medicare Part B.

Percentage of people age 65 and over vaccinated against influenza and pneumococcal disease, by race and Hispanic origin, selected years 1989–2010



NOTE: For influenza, the percentage vaccinated consists of people who reported having a flu shot during the past 12 months and does not include receipt of nasal spray flu vaccinations. For pneumococcal disease, the percentage refers to people who reported ever having a pneumonia vaccination. See data sources for the definition of race and Hispanic origin in the National Health Interview Survey.

Reference population: These data refer to the civilian noninstitutionalized population.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

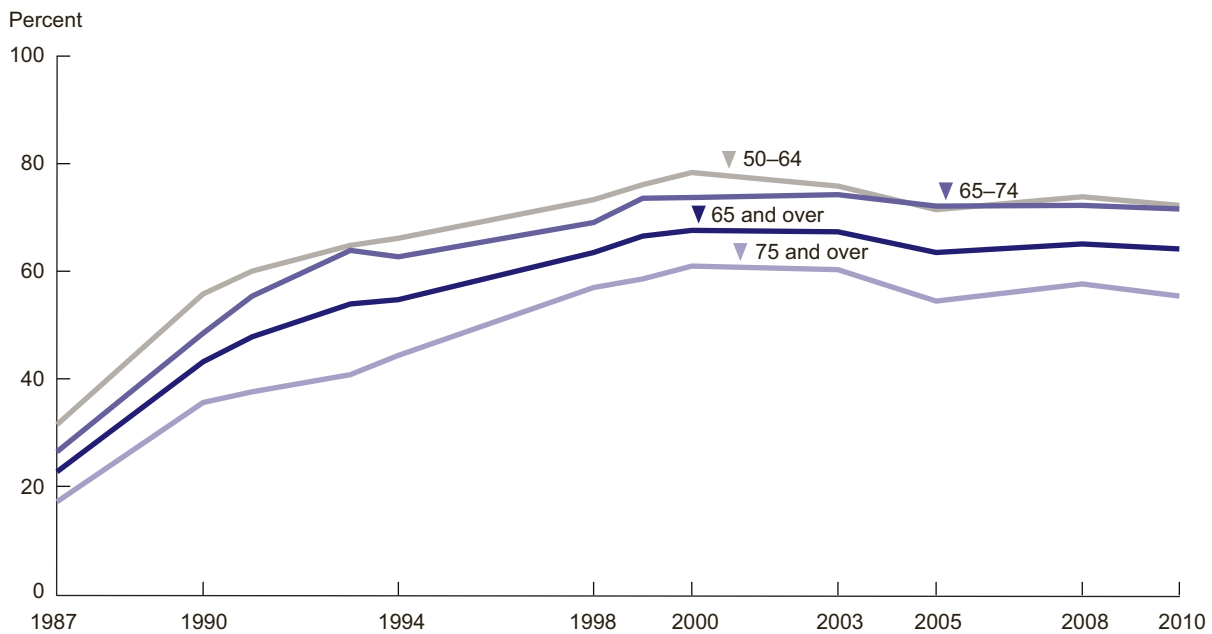
- In 2010, 63 percent of people age 65 and over reported receiving a flu shot in the past 12 months; however, there were differences by race and ethnicity. Sixty-six percent of non-Hispanic Whites reported receiving a flu shot, compared with 52 percent of non-Hispanic Blacks and 54 percent of Hispanics.
- In 2010, about 60 percent of people age 65 and over had ever received a pneumonia vaccination. Despite increases in the rates for all groups over time, in 2010, non-Hispanic Whites were more likely to have received a pneumonia vaccination (64 percent) compared with non-Hispanic Blacks (46 percent) or Hispanics (39 percent).
- The percentage of older people receiving vaccinations increased with age. In 2010, about 70 percent of persons age 85 and over had received a flu shot, compared with 68 percent of persons age 75–84 and 59 percent of persons age 65–74. For pneumonia vaccinations, 68 percent of persons 85 and over had ever received a pneumonia vaccination compared with 55 percent of persons age 65–74.

Data for this indicator's charts and bullets can be found in Tables 21a and 21b on page 122.

INDICATOR 22 Mammography

Health care services and screenings can help prevent disease or detect it at an early, treatable stage. Mammography has been shown to be effective in reducing breast cancer mortality among women age 50–74.¹⁷

Percentage of women age 50 and over who had a mammogram within the past two years, by age group, selected years, 1987–2010



NOTE: Questions concerning the use of mammography differed slightly on the National Health Interview Survey across the years for which data are shown. For details, see *Health, United States 2011*, Appendix II.

Reference population: These data refer to the civilian noninstitutionalized population.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

- Among women age 65 and over, the percentage who had a mammogram within the preceding two years almost tripled from 23 percent in 1987 to 64 percent in 2010. There was a significant difference in 1987 between the percentage of older non-Hispanic White women (24 percent) and the percentage of older non-Hispanic Black women (14 percent) who reported having had a mammogram but, in recent years, this difference has disappeared.
- Older women who were poor were less likely to have had a mammogram in the preceding two years than older women who were not poor. In 2010, 51 percent of women age 65 and over who lived in families with incomes of less than 100 percent of the poverty threshold reported having had a mammogram.

Among older women living in families with incomes of 400 percent or more of the poverty threshold, 75 percent reported having had a mammogram.

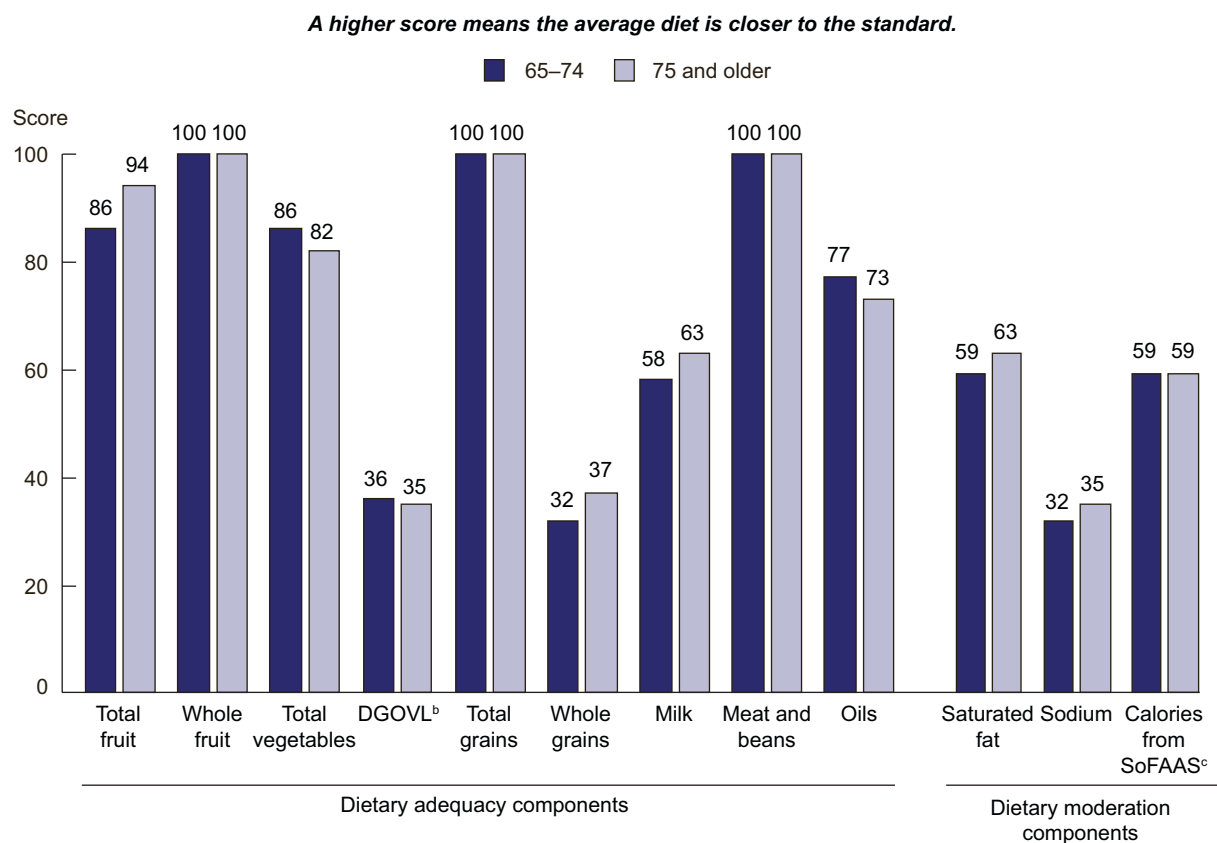
- Older women without a high school diploma were less likely to have had a mammogram than older women with a high school diploma. In 2010, 54 percent of women age 65 and over without a high school diploma reported having had a mammogram in the preceding two years, compared with 63 percent of women who had a high school diploma and 71 percent of women who had at least some college education.

Data for this indicator's charts and bullets can be found in Table 22 on page 123.

INDICATOR 23 Diet Quality

Dietary intake affects the health of older Americans, because poor diet quality is associated with cardiovascular disease, hypertension, type 2 diabetes, osteoporosis, and some types of cancer.¹⁸ An index that assesses the multidimensional components of diet is useful in describing diet quality. The Healthy Eating Index-2005,^{19,20} developed by the U.S. Department of Agriculture (USDA) Center for Nutrition Policy and Promotion, measures compliance with the diet-related recommendations of the *2005 Dietary Guidelines for Americans*.¹⁸ It has 12 components, and a higher score indicates a higher quality diet. Intakes equal to or better than the standards set for each component are assigned a maximum score of 100 percent. For the nine adequacy components (e.g., total fruit), no intake gets zero percent, and scores increase up to 100 percent as the intakes increase towards the standard. The three moderation components (e.g., sodium) are scored in reverse; that is, excessively high intakes get zero percent and as intakes decrease toward the standard, scores increase up to 100 percent. Scores are averages across all adults based on usual dietary intake.

Average diet scores,^a for the population age 65 and over, by age group, 2007–2008



^a Scores, reported as percentages in this chart, are average Healthy Eating Index-2005 scores and not the percentages of individuals who meet the diet quality standards.

^b Dark green and orange vegetables and legumes.

^c Solid fats, alcoholic beverages, and added sugars.

Reference population: These data refer to the resident noninstitutionalized population.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, *National Health and Nutrition Examination Survey, 2007–2008* and U.S. Department of Agriculture, Center for Nutrition Policy and Promotion, *MyPyramid Equivalents Database 2007–2008* (preliminary), Healthy Eating Index-2005.

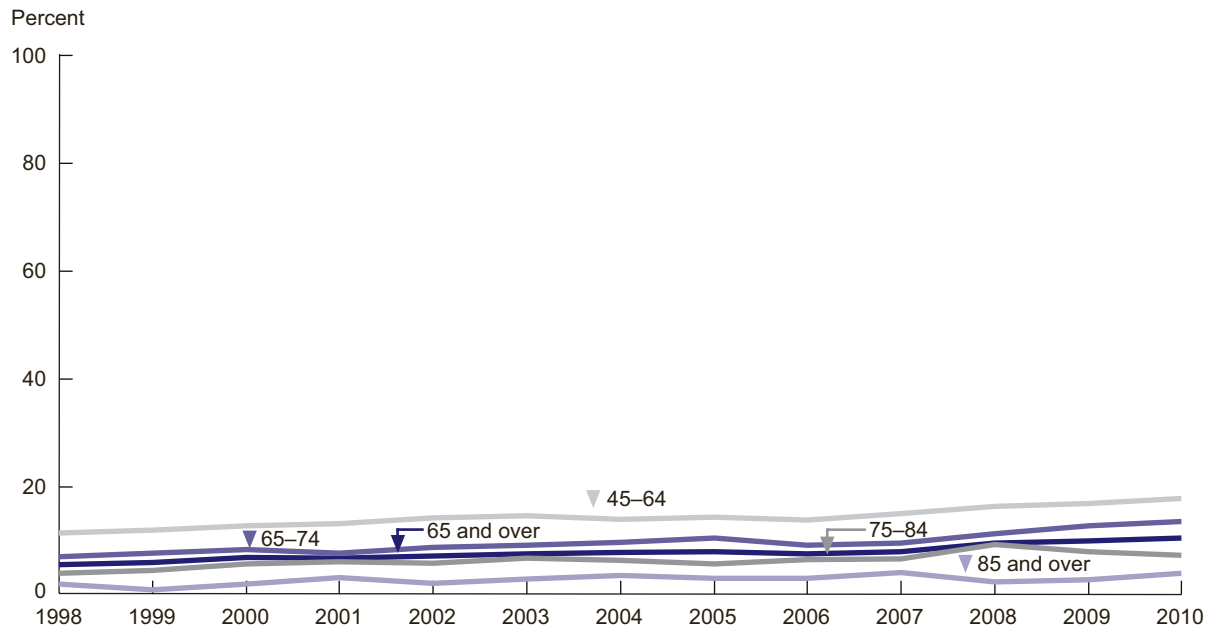
- In 2007–2008, the average diet of older Americans (age 65 and over) scored 100 percent for only three dietary components: whole fruit, total grains, and meat and beans. In other words, diets for these three components met the standard, while nine fell short—ranging from 33 percent (sodium) to 90 percent (total fruit).
- The average diet of adults age 75 and over was superior in quality to the average diet of their younger counterparts, age 65–74, for total fruit, whole grains, milk, saturated fat, and sodium. For total vegetables and oils, adults’ age 65–74 average diets were better than those age 75 and over.
- Average intakes of calories from solid fats, alcoholic beverages, and added sugars were too high and thus remained well below the quality standards for both age groups.
- Major improvements in the nutritional health of older Americans could be made by increasing intakes of whole grains, dark green and orange vegetables and legumes, and fat-free or low-fat milk products and by incorporating foods and beverages that are lower in sodium and have fewer calories from solid fats, alcoholic beverages, and added sugars.

Data for this indicator’s charts and bullets can be found in Table 23 on page 124.

INDICATOR 24 Physical Activity

Physical activity is beneficial for the health of people of all ages, including the age 65 and over population. It can reduce the risk of certain chronic diseases, may relieve symptoms of depression, helps to maintain independent living, and enhances overall quality of life.^{21,22} Research has shown that even among frail and very old adults, mobility and functioning can be improved through physical activity.²³ Strength training is recommended as part of a comprehensive physical activity program among older adults and may help to improve balance and decrease risk of falls.²⁴ In 2008, the Department of Health and Human Services released updated guidelines for aerobic activity and muscle-strengthening activities for Americans.

Percentage of people age 45 and over who reported participating in leisure-time aerobic and muscle-strengthening activities that meet the 2008 Federal physical activity guidelines, by age group, 1998–2010



NOTE: This measure of physical activity differs from previous editions of *Older Americans*. The measure reflects the 2008 Federal physical activity guidelines for Americans (available from: <http://www.health.gov/PAGuidelines/>). The 2008 Federal guidelines recommend that for substantial health benefits, adults perform at least 150 minutes (2 hours and 30 minutes) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Aerobic activity should be performed in episodes of at least 10 minutes, and preferably, it should be spread throughout the week. The 2008 guidelines also recommend that adults perform muscle-strengthening activities that are moderate or high intensity and involve all major muscle groups on two or more days a week, because these activities provide additional health benefits. The measure shown here presents the percentage of people who fully met both the aerobic activity and muscle-strengthening guidelines.

Reference population: These data refer to the civilian noninstitutionalized population.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

- In 2010, about 11 percent of people age 65 and over reported participating in leisure-time aerobic and muscle-strengthening activities that met the 2008 Federal physical activity guidelines. The percentage of older people meeting the physical activity guidelines decreased with age, ranging from 14 percent among people age 65–74 to 4 percent among people age 85 and over.
- Men age 65 and over were more likely than women in the same age group to meet the physical activity guidelines (14 percent and

8 percent, respectively, in 2010). Older non-Hispanic Whites reported higher levels of physical activity than non-Hispanic Blacks (12 percent compared with 5 percent).

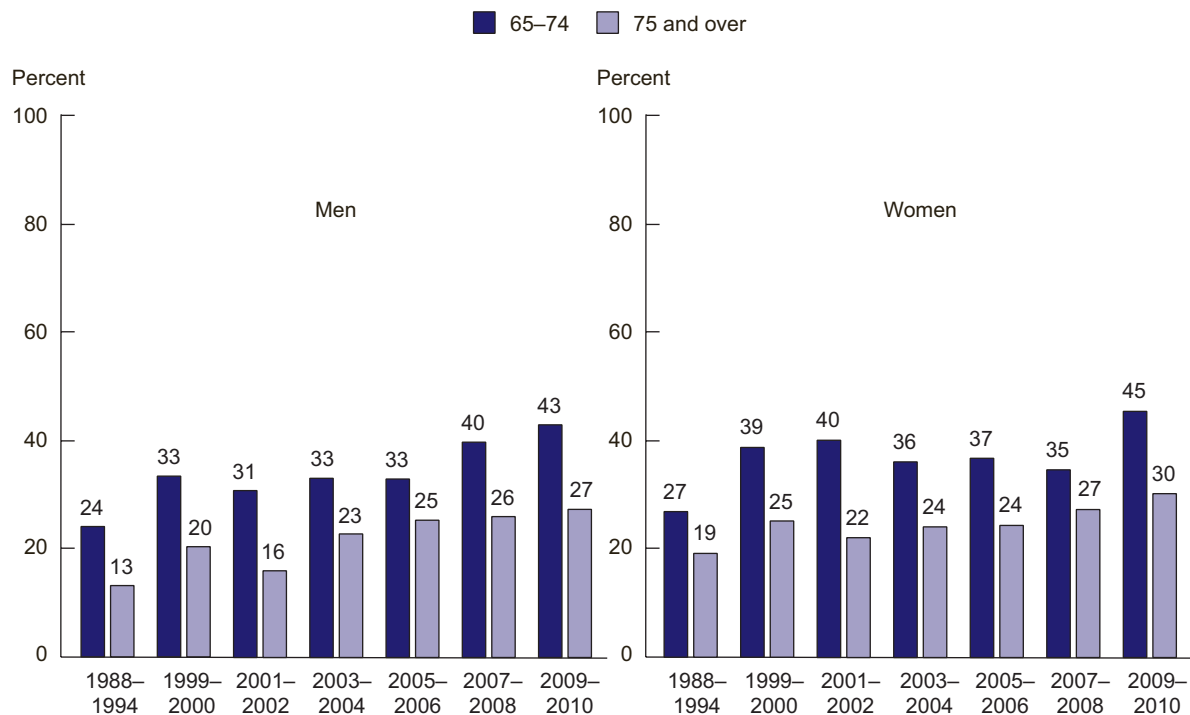
- The percentage of older people meeting the Federal physical activity guidelines increased over time. In 1998, about 6 percent of people age 65 and over met the guidelines, compared with 11 percent in 2010.

Data for this indicator's charts and bullets can be found in Tables 24a and 24b on page 125.

INDICATOR 25 Obesity

Obesity is a major cause of preventable disease and premature death.²⁵ Both are associated with increased risk of coronary heart disease; Type 2 diabetes; endometrial, colon, postmenopausal breast, and other cancers; asthma and other respiratory problems; osteoarthritis; and disability.^{26,27}

Percentage of population age 65 and over who are obese, by sex and age group, selected years, 1988–2010



NOTE: Data are based on measured height and weight. Height was measured without shoes. Obese is defined by a BMI of 30 kilograms/meter² or greater. The percentage of people who are obese is a subset of the percentage of those who are overweight. See data source for the definition of BMI.

Reference population: These data refer to the civilian noninstitutionalized population.

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

- As with other age groups, the percentage of people age 65 and over who are obese has increased since 1988–1994. In 2009–2010, 38 percent of people age 65 and over were obese, compared with 22 percent in 1988–1994.
- In 2009–2010, 45 percent of women age 65–74 and 30 percent of women age 75 and over were obese. This is an increase from 1988–1994, when 27 percent of women age 65–74 and 19 percent of women age 75 and over were obese.
- Older men followed similar trends: 24 percent of men age 65–74 and 13 percent of men age 75 and over were obese in 1988–1994, compared with 43 percent of men age 65–74 and 27 percent of men age 75 and over in 2009–2010.
- Over the past 12 years, between 1999–2000 and 2009–2010, there has been no significant trend in women, but among men there has been an increase in obesity prevalence.

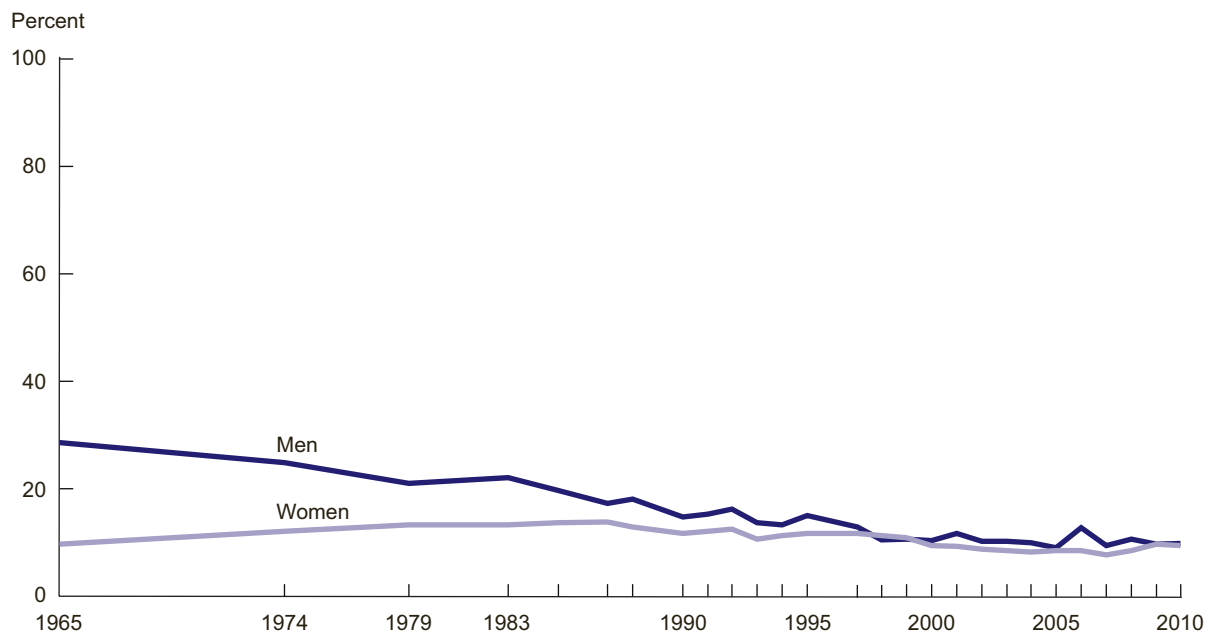
Data for this indicator's charts and bullets can be found in Table 25 on page 126.

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INDICATOR 26 Cigarette Smoking

Smoking has been linked to an increased likelihood of cancer, cardiovascular disease, chronic obstructive lung diseases, and other debilitating health conditions. Among older people, the death rate for chronic lower respiratory diseases (the third leading cause of death among people age 65 and over) increased 57 percent between 1981 and 2009 (see “Indicator 15: Mortality”). This increase reflects, in part, the cumulative effects of cigarette smoking over time.^{28,29}

Percentage of people age 65 and over who are current cigarette smokers, by sex, selected years 1965–2010



NOTE: Data starting in 1997 are not strictly comparable with data for earlier years due to the 1997 National Health Interview Survey (NHIS) questionnaire redesign. Starting with 1993 data, current cigarette smokers were defined as ever smoking 100 cigarettes in their lifetime and smoking now on every day or some days.

Reference population: These data refer to the civilian noninstitutionalized population.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey.

- The percentage of older Americans who were current cigarette smokers declined between 1965 and 2010. Most of the decrease during this period was the result of the declining prevalence of cigarette smoking among men (from 29 percent in 1965 to 10 percent in 2010). For the same period, the percentage of women who smoked cigarettes has remained relatively constant (10 percent in 1965 and 9 percent in 2010).
- In 2010, the percentage of older Americans who were current smokers was similar for Whites and Blacks.

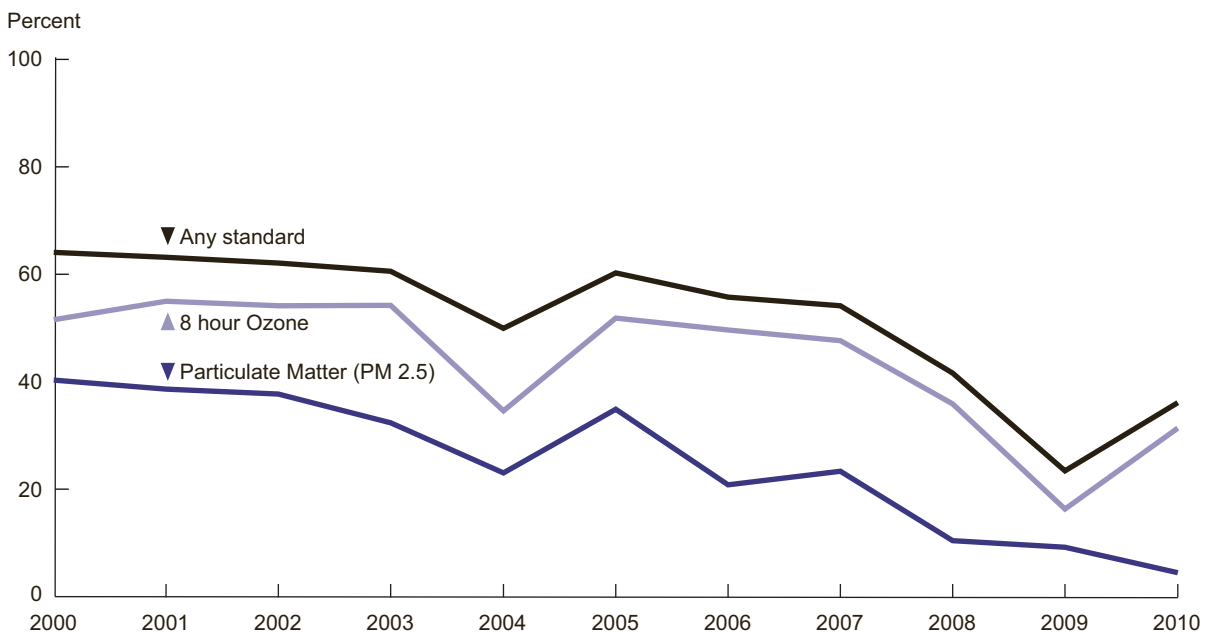
- A large percentage of both men and women age 65 and over were former smokers. In 2010, about 53 percent of older men previously smoked cigarettes, while 29 percent of women age 65 and over were former smokers.

Data for this indicator's charts and bullets can be found in Tables 26a and 26b on pages 127–128.

INDICATOR 27 Air Quality

As people age, their bodies are less able to compensate for the effects of environmental hazards. Air pollution can aggravate chronic heart and lung diseases, leading to increased medication use, more visits to health care providers, admissions to additional emergency rooms and hospitals, and even death. An important indicator for environmental health is the percentage of older adults living in areas that have measured air pollutant concentrations above the level of the Environmental Protection Agency's (EPA) national standards. Ozone and particulate matter (PM), especially the smaller, fine particle pollution called PM 2.5, have the greatest potential to affect the health of older adults. Fine particle pollution has been linked to premature death, cardiac arrhythmias and heart attacks, asthma attacks, and the development of chronic bronchitis. Ozone, even at low levels, can exacerbate respiratory diseases such as chronic obstructive pulmonary disease or asthma.^{30–34}

Percentage of people age 65 and over living in counties with instances of "poor air quality," 2000–2010



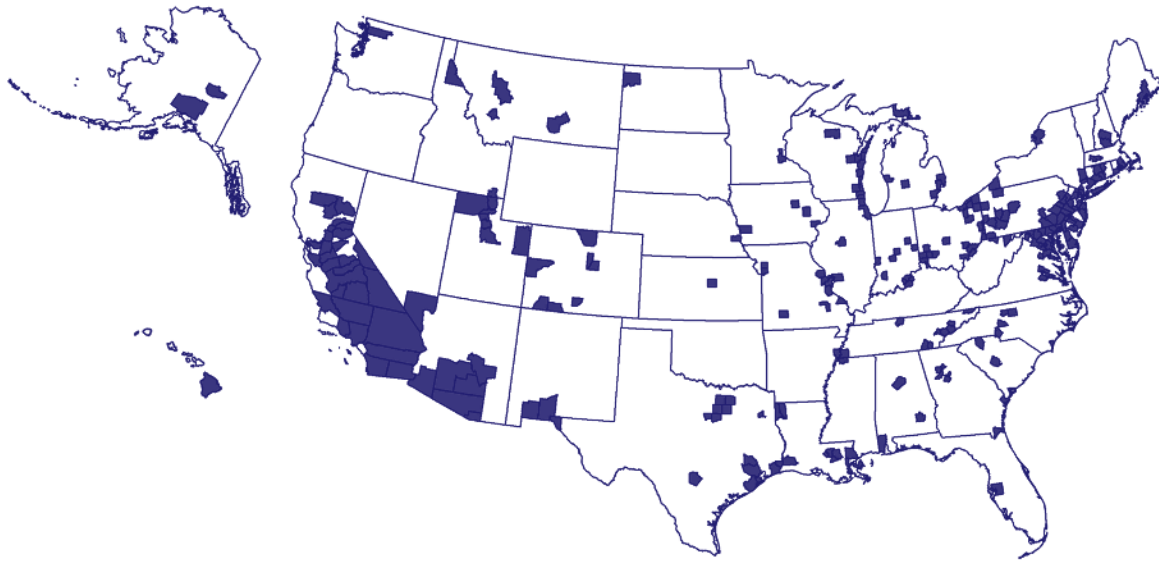
NOTE: The term "poor air quality" is defined as air quality concentrations above the level of the National Ambient Air Quality Standards (NAAQS). The term "any standard" refers to any NAAQS for ozone, particulate matter, nitrogen dioxide, sulfur dioxide, carbon monoxide, and lead. Data for previous years have been computed using the new daily PM 2.5 standard of 35 micrograms/m³ to enable comparisons over time. This results in percentages that are not comparable to previous publications of *Older Americans*. Measuring concentrations above the level of a standard is not equivalent to violating the standard. The level of a standard may be exceeded on multiple days before the exceedance is considered a violation of the standard.

Reference population: These data refer to the resident population.

SOURCE: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Air Quality System; U.S. Census Bureau, Population Projections, 2000–2010.

- In 2010, about 32 percent of people age 65 and over lived in counties with poor air quality for ozone, compared with 52 percent in 2000.
- A comparison of 2000 and 2010 showed a reduction in exposure to PM 2.5 pollution. In 2000, about 41 percent of people age 65 and over lived in a county where PM 2.5 concentrations were at times above the EPA standards, compared with 5 percent of people age 65 and over in 2010.
- The percentage of people age 65 and over living in counties that experienced poor air quality for any air pollutant decreased from 64 percent in 2000 to 36 percent in 2010.

Counties with instances of “poor air quality” for any standard in 2010



NOTE: The term “poor air quality” is defined as air quality concentrations above the level of the National Ambient Air Quality Standards (NAAQS). The term “any standard” refers to any NAAQS for ozone, particulate matter, nitrogen dioxide, sulfur dioxide, carbon monoxide, and lead. Measuring concentrations above the level of a standard is not equivalent to violating the standard. The level of a standard may be exceeded on multiple days before the exceedance is considered a violation of the standard.

Reference population: These data refer to the resident population.

SOURCE: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Air Quality System; U.S. Census Bureau, Population Projections, 2000–2010.

- In 2010, nearly 40 percent of the population lived in a county where measured air pollutants reached concentrations above EPA standards. This percentage was fairly consistent across all age groups, including people age 65 and over.
- Overall, approximately 124 million people lived in counties where monitored air in 2010 was unhealthy at times because of high

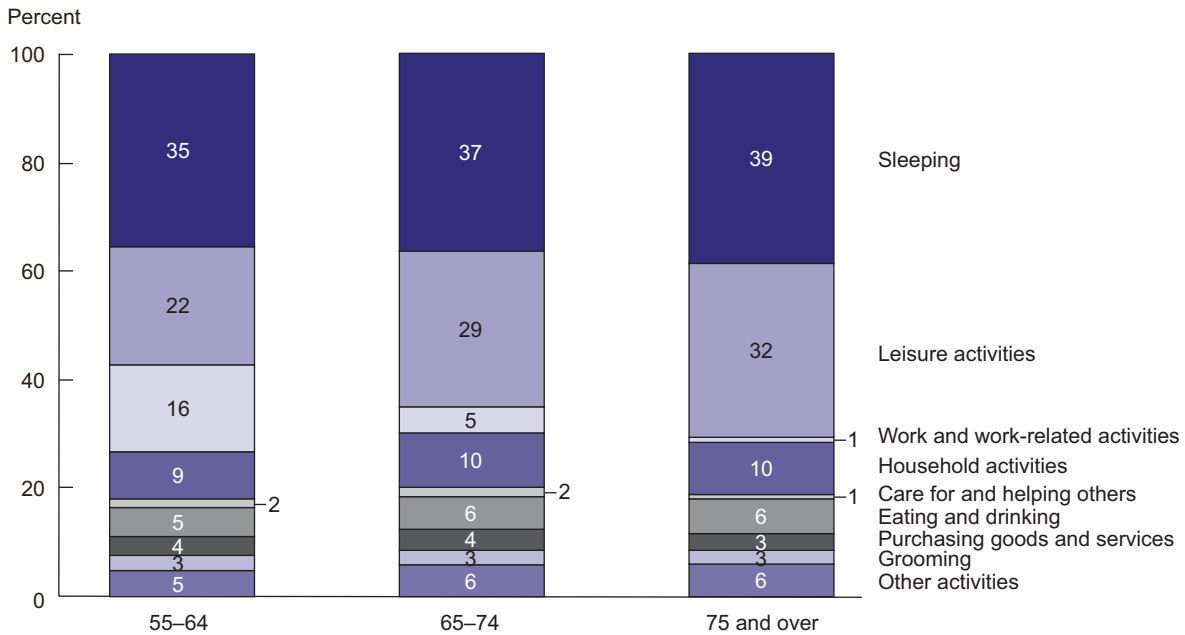
levels of at least one of the six principal air pollutants: ozone, particulate matter (PM), nitrogen dioxide, sulfur dioxide, carbon monoxide, and lead. The vast majority of areas that experienced unhealthy air did so because of one or both of two pollutants—ozone and PM 2.5.

Data for this indicator’s charts and bullets can be found in Tables 27a and 27b on pages 129–132.

INDICATOR 28 Use of Time

How individuals spend their time reflects their financial and personal situations, needs, and desires. Time-use data show that as Americans get older, they spend more of their time in leisure activities.

Percentage of day that people age 55 and over spend doing selected activities on an average day, by age group, 2010



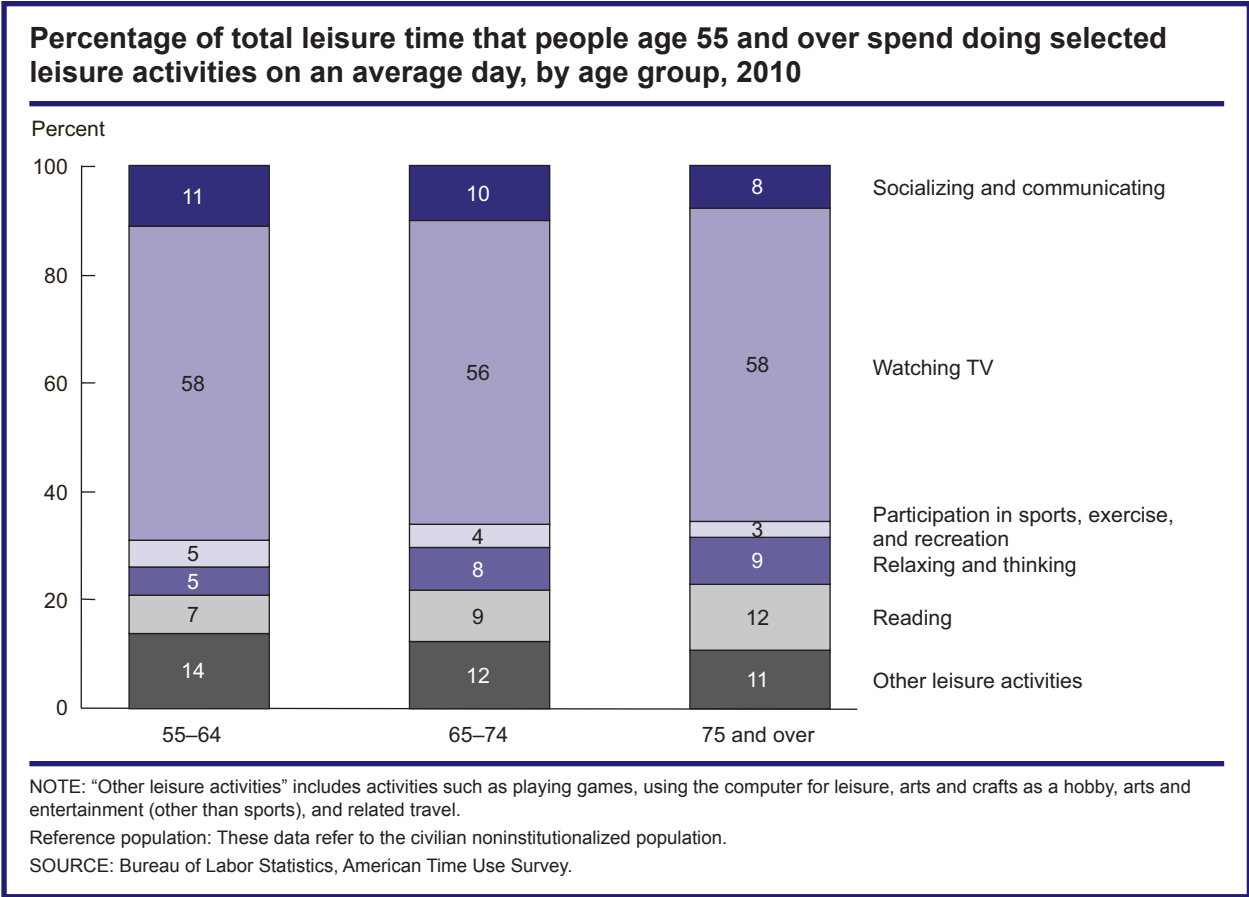
NOTE: "Other activities" includes activities such as educational activities; organizational, civic, and religious activities; and telephone calls. Chart includes people who did not work at all.

Reference population: These data refer to the civilian noninstitutionalized population.

SOURCE: Bureau of Labor Statistics, American Time Use Survey.

- In 2010, older Americans spent on average more than one-quarter of their time in leisure activities. This proportion increased with age: Americans age 75 and over spent 32 percent of their time in leisure activities, compared with 22 percent for those age 55–64.
- On an average day, people age 55–64 spent 16 percent of their time (almost four hours) working or doing work-related activities compared with 5 percent (about one hour) for people age 65–74 and 1 percent (about 15 minutes) for people age 75 and over.

Leisure activities are those done when free from duties such as working, household chores or caring for others. During these times, individuals have flexibility in choosing what to do.



- Watching TV was the activity that occupied the most leisure activity time—more than one-half of the total—for Americans age 55 and over.
- Americans age 75 and over spent a higher percentage of their leisure time reading (12 percent versus 7 percent) and relaxing and thinking (9 percent versus 5 percent) than did Americans age 55–64.
- The proportion of leisure time that older Americans spent socializing and communicating—such as visiting friends or attending or hosting social events—declined with age. For Americans age 55–64, about 11 percent of leisure time was spent socializing and communicating compared to 8 percent for those age 75 and over.

Data for this indicator's charts and bullets can be found in Tables 28a and 28b on page 133.