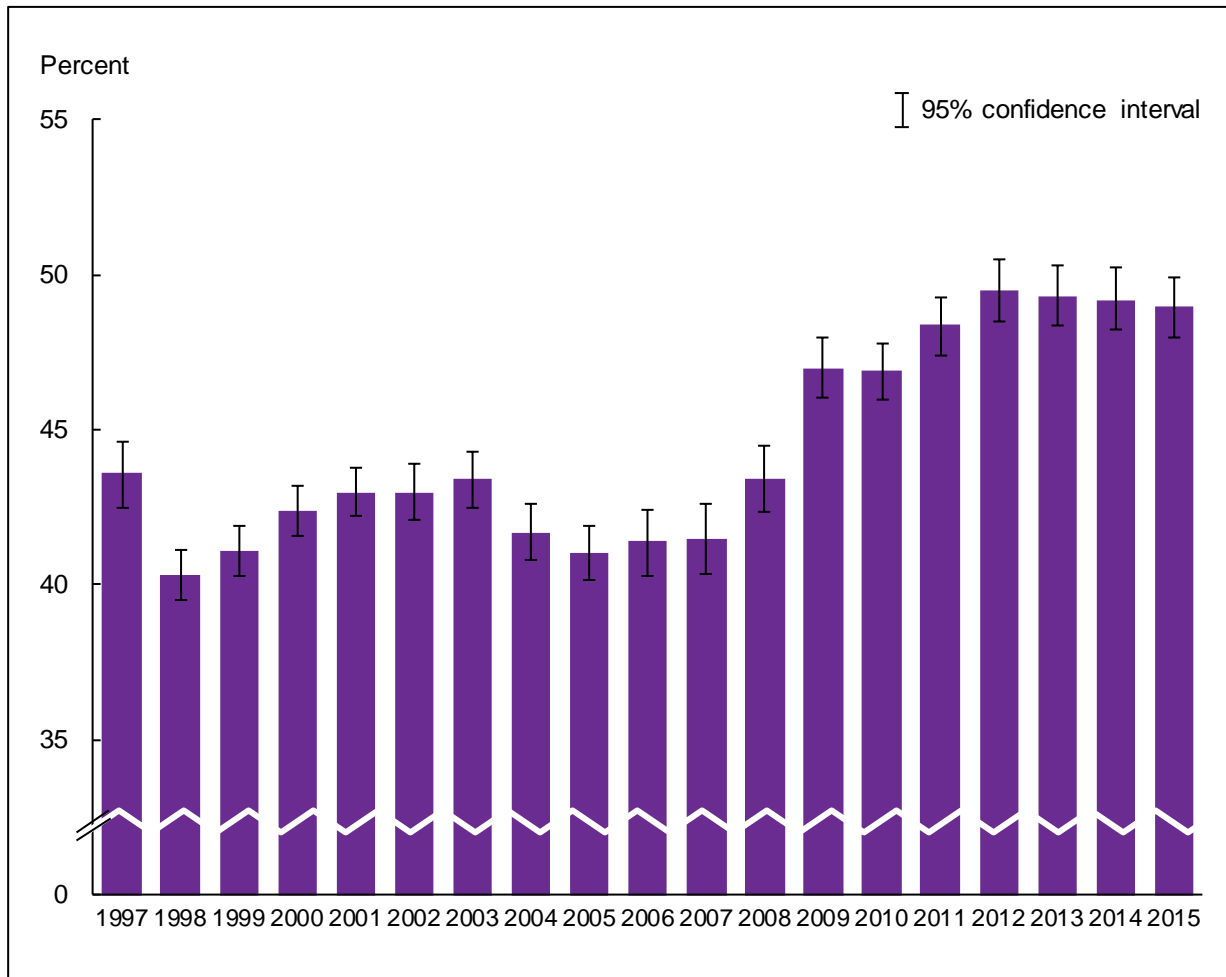


Leisure-time physical activity

Figure 7.1. Percentage of adults aged 18 and over who met 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity: United States, 1997–2015

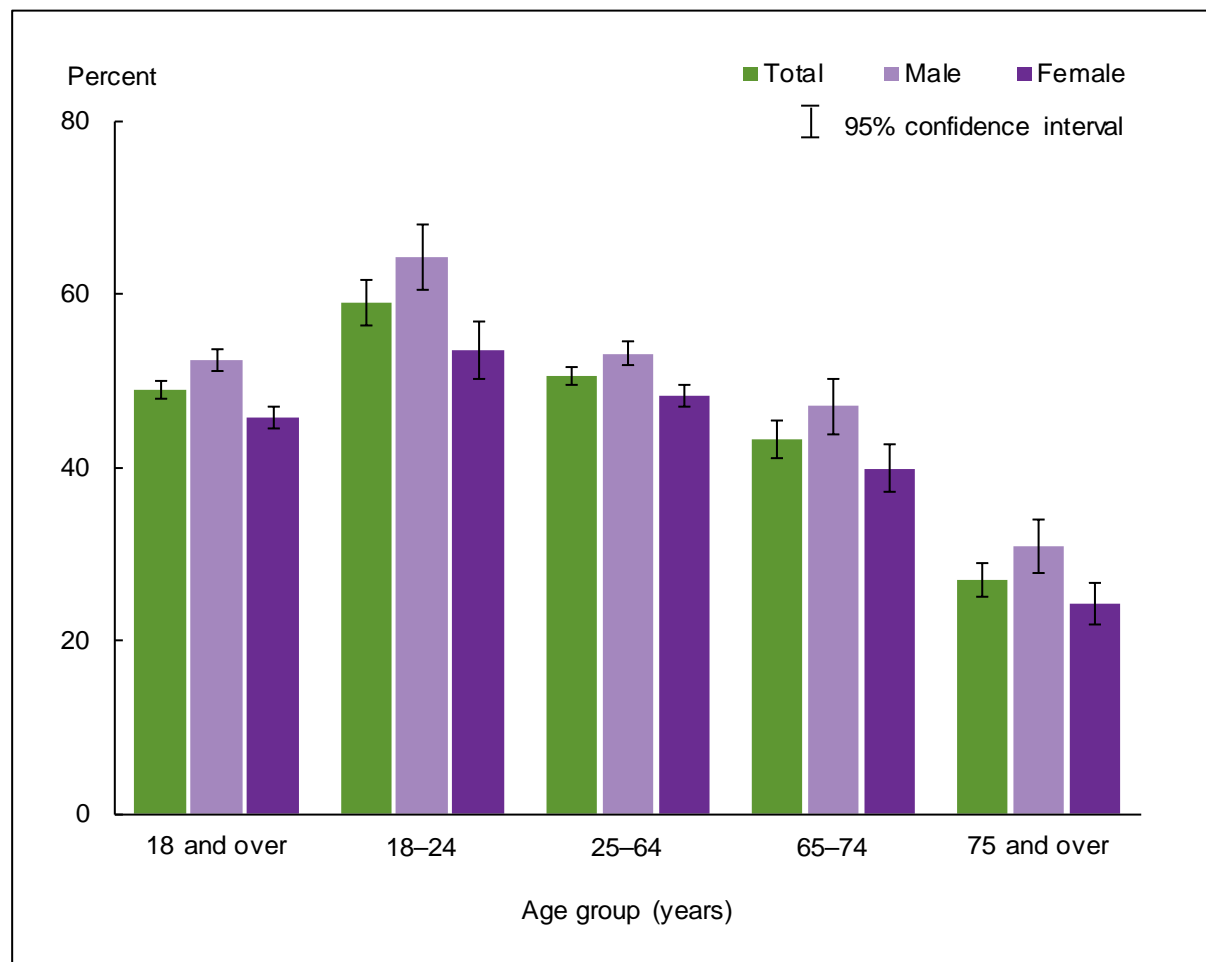


NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Estimates in this figure are limited to leisure-time physical activity only. This measure reflects an estimate of leisure-time aerobic activity motivated by the 2008 federal Physical Activity Guidelines for Americans, which are being used for Healthy People 2020 Objectives (3). The 2008 guidelines refer to any kind of aerobic activity, not just leisure-time aerobic activity, so the leisure-time aerobic activity estimates in this figure may underestimate the percentage of adults who met the 2008 guidelines for aerobic activity. This figure presents the percentage of adults who met the 2008 federal guidelines for aerobic activity. The 2008 federal guidelines recommend that for substantial health benefits, adults perform at least 150 minutes a week of moderate-intensity aerobic physical activity, or 75 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. The 2008 guidelines state that aerobic activity should be performed in episodes of at least 10 minutes and preferably should be spread throughout the week. The 2008 guidelines were applied to leisure-time activity data starting with 1997 to derive the aerobic activity estimates in this figure, allowing trend analysis. The analyses exclude persons with unknown physical activity participation (about 3% of respondents each year). See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 1997–2015, Sample Adult Core component.

- For 2015, 49.0% (95% confidence interval = 47.98%–49.95%) of U.S. adults aged 18 and over met the 2008 federal physical activity guidelines for aerobic activity (based on leisure-time activity). This percentage was not significantly different from the 2014 estimate (49.2%).
- The annual percentage of adults aged 18 and over who met the 2008 federal physical activity guidelines for aerobic activity (based on leisure-time activity) increased from 41.4% in 2006 to 49.5% in 2012, and has since remained stable through 2015.

Figure 7.2. Percentage of adults aged 18 and over who met 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity, by age group and sex: United States, 2015

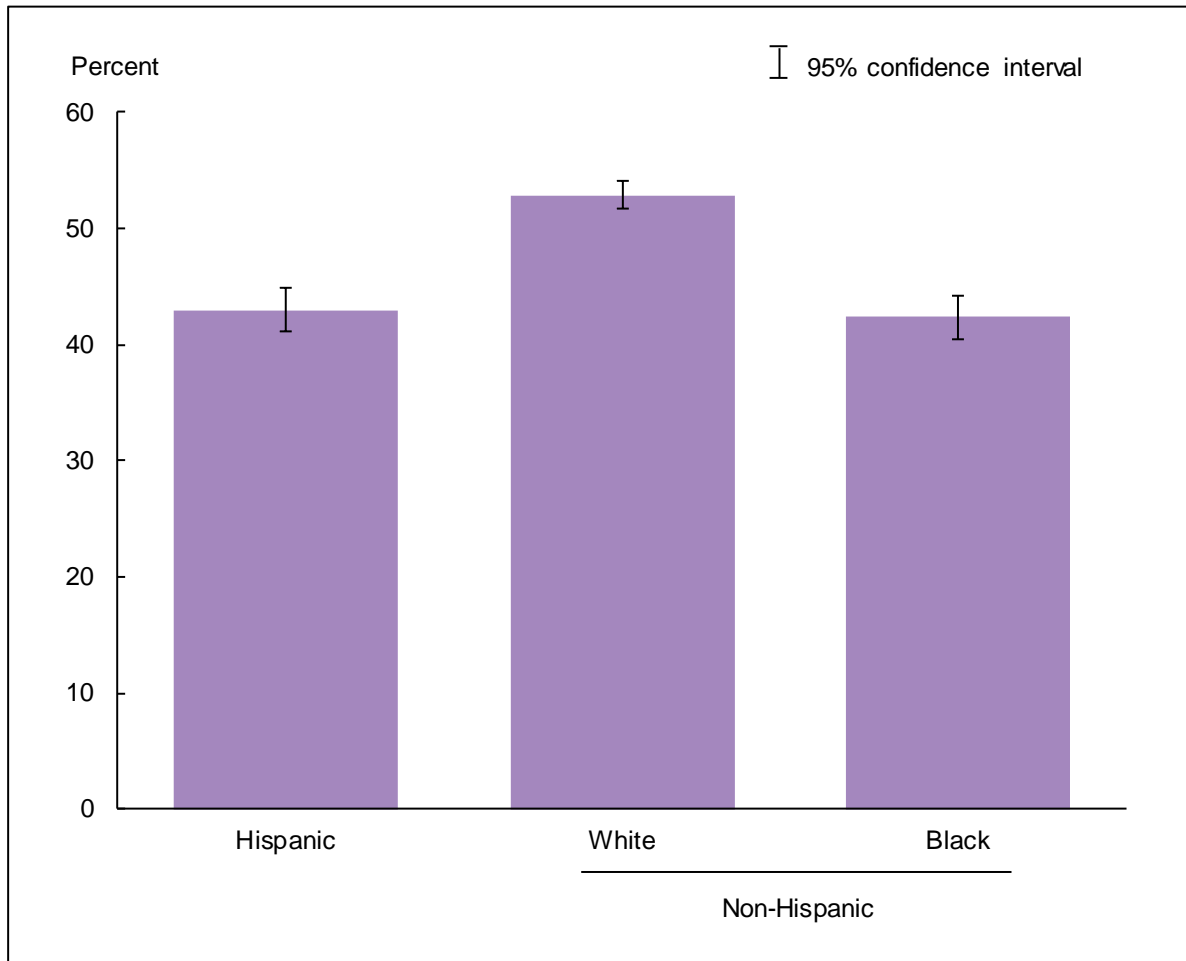


NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Estimates in this figure are limited to leisure-time physical activity only. This measure reflects an estimate of leisure-time aerobic activity motivated by the 2008 federal Physical Activity Guidelines for Americans, which are being used for Healthy People 2020 Objectives (3). The 2008 guidelines refer to any kind of aerobic activity, not just leisure-time aerobic activity, so the leisure-time aerobic activity estimates in this figure may underestimate the percentage of adults who met the 2008 guidelines for aerobic activity. This figure presents the percentage of adults who met the 2008 federal guidelines for aerobic activity. The 2008 federal guidelines recommend that for substantial health benefits, adults perform at least 150 minutes a week of moderate-intensity aerobic physical activity, or 75 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. The 2008 guidelines state that aerobic activity should be performed in episodes of at least 10 minutes and preferably should be spread throughout the week. The analyses exclude the 1.4% of persons with unknown physical activity participation. See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 2015, Sample Adult Core component.

- For both sexes combined, as age increased, the percentage of adults who met the 2008 federal physical activity guidelines for aerobic activity (based on leisure-time activity) decreased.
- For adults aged 18 and over and for age groups 18-24, 25-64, 65-74, and 75 and over, women were less likely than men to meet the 2008 federal physical activity guidelines for aerobic activity (based on leisure-time activity).

Figure 7.3. Age-sex-adjusted percentage of adults aged 18 and over who met 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity, by race/ethnicity: United States, 2015

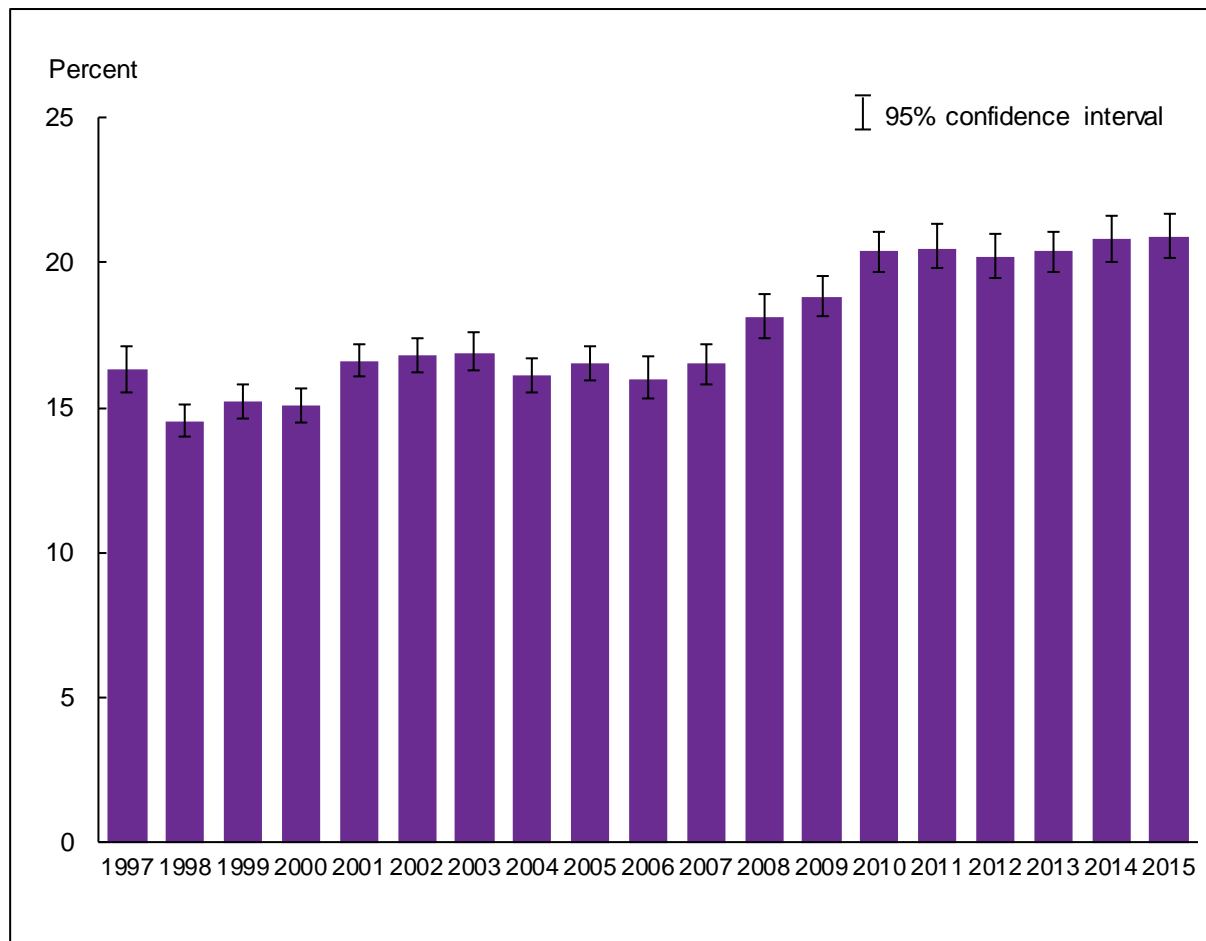


NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Estimates in this figure are limited to leisure-time physical activity only. This measure reflects an estimate of leisure-time aerobic activity motivated by the 2008 federal Physical Activity Guidelines for Americans, which are being used for Healthy People 2020 Objectives (3). The 2008 guidelines refer to any kind of aerobic activity, not just leisure-time aerobic activity, so the leisure-time aerobic activity estimates in this figure may underestimate the percentage of adults who met the 2008 guidelines for aerobic activity. This figure presents the percentage of adults who met the 2008 federal guidelines for aerobic activity. The 2008 federal guidelines recommend that for substantial health benefits, adults perform at least 150 minutes a week of moderate-intensity aerobic physical activity, or 75 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. The 2008 guidelines state that aerobic activity should be performed in episodes of at least 10 minutes and preferably should be spread throughout the week. The analyses exclude the 1.4% of persons with unknown physical activity participation. Estimates are age-sex-adjusted using the projected 2000 U.S. population as the standard population and five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over. See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 2015, Sample Adult Core component.

- The age-sex-adjusted percentages of adults by race/ethnicity who met the 2008 federal physical activity guidelines for aerobic activity (based on leisure-time activity) were 43.0% for Hispanic adults, 52.9% for non-Hispanic white adults and 42.4% for non-Hispanic black adults.
- Non-Hispanic white adults were more likely to meet the 2008 federal physical activity guidelines for aerobic activity (based on leisure-time activity) compared with Hispanic adults and non-Hispanic black adults.

Figure 7.4. Percentage of adults aged 18 and over who met 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities through leisure-time aerobic and muscle-strengthening activities: United States, 1997–2015

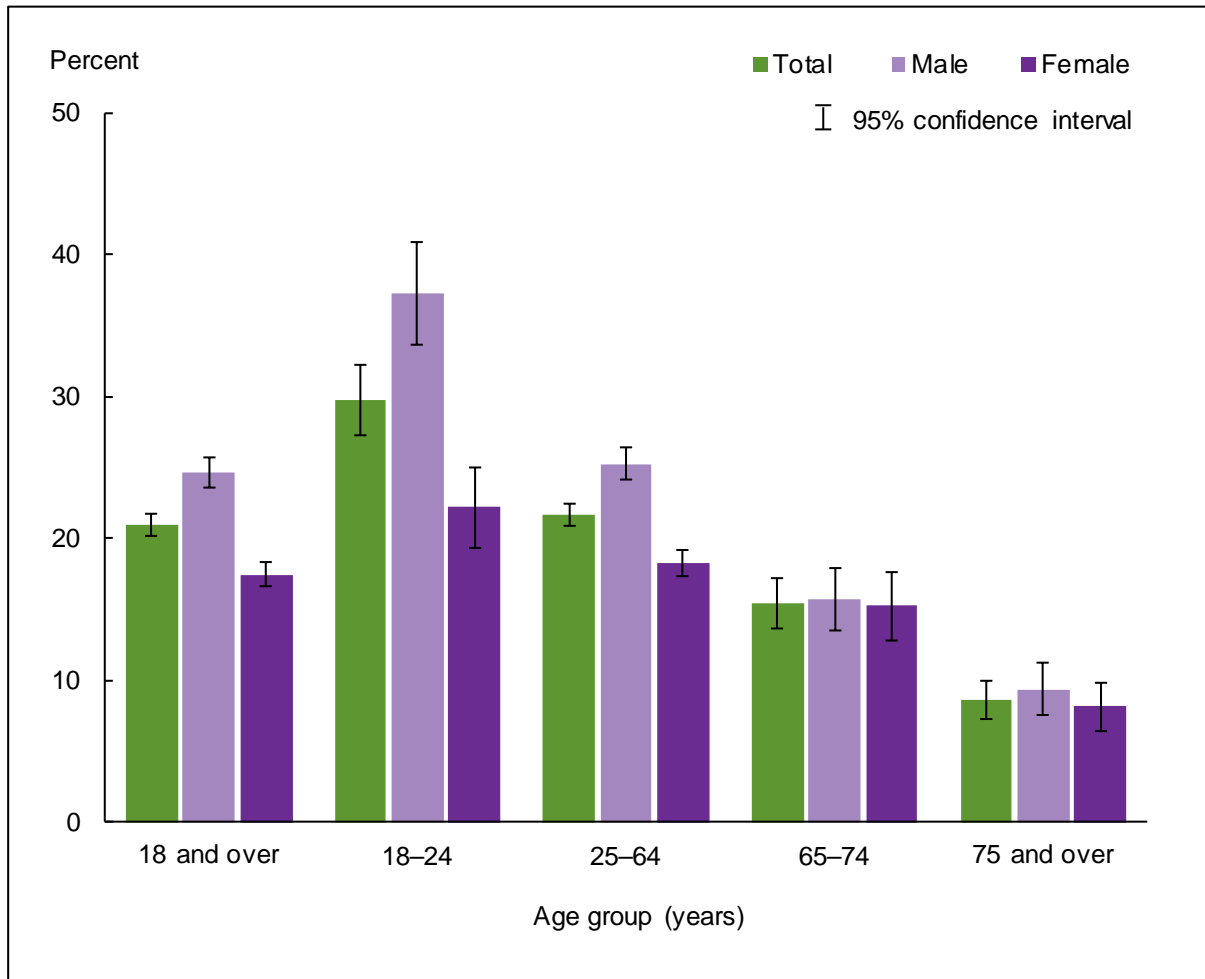


NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Estimates in this figure are limited to leisure-time physical activity only. This measure reflects an estimate of leisure-time aerobic and muscle-strengthening activities motivated by the 2008 federal Physical Activity Guidelines for Americans, which are being used for Healthy People 2020 Objectives (3). The 2008 guidelines refer to any kind of aerobic and muscle-strengthening activities, not just leisure-time aerobic and muscle-strengthening activities, so the leisure-time aerobic and muscle-strengthening activity estimates in this figure may underestimate the percentage of adults who met the 2008 guidelines for aerobic and muscle-strengthening activities. This figure presents the percentage of adults who met the 2008 federal guidelines for both aerobic activity and muscle strengthening. The 2008 federal guidelines recommend that for substantial health benefits, adults perform at least 150 minutes a week of moderate-intensity aerobic physical activity, or 75 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. The 2008 guidelines state that aerobic activity should be performed in episodes of at least 10 minutes and preferably should be spread throughout the week. The 2008 guidelines also recommend that adults perform muscle-strengthening activities that are of moderate or high intensity and involve all major muscle groups on 2 or more days a week because these activities provide additional health benefits. The National Health Interview Survey estimates are based on number of times per week, which may or may not be the same as number of days per week. The 2008 guidelines were applied to both leisure-time activity and muscle-strengthening data starting with 1997 to derive the aerobic activity and muscle-strengthening estimates in this figure, allowing trend analysis. The analyses exclude persons with unknown physical activity participation (about 3% of respondents each year). See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 1997–2015, Sample Adult Core component.

- In 2015, 20.9% (95% confidence interval = 20.20%–21.66%) of U.S. adults aged 18 and over met the 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities (based on leisure-time activities). This percentage was not significantly different from the 2014 estimate of 20.8%.
- The annual percentage of adults aged 18 and over who met the 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities (based on leisure-time activities) increased from 16.0% in 2006 to 20.4% in 2010, and has since remained stable through 2015.

Figure 7.5. Percentage of adults aged 18 and over who met 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities through leisure-time aerobic and muscle-strengthening activities, by age group and sex: United States, 2015

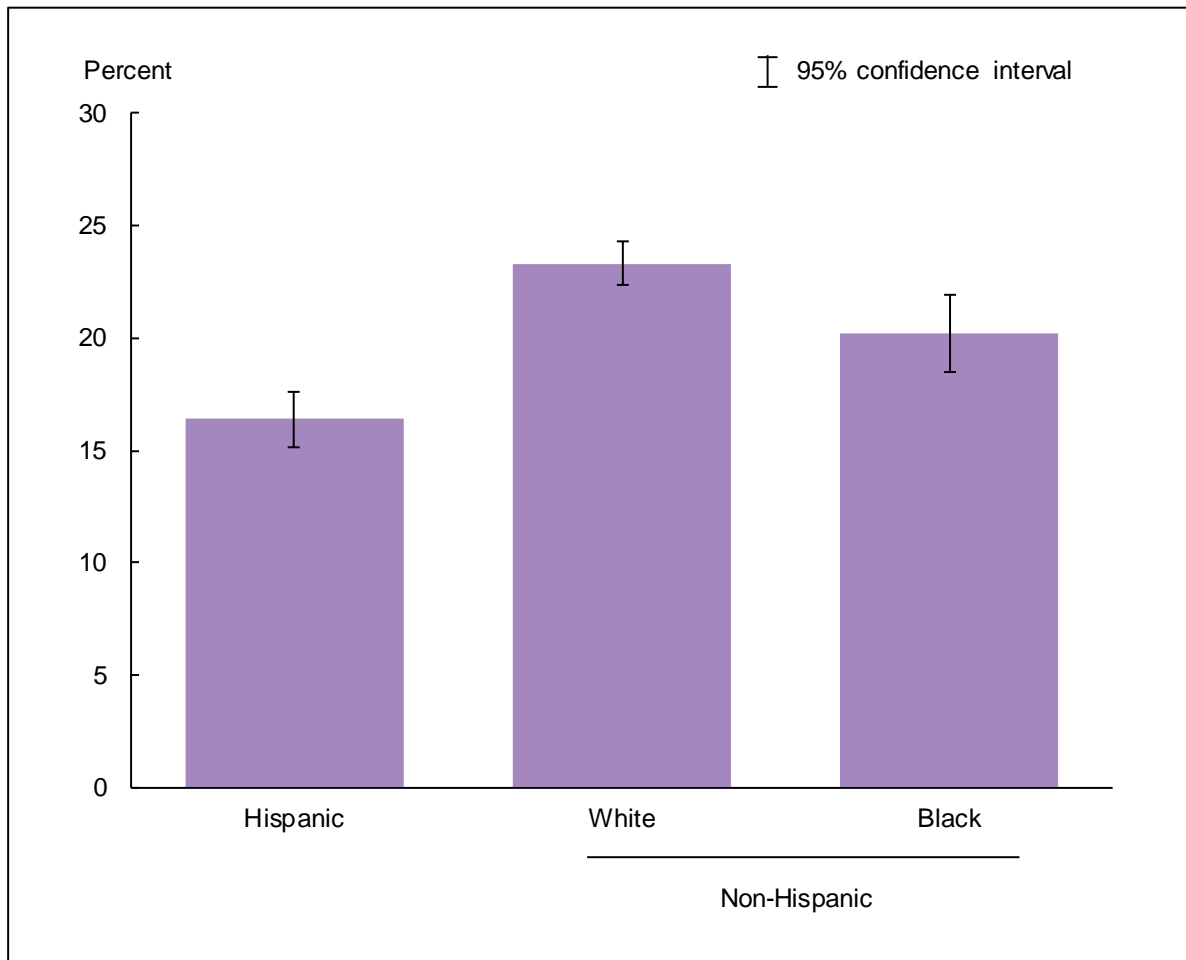


NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Estimates in this figure are limited to leisure-time physical activity only. This measure reflects an estimate of leisure-time aerobic and muscle-strengthening activities motivated by the 2008 federal Physical Activity Guidelines for Americans, which are being used for Healthy People 2020 Objectives (3). The 2008 guidelines refer to any kind of aerobic and muscle-strengthening activities, not just leisure-time aerobic and muscle-strengthening activities, so the leisure-time aerobic and muscle-strengthening activity estimates in this figure may underestimate the percentage of adults who met the 2008 guidelines for aerobic and muscle-strengthening activities. This figure presents the percentage of adults who met the 2008 federal guidelines for both aerobic activity and muscle strengthening. The 2008 federal guidelines recommend that for substantial health benefits, adults perform at least 150 minutes a week of moderate-intensity aerobic physical activity, or 75 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. The 2008 guidelines state that aerobic activity should be performed in episodes of at least 10 minutes and preferably should be spread throughout the week. The 2008 guidelines also recommend that adults perform muscle-strengthening activities that are of moderate or high intensity and involve all major muscle groups on 2 or more days a week because these activities provide additional health benefits. The National Health Interview Survey estimates are based on number of times per week, which may not be the same as number of days per week. The analyses exclude the 1.6% of persons with unknown physical activity participation. See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 2015, Sample Adult Core component.

- For both sexes combined, as age increased, the percentage of adults who met the 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities (based on leisure-time activities) decreased.
- For adults aged 18 and over and age groups 18-24 and 25-64, women were less likely to meet the 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities (based on leisure-time activities) compared with men.

Figure 7.6. Age-sex-adjusted percentage of adults aged 18 and over who met 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities through leisure-time aerobic and muscle-strengthening activities, by race/ethnicity: United States, 2015



NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Estimates in this figure are limited to leisure-time physical activity only. This measure reflects an estimate of leisure-time aerobic and muscle-strengthening activities motivated by the 2008 federal Physical Activity Guidelines for Americans, which are being used for Healthy People 2020 Objectives (3). The 2008 guidelines refer to any kind of aerobic and muscle-strengthening activities, not just leisure-time aerobic and muscle-strengthening activities, so the leisure-time aerobic and muscle-strengthening activity estimates in this figure may underestimate the percentage of adults who met the 2008 guidelines for aerobic and muscle-strengthening activities. This figure presents the percentage of adults who met the 2008 federal guidelines for both aerobic activity and muscle strengthening. The 2008 federal guidelines recommend that for substantial health benefits, adults perform at least 150 minutes a week of moderate-intensity aerobic physical activity, or 75 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. The 2008 guidelines state that aerobic activity should be performed in episodes of at least 10 minutes and preferably should be spread throughout the week. The 2008 guidelines also recommend that adults perform muscle-strengthening activities that are of moderate or high intensity and involve all major muscle groups on 2 or more days a week because these activities provide additional health benefits. The National Health Interview Survey estimates are based on number of times per week, which may not be the same as number of days per week. The analyses exclude the 1.6% of persons with unknown physical activity participation. Estimates are age-sex-adjusted using the projected 2000 U.S. population as the standard population and five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over. See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 2015, Sample Adult Core component.

- The age-sex-adjusted percentages of adults by race/ethnicity who met the 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities (based on leisure-time activities) were 16.4% for Hispanic adults, 23.3% for non-Hispanic white adults and 20.2% for non-Hispanic black adults.
- Non-Hispanic white adults were the most likely to meet the 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities (based on leisure-time activities), followed by non-Hispanic black adults and Hispanic adults. Non-Hispanic black adults were more likely to meet the 2008

federal activity guidelines for both aerobic and muscle-strengthening activities (based on leisure-time activities) than Hispanic adults.

Data tables for Figures 7.1–7.6:

Data table for Figure 7.1. Percentage of adults aged 18 and over who met 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity: United States, 1997–2015

Year	Crude ¹ percent (95% confidence interval)	Age-adjusted ² percent (95% confidence interval)
1997	43.6 (42.5-44.6)	43.3 (42.2-44.3)
1998	40.3 (39.5-41.1)	40.1 (39.3-40.9)
1999	41.1 (40.3-41.9)	40.9 (40.2-41.7)
2000	42.4 (41.6-43.2)	42.3 (41.5-43.1)
2001	43.0 (42.2-43.8)	42.9 (42.1-43.7)
2002	43.0 (42.1-43.9)	42.9 (42.1-43.8)
2003	43.4 (42.5-44.3)	43.3 (42.4-44.2)
2004	41.7 (40.8-42.6)	41.6 (40.8-42.5)
2005	41.0 (40.18-41.89)	41.1 (40.21-41.90)
2006	41.4 (40.31-42.42)	41.4 (40.37-42.47)
2007	41.5 (40.36-42.63)	41.5 (40.33-42.59)
2008	43.4 (42.33-44.47)	43.5 (42.43-44.58)
2009	47.0 (46.05-47.95)	47.2 (46.25-48.16)
2010	46.9 (45.96-47.78)	47.1 (46.20-47.98)
2011	48.4 (47.42-49.30)	48.7 (47.76-49.61)
2012	49.5 (48.51-50.49)	49.9 (48.92-50.87)
2013	49.3 (48.38-50.28)	49.9 (48.95-50.84)
2014	49.2 (48.21-50.24)	49.8 (48.78-50.82)
2015	49.0 (47.98-49.95)	49.7 (48.72-50.69)

¹Crude estimates are presented.

²Estimates for this Healthy People 2020 Leading Health Indicator are age-adjusted using the projected 2000 U.S. population as the standard population and five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Beginning with 2012 data, the National Health Interview Survey transitioned to weights derived from the 2010 census. For 2003–2011 data, weights were derived from the 2000 census. In this Early Release, estimates for 2000–2002 were recalculated using weights derived from the 2000 census. For 1997–1999 data, weights were derived from the 1990 census. See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 1997–2015, Sample Adult Core component.

Data table for Figure 7.2. Percentage of adults aged 18 and over who met 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity, by age group and sex: United States, 2015

Age (years) and sex	Percent	95% confidence interval
18–24, total	59.0	56.30-61.61
18–24, male	64.3	60.45-68.12
18–24, female	53.6	50.24-56.88
25–64, total	50.6	49.58-51.69
25–64, male	53.1	51.71-54.59
25–64, female	48.2	46.96-49.53
65–74, total	43.3	41.13-45.38
65–74, male	47.1	43.93-50.28
65–74, female	39.9	37.12-42.66
75 and over, total	27.1	25.13-29.02
75 and over, male	30.9	27.85-34.02
75 and over, female	24.3	21.96-26.68
18 and over (crude ¹), total	49.0	47.98-49.95
18 and over (crude ¹), male	52.4	51.13-53.67
18 and over (crude ¹), female	45.8	44.60-46.95
18 and over (age-adjusted ²), total	49.7	48.72-50.69
18 and over (age-adjusted ²), male	52.9	51.62-54.20
18 and over (age-adjusted ²), female	46.7	45.55-47.89

¹Crude estimates are presented.

²Estimates for this Healthy People 2020 Leading Health Indicator are age-adjusted using the projected 2000 U.S. population as the standard population and five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

DATA SOURCE: NCHS, National Health Interview Survey, 2015, Sample Adult Core component.

Data table for Figure 7.3. Adjusted percentage of adults aged 18 and over who met 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity, by race/ethnicity: United States, 2015

Race/ethnicity	Age-sex-adjusted ¹ percent (95% confidence interval)	Age-adjusted ² percent (95% confidence interval)
Hispanic or Latino	43.0 (41.14-44.83)	43.0 (41.20-44.90)
Not Hispanic or Latino, single race, white	52.9 (51.64-54.19)	53.0 (51.70-54.23)
Not Hispanic or Latino, single race, black	42.4 (40.43-44.28)	41.8 (39.98-43.69)

¹Estimates are age-sex-adjusted using the projected 2000 U.S. population as the standard population and five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

²Estimates for this Healthy People 2020 Leading Health Indicator are age-adjusted using the projected 2000 U.S. population as the standard population and five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

DATA SOURCE: NCHS, National Health Interview Survey, 2015, Sample Adult Core component.

Data table for Figure 7.4. Percentage of adults aged 18 and over who met 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities through leisure-time aerobic and muscle-strengthening activities: United States, 1997–2015

Year	Crude ¹ percent (95% confidence interval)	Age-adjusted ² percent (95% confidence interval)
1997	16.3 (15.5-17.1)	16.1 (15.3-16.9)
1998	14.5 (14.0-15.1)	14.4 (13.9-14.9)
1999	15.2 (14.6-15.8)	15.0 (14.5-15.6)
2000	15.1 (14.5-15.7)	15.0 (14.5-15.6)
2001	16.6 (16.1-17.2)	16.5 (16.0-17.1)
2002	16.8 (16.2-17.4)	16.7 (16.2-17.3)
2003	16.9 (16.3-17.6)	16.9 (16.3-17.5)
2004	16.1 (15.5-16.7)	16.1 (15.5-16.7)
2005	16.5 (15.96-17.13)	16.6 (15.99-17.14)
2006	16.0 (15.30-16.80)	16.1 (15.37-16.87)
2007	16.5 (15.79-17.19)	16.5 (15.83-17.20)
2008	18.1 (17.38-18.91)	18.2 (17.49-19.00)
2009	18.8 (18.14-19.56)	19.0 (18.32-19.75)
2010	20.4 (19.69-21.06)	20.6 (19.90-21.25)
2011	20.5 (19.79-21.31)	20.8 (20.05-21.56)
2012	20.2 (19.45-20.99)	20.6 (19.79-21.31)
2013	20.4 (19.65-21.10)	20.7 (19.99-21.45)
2014	20.8 (20.01-21.60)	21.2 (20.43-22.06)
2015	20.9 (20.20-21.66)	21.4 (20.69-22.17)

¹Crude estimates are presented.

²Estimates for this Healthy People 2020 Leading Health Indicator are age-adjusted using the projected 2000 U.S. population as the standard population and five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Beginning with 2012 data, the National Health Interview Survey transitioned to weights derived from the 2010 census. For 2003–2011 data, weights were derived from the 2000 census. In this Early Release, estimates for 2000–2002 were recalculated using weights derived from the 2000 census. For 1997–1999 data, weights were derived from the 1990 census. See [Technical Notes](#) for more details.

DATA SOURCE: NCHS, National Health Interview Survey, 1997–2015, Sample Adult Core component.

Data table for Figure 7.5. Percentage of adults aged 18 and over who met 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities through leisure-time aerobic and muscle-strengthening activities, by age group and sex: United States, 2015

Age (years) and sex	Percent	95% confidence interval
18–24, total	29.8	27.28-32.23
18–24, male	37.3	33.59-40.92
18–24, female	22.2	19.34-24.99
25–64, total	21.7	20.89-22.42
25–64, male	25.2	24.11-26.36
25–64, female	18.3	17.31-19.21
65–74, total	15.5	13.70-17.21
65–74, male	15.7	13.48-17.92
65–74, female	15.2	12.83-17.65
75 and over, total	8.7	7.32-10.02
75 and over, male	9.4	7.49-11.22
75 and over, female	8.2	6.48-9.89
18 and over (crude ¹), total	20.9	20.20-21.66
18 and over (crude ¹), male	24.7	23.56-25.75
18 and over (crude ¹), female	17.5	16.63-18.31
18 and over (age-adjusted ²), total	21.4	20.69-22.17
18 and over (age-adjusted ²), male	25.1	24.02-26.19
18 and over (age-adjusted ²), female	17.9	17.01-18.73

¹Crude estimates are presented.

²Estimates for this Healthy People 2020 Leading Health Indicator are age-adjusted using the projected 2000 U.S. population as the standard population and five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

DATA SOURCE: NCHS, National Health Interview Survey, 2015, Sample Adult Core component.

Data table for Figure 7.6. Adjusted percentage of adults aged 18 and over who met 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities through leisure-time aerobic and muscle-strengthening activities, by race/ethnicity: United States, 2015

Race/ethnicity	Age-sex-adjusted ¹ percent (95% confidence interval)	Age-adjusted ² percent (95% confidence interval)
Hispanic or Latino	16.4 (15.16-17.62)	16.5 (15.24-17.69)
Not Hispanic or Latino, single race, white	23.3 (22.34-24.31)	23.3 (22.34-24.32)
Not Hispanic or Latino, single race, black	20.2 (18.53-21.91)	19.7 (18.02-21.31)

¹Estimates are age-sex-adjusted using the projected 2000 U.S. population as the standard population and five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

²Estimates for this Healthy People 2020 Leading Health Indicator are age-adjusted using the projected 2000 U.S. population as the standard population and five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

NOTE: Data are based on household interviews of a sample of the civilian noninstitutionalized population.

DATA SOURCE: NCHS, National Health Interview Survey, 2015, Sample Adult Core component.