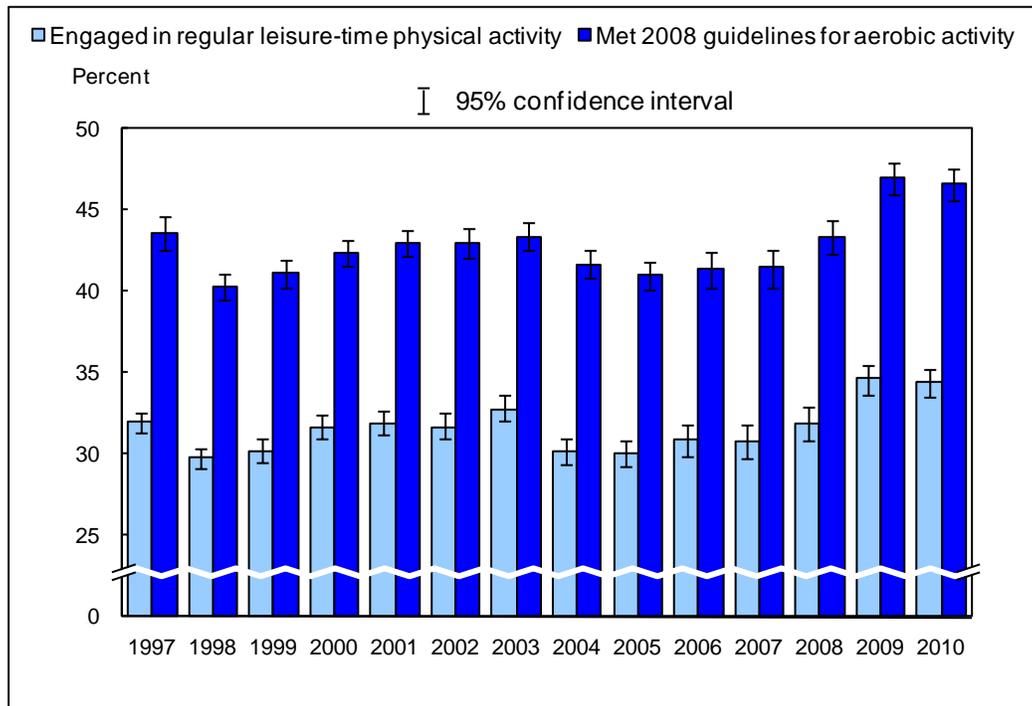


Figure 7.1. Percentage of adults aged 18 years and over who engaged in regular leisure-time physical activity, and percentage of adults aged 18 years and over who met the 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity: United States, 1997–2010



NOTES: Estimates in this figure are limited to leisure-time physical activity only. For each year, this figure presents two different types of estimates: (a) an estimate of regular leisure-time activity, which was presented in previous Early Release reports and was used as the physical activity Leading Health Indicator in *Healthy People 2010* (3), and (b) 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 (16). The 2008 guidelines refer to any kind of aerobic activity, not just to leisure-time aerobic activity, so the leisure-time aerobic activity estimates in this figure may be underestimates of the percentage of adults who met the 2008 guidelines for aerobic activity. Based on the *Healthy People 2010* (3) definition, regular leisure-time physical activity is defined as engaging in light-moderate leisure-time physical activity for greater than or equal to 30 minutes at a frequency greater than or equal to five times per week or engaging in vigorous leisure-time physical activity for greater than or equal to 20 minutes at a frequency greater than or equal to three times per week. 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 say that aerobic activity should be performed in episodes of at least 10 minutes, and preferably it should be spread throughout the week. The 2008 guidelines were applied to leisure-time activity data back to 1997 to derive the aerobic activity estimates in this figure, allowing trend analysis. The analyses excluded persons with unknown physical activity participation (about 3% of respondents each year). Beginning with the 2003 data, the National Health Interview Survey transitioned to weights derived from the 2000 census. In this Early Release, estimates for 2000–2002 were recalculated using weights derived from the 2000 census. See "About This Early Release" for more details.

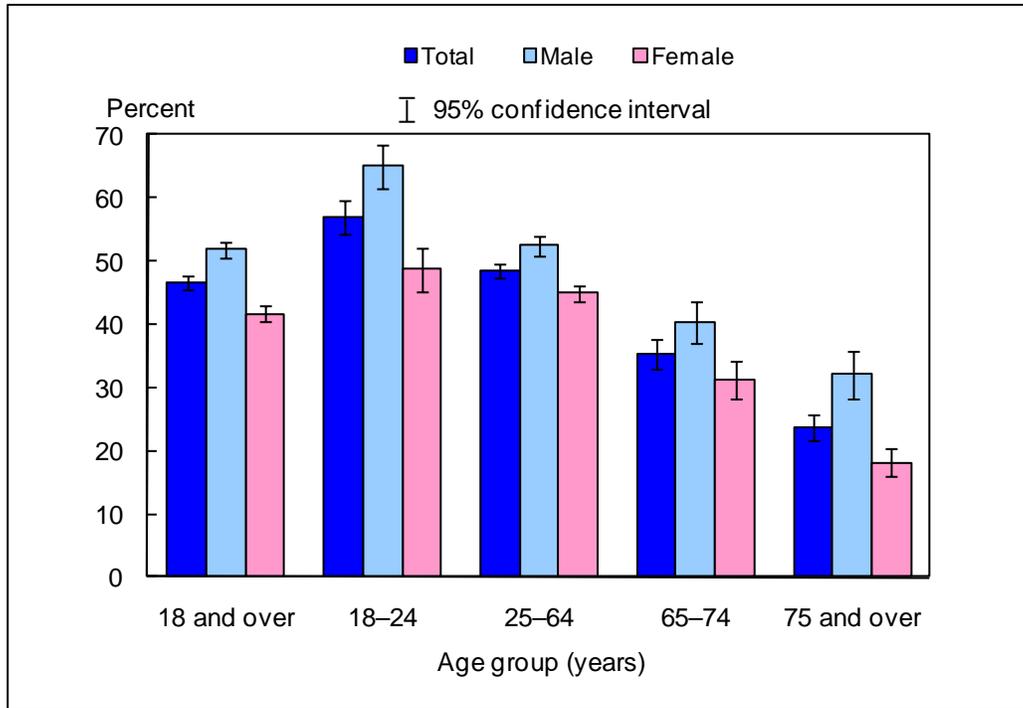
DATA SOURCE: CDC/NCHS, National Health Interview Survey, 1997–2010, Sample Adult Core component. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

- The annual percentage of adults aged 18 and over who engaged in regular leisure-time physical activity was lowest in 1998 (29.8%) and highest in 2009 (34.7%).



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- 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) was lowest in 1998 (40.3%) and highest in 2009 (47.0%).

Figure 7.2. Percentage of adults aged 18 years and over who met the 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity, by age group and sex: United States, 2010

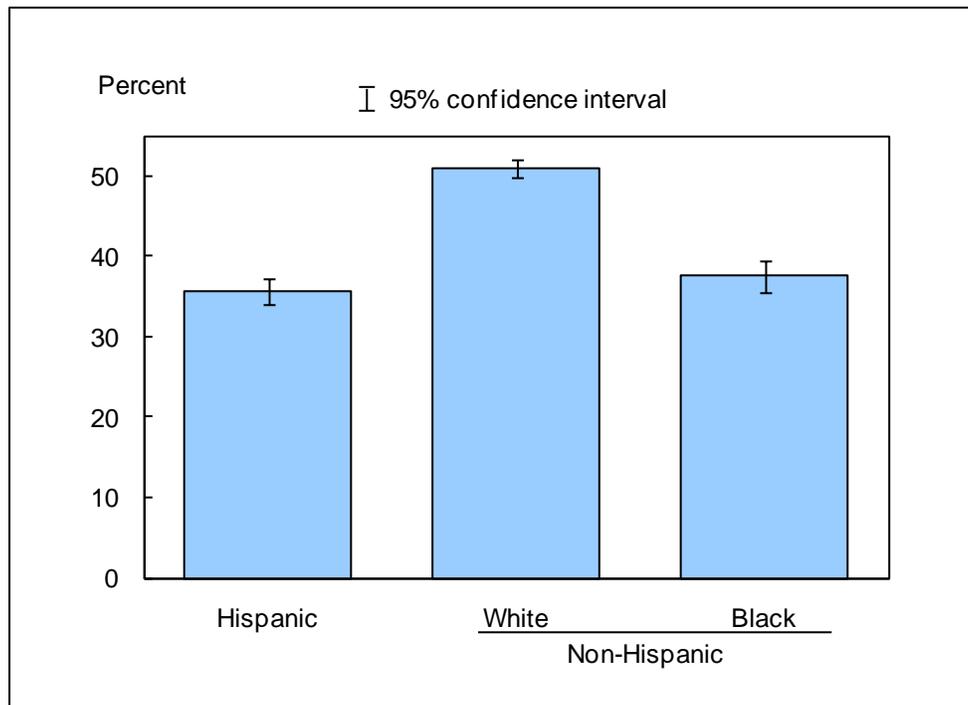


NOTES: Estimates in this figure are limited to leisure-time physical activity only. This measure reflects an estimate of leisure-time aerobic activity motivated by the 2008 federal *Physical Activity Guidelines for Americans*, which are being used for *Healthy People 2020* Objectives (16). The 2008 guidelines refer to any kind of aerobic activity, not just to leisure-time aerobic activity, so the leisure-time aerobic activity estimates in this figure may be underestimates of 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 say that aerobic activity should be performed in episodes of at least 10 minutes, and preferably it should be spread throughout the week. The analyses excluded 514 persons (1.9%) with unknown physical activity participation.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, 2010, Sample Adult Core component. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

- For both sexes combined, adults aged 75 and over were less likely than adults in younger age groups to meet the 2008 federal physical activity guidelines for aerobic activity (based on leisure-time activity).
- For adults aged 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 years and over who met the 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity, by race/ethnicity: United States, 2010

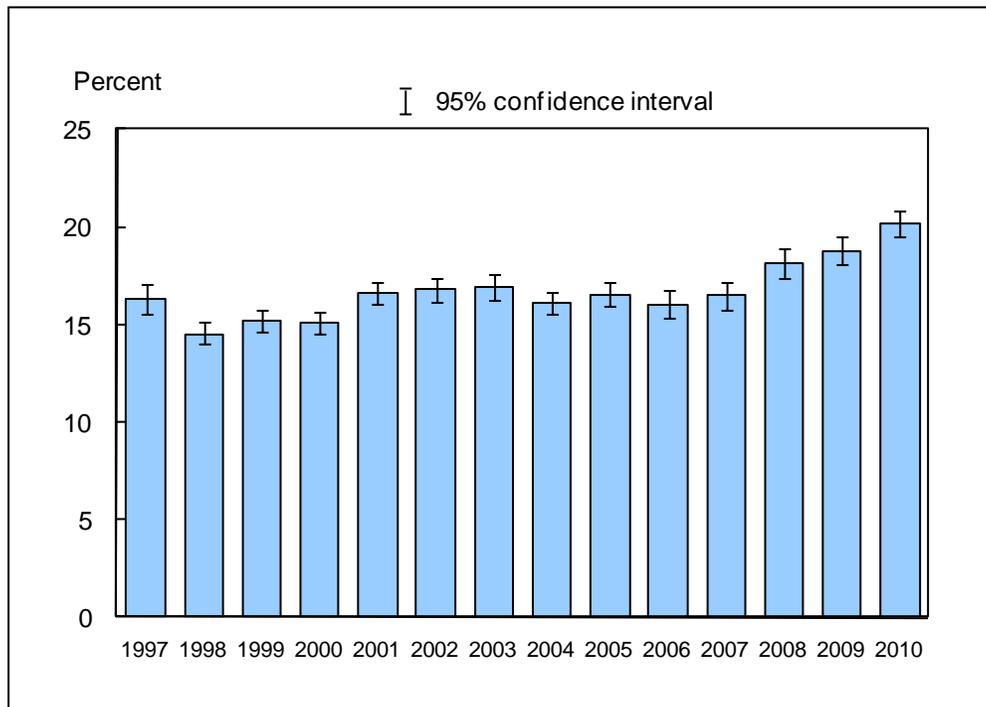


NOTES: Estimates in this figure are limited to leisure-time physical activity only. This measure reflects an estimate of leisure-time aerobic activity motivated by the 2008 federal *Physical Activity Guidelines for Americans*, which are being used for *Healthy People 2020* Objectives (16). The 2008 guidelines refer to any kind of aerobic activity, not just to leisure-time aerobic activity, so the leisure-time aerobic activity estimates in this figure may be underestimates of 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 say that aerobic activity should be performed in episodes of at least 10 minutes, and preferably it should be spread throughout the week. The analyses excluded 514 persons (1.9%) with unknown physical activity participation. Estimates are age-sex-adjusted using the projected 2000 U.S. population as the standard population and using five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, 2010, Sample Adult Core component. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

- The age-sex-adjusted percentage of adults who met the 2008 federal physical activity guidelines for aerobic activity (based on leisure-time activity) was 35.6% for Hispanic adults, 50.9% for non-Hispanic white adults, and 37.5% 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) than Hispanic adults and non-Hispanic black adults.

Figure 7.4. Percentage of adults aged 18 years and over who met the 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities through leisure-time aerobic and muscle-strengthening activities: United States, 1997-2010



NOTES: 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 (16). The 2008 guidelines refer to any kind of aerobic and muscle-strengthening activities, not just to leisure-time aerobic and muscle-strengthening activities, so the leisure-time aerobic and muscle-strengthening activity estimates in this figure may be underestimates of 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 say that 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 National Health Interview Survey (NHIS) 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 back to 1997 to derive the aerobic activity and muscle-strengthening estimates in this figure, allowing trend analysis. The analyses excluded persons with unknown physical activity participation (about 3% of respondents each year). Beginning with the 2003 data, NHIS transitioned to weights derived from the 2000 census. In this Early Release, estimates for 2000–2002 were recalculated using weights derived from the 2000 census. See "About This Early Release" for more details.

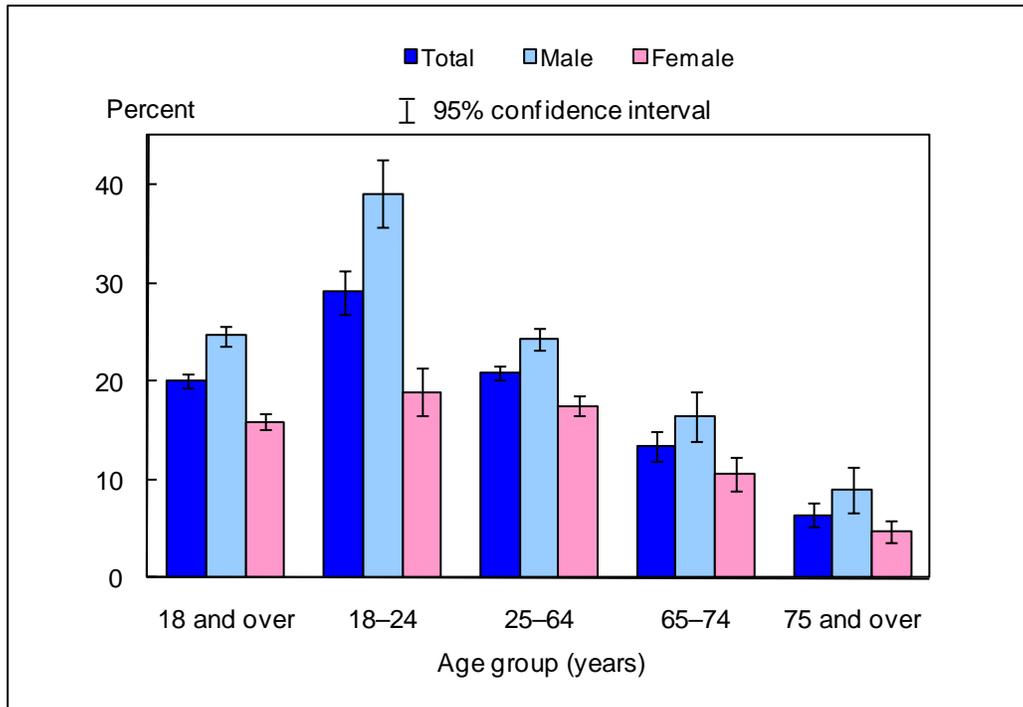
DATA SOURCE: CDC/NCHS, National Health Interview Survey, 1997-2010, Sample Adult Core component. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

- In 2010, 20.2% (95% confidence interval = 19.47%–20.85%) 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), which was higher than the 2009 estimate of 18.8%.



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- The annual percentages 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) was lowest in 1998 (14.5%) and highest in 2010 (20.2%).

Figure 7.5. Percentage of adults aged 18 years and over who met the 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, 2010

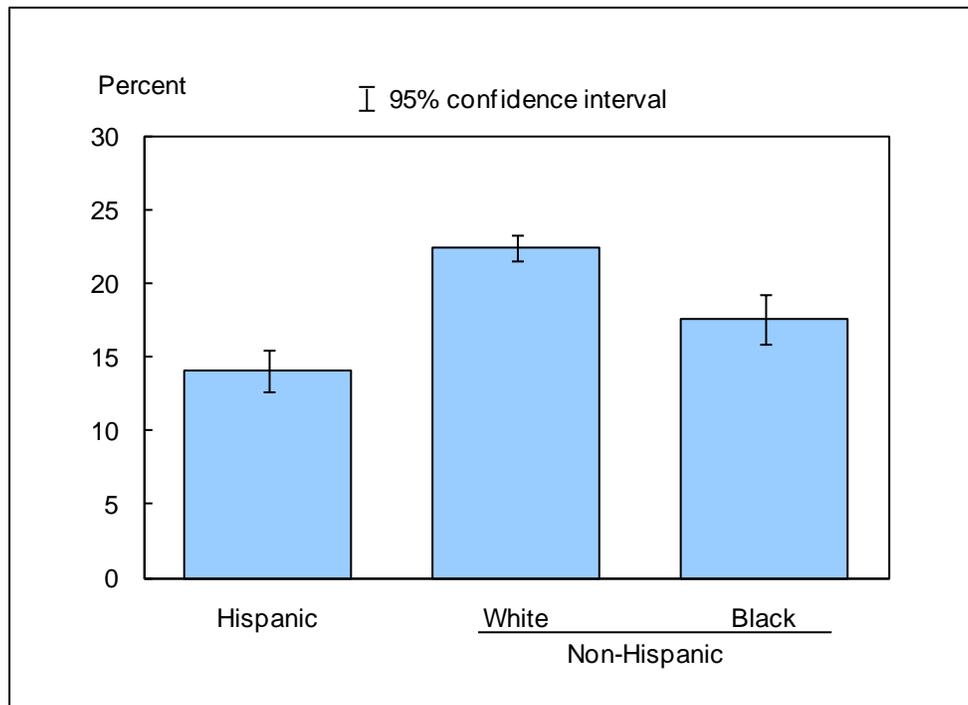


NOTES: Estimates in this figure are limited to leisure-time physical activity only. This measure reflects an estimate of leisure-time aerobic and muscle-strengthening activities motivated by the 2008 federal *Physical Activity Guidelines for Americans*, which are being used for *Healthy People 2020* Objectives (16). The 2008 guidelines refer to any kind of aerobic and muscle-strengthening activities, not just to leisure-time aerobic and muscle-strengthening activities, so the leisure-time aerobic and muscle-strengthening activity estimates in this figure may be underestimates of 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 say that 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 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 analyses excluded 570 persons (2.1%) with unknown physical activity participation.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, 2010, Sample Adult Core component. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

- For both sexes combined, adults aged 75 and over were less likely than adults in younger age groups to meet the 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities (based on leisure-time activities).
- For adults aged 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 both aerobic and muscle-strengthening activities (based on leisure-time activities).

Figure 7.6. Age-sex-adjusted percentage of adults aged 18 years and over who met the 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, 2010



NOTES: 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 (16). The 2008 guidelines refer to any kind of aerobic and muscle-strengthening activities, not just to leisure-time aerobic and muscle-strengthening activities, so the leisure-time aerobic and muscle-strengthening activity estimates in this figure may be underestimates of 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 say that 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 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 analyses excluded 570 persons (2.1%) with unknown physical activity participation. The analyses excluded 570 persons (2.1%) with unknown physical activity participation. Estimates are age-sex-adjusted using the projected 2000 U.S. population as the standard population and using five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, 2010, Sample Adult Core component. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

- The age-sex-adjusted percentage of adults who met the 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities (based on leisure-time activities) was 14.1% for Hispanic adults, 22.4% for non-Hispanic white adults, and 17.6% for non-Hispanic black adults.



- Non-Hispanic white adults were more likely to meet the 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities (based on leisure-time activities) than Hispanic adults and non-Hispanic black adults.

Data tables for Figures 7.1–7.6:

Data table for Figure 7.1. Percentage of adults aged 18 years and over who engaged in regular leisure-time physical activity, and percentage of adults aged 18 years of age and over who met the 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity: United States, 1997–2010

Year	Crude ¹ percent (95% confidence interval): Leisure- time physical activity	Age-adjusted ² percent (95% confidence interval): Leisure- time physical activity	Crude ¹ percent (95% confidence interval): Aerobic activity	Age-adjusted ² percent (95% confidence interval): Aerobic activity
1997	32.0 (31.3–32.6)	31.8 (31.1–32.4)	43.6 (42.5–44.6)	43.3 (42.2–44.3)
1998	29.8 (29.1–30.4)	29.6 (28.9–30.3)	40.3 (39.5–41.1)	40.1 (39.3–40.9)
1999	30.2 (29.5–31.0)	30.1 (29.4–30.8)	41.1 (40.3–41.9)	40.9 (40.2–41.7)
2000	31.7 (31.0–32.4)	31.7 (31.0–32.4)	42.4 (41.6–43.2)	42.3 (41.5–43.1)
2001	31.9 (31.2–32.7)	31.8 (31.1–32.6)	43.0 (42.2–43.8)	42.9 (42.1–43.7)
2002	31.7 (31.0–32.5)	31.7 (30.9–32.5)	43.0 (42.1–43.9)	42.9 (42.1–43.8)
2003	32.8 (32.1–33.6)	32.8 (32.0–33.6)	43.4 (42.5–44.3)	43.3 (42.4–44.2)
2004	30.2 (29.4–31.0)	30.1 (29.3–30.9)	41.7 (40.8–42.6)	41.6 (40.8–42.5)
2005	30.1 (29.38–30.92)	30.1 (29.37–30.90)	41.0 (40.18–41.89)	41.1 (40.21–41.90)
2006	30.9 (29.91–31.80)	30.9 (29.96–31.85)	41.4 (40.31–42.42)	41.4 (40.37–42.47)
2007	30.8 (29.73–31.82)	30.8 (29.74–31.82)	41.5 (40.36–42.63)	41.5 (40.33–42.59)
2008	31.9 (30.92–32.97)	32.0 (30.95–33.01)	43.4 (42.33–44.47)	43.5 (42.43–44.58)
2009	34.7 (33.73–35.58)	34.8 (33.89–35.76)	47.0 (46.05–47.95)	47.2 (46.25–48.16)
2010	34.4 (33.51–35.28)	34.6 (33.68–35.45)	46.6 (45.63–47.60)	46.8 (45.87–47.80)

¹Crude estimates are presented in the figure.

²Estimates for this Healthy People 2010 Leading Health Indicator (leisure-time physical activity) and the 2008 federal guidelines (aerobic activity) are age adjusted using the projected 2000 U.S. population as the standard population and using five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

NOTES: Beginning with the 2003 data, the National Health Interview Survey transitioned to weights derived from the 2000 census. In this Early Release, estimates for 2000–2002 were recalculated using weights derived from the 2000 census. See "About This Early Release" for more details.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, 1997–2010, Sample Adult Core component. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

Data table for Figure 7.2. Percentage of adults aged 18 years and over who met the 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity, by age group and sex: United States, 2010

Age (years) and sex	Percent	95% confidence interval
18-24, total	56.9	54.36-59.53
18-24, male	65.0	61.50-68.51
18-24, female	48.7	45.20-52.21
25-64, total	48.6	47.55-49.73
25-64, male	52.5	51.00-53.94
25-64, female	44.9	43.71-46.18
65-74, total	35.4	33.09-37.77
65-74, male	40.3	36.89-43.72
65-74, female	31.2	28.26-34.23
75 and over, total	23.7	21.61-25.80
75 and over, male	32.0	28.26-35.81
75 and over, female	18.1	15.97-20.32
18 and over (crude ¹), total	46.6	45.63-47.60
18 and over (crude ¹), male	51.8	50.49-53.13
18 and over (crude ¹), female	41.7	40.61-42.88
18 and over (age-adjusted ²), total	46.8	45.87-47.80
18 and over (age-adjusted ²), male	51.6	50.36-52.91
18 and over (age-adjusted ²), female	42.4	41.23-43.48

¹Crude estimates are presented in the figure.

²Estimates for the 2008 federal guidelines are age adjusted using the projected 2000 U.S. population as the standard population and using five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, 2010, Sample Adult Core component. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

Data table for Figure 7.3. Adjusted percentage of adults aged 18 years and over who met the 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity, by race/ethnicity: United States, 2010

Race/ethnicity	Age-sex-adjusted¹ percent (95% confidence interval)	Age-adjusted² percent (95% confidence interval)
Hispanic or Latino	35.6 (34.12-37.13)	35.9 (34.32-37.42)
Not Hispanic or Latino, single race, white	50.9 (49.73-52.15)	51.0 (49.79-52.23)
Not Hispanic or Latino, single race, black	37.5 (35.59-39.37)	37.1 (35.23-39.04)

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

²Estimates for the 2008 federal guidelines are age adjusted using the projected 2000 U.S. population as the standard population and using five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, 2010, Sample Adult Core component. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

Data table for Figure 7.4. Percentage of adults aged 18 years and over who met the 2008 federal physical activity guidelines for both aerobic and muscle-strengthening activities through leisure-time aerobic and muscle-strengthening activities: United States, 1997-2010

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	20.2 (19.47-20.85)	20.4 (19.67-21.05)

¹Crude estimates are presented in the figure.

²Estimates for the 2008 federal guidelines are age adjusted using the projected 2000 U.S. population as the standard population and using five age groups: 18-24, 25-34, 35-44, 45-64, and 65 and over.

NOTES: Beginning with the 2003 data, the National Health Interview Survey transitioned to weights derived from the 2000 census. In this Early Release, estimates for 2000-2002 were recalculated using weights derived from the 2000 census. See "About This Early Release" for more details.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, 1997-2010, Sample Adult Core component. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

Data table for Figure 7.5. Percentage of adults aged 18 years and over who met the 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, 2010

Age (years) and sex	Percent	95% confidence interval
18-24, total	29.1	26.92-31.31
18-24, male	39.1	35.64-42.53
18-24, female	19.0	16.53-21.37
25-64, total	20.9	20.08-21.68
25-64, male	24.4	23.28-25.49
25-64, female	17.5	16.51-18.52
65-74, total	13.4	11.86-14.87
65-74, male	16.5	14.01-19.00
65-74, female	10.7	8.85-12.49
75 and over, total	6.4	5.24-7.57
75 and over, male	9.0	6.66-11.26
75 and over, female	4.7	3.56-5.85
18 and over (crude ¹), total	20.2	19.47-20.85
18 and over (crude ¹), male	24.7	23.70-25.72
18 and over (crude ¹), female	15.9	15.05-16.77
18 and over (age-adjusted ²), total	20.4	19.67-21.05
18 and over (age-adjusted ²), male	24.7	23.69-25.62
18 and over (age-adjusted ²), female	16.2	15.36-17.10

¹Crude estimates are presented in the figure.

²Estimates for the 2008 federal guidelines are age adjusted using the projected 2000 U.S. population as the standard population and using five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, 2010. Sample Adult Core component. Data are based on household interviews of a sample of the civilian noninstitutionalized population.

Data table for Figure 7.6. Adjusted percentage of adults aged 18 years and over who met the 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, 2010

Race/ethnicity	Age-sex-adjusted¹ percent (95% confidence interval)	Age-adjusted² percent (95% confidence interval)
Hispanic or Latino	14.1 (12.71-15.46)	14.3 (12.92-15.71)
Not Hispanic or Latino, single race, white	22.4 (21.50-23.30)	22.4 (21.52-23.34)
Not Hispanic or Latino, single race, black	17.6 (15.93-19.21)	17.2 (15.52-18.79)

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

²Estimates for the 2008 federal guidelines are age adjusted using the projected 2000 U.S. population as the standard population and using five age groups: 18–24, 25–34, 35–44, 45–64, and 65 and over.

DATA SOURCE: CDC/NCHS, National Health Interview Survey, 2010, Sample Adult Core component. Data are based on household interviews of a sample of the civilian noninstitutionalized population.