Centers for Disease Control and Prevention
MMWR
Morbidity and Mortality Weekly Report
Early Release / Vol. 61
August 7, 2012

Vital Signs: Walking Among Adults — United States, 2005 and 2010

Abstract

Background: Physical activity has numerous health benefits, including improving weight management. The *2008 Physical Activity Guidelines for Americans* recommend ≥150 minutes/week of moderate-intensity aerobic physical activity (e.g., brisk walking) for substantial health benefits. Walking is the most commonly reported physical activity by U.S. adults.

Methods: CDC used data from the 2005 and 2010 National Health Interview Surveys to assess changes in prevalence of walking (defined as walking for transportation or leisure in at least one bout of 10 minutes or more in the preceding 7 days) by sex, age group, race/ethnicity, education, body mass index category, walking assistance status, region, and physician-diagnosed chronic disease. CDC also assessed the association between walking and meeting the aerobic physical activity guideline.

Results: Overall, walking prevalence increased significantly from 55.7% in 2005 to 62.0% in 2010. Significantly higher walking prevalence was observed in most demographic and health characteristic categories examined. In 2010, the adjusted odds ratio of meeting the aerobic physical activity guideline among walkers, compared with non-walkers, was 2.95 (95% confidence interval = 2.73–3.19).

Conclusions and Implications for Public Health Practice: To sustain increases in the prevalence of walking, communities can implement evidence-based strategies such as creating or enhancing access to places for physical activity, or using design and land use policies and practices that emphasize mixed-use communities and pedestrian-friendly streets. The impact of these strategies on both walking and physical activity should be monitored systematically at the national, state, and local levels. Public health efforts to promote walking as a way to meet physical activity guidelines can help improve the health of U.S. residents.

Introduction

Regular physical activity helps with weight control; however, physical activity also provides many health benefits even without weight loss (*1*). Regular physical activity helps prevent early death and chronic diseases such as coronary heart disease, stroke, type 2 diabetes, depression, and some types of cancer (*1,2*). The *2008 Physical Activity Guidelines for Americans* concluded that adults should engage in aerobic physical activity of moderate intensity (e.g., brisk walking) for at least 150 minutes per week, or of vigorous intensity (e.g., jogging) for at least 75 minutes per week, or an equivalent combination, in periods lasting at least 10 minutes each to gain substantial health benefits (*3*). One third of U.S. adults, however, report no aerobic physical activity during their leisure time and less than half report levels of activity that meet the current aerobic physical activity guideline (*4*).

Walking is the most commonly reported physical activity among U.S. adults overall and also the most frequently reported activity among adults who meet physical activity guidelines (*5,6*). Most adults are physically able to walk and for many persons with disabilities, walking or moving with assistive devices is also possible. Walking is a physical activity most persons can do because it does not require a special skill or special facilities, and can be done indoors or outdoors, alone or with others (*7*). Walking also can be undertaken for multiple purposes, such as for leisure-time exercise or transportation.

Promotion of walking is a viable public health strategy to help adults meet physical activity guidelines and gain health

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benefits. This report summarizes the association between walking and meeting physical activity guidelines and examines changes in walking among U.S. adults using data from the 2005 and 2010 National Health Interview Survey (NHIS).

Methods

NHIS is a continuous cross-sectional survey of U.S. households using in-person interviews.* The survey consists of a core questionnaire as well as supplements to address public health data needs as they arise. Questions specific to walking for leisure and transportation were only asked in the 2005 and 2010 cancer control supplements and were asked of a randomly selected adult (aged ≥18 years) in each sampled family. The overall adult response rate, incorporating family and household response rates, was 69.0% in 2005 and 60.8% in 2010. From an initial combined sample of 58,585, a total of 9,128 participants were excluded for missing data on physical activity or walking (5,054 persons) or because of an inability to walk (1,386), or for missing data on health characteristics (2,417) or demographics (271). The final analytical sample included 26,328 participants from 2005 and 23,129 from 2010.

Walking was defined as engaging in at least one bout of 10 minutes or more of transportation walking or leisure-time walking during the past 7 days. To assess transportation walking, respondents to the 2005 and 2010 NHIS cancer control supplement were asked if they walked "to get some place" that took ≥10 minutes in the past 7 days. To assess leisure-time walking ("for fun, relaxation, exercise, or to walk the dog") respondents were asked if during the past 7 days they walked "for at least 10 minutes" in 2010 and "for at least 10 minutes at a time" in 2005. Usual walking time for each purpose (transportation, leisure-time) was assessed by asking respondents how long they walked each day (2005) or during each bout (2010). Respondents reporting times of <10 minutes were classified as non-walkers for that walking purpose.

Meeting the current aerobic physical activity guideline was defined as participating in ≥150 minutes of moderate-intensity equivalent aerobic activity per week. The guideline was assessed using responses to the NHIS adult core questionnaire on the usual frequency and duration of light- to moderate-intensity and of vigorous-intensity leisure-time aerobic physical activity. Minutes of vigorous-intensity activity were multiplied by two when combining light/moderate and vigorous intensity to calculate the moderate intensity–equivalent combination (*3*). All other analytic variables were derived from the adult core questionnaire.

Prevalence of walking and 95% confidence intervals (CIs) were estimated, and percentage point differences between 2005 and 2010 were compared by sex, age group, race/ethnicity, educational level, region of residence, body mass index category, walking assistance status (i.e., those who cannot, or find it very difficult, "to walk one-quarter mile without special equipment" were categorized as "needs assistance"), and presence of physician-diagnosed chronic diseases (i.e., arthritis, hypertension, and diabetes). Changes in prevalence from 2005 to 2010 were assessed using t-tests. Among walkers, mean time spent walking was estimated by combining the time spent in each purpose for walking. Multiple variable logistic regression analysis was used to estimate the odds for meeting the aerobic physical activity guideline among walkers compared with non-walkers, adjusting for all other variables. The adjusted odds ratios (aORs) were similar for 2005 and 2010; therefore, the more recent 2010 results are presented. Statistical software was used to account for the complex sampling design and provide weighted and age-adjusted national estimates.

Results

From 2005 to 2010, the proportion of U.S. adults who reported walking increased significantly by 6.3 percentage points, from 55.7% to 62.0%. Among men, the increase was 7.4 percentage points, from 54.3% to 61.7%, and among women the increase was 5.2 percentage points, from 57.2% to 62.4% (Table 1). Among both sexes, the prevalence increase was significant in most subgroups. The mean time spent walking among walkers decreased significantly from approximately 15 minutes per day (105.5 minutes per week [CI = 103.2–107.8]) in 2005 to approximately 13 minutes per day (90.8 minutes per week [CI = 88.8–92.9]) in 2010.

The prevalence of meeting the aerobic physical activity guideline increased significantly from 42.1% in 2005 to 48.0% in 2010. In 2010, 59.5% of adults who walked met the guideline compared with 29.5% of those who did not walk. Walkers were significantly more likely to meet the aerobic physical activity guideline than non-walkers (aOR = 2.95). This association was significant for both men (aOR = 2.64) and women (aOR = 3.46) and for persons with every characteristic examined (Table 2). Even among adults needing walking assistance, approximately one in four reported walking and walking was strongly associated with meeting the guideline. When stratified by weekly walking time, the aORs of meeting the aerobic physical activity guideline among walkers, compared with non-walkers, increased with increasing walking time: 10–19 minutes per week: 1.34; 20–29 minutes per week: 1.52; 30–59 minutes per week: 1.80; ≥60 minutes per week: 3.82. When adults reporting no physical activity were excluded from the analysis, walkers were more likely to meet the guideline compared with persons who did not walk (aOR for men = 1.46 [CI: 1.25–1.72], aOR for women = 1.80 [CI: 1.58–2.06]).

*Additional information available at http://www.cdc.gov/nchs/nhis.htm.

TABLE 1. Percentage of adults aged ≥18 years who reported recent walking,* by sex and selected characteristics — National Health Interview Survey, United States, 2005 and 2010†

Characteristic	Men					Women				
	2005 (N = 11,813)		2010 (N = 10,473)		Percentage point change from 2005 to 2010§	2005 (N =14,515)		2010 (N = 12,656)		Percentage point change from 2005 to 2010§
	%	(95% CI)	%	(95% CI)		%	(95% CI)	%	(95% CI)	
Total	**54.3**	**(53.0–55.6)**	**61.7**	**(60.6–62.9)**	**7.4**	**57.2**	**(56.0–58.4)**	**62.4**	**(61.2–63.6)**	**5.2**
Age group (yrs)										
18–24	56.4	(52.9–59.8)	65.2	(61.6–68.9)	8.9	61.1	(57.8–64.5)	65.3	(62.1–68.5)	4.2¶
25–34	52.3	(49.8–54.8)	63.7	(61.1–66.4)	11.4	59.6	(57.1–62.0)	66.7	(64.3–69.1)	7.2
35–44	54.5	(52.2–56.8)	61.2	(58.6–63.8)	6.7	62.0	(59.8–64.2)	66.1	(63.8–68.4)	4.1
45–64	54.4	(52.6–56.3)	61.7	(59.8–63.6)	7.3	56.7	(54.8–58.6)	62.6	(60.9–64.4)	5.9
≥65	54.3	(51.6–56.9)	57.5	(54.7–60.4)	3.3¶	46.6	(44.4–48.8)	50.5	(48.0–52.9)	3.8
Race/Ethnicity										
White, non-Hispanic	55.1	(53.6–56.7)	62.8	(61.3–64.2)	7.6	59.3	(57.9–60.8)	64.0	(62.5–65.5)	4.6
Black, non-Hispanic	50.9	(47.9–53.8)	55.3	(52.1–58.5)	4.4	47.5	(45.0–50.1)	53.7	(51.1–56.4)	6.2
Hispanic	52.2	(49.4–55.0)	60.0	(57.3–62.8)	7.8	54.1	(51.1–57.1)	60.7	(58.3–63.1)	6.6
Other race	54.1	(48.6–59.6)	65.1	(61.2–69.1)	11.1	59.2	(55.0–63.3)	67.1	(64.0–70.2)	7.9
Education level										
Less than high school graduate	46.5	(43.9–49.0)	53.7	(51.0–56.4)	7.3	47.0	(44.3–49.6)	51.1	(48.3–53.9)	4.2
High school graduate	46.4	(44.4–48.4)	55.3	(53.1–57.4)	8.9	49.6	(47.6–51.6)	55.6	(53.3–57.8)	6.0
Some college	55.7	(53.6–57.7)	61.6	(59.5–63.8)	5.9	59.8	(57.9–61.7)	63.3	(61.3–65.3)	3.5
College graduate	64.8	(62.4–67.2)	71.5	(69.3–73.7)	6.7	68.5	(66.3–70.7)	72.3	(70.2–74.4)	3.8
Region										
Midwest	54.3	(51.8–56.8)	60.4	(58.0–62.8)	6.1	56.5	(54.1–58.8)	62.6	(60.4–64.9)	6.2
Northeast	62.0	(59.1–64.9)	66.2	(63.4–69.0)	4.2	66.1	(63.8–68.4)	65.5	(62.6–68.3)	-0.7¶
South	47.7	(45.6–49.9)	57.3	(55.2–59.4)	9.6	50.6	(48.4–52.8)	56.3	(54.3–58.4)	5.7
West	58.8	(56.0–61.6)	66.1	(63.8–68.4)	7.3	61.8	(59.4–64.2)	69.1	(66.8–71.4)	7.3
Body mass index**										
Underweight/Normal weight	55.1	(53.0–57.2)	63.9	(62.0–65.9)	8.8	61.3	(59.8–62.8)	66.5	(65.0–68.1)	5.2
Overweight	55.7	(53.8–57.5)	62.5	(60.7–64.4)	6.9	56.4	(54.4–58.5)	63.8	(62.0–65.6)	7.4
Obese	51.6	(49.4–53.9)	58.3	(56.1–60.4)	6.6	49.8	(47.8–51.8)	54.5	(52.4–56.6)	4.7
Walking assistance status††										
Needs assistance	26.6	(19.5–33.7)	26.8	(19.5–34.2)	0.2¶	25.7	(20.5–31.0)	23.6	(18.1–29.2)	-2.1¶
Does not need assistance	55.8	(54.5–57.1)	63.7	(62.5–64.8)	7.8	59.6	(58.4–60.8)	65.2	(64.0–66.4)	5.6
Meeting the aerobic physical activity guideline§§										
Meets	70.8	(69.3–72.3)	74.6	(73.2–76.0)	3.8	76.8	(75.4–78.2)	79.4	(78.1–80.8)	2.6
Does not meet	41.2	(39.5–42.8)	48.7	(47.0–50.4)	7.5	44.8	(43.3–46.2)	49.2	(47.6–50.8)	4.4
Chronic disease										
Arthritis	52.8	(50.2–55.4)	57.6	(55.1–60.1)	4.8	50.7	(48.8–52.6)	54.1	(52.0–56.3)	3.5
Hypertension	53.3	(51.1–55.5)	60.5	(58.5–62.6)	7.2	49.9	(47.9–51.9)	54.0	(52.0–56.0)	4.1
Diabetes	53.8	(50.1–57.6)	55.1	(51.3–58.9)	1.2¶	42.7	(39.0–46.5)	47.3	(43.7–51.0)	4.6¶

See footnotes on page 4.

Conclusions and Comments

The results in this report show an association between recent walking and meeting the aerobic physical activity guideline and suggest promotion of walking might be an effective strategy to increase physical activity. Significant increases in the percentage of U.S. adults who reported walking were seen in nearly all subgroups in 2010 compared with 2005. Importantly, in subgroups at risk for inactivity, such as adults with lower educational attainment (*4*), increases occurred. However, although the percentage of U.S. residents who walked increased from 2005 to 2010, average walking time among those who walked at least 10 minutes in the preceding 7 days decreased by about 2 minutes per day. The reason for this finding is unknown. Overall, the results of this analysis are consistent with the increase in prevalence of those meeting the aerobic physical activity guideline and with findings from another national survey† showing increases in walking (*8*). Because walking or moving with assistance is possible for most persons, does not require special skills or facilities, and can serve multiple purposes, it represents a way many U.S. residents can achieve a more physically active lifestyle, regardless of sex, race/ethnicity, age, or education level.

Less than half of the adult population report getting enough aerobic physical activity for substantial health benefits, and nearly one third report being physically inactive (*4*). The public health implications of low levels of physical activity

† Additional information available at http://nhts.ornl.gov.

TABLE 1. (*Continued*) Percentage of adults aged ≥18 years who reported recent walking,* by sex and selected characteristics — National Health Interview Survey, United States, 2005 and 2010†

Characteristic	Men and women overall				
	2005 (N = 26,328)		2010 (N = 23,129)		Percentage point change from 2005 to 2010§
	%	(95% CI)	%	(95% CI)	
Total	**55.7**	**(54.7–56.7)**	**62.0**	**(61.1–62.9)**	**6.3**
Age group (yrs)					
18–24	58.7	(56.3–61.2)	65.3	(62.8–67.8)	6.6
25–34	55.9	(54.1–57.8)	65.2	(63.3–67.1)	9.3
35–44	58.2	(56.6–59.9)	63.6	(61.9–65.4)	5.4
45–64	55.6	(54.2–57.0)	62.2	(60.9–63.5)	6.6
≥65	50.0	(48.3–51.8)	53.7	(51.9–55.5)	3.6
Race/Ethnicity					
White, non-Hispanic	57.2	(56.0–58.4)	63.3	(62.2–64.4)	6.1
Black, non-Hispanic	49.0	(46.8–51.2)	54.4	(52.0–56.8)	5.4
Hispanic	53.0	(50.9–55.0)	60.2	(58.3–62.2)	7.3
Other race	56.5	(53.2–59.8)	66.3	(63.8–68.7)	9.8
Education level					
Less than high school graduate	46.6	(44.7–48.5)	52.4	(50.4–54.4)	5.8
High school graduate	47.7	(46.2–49.1)	55.3	(53.7–56.9)	7.7
Some college	57.8	(56.3–59.3)	62.5	(61.0–64.1)	4.7
College graduate	66.9	(65.0–68.7)	72.0	(70.5–73.5)	5.1
Region					
Midwest	55.3	(53.3–57.3)	61.4	(59.6–63.2)	6.1
Northeast	64.2	(62.3–66.1)	65.8	(63.5–68.0)	1.6¶
South	49.1	(47.2–51.0)	56.8	(55.2–58.4)	7.7
West	60.2	(58.2–62.2)	67.5	(65.8–69.2)	7.3
Body mass index**					
Underweight/Normal weight	58.9	(57.5–60.3)	65.5	(64.2–66.8)	6.6
Overweight	55.8	(54.4–57.2)	63.0	(61.6–64.3)	7.2
Obese	50.5	(48.9–52.2)	56.3	(54.8–57.9)	5.8
Walking assistance status††					
Needs assistance	26.0	(21.4–30.5)	25.0	(20.3–29.7)	-1.0¶
Does not need assistance	57.7	(56.7–58.7)	64.4	(63.5–65.3)	6.7
Meeting the aerobic physical activity guideline§§					
Meets	73.6	(72.5–74.7)	76.8	(75.7–77.8)	3.2
Does not meet	43.0	(41.8–44.2)	48.9	(47.7–50.1)	5.9
Chronic disease					
Arthritis	51.5	(49.9–53.2)	55.6	(53.9–57.3)	4.1
Hypertension	51.6	(49.9–53.2)	57.3	(55.8–58.8)	5.7
Diabetes	48.4	(45.6–51.2)	51.5	(48.8–54.3)	3.1¶

Abbreviation: CI = confidence interval.

* Walking for transportation (i.e., "to get to some place") or for leisure (i.e., "for fun, relaxation, exercise, or to walk the dog") for at least one bout of 10 minutes or more in the preceding 7 days.

† Estimates were age adjusted to the 2000 U.S. standard population, using five age groups: 18–24 years, 25–34 years, 35–44 years, 45–64 years, and ≥65 years. Estimates by age group and chronic disease were not age adjusted.

§ Differences might not appear exact because of rounding.

¶ Not statistically significant (p≥0.05).

** Body mass index (weight [kg] / height [m]^2) estimates were calculated from self-reported weight and height. Underweight and normal weight: <25.0, overweight: 25.0–29.9, and obese: ≥30.

†† Needs assistance = participant cannot, or finds it very difficult to, walk a quarter-mile without special equipment.

§§ Participant is physically active, per self-report, at moderate intensity ≥150 minutes/week, vigorous intensity ≥75 minutes/week, or at an equivalent combination.

are addressed in the National Prevention Strategy's Active Living Priority (*9*), the National Physical Activity Plan (*10*), and more recently, the Institute of Medicine's Accelerating Progress in Obesity Prevention consensus report (*11*). These reports recommend environmental and policy efforts involving communities, schools, governments, worksites, and health-care agencies to increase opportunities for physical activity, of which walking can be an important part.

The Guide to Community Preventive Services§ recommends evidenced-based approaches to increase physical activity; three of the recommended environmental and policy strategies can be used to promote walking. The first, creating or enhancing access to places for physical activity combined with informational outreach, includes improving walking

§ Additional information available at http://www.thecommunityguide.org/index.html.

TABLE 2. Adjusted odds ratio for meeting the *2008 Physical Activity Guidelines for Americans* for aerobic activity, comparing walkers* with non-walkers, by sex and selected characteristics — National Health Interview Survey, United States, 2010†

Characteristic	Men		Women		Men and women overall	
	Adjusted odds ratio	(95% CI)	Adjusted odds ratio	(95% CI)	Adjusted odds ratio	(95% CI)
Total	**2.64**	**(2.37–2.95)**	**3.46**	**(3.11–3.84)**	**2.95**	**(2.73–3.19)**
Age group (yrs)						
18–24	1.78	(1.25–2.55)	3.99	(2.94–5.42)	2.54	(2.02–3.19)
25–34	2.21	(1.75–2.78)	3.80	(2.99–4.83)	2.73	(2.32–3.22)
35–44	2.82	(2.25–3.54)	3.32	(2.63–4.20)	3.00	(2.58–3.49)
45–64	2.95	(2.44–3.56)	3.54	(2.92–4.30)	3.18	(2.78–3.64)
≥65	3.99	(3.04–5.23)	2.82	(2.29–3.48)	3.36	(2.85–3.95)
Race/Ethnicity						
White, non-Hispanic	2.76	(2.40–3.18)	3.37	(2.95–3.85)	2.99	(2.71–3.30)
Black, non-Hispanic	2.39	(1.80–3.17)	3.27	(2.54–4.22)	2.70	(2.27–3.22)
Hispanic	2.60	(2.04–3.32)	3.84	(3.04–4.86)	2.96	(2.48–3.53)
Other race	2.25	(1.51–3.35)	4.92	(3.38–7.16)	3.28	(2.52–4.28)
Education level						
Less than high school graduate	2.14	(1.64–2.77)	3.49	(2.57–4.74)	2.63	(2.14–3.23)
High school graduate	2.81	(2.30–3.42)	3.72	(3.04–4.55)	3.12	(2.74–3.56)
Some college	2.76	(2.24–3.41)	3.40	(2.81–4.11)	2.99	(2.61–3.42)
College graduate	2.73	(2.21–3.37)	3.45	(2.88–4.12)	2.96	(2.58–3.40)
Region						
Midwest	2.76	(2.23–3.42)	3.74	(3.04–4.60)	3.12	(2.72–3.58)
Northeast	2.57	(1.98–3.34)	2.71	(2.06–3.55)	2.60	(2.10–3.21)
South	2.89	(2.41–3.47)	3.98	(3.33–4.76)	3.31	(2.91–3.76)
West	2.33	(1.83–2.98)	3.12	(2.54–3.83)	2.61	(2.21–3.08)
Body mass index§						
Underweight/Normal weight	2.37	(1.96–2.86)	3.83	(3.28–4.47)	3.07	(2.72–3.47)
Overweight	2.64	(2.24–3.10)	3.22	(2.65–3.92)	2.78	(2.45–3.16)
Obese	2.99	(2.40–3.71)	3.18	(2.58–3.92)	3.04	(2.62–3.52)
Walking assistance status¶						
Needs assistance	2.56	(1.28–5.13)	2.64	(1.61–4.33)	2.52	(1.70–3.72)
Does not need assistance	2.65	(2.37–2.96)	3.51	(3.16–3.90)	2.98	(2.75–3.22)
Chronic disease						
Arthritis	3.12	(2.45–3.97)	2.88	(2.34–3.55)	2.96	(2.53–3.47)
Hypertension	2.80	(2.28–3.44)	3.02	(2.45–3.73)	2.91	(2.50–3.38)
Diabetes	2.55	(1.79–3.65)	3.61	(2.44–5.34)	2.79	(2.20–3.54)

Abbreviation: CI = confidence interval.
* Walking for transportation (i.e., "to get to some place") or for leisure (i.e., "for fun, relaxation, exercise, or to walk the dog") for at least one bout of 10 minutes or more in the preceding 7 days.
† Estimates were adjusted for age group, race/ethnicity, education level, region, body mass index, walking assistance status, and presence of arthritis, hypertension and diabetes.
§ Body mass index (weight [kg] / height [m]^2) estimates were calculated from self-reported weight and height. Underweight and normal weight: <25.0, overweight: 25.0–29.9, and obese: ≥30.
¶ Needs assistance = participant cannot, or finds it very difficult to, walk a quarter-mile without special equipment.

trails so they are accessible to those with mobility limitations, creating and promoting walking paths around a worksite, and establishing joint use agreements to allow use of school tracks for walking during non–school hours (*12*). A second strategy, using street-scale urban design and land use policies, includes improved street lighting and landscaping, infrastructure projects to increase safety of street crossings, and use of traffic calming features such as speed bumps (*13*). A third strategy, using community-scale urban design land use policies and practices, includes applying building codes and zoning regulations that facilitate mixed-use development (i.e., jobs, housing, and commercial activities located in close proximity to one another) and designing and operating complete streets (i.e., including bicycle lanes and sidewalks) that enable safe access to all users, including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities, including those with disabilities (*13*). Implementation of these strategies can increase safe and accessible opportunities for all U.S. residents to integrate more physical activity, such as walking or moving with assistance, into their daily lives. Systematic monitoring of changes in walking and physical activity at national, state, and local levels is key to assessing the impact of these efforts.

The implementation of environmental and policy approaches to increase physical activity in communities is supported in several federal initiatives. For example, CDC currently funds 25 states to address obesity and other chronic diseases by changing environments where persons live, work, learn, and play, and includes physical activity as a target

behavior.[¶] CDC's Communities Putting Prevention to Work program[**] and Community Transformation Grants program[††] implement environmental changes such as providing safe, accessible places for walking. The First Lady's Let's Move! campaign[§§] promotes an Active Communities initiative to revitalize parks and community centers. Other organizations also have implemented these approaches. For example, the nonprofit Rails-to-Trails Conservancy[¶¶] strives to create a nationwide network of trails and connecting corridors from former rail lines, with nearly 20,000 miles of rail-trail now available for walking and other physical activities such as running and bicycling. Even relatively small modifications to the environment can help increase walking. Because walking is an activity most persons can do, environmental improvements to support walking could have broad reach to improve physical activity and health (*12*).

The findings in this report are subject to at least four limitations. First, NHIS data are self-reported and subject to recall and social-desirability biases (*14*). However, currently the only way to measure specific physical activities, such as walking, in a surveillance system is through survey questionnaires. Second, the recall periods and domains for aerobic physical activity assessment (i.e., usual or leisure-time) and walking (i.e., past 7 days, transportation or leisure-time) were different, and quantifying to what extent walking contributes to meeting the guidelines was not possible. Third, the NHIS leisure-time walking questions changed slightly from 2005 to 2010. However, the potential effect of this change was limited by reclassifying all walkers who reported at least 10 minutes per day of walking to non-walkers if the usual bout time was not at least 10 minutes. Finally, response rates in 2005 and 2010 were 69.0% and 60.8%, respectively; therefore, the findings might be subject to response bias. However, NHIS data undergo nonresponse bias analysis and are weighted to adjust for nonresponse. Any residual nonresponse bias related to walking is presumed constant over time.

Improving physical activity generally and walking specifically requires support from many societal sectors. U.S. residents should have safe and accessible options for physical activity, regardless of age, education level or disability status (*9*). The findings in this analysis suggest that walking is an activity many adults can do. Achieving at least 150 minutes/week of moderate-intensity physical activity lowers the risk for a number of chronic diseases and can help maintain a healthy weight. Many U.S. residents are missing the opportunity to improve their health through regular physical activity. Modifying environments and policies to improve the spaces and increase the number of places for walking might facilitate continued increases in the percentage of U.S. residents who are physically active.

Key Points

- Regular physical activity provides many health benefits; however, approximately half of all adults do not get the recommended amount of physical activity and about one third report no physical activity.
- The percentage of adults who walk for at least 10 minutes at a time increased from 55.7% in 2005 to 62.0% in 2010.
- Adults should get at least 150 minutes of moderate-intensity aerobic activity each week. Walkers are approximately three times more likely than non-walkers to meet this guideline.
- Walking is a physical activity most persons can do because it does not require special equipment, can be done indoors or outdoors, and can be done alone or with others.
- Improving spaces and increasing places for walking can help more adults get the physical activity needed for health benefits.
- Additional information is available at http://www.cdc.gov/vitalsigns.

[¶] Additional information available at http://www.cdc.gov/obesity/stateprograms.
[**] Additional information available at http://www.cdc.gov/communitiesputtingpreventiontowork.
[††] Additional information available at http://www.cdc.gov/communitytransformation.
[§§] Additional information available at http://www.letsmove.gov.
[¶¶] Additional information available at http://www.railstotrails.org/index.html.

Reported by

David Berrigan, PhD, National Cancer Institute. Dianna D. Carroll, PhD, Janet E. Fulton, PhD, Deborah A. Galuska, PhD, David R. Brown, PhD, Joan M. Dorn, PhD, Div of Nutrition, Physical Activity, and Obesity, National Center for Chronic Disease Prevention and Health Promotion; Brian Armour, PhD, Div of Human Development and Disability, National Center on Birth Defects and Developmental Disabilities; Prabasaj Paul, PhD, EIS Officer, CDC. ***Corresponding contributor:*** *Dianna D. Carroll, ddcarroll@cdc.gov, 770-488-6339.*

Acknowledgments

National Cancer Institute. Vince Campbell, Div of Human Development and Disability, National Center on Birth Defects and Developmental Disabilities; Rosemary Bretthauer-Mueller, MinKyoung Song, Div of Nutrition, Physical Activity, and Obesity, National Center for Chronic Disease Prevention and Health Promotion, CDC.

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