

**Midcourse
Review**



**Physical Activity
and Fitness** **22**

Co-Lead Agencies:

Centers for Disease Control and Prevention
President’s Council on Physical Fitness and Sports

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Goal: Improve health, fitness, and quality of life through daily physical activity.

Introduction*

Recognition of physical inactivity as an important public health problem has evolved rapidly since moderate-intensity physical activity was first recommended for overall health benefits in 1996 by the landmark *Physical Activity and Health: A Report of the Surgeon General*.¹ Physical activity plays a key role in the Healthy People 2010 overarching goals of increasing quality and years of healthy life and eliminating health disparities. Physical activity is associated with decreased risk of cardiovascular disease, stroke, diabetes, colorectal and breast cancer, and osteoporosis.¹ Other benefits of active lifestyles include the following:

- Improved mood and feelings of well-being.
- Better control of body weight, blood glucose, blood pressure, and cholesterol.
- Enhanced independent living among older adults.
- Better health benefits for people who have chronic diseases or disabilities.
- Increased quality of life for all persons.¹

The focus area for physical activity and fitness has 15 objectives related to participation in physical activities and access to physical activity and fitness programs and facilities at schools and worksites. Progress toward the targets occurred for several objectives; changes were similar in all populations. No progress was made in eliminating disparities in physical activity participation.

Modifications to Objectives and Subobjectives

The following discussion highlights the modifications, including changes, additions, and deletions, to this focus area's objectives and subobjectives as a result of the midcourse review.

Two objectives were modified following publication of *Healthy People 2010*. Earlier in the decade, the operational definition for increasing moderate-intensity physical activity in adults (22-2) was changed from moderate activity only to include activities of at least moderate intensity. Scientific evidence has demonstrated that persons who engage in vigorous-intensity physical activities at least 3 days per week for 20 minutes per occasion accrue overall health benefits.¹ Thus, adults who meet the objective for vigorous physical activity also meet the objective for moderate physical activity.

For clarity and consistency, the wording of moderate physical activity among adolescents (22-6) was revised to specify “moderate physical activity for at least 30 minutes per day 5 or more days per week,” rather than “for at least 30 minutes on 5 or more of the previous 7 days per week.”

* Unless otherwise noted, data referenced in this focus area come from Healthy People 2010 and can be located at <http://wonder.cdc.gov/data2010>. See the section on DATA2010 in the Technical Appendix for more information.

Physical activity at school facilities (22-12) became measurable, with a baseline of 35 percent and a target of 50 percent of public and private schools providing community access to school physical activity facilities for all persons outside of normal school hours (that is, before and after the school day, on weekends, and during summer and other vacations).

Progress Toward Healthy People 2010 Targets

The following discussion highlights objectives that met or exceeded their 2010 targets; moved toward the targets, demonstrated no change, or moved away from the targets; and those that lacked data to assess progress. Progress is illustrated in the Progress Quotient bar chart (see Figure 22-1), which displays the percent of targeted change achieved for objectives and subobjectives with sufficient data to assess progress.

Objectives that met or exceeded their targets. No physical activity and fitness objectives met their targets at the time of the midcourse review.

Objectives that moved toward their targets. Five physical activity and fitness objectives for adults and two for adolescents in grades 9 through 12 moved toward their targets. Reducing the proportion of adults who do not participate in some form of leisure-time physical activity (22-1) moved toward its target of 20 percent, achieving 15 percent of its targeted change. Compared with a baseline of 40 percent of the population being inactive in 1997, 37 percent reported no leisure-time physical activity in 2003. Regular moderate or vigorous physical activity (22-2) moved toward its target of 50 percent, achieving 6 percent of the targeted change. Regular vigorous physical activity (22-3) achieved 14 percent of the targeted change, moving toward its target of 30 percent. Muscular strength and endurance (22-4) and flexibility exercises among adults (22-5) also advanced toward their targets, achieving 17 percent and 8 percent of the targeted change, respectively.

Improvement in physical activity levels of Americans may relate to the steady increase in the visibility of physical inactivity as a health issue and to a growing number of initiatives that seek to promote physical activity. A public health initiative that identifies interventions to promote physical activity is the *Community Guide to Preventive Services*.² This resource for public health practitioners recommends evidence-based intervention strategies for modifying behavioral, environmental, and policy correlates of active lifestyles. In addition, many State health programs use national guidelines and recommendations to promote healthy behaviors to reduce the burden of cardiovascular disease, stroke, cancer, and obesity and to increase healthful behavior in youth.³

Gains were made among students in grades 9 through 12 for objectives addressing physical activity during physical education class (22-10) and television viewing time (22-11). The proportion of students in grades 9 through 12 who spent at least half of physical education class time being active reached 8 percent of its targeted change. The increased use of school-based programs may have contributed to the increase in active physical education time. For example, the Sports Play and Active Recreation for Kids (SPARK)⁴ and the Coordinated Approach to Child Health (CATCH)⁵ programs provide teachers with information and ideas on ways to increase activity time during physical education classes. The proportion of adolescents who limited television viewing to 2 or fewer hours a day increased from 57 percent in 1999 to 62 percent in 2003, achieving 28 percent of the targeted change and moving toward its target of 75 percent. An increase in time spent multitasking, such as playing video games, instant messaging, or doing homework while the television is on, might have influenced the change in television viewing.⁶

Objectives that demonstrated no change. None of the objectives for this focus area remained static since the launch of Healthy People 2010.

Objectives that moved away from their targets. The objective covering moderate physical activity among students in grades 9 through 12 (22-6) moved away from its target. From a baseline of 27 percent in 1999, the proportion of students who participated in such activity dropped to 25 percent in 2003, moving away from the target of 35 percent. Vigorous physical activity (22-7) and participation in daily physical education in schools (22-9) among students in grades 9 through 12 also moved away from their targets. Even though most States have mandates for physical education, decisions on curriculum content and specific requirements often fall to local school districts or individual schools, which leads to a wide range of requirements for students at all levels. Some schools may require 1 year of physical education, whereas other States or school districts may not require physical education beyond eighth grade.

Evidence suggests that adolescents may perceive vigorous physical activity as socially unacceptable.⁷ The same research also suggests that adolescents—as they become more independent—reject adult-oriented health goals. These findings, in addition to diminished school-based physical education, provide possible explanations for the decrease in moderate and vigorous activity among this population group.

One initiative to increase physical activity among adolescents was “VERB™ It’s what you do.” VERB was a national, multicultural, social marketing campaign coordinated by the Centers for Disease Control and Prevention that helped influence the values of young people aged 9 to 13 years (“tweens”) by encouraging them to be active every day. Begun in 2002 and concluded in 2006, the VERB campaign combined paid advertising, marketing strategies, and partnership efforts to reach the distinct audiences of tweens and adults/influencers. VERB was successful in increasing physical activity levels among tweens.⁸ As these youth become high school students in the latter half of the decade, the long-term effects of VERB may be measured by the youth physical activity objectives.

Objectives that could not be assessed. Trend data were not available for the objectives regarding physical education requirements in schools (22-8), access to school physical activity facilities (22-12), worksite physical activity and fitness (22-13), and walking (22-14) or bicycling (22-15) for transportation. Data sources were identified for all of these objectives, and data to establish baselines and assess progress are anticipated by the end of the decade.

Progress Toward Elimination of Health Disparities

The following discussion highlights progress toward the elimination of health disparities. The disparities are illustrated in the Disparities Table (see Figure 22-2), which displays information about disparities among select populations for which data were available for assessment.

Of all the physical activity objectives examined, disparities were similar over time, with one exception: From 1999 to 2003, the disparity in the lack of participation in leisure-time physical activity (22-1) between high school graduates and persons with at least some college education increased. The population with at least some college had the best rate. In 2003, high school graduates had a rate of no leisure-time physical activity that was 50 percent to 99 percent higher than persons with at least some college, while the rate for those with less than a high school education was at least 100 percent higher.

The remaining objectives had similar changes from the baseline in all populations, which resulted in no change in disparities. For most objectives in this focus area, the best group rates were observed in the white non-Hispanic population, persons with at least some college education, urban dwellers, males, and adults without disabilities.

Significant gender differences were observed for several objectives. Men had a more favorable rate than women for participation in leisure-time physical activity (22-1). Boys in grades 9 through 12 had better rates of engaging in vigorous physical activity (22-7) and physical activity in physical education class (22-10). In addition, boys aged 5 to 15 years had a better rate for walking for transportation (22-14b) than did girls. Multiple programs exist that attempt to address these differences. The “Pick Your Path to Health” campaign, sponsored by the Office on Women’s Health within the U.S. Department of Health and Human Services (HHS), encourages local communities to promote practical, culturally appropriate steps to wellness and targets minority women. Young women can also receive updated, science-based, plain language information sources at a website sponsored by the National Women’s Health Information Center.⁹

The white non-Hispanic population had the best rates for no leisure-time physical activity (22-1) and regular physical activity (22-2 and 22-3). Persons of two or more races had the best rates for muscular strength and endurance (22-4) and flexibility (22-5). Hispanic students in grades 9 through 12 had the best rates for participation in daily physical activity in school and in physical education classes (22-9 and 22-10, respectively). However, disparities for Hispanic and black non-Hispanic populations were seen among adolescents engaging in vigorous physical activity (22-7). Television viewing (22-11) was associated with persistent disparities of 50 percent or more among Hispanic and black non-Hispanic youth, compared with the best rate.

Adults with at least some college had more favorable rates for physical activity participation (22-1 through 22-5) than persons with a high school education or less. Walking for transportation (22-14a) was less common among adults aged 18 years and older living in rural or nonmetropolitan areas than urban areas. Adults with disabilities were more likely to report less overall activity than adults without disabilities (22-1, 22-2, and 22-3).

Initiatives to combat disparities within the realm of physical activity and fitness exist at Federal, State, and local levels in many different and innovative forms. For example, REACH 2010 (Racial and Ethnic Approaches to Community Health 2010) is a collaborative Federal initiative aimed at eliminating disparities in health status experienced by select populations.¹⁰ The VERB campaign targeted American Indian or Alaska Native adolescents and Hispanic adolescents with multicultural media messages about physical activity.¹¹ I Can Do It, You Can Do It! is an initiative supported by the HHS Office on Disability, the President’s Council on Physical Fitness and Sports, the National Institutes of Health, and numerous community and nonprofit organizations to improve and evaluate the activity and nutrition of people with disabilities.¹² The *National Blueprint: Increasing Physical Activity Among Adults Aged 50 and Older* identifies organizations and strategies to help combat inactivity and improve the quality of life for older Americans.¹³ Through these and other programs, persisting disparities are being addressed.

Opportunities and Challenges

Historically, physical activity and fitness were integral to daily life and culture as a means of transportation, occupation, and maintaining a home.¹ During the 20th century, most physical activity was engineered out of daily living by the emergence of automobiles and labor-saving devices.^{14, 15} Thus, an

active lifestyle for many people became one that included yard work and frequent trips to the gym during discretionary time. By the end of the century, physical inactivity was recognized as a risk factor for many chronic diseases and poor mental health, and active lifestyles were associated with overall health and well-being of individuals and communities. The restoration of physical activity to daily life increasingly has been considered by employers, school administrators, park and recreation managers, urban planners, transportation engineers, and public health practitioners. Intervention strategies are guided by recent science showing that multidisciplinary environmental interventions can improve physical activity levels and benefit local communities.²

Two Federal memorandums of understanding (MOUs) define future collaborations among Federal departments, including agencies within HHS. The Healthier Children and Youth MOU between HHS and the U.S. Departments of Agriculture (USDA) and Education synthesizes interagency activities in nutrition and physical activity that target young people. It provides an opportunity to widely shape the physical activity message to audiences, including school officials, parents, and children. The Public Health and Recreation MOU brings together the Federal land management agencies within USDA, the U.S. Departments of Interior and Transportation, the U.S. Army Corps of Engineers, and agencies in HHS. Together, they promote the use of public lands for public health and help ensure that all Americans understand the benefits of being physically active and the location of public spaces available to them for their active pursuits.

Also reflecting the role of public lands and recreational facilities in health promotion was a collaboration between the National Heart, Lung, and Blood Institute and the National Recreation and Park Association. Together, they developed Hearts N' Parks,¹⁶ a community-based initiative designed to encourage all Americans to maintain a healthy weight by improving nutrition and increasing physical activity. Local park and recreation departments were instrumental in implementing the 3-year program. The collaboration was successful in improving healthy eating and physical activity knowledge and behaviors among adults and children through community-based programs.

Opportunities for professional development, communication, and collaboration among physical activity practitioners in public health are increasing. Emerging public health organizations, programs, journals, and institutions, with a focus on physical activity in partnership with nongovernmental organizations, will continue to provide opportunities to collaborate, share ideas, and obtain technical assistance.¹⁷

The population-based interventions recommended in the *Community Guide to Preventive Services* provide public health professionals with approaches that are effective in influencing physical activity behavior.² Evidence-based activities or interventions include the following:

- Informational approaches: communitywide campaigns and point-of-decision prompts.
- Behavioral approaches: school-based physical education, individually adapted health behavior-change programs, and social support interventions in community settings.
- Environmental and policy approaches: access to places offering physical activity combined with informational outreach, street-scale and community-scale urban design and land-use policies and practices, and point-of-decision prompts.

The lack of evidence-based practices for physical activity programs targeting select populations continues to challenge public health practitioners trying to affect physical activity behaviors. Program planners need to strategically target select populations. REACH 2010 uses evidence-based strategies toward that end. In contrast, among people with disabilities, a variety of challenges diminish physical activity

participation. These challenges include limited research and recommendations for physical activity programming that is appropriate for individuals with specific disabilities¹² and physical barriers (for example, lack of access to changing rooms in fitness facilities).¹³

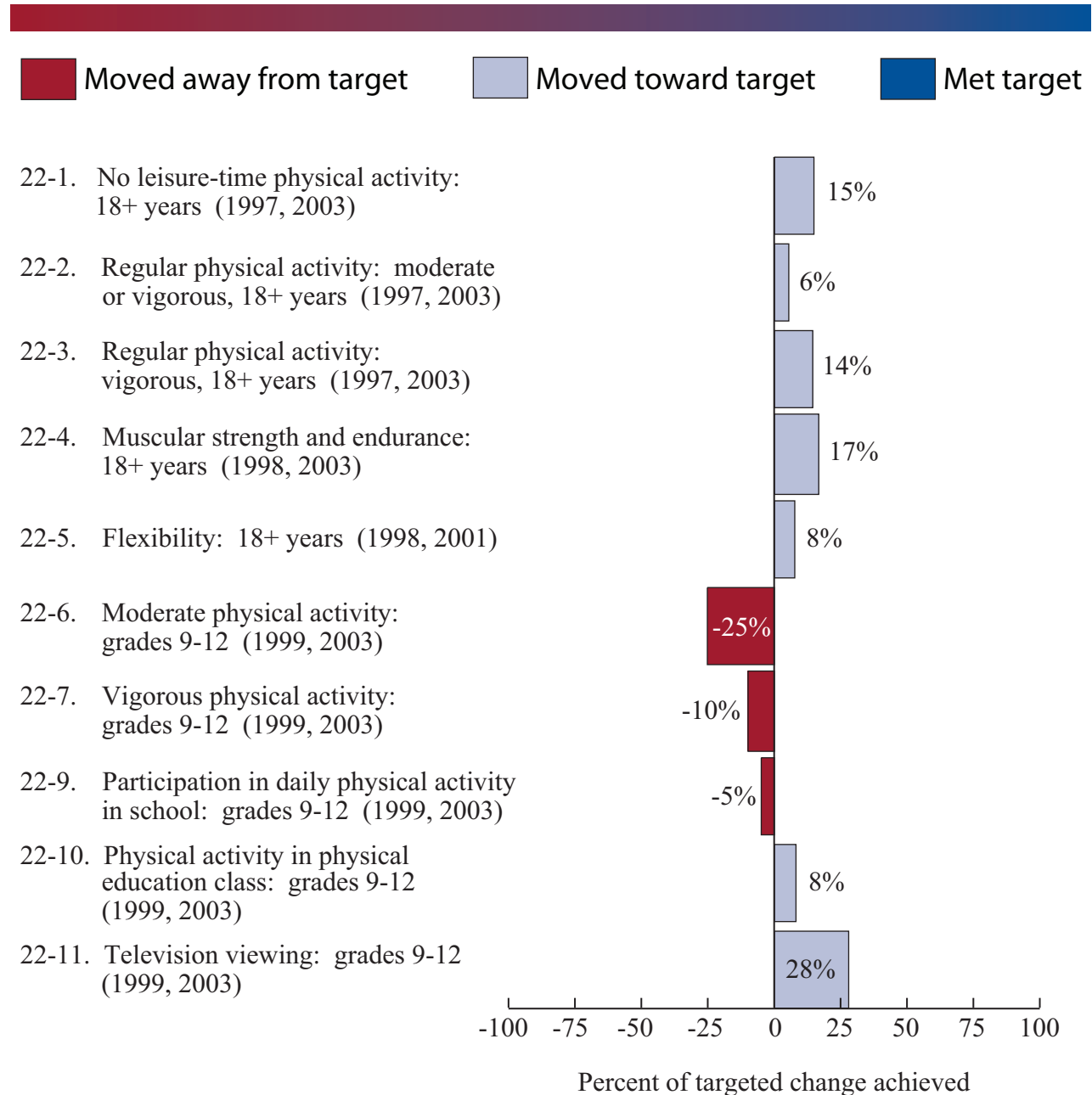
Emerging Issues

Since the beginning of the decade, opportunities for future objectives have emerged. The technology to measure individual physical activity levels has advanced to include additional types of devices (for example, pedometers, motion detectors, and heart rate monitors). Since their introduction in the National Health and Nutrition Examination Survey in 2003, motion detectors have been used for population assessment. These and similar technologies provide the opportunity to track population progress in physical activity and fitness measures that augment health surveys.

Increasing opportunities for physical activity through multidisciplinary environmental and policy interventions has emerged as a priority for public health. For example, the *Community Guide to Preventive Services*² recommends increasing access to and promoting public awareness of suitable locations for physical activity, such as walking or biking trails or recreational facilities, and reducing barriers associated with facilities' operating hours and usage fees. An example of a multidisciplinary method to increase physical activity is the Safe Routes to School initiative.¹⁸ The project facilitates walking and bicycling to school by involving partners such as traffic engineers, public works officials, local school boards and school staff members, community planners, and parents.

At the midcourse of Healthy People 2010, progress was made toward increasing physical activity and fitness-related activities. However, many of the challenges present in 2000 still exist. Looking ahead to the future, public health practitioners increasingly view physical activity as a pillar of chronic disease prevention and mental health initiatives. The benefits of this status will be realized as interventions and programs that began between 2000 and 2005 come to fruition during the second half of the decade.

Figure 22-1. Progress Quotient Chart for Focus Area 22: Physical Activity and Fitness



Notes: Tracking data for objectives 22-8a and b, 22-12, 22-13, 22-14a and b, and 22-15a and b are unavailable.

Years in parentheses represent the baseline data year and the most recent data year used to compute the percent of the Healthy People 2010 target achieved.

$$\text{Percent of targeted change achieved} = \left(\frac{\text{Most recent value} - \text{baseline value}}{\text{Year 2010 target} - \text{baseline value}} \right) \times 100$$

Figure 22-2. Disparities Table for Focus Area 22: Physical Activity and Fitness

Disparities from the best group rate for each characteristic at the most recent data point and changes in disparity from the baseline to the most recent data point.

	Characteristics																	
	Race and ethnicity							Gender		Education			Location		Disability			
	American Indian or Alaska Native	Asian	Native Hawaiian or other Pacific Islander	Two or more races	Hispanic or Latino	Black non-Hispanic	White non-Hispanic	Summary index	Female	Male	Less than high school	High school graduate	At least some college	Summary index	Urban or metropolitan	Rural or nonmetropolitan	Persons with disabilities	Persons without disabilities
Population-based objectives																		
22-1.				b			B		B		↑	B		B				B
22-2.							B		B			B		B				B
22-3.							B		B			B		B				B
22-4.				B					B			B		B				B
22-5.				B				B				B		B				B
22-6.							B		B									
22-7.							B		B									
22-9.					B				B									
22-10.					B				B									
22-11.							B	B										
22-14a.								B		B				B				
22-14b.									B					B				
22-15a.									B	B		B		B				
22-15b.									B					B				

Notes: Data for objectives 22-8a and b, 22-12, and 22-13 are unavailable or not applicable.

Years in parentheses represent the baseline data year and the most recent data year (if available).

Disparity from the best group rate is defined as the percent difference between the best group rate and each of the other group rates for a characteristic (for example, race and ethnicity). The summary index is the average of these percent differences for a characteristic. Change in disparity is estimated by subtracting the disparity at baseline from the disparity at the most recent data point. Change in the summary index is estimated by subtracting the summary index at baseline from the summary index at the most recent data point. See Technical Appendix for more information.

(continued)

Figure 22-2. (continued)

The best group rate at the most recent data point.	<input type="checkbox"/> B	The group with the best rate for specified characteristic.	<input type="checkbox"/> b	Most favorable group rate for specified characteristic, but reliability criterion not met.	<input type="checkbox"/>	Best group rate reliability criterion not met.		
Percent difference from the best group rate								
Disparity from the best group rate at the most recent data point.	<input type="checkbox"/>	Less than 10 percent or not statistically significant	<input type="checkbox"/>	10-49 percent	<input type="checkbox"/>	50-99 percent	<input type="checkbox"/>	100 percent or more
	Increase in disparity (percentage points)							
Changes in disparity over time are shown when the change is greater than or equal to 10 percentage points and statistically significant, or when the change is greater than or equal to 10 percentage points and estimates of variability were not available.	↑	10-49	↑↑	50-99	↑	100 or more	↑↑	100 or more
	Decrease in disparity (percentage points)							
Availability of data.	<input type="checkbox"/>	Data not available.	<input type="checkbox"/>	Characteristic not selected for this objective.				

* The variability of best group rates was assessed, and disparities of $\geq 10\%$ are statistically significant at the 0.05 level. Changes in disparity over time, noted with arrows, are statistically significant at the 0.05 level. See Technical Appendix.

† Measures of variability were not available. Thus, the variability of best group rates was not assessed, and the statistical significance of disparities and changes in disparity over time could not be tested. See Technical Appendix.

¹ Baseline data by race and ethnicity are for 1999.

² Baseline data by race and ethnicity are for 2001.

Objectives and Subobjectives for Focus Area 22: Physical Activity and Fitness

Goal: Improve health, fitness, and quality of life through daily physical activity.

As a result of the Healthy People 2010 Midcourse Review, changes were made to the Healthy People 2010 objectives and subobjectives. These changes are specific to the following situations:

- Changes in the wording of an objective to more accurately describe what is being measured.
- Changes to reflect a different data source or new science.
- Changes resulting from the establishment of a baseline and a target (that is, when a formerly developmental objective or subobjective became measurable).
- Deletion of an objective or subobjective that lacked a data source.
- Correction of errors and omissions in *Healthy People 2010*.

Revised baselines and targets for measurable objectives and subobjectives do not fall into any of the above categories and, thus, are not considered a midcourse review change.¹

When changes were made to an objective, three sections are displayed:

1. In the Original Objective section, the objective as published in *Healthy People 2010* in 2000 is shown.
2. In the Objective With Revisions section, strikethrough indicates text deleted, and underlining is used to show new text.
3. In the Revised Objective section, the objective appears as revised as a result of the midcourse review.

Details of the objectives and subobjectives in this focus area, including any changes made at the midcourse, appear on the following pages.

¹ See Technical Appendix for more information on baseline and target revisions.

Physical Activity in Adults

NO CHANGE IN OBJECTIVE

22-1. Reduce the proportion of adults who engage in no leisure-time physical activity.

Target: 20 percent.

Baseline: 40 percent of adults aged 18 years and older engaged in no leisure-time physical activity in 1997 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: National Health Interview Survey (NHIS), CDC, NCHS.

NO CHANGE IN OBJECTIVE (Data updated and footnoted)

22-2. Increase the proportion of adults who engage in moderate physical activity for at least 30 minutes per day 5 or more days per week or vigorous physical activity for at least 20 minutes per day 3 or more days per week.¹

Target: 50² percent.

Baseline: 32³ percent of adults aged 18 years and older engaged in moderate physical activity for at least 30 minutes per day or vigorous physical activity for at least 20 minutes per day¹ in 1997 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: National Health Interview Survey (NHIS), CDC, NCHS.

¹ In 2001, the language of objective 22-2 was changed after November 2000 publication to include adults who met the definition for vigorous physical activity.

² Target revised from 30 because of baseline revision after November 2000 publication.

³ Baseline revised from 15 after November 2000 publication.

NO CHANGE IN OBJECTIVE

22-3. Increase the proportion of adults who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness for at least 20 minutes per day 3 or more days per week.

Target: 30 percent.

Baseline: 23 percent of adults aged 18 years and older engaged in vigorous physical activity 3 or more days per week for 20 or more minutes per occasion in 1997 (age adjusted to the year 2000 standard population).

NO CHANGE IN OBJECTIVE (continued)

Target setting method: Better than the best.

Data source: National Health Interview Survey (NHIS), CDC, NCHS.

Muscular Strength/Endurance and Flexibility

NO CHANGE IN OBJECTIVE

22-4. Increase the proportion of adults who perform physical activities that enhance and maintain muscular strength and endurance.

Target: 30 percent.

Baseline: 18 percent of adults aged 18 years and older performed physical activities that enhance and maintain strength and endurance 2 or more days per week in 1998 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: National Health Interview Survey (NHIS), CDC, NCHS.

NO CHANGE IN OBJECTIVE

22-5. Increase the proportion of adults who perform physical activities that enhance and maintain flexibility.

Target: 43 percent.

Baseline: 30 percent of adults aged 18 years and older did stretching exercises in the past 2 weeks in 1998 (age adjusted to the year 2000 standard population).

Target setting method: Better than the best.

Data source: National Health Interview Survey (NHIS), CDC, NCHS.

Physical Activity in Children and Adolescents

ORIGINAL OBJECTIVE

22-6. Increase the proportion of adolescents who engage in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days per week.

Target: 35 percent.

ORIGINAL OBJECTIVE *(continued)*

Baseline: 27 percent of students in grades 9 through 12 engaged in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days in 1999.

Target setting method: Better than the best.

Data source: Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

OBJECTIVE WITH REVISIONS

22-6. Increase the proportion of adolescents who engage in moderate physical activity for at least 30 minutes per day on 5 or more of the ~~previous 7~~ days per week.

Target: 35 percent.

Baseline: 27 percent of students in grades 9 through 12 engaged in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days in 1999.

Target setting method: Better than the best.

Data source: Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

REVISED OBJECTIVE

22-6. Increase the proportion of adolescents who engage in moderate physical activity for at least 30 minutes per day 5 or more days per week.

Target: 35 percent.

Baseline: 27 percent of students in grades 9 through 12 engaged in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days in 1999.

Target setting method: Better than the best.

Data source: Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

NO CHANGE IN OBJECTIVE

22-7. Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

Target: 85 percent.

Baseline: 65 percent of students in grades 9 through 12 engaged in vigorous physical activity for at least 20 minutes on 3 or more of the previous 7 days in 1999.

NO CHANGE IN OBJECTIVE (continued)

Target setting method: Better than the best.

Data source: Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

**NO CHANGE IN OBJECTIVE
(Data updated and footnoted)**

22-8. Increase the proportion of the Nation’s public and private schools that require daily physical education for all students.

Target and baseline:

Objective	Increase in Schools Requiring Daily Physical Activity for All Students	2000 Baseline	2010 Target
		<i>Percent</i>	
22-8a.	Middle and junior high school	6.4 ¹	9.4 ²
22-8b.	Senior high schools	5.8 ³	14.5 ⁴

Target setting method: 47 percent improvement for middle and junior high schools; 150 percent improvement for senior high schools.

Data source: School Health Policies and Programs Study (SHPPS), CDC, NCCDPHP.

¹ Baseline and baseline year revised from 17 and 1994 after November 2000 publication.

² Target revised from 25 because of baseline revision after November 2000 publication.

³ Baseline and baseline year revised from 2 and 1994 after November 2000 publication.

⁴ Target revised from 5 because of baseline revision after November 2000 publication.

NO CHANGE IN OBJECTIVE

22-9. Increase the proportion of adolescents who participate in daily school physical education.

Target: 50 percent.

Baseline: 29 percent of students in grades 9 through 12 participated in daily school physical education in 1999.

Target setting method: Better than the best.

Data source: Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

NO CHANGE IN OBJECTIVE

22-10. Increase the proportion of adolescents who spend at least 50 percent of school physical education class time being physically active.

Target: 50 percent.

Baseline: 38 percent of students in grades 9 through 12 were physically active in physical education class more than 20 minutes 3 to 5 days per week in 1999.

Target setting method: Better than the best.

Data source: Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

NO CHANGE IN OBJECTIVE

22-11. Increase the proportion of adolescents who view television 2 or fewer hours on a school day.

Target: 75 percent.

Baseline: 57 percent of students in grades 9 through 12 viewed television 2 or fewer hours per school day in 1999.

Target setting method: Better than the best.

Data source: Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP.

Access

ORIGINAL OBJECTIVE

22-12. (Developmental) Increase the proportion of the Nation's public and private schools that provide access to their physical activity spaces and facilities for all persons outside of normal school hours (that is, before and after the school day, on weekends, and during summer and other vacations).

Potential data source: School Health Policies and Programs Study (SHPPS), CDC, NCCDPHP.

OBJECTIVE WITH REVISIONS

22-12. (Developmental) Increase the proportion of the Nation's public and private schools that provide access to their physical activity spaces and facilities for all persons outside of normal school hours (that is, before and after the school day, on weekends, and during summer and other vacations).

Target: 50 percent.

OBJECTIVE WITH REVISIONS *(continued)*

Baseline: 35 percent of public and private elementary, middle/junior high, and senior high schools provided community access to their physical activity or athletic facilities in 2000.

Target setting method: 43 percent improvement.

Potential Data source: School Health Policies and Programs Study (SHPPS), CDC, NCCDPHP.

REVISED OBJECTIVE

22-12. Increase the proportion of the Nation's public and private schools that provide access to their physical activity spaces and facilities for all persons outside of normal school hours (that is, before and after the school day, on weekends, and during summer and other vacations).

Target: 50 percent.

Baseline: 35 percent of public and private elementary, middle/junior high, and senior high schools provided community access to their physical activity or athletic facilities in 2000.

Target setting method: 43 percent improvement.

Data source: School Health Policies and Programs Study (SHPPS), CDC, NCCDPHP.

NO CHANGE IN OBJECTIVE

22-13. Increase the proportion of worksites offering employer-sponsored physical activity and fitness programs.

Target: 75 percent.

Baseline: 46 percent of worksites with 50 or more employees offered physical activity and/or fitness programs at the worksite or through their health plans in 1998–1999.

Worksite Size	Worksite or Health Plan	Health Plan	Worksite
	<i>Percent</i>		
Total (50 or more employees)	46	22	36
50 to 99 employees	38	21	24
100 to 249 employees	42	20	31
250 to 749 employees	56	25	44

NO CHANGE IN OBJECTIVE *(continued)*

750 or more employees	68	27	61
Less than 50 employees	Developmental		

Target setting method: Better than the best.

Data source: National Worksite Health Promotion Survey (NWHPS), Partnership for Prevention and OPHS, ODPHP.

NO CHANGE IN OBJECTIVE (Data updated and footnoted)

22-14. Increase the proportion of trips made by walking.

Target and baseline:

Objective	Increase in Trips Made by Walking	Length of Trip	1995 Baseline*	2010 Target
			<i>Percent</i>	
22-14a.	Adults aged 18 years and older	Trips of 1 mile or less	17	25
22-14b.	Children and adolescents aged 5 to 15 years	Trips to school of 1 mile or less	31	50

* Age adjusted to the year 2000 standard population.

Target setting method: 47 percent improvement for 22-14a and 61¹ percent improvement for 22-14b. (Better than the best will be used when data are available.)

Data source: Nationwide Personal Transportation Survey (NPTS), DOT.

¹ Target setting method corrected from 68 percent after November 2000 publication.

NO CHANGE IN OBJECTIVE

22-15. Increase the proportion of trips made by bicycling.

Target and baseline:

Objective	Increase in Trips Made by Bicycling	Activity	1995 Baseline*	2010 Target
			<i>Percent</i>	
22-15a.	Adults aged 18 years and older	Trips of 5 miles or less	0.6	2.0

NO CHANGE IN OBJECTIVE (continued)

22-15b.	Children and adolescents aged 5 to 15 years	Trips to school of 2 miles or less	2.4	5.0
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* Age adjusted to the year 2000 standard population.

Target setting method: 233 percent improvement for 22-15a and 108 percent improvement for 22-15b. (Better than the best will be used when data are available.)

Data source: Nationwide Personal Transportation Survey (NPTS), DOT.

References

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¹⁷ More information on the National Society of Physical Activity Practitioners in Public Health available at the Physical Activity Collaborative website www.pacollaborative.org.

¹⁸ More information on the Safe Routes to School initiative available at www.nhtsa.dot.gov/people/injury/pedbimot/bike/Safe-Routes-2004/index.html; accessed October 31, 2006.

Related Objectives From Other Focus Areas

1. Access to Quality Health Services

- 1-3. Counseling about health behaviors

2. Arthritis, Osteoporosis, and Chronic Back Conditions

- 2-2. Activity limitations due to arthritis
- 2-3. Personal care limitations
- 2-8. Arthritis education
- 2-9. Cases of osteoporosis
- 2-11. Activity limitations due to chronic back conditions

3. Cancer

- 3-5. Colorectal cancer deaths
- 3-7. Prostate cancer deaths
- 3-9. Sun exposure and skin cancer
- 3-10. Provider counseling about cancer prevention

4. Chronic Kidney Disease

- 4-8. Medical evaluation and treatment for persons with diabetes and chronic kidney disease

5. Diabetes

- 5-1. Diabetes education
- 5-2. New cases of diabetes
- 5-3. Overall cases of diagnosed diabetes
- 5-4. Diagnosis of diabetes
- 5-5. Diabetes deaths
- 5-6. Diabetes-related deaths
- 5-7. Cardiovascular disease deaths in persons with diabetes

6. Disability and Secondary Conditions

- 6-2. Feelings and depression among children with disabilities
- 6-3. Feelings and depression interfering with activities among adults with disabilities
- 6-4. Social participation among adults with disabilities
- 6-9. Inclusion of children and youth with disabilities in regular education programs
- 6-10. Accessibility of health and wellness programs
- 6-12. Environmental barriers affecting participation in activities
- 6-13. Surveillance and health promotion programs

7. Educational and Community-Based Programs

- 7-2. School health education
- 7-3. Health-risk behavior information for college and university students
- 7-5. Worksite health promotion programs
- 7-6. Participation in employer-sponsored health promotion activities

- 7-10. Community health promotion programs
- 7-11. Culturally appropriate and linguistically competent community health promotion programs
- 7-12. Older adult participation in community health promotion activities

8. Environmental Health

- 8-1. Harmful air pollutants
- 8-2. Alternative modes of transportation
- 8-9. Beach closings
- 8-20. School policies to protect against environmental hazards

9. Family Planning

- 9-11. Reproductive health education

11. Health Communication

- 11-1. Households with Internet access
- 11-4. Quality of Internet health information sources

12. Heart Disease and Stroke

- 12-1. Coronary heart disease (CHD) deaths
- 12-7. Stroke deaths
- 12-9. High blood pressure
- 12-10. High blood pressure control
- 12-11. Action to help control blood pressure
- 12-13. Mean total blood cholesterol levels
- 12-14. High blood cholesterol levels
- 12-16. LDL-cholesterol level in CHD patients

15. Injury and Violence Prevention

- 15-1. Nonfatal head injuries
- 15-2. Nonfatal spinal cord injuries
- 15-13. Deaths from unintentional injuries
- 15-14. Emergency department visits for nonfatal unintentional injuries
- 15-16. Pedestrian deaths
- 15-18. Nonfatal pedestrian injuries
- 15-21. Motorcycle helmet use
- 15-23. Bicycle helmet use
- 15-24. Bicycle helmet laws
- 15-27. Deaths from falls
- 15-28. Hip fractures
- 15-29. Drownings
- 15-31. Injury protection in school sports

16. Maternal, Infant, and Child Health

- 16-3. Adolescent and young adult deaths
- 16-12. Weight gain during pregnancy

17. Medical Product Safety

- 17-2. Use of information technology
- 17-5. Receipt of oral counseling about medications from prescribers and dispensers

18. Mental Health and Mental Disorders

- 18-5. Disordered eating behaviors
- 18-7. Treatment for children with mental health problems
- 18-9. Treatment for adults with mental disorders

19. Nutrition and Overweight

- 19-1. Healthy weight in adults
- 19-2. Obesity in adults
- 19-3. Overweight or obesity in children and adolescents
- 19-16. Worksite promotion of nutrition education and weight management

20. Occupational Safety and Health

- 20-1. Work-related injury deaths
- 20-2. Work-related injuries
- 20-3. Overextension or repetitive motion
- 20-9. Worksite stress reduction programs

23. Public Health Infrastructure

- 23-2. Public access to information and surveillance data
- 23-17. Population-based prevention research

24. Respiratory Diseases

- 24-1. Deaths from asthma
- 24-2. Hospitalizations for asthma
- 24-3. Hospital emergency department visits for asthma
- 24-4. Activity limitations
- 24-5. School or work days lost
- 24-6. Patient education
- 24-7. Appropriate asthma care

25. Sexually Transmitted Diseases

- 25-11. Responsible adolescent sexual behavior

26. Substance Abuse

- 26-9. Substance-free youth
- 26-14. Steroid use among adolescents
- 26-17. Perception of risk associated with substance abuse
- 26-23. Community partnerships and coalitions

27. Tobacco Use

- 27-1. Adult tobacco use
- 27-2. Adolescent tobacco use
- 27-3. Initiation of tobacco use
- 27-4. Age at first tobacco use
- 27-5. Smoking cessation by adults
- 27-7. Smoking cessation by adolescents

28. Vision and Hearing

- 28-9. Protective eyewear