



# Physical Activity and Fitness

U.S. Department of Health & Human Services • Public Health Service

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## PROGRESS REVIEW



In the 20th in a series of assessments of *Healthy People 2010*, Acting Assistant Secretary for Health Cristina Beato chaired a focus area Progress Review on Physical Activity and Fitness. In emphasizing its transcendent importance, Dr. Beato noted that virtually all individuals can benefit from regular physical activity, whether they exercise vigorously or participate in a moderate activity, such as walking. Even moderate activity can reduce substantially the risk of developing or dying from heart disease, diabetes, colon cancer, or high blood pressure. Moreover, at a time when more than two-thirds of Americans are overweight or obese, physical activity plays a role of crucial public health importance in helping to prevent weight gain and promote the maintenance of weight loss. Dr. Beato was assisted by staff of the co-lead agencies for this *Healthy People 2010* focus area—the Centers for Disease Control and Prevention (CDC) and the President’s Council on Physical Fitness and Sports (PCPFS). Also participating were representatives of other Department of Health and Human Services (HHS) agencies and offices, as well as the Department of Education and the Department of Agriculture.

The complete text for the Physical Activity and Fitness focus area of *Healthy People 2010* is available at [www.healthypeople.gov/document/html/volume2/22physical.htm](http://www.healthypeople.gov/document/html/volume2/22physical.htm). The meeting agenda, tabulated data for all focus area objectives, charts, and other materials used in the Progress Review can be found at [www.cdc.gov/nchs/about/otheract/hpdata2010/focusareas/fa22-paf.htm](http://www.cdc.gov/nchs/about/otheract/hpdata2010/focusareas/fa22-paf.htm).

### Data Trends

Richard Klein of CDC’s National Center for Health Statistics presented an overview of data trends in the focus area. He noted that, despite worsening national trends in overweight and obesity, there has been little or no change since the past decade in the status of most objectives for Physical Activity and Fitness. Since the 1997 baselines, modest improvements have been recorded for two objectives: (1) a smaller proportion of the adult population reports pursuing no leisure-time physical activity (Obj. 22-1) and (2) a larger proportion of adults performs physical activities that enhance muscular strength and endurance (Obj. 22-4).

In 2002, 38 percent of adults (age-adjusted, aged 18 years and older) engaged in *no* leisure-time physical activity, compared with 40 percent in 1997. Females were 14 percent more likely to be in this category in 2002 than males. By geographic region, people in the southern and lower midwestern states were generally the least physically active during leisure time. Between 1997 and 2002, there was an 8 percent reduction in this category for individuals aged 65 to 74 years (from 51 percent to 47 percent) and a 10 percent reduction among those aged 45 to 64 (from 42 percent to 38 percent). Among five racial and ethnic groups, Hispanics had the

highest rate of being nonphysically active in leisure time; whites had the lowest. Among persons with disabilities, 51 percent reported no leisure-time physical activity in 2002, compared with 34 percent of those without disabilities. The 2010 target is to reduce this proportion to 20 percent for all population groups.

Preliminary age-adjusted data for 2003 show that 33 percent of adults aged 18 years and older engaged regularly in moderate physical activity (i.e., 30+ minutes of moderate activity at least 5 times a week), hardly changed from 32 percent in 1997. The proportion of males who did so in 2003 was 36 percent, compared with 31 percent of females. Data for 2002 show that 22 percent of persons with disabilities engaged in regular, moderate physical activity, compared with 34 percent of persons without disabilities. The target is 50 percent (Obj. 22-2). In 2002, as in 1997, 23 percent of adults (age-adjusted,

aged 18 years and older) engaged in vigorous physical activity that promoted cardiorespiratory fitness for 20+ minutes on at least 3 occasions per week. The proportion of males that did so was 27 percent, compared with 20 percent of females. The proportion of persons without disabilities who engaged in vigorous physical activity in 2002 was 25 percent, almost twice that of persons with disabilities (14 percent). The target is 30 percent (Obj. 22-3).

In 2001, 65 percent of students in grades 9 through 12 engaged in vigorous physical activity, the same proportion as in 1999. By gender, the proportions engaging in such activity were 73 percent of males and 57 percent of females. In each of the grades from 10 through 12, the proportion of students who engaged in vigorous physical activity was lower than in the preceding grade. The target for all is 85 percent (Obj. 22-7).

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## Key Challenges and Current Strategies

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In the presentations that followed the data overview, the principal themes were introduced by representatives of the two co-lead agencies—Donna Stroup, Associate Director for Science and Acting Deputy Director of CDC's National Center for Chronic Disease Prevention and Health Promotion, and PCPFS Executive Director Melissa Johnson. Their remarks and the discussions that followed highlighted a number of obstacles to achieving the objectives, as well as activities under way to meet these challenges, including the following:

- Of the total of 2,391,400 deaths in the United States in 2000, poor diet and physical inactivity accounted for an estimated 17 percent (approximately 400,000 deaths).
- In 2000, poor diet coupled with lack of exercise was the second leading actual cause of death. The gap between this risk factor and tobacco use, the leading cause, has narrowed substantially over the past decade.
- Measuring levels of fitness by means of the surveillance systems currently in use poses difficulties because of the lack of a standard methodology; variances in individuals' understanding of the terms employed, such as "physical activity," "leisure," and "moderate intensity"; the influence of the order in which questions are asked; memory lapses; and the potential bias inherent in self-reported data.
- In a new chapter in the *Guide to Community Preventive Services*, the Task Force on Community Preventive Services recommends the following strategies that demonstrate strong evidence of effectiveness in increasing physical activity: communitywide campaigns, school-based physical education, individually adapted behavior-change programs, and creation of or enhanced access to places for physical activity, combined with informational outreach activities. Also recommended as effective were "point-of-decision" prompts, such as motivational signs that encourage people to use the stairs instead of elevators.

- With support from CDC, the community-based Kidswalk-to-School program aims to increase opportunities for daily physical activity by encouraging children to walk to and from school in groups accompanied by adults. The program also advocates for communities to build partnerships with local authorities and organizations to create an environment that is supportive of walking and bicycling to school safely.
- In support of the President's *HealthierUS* initiative, HHS and the Departments of Education and Agriculture collaborated to create the Healthier Children and Youth Memorandum of Understanding (MOU), which encourages all school-aged children to adopt healthy eating and physical activity behaviors to curb the increasing rate of obesity and overweight. In addition, the Secretaries of HHS, Agriculture, Interior, and Transportation and the Acting Secretary of the Army signed the Public Health and Recreation MOU, which highlights the benefits of physical activity and the many opportunities to be active on America's public lands.
- In fiscal year 2004, CDC will provide funds to 28 states to hire necessary staff and develop comprehensive nutrition and physical activity plans to prevent and control obesity and other chronic conditions and diseases.
- The Physical Activity Monitor, a belt-worn device that has been in the field since January 2003, promises to provide more accurate and comprehensive measurements of an individual's physical activity. It automatically records locomotion movement, duration, and intensity over a 7-day time period, data that will be linked to interview and other health component data (e.g., body weight, functional status, and bone status).
- Through the outreach initiative called *You Can! Steps to a Healthier Aging Campaign*, the HHS Administration on Aging mobilizes community partnerships to increase the number of older people who stay active and healthy.
- *I Can Do It, You Can Do It!* is a collaborative initiative between PCPFS, the HHS Office on Disability, and many community and nonprofit organizations. It will encourage physically active lifestyles among young people with disabilities by pairing them with fit adults who have disabilities.
- *VERB It's what you do* is a media campaign that aims to get 9- to 13-year-old children to become more physically active. An evaluation of results from its first year of funding demonstrated increases in physical activity of 27 percent among girls, 34 percent among children aged 9 to 10 years, and 25 percent among children from lower middle income levels. The most sedentary individuals among these groups are the most likely to benefit.
- CDC's Prevention Research Centers (PRC) program is a national network of 28 academic research centers that engage communities as participants in research on preventing chronic diseases and their risk factors. Many of these sites have physical activity as part of their research plans. The newest PRC, at the University of Iowa, works to remedy poor nutrition and lack of physical activity among rural residents.
- The President's Challenge is a physical activity/fitness awards program of the PCPFS that offers a menu of four programs for people aged 6 years and older, focusing on active lifestyles and physical fitness. The activity log on the Web site at **www.presidentschallenge.org** can track an individual's physical activity participation. In the 2002–2003 school year, about 7 million awards were disseminated nationally.
- Secretary Tommy G. Thompson challenged HHS employees in the Washington, DC, Southwest complex to be more physically active through the HHS *Steps to a HealthierUS* physical activity campaign. Over 25 percent of the 849 registrants met the requirement of 30 minutes of activity, 5 days a week for 6 weeks. Governors have followed suit and challenged their states to be more physically active. Wisconsin Governor Jim Doyle is the first to use the **www.presidentschallenge.org** Web site as a model for the **www.wisconsinchallenge.org** Web site to get Wisconsinites on the path to improved health.

## Approaches for Consideration

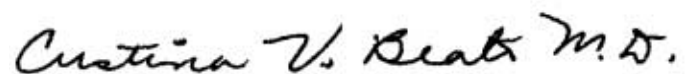
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Participants in the review made the following suggestions for steps to enable further progress toward achievement of the objectives for Physical Activity and Fitness:

- Conduct pilot studies on the efficacy and benefits of extending the school day to allow for inclusion of periods set aside for physical education and sports.
- Endeavor to adapt models of interventions that have been successful for one age or population group to a form that can be replicated more generally.
- Because females in most age groups lag behind their male counterparts in levels of physical activity participation, widen the application of evidence-based practices in physical activity promotion programs for women and girls. This range of practices should include attention to communitywide campaigns, individually adapted behavior change, social support, increased access to facilities, and the amelioration of inhibiting sociocultural factors.
- Step up training of healthcare providers in how to screen for insufficient physical activity levels, especially among children, the elderly, people with disabilities, women, and disadvantaged racial and ethnic groups. Provide them with proven messages or counseling tactics that encourage their patients to be more physically active.
- Identify and implement proven intervention strategies for active older adults, frail elderly, the homebound, and older adults who are disabled. These strategies should be adapted for use in homes, assisted living communities, and communities with a large proportion of retirees.
- Promote the development of tools for assessing fitness levels that take cultural differences into account and that provide language translations of key physical activity-related terms.
- Encourage facilities to conduct an accessibility review and increase funding for accessibility enhancement projects for public spaces that are compliant with the Americans with Disabilities Act.

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