America’s Public Lands and Waters: The Gateway to Better Health?

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1. INTRODUCTION

Obesity is the number one health problem facing America today. The connection to physical inactivity and a sedentary lifestyle has long been recognized, but only recently has it become a focal point for physicians worldwide. Surprisingly, the answer may be as close as America’s backyard—the public lands and waters under the management of the U.S. Department of the Interior (“Interior”), as well as other federal, state, and local agencies. While traditional efforts to increase physical activity among Americans have focused on “exercise”-related activities such as calisthenics, treadmills, or stair machines, more recently leisure-time activities like gardening and housework have emerged as additions to the physical activity arsenal. These activities in turn have shifted attention away from individual obstacles and toward barriers to human movement in the “built environment.”

Yet despite a myriad of individual interventions to promote exercise, obesity continues to rise, which is especially troubling when one considers its prevalence among the nation’s youth. And while changes to the built environment show promise, they are more likely to be a major factor in providing long-term, rather than short-term, solutions. It is clear that innovative and unconventional strategies to affect health behaviors in positive and more immediate ways are needed.

1 J.D.; Secretary, U.S. Department of the Interior.
4 JoAnn E. Manson et al., The Escalating Pandemics of Obesity and Sedentary Lifestyle: A Call to Action for Clinicians. 164 ARCHIVES INTERNAL MED. 249 (2004); see also, Brian Vastag. Obesity is Now on Everybody’s Plate, 291 JAMA 1186 (2004).
6 The “built environment” refers to the urban environment consisting of buildings, roads, fixtures, parks, and all other improvements that form the physical character of a city. See SEBASTIAN TOMBS, THE BUILT ENVIRONMENT, at http://www.scottisharchitecture.net/be-home-more.html (June 2002).
Rather than developing new and expensive promotional campaigns which advocate redundant messages, we might look for answers in places immediately before us. The vast interconnected outdoor recreation network of federal, state, and local lands and waters present a largely untapped resource which may be capable of helping to achieve this purpose. Combining inherently enjoyable and readily accessible activities with simple, effective, health-related messaging may serve as a gateway to better health.

II. PHYSICAL INACTIVITY AND OBESITY

The Centers for Disease Control and Prevention recently announced that obesity is considered the common thread between the three leading causes of death in the United States: heart disease, cancer, and stroke. Obesity and its enormous costs to society have become the chief health problem in the United States. While over-consumption and poor eating habits partially account for the obesity crisis, physical inactivity is a critical contributing factor.

The direct causal link between physical inactivity and obesity has been both well documented and well communicated to most Americans. Yet despite this fact, obesity has steadily risen over the last thirty years to its epidemic level today. In 2000, nearly two-thirds of U.S. adults aged twenty to seventy-four were found to be overweight and 31% obese. The statistics relating to the nation’s youth are even more troubling. Data from 1999 to 2000 show that more that 15% of children aged six to nineteen are overweight—double the proportion noted from 1976 through 1980.


8 The cost of this epidemic to society is enormous. Nationally it is estimated that obesity and physical inactivity cost society about $117 billion dollars in 2000. OFFICE OF THE SURGEON GENERAL, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, OVERWEIGHT AND OBESITY: AT A GLANCE, at http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_glance.htm (last visited July 13, 2004). Being overweight increases yearly per-person healthcare costs by $125, while obesity increases costs by $395. NATIONAL CENTER FOR POLICY ANALYSIS, COSTS OF OBESITY, DRINKING, SMOKING AND GROWING OLDER, at http://www.ncpa.org/iss/hea/2002/pd041902c.html (Apr. 19, 2002). In addition, a comparison of individuals fifteen years and older found a significant difference in annual direct medical costs between those who were regularly physically active and those who were not. Michael Pratt et al., Higher Direct Medical Costs Associated with Physical Inactivity, 28 PHYSICIAN & SPORTSMEDICINE 63, 66-67 (2000).

9 Pratt et al., supra note 8, at 68.


11 See Must et al., supra note 7.

12 CENTERS FOR DISEASE CONTROL AND PREVENTION, supra note 7, at 2.


14 Ogden, supra note 5, at 1731. Equally troubling is the fact that diseases once seen only in adults, such as Type 2 Diabetes, are now diagnosed in children. Furthermore, overweight children are far more likely to become overweight adults who as they age face serious health problems, such as cardiovascular disease, certain cancers, osteoarthritis, depression, and other complications. OFFICE OF THE SURGEON GENERAL, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, OVERWEIGHT IN CHILDREN AND ADOLESCENTS, at http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_adolescents.htm (last visited July 13, 2004).
At least 75% of adult Americans do not meet the Surgeon General’s minimum targets for physical activity, defined as thirty minutes of moderate-to-vigorous activity most days of the week. Nearly one-third does not engage in any leisure-time physical activity at all. Poor diet and physical inactivity are believed to be a primary contributing factor in at least 400,000 deaths annually in the United States—equivalent to almost 17% of all deaths each year.

Much of this can be attributed to the increasingly sedentary nature of leisure-time activities, with television watching, video games, and personal computing emerging as some of the most popular pastimes. Between 1977 and 1995, the active endeavors of walking and bicycling among children between the ages of five and fifteen years declined 40%.

The U.S. Department of Health and Human Services has identified physical inactivity and obesity as two of ten Leading Health Indicators, and will be used to measure the health of the nation over the next ten years. The Leading Health Indicators reflect the major public health concerns in the United States and were chosen based on their ability to motivate action and to encourage wide participation in improving health in the next decade. It is widely believed that by developing strategies and action plans to address these indicators, government agencies can have a profound positive effect on creating healthier Americans.

III. NOT ALL PHYSICAL ACTIVITY IS THE SAME

Physical activity and interventions to promote it can be broken down into three cultural “functions”:

1) Physical activity necessary to fulfill obligations of paid work, household work, personal care, and childcare interventions include, (e.g., programs that encourage the use of stairs rather than elevators);

2) Physical activity undertaken as a specific means to improve health or to escape negative health consequences (e.g., aerobics); and

3) Physical activity that is inherently part of a pleasurable leisure experience (e.g., hiking).

In recent decades, strategies to promote physical activity have largely been centered on the first two cultural functions. And while encouraging movement in

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16 Id.
18 See Thomas N. Robinson, Reducing Children’s Television Viewing to Prevent Obesity: A Randomized Controlled Trial, 282 JAMA 1561 (1999).
19 Richard Lowry et al., Recent Trends in Participation in Physical Education among US High School Students, J. SCH. HEALTH, Apr. 1, 2001. In addition, children who watched more television were also less likely to participate in vigorous activity and tended to have a higher body mass index. Ross E. Andersen et al., Relationship of Physical Activity and Television Watching with Body Weight and Level of Fatness among Children: Results from the Third National Health and Nutrition Examination Survey, 279 JAMA 938 (1998).
21 Id.
22 Id. at 2.
the workplace is not especially new, it arguably lacks the sense of enjoyment that can trigger behavioral change. Similarly, exercise as a specific means for improving health is not universally welcomed. For some people, exercise conjures up images of activities such as chin-ups, sit-ups, and stationary bicycles or environments such as a gym, meeting with a personal trainer or a completing a structured program which they may find particularly intimidating or distasteful. It is natural to assume that when given a choice, people are more inclined to engage in activities they anticipate will be enjoyable. For many, this may be the first hurdle to a physically active lifestyle. Enjoyment then may be the key to the gateway to better health. As Professor Geoffrey Godbey explains:

It would appear that, in the next few decades, the greatest potential to increase human movement in daily life will be by increasing participation in physical activity which is inherently part of pleasurable leisure experience and has meaning aside from exercise. In other words, leisure, play, recreation, sport, contact with nature, etc.

Physical activity can take many forms, including recreational activities such as hiking, biking, and camping. As a testament to their inherent pleasurable qualities, these activities have the greatest longevity of any of the human-powered outdoor activities. But what may be more important is the simple fact that people who enjoy these activities are more likely to also try other forms of outdoor recreation, such as climbing, downhill skiing, snowboarding, kayaking, cross country skiing, trail running, and snowshoeing.

IV. THE DEPARTMENT OF THE INTERIOR'S ROLE

Since its inception, the Department of the Interior has balanced the principles of conservation, public enjoyment and civic engagement in providing venues for outdoor recreational activity to all Americans. Today, the Bureau of Land Management, Fish and Wildlife Service, Bureau of Reclamation, and National Park Service provide a diverse array of recreational activities on the federally managed lands that make up one in every five acres of the United States.21

24 Id. at 8-9.
25 Karla A. Henderson, Enjoyment as the Link Between Leisure and Physical Activity, 74 J. PHYSICAL ED. RECREATION & DANCE 6, 7 (2003).
26 Id. at 6-7.
27 GODBEY ET AL., supra note 22, at 2.
28 Outdoor recreation is important to the mental, physical, and spiritual well-being of individuals. Almost 90% of Americans age sixteen and older feel that getting outdoors reduces their stress levels and leaves them with a sense of accomplishment. Furthermore, nearly 80% of Americans feel that experiencing outdoor recreational activities strengthens their family relationships. OUTDOOR INDUSTRY ASSOCIATION, NEW HARRIS INTERACTIVE STUDY FINDS THAT PARTICIPATING IN OUTDOOR ACTIVITIES IMPROVES MENTAL AND PHYSICAL HEALTH, at http://www.outdoorindustry.org/press. oia.php?news_id=393&sort_year=2004 (Jan. 30, 2004).
29 The key to being a life long active outdoor participant is to start young. Nearly 90% of current outdoor enthusiasts have been participating since they were young. Starting at a young age teaches children to love and appreciate the outdoors while the personal challenge and health benefits are what keeps them participating throughout their lives. Id.
30 The National Park Service Organic Act directs the bureau to "conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." 16 U.S.C. § 1 (2000).
The Department of the Interior's lands and waters boast some of the most popular vacation places in the world, and receive nearly a half billion visitors per year. Scenic vistas, breathtaking landscapes, and unique natural wonders characterize these places which are part of the American tradition and provide visitors havens for recreation, reflection, and solace.

Today, a nexus between public land officials and public health administrators has only just begun to be explored. Perhaps due to a lack of immediately apparent synergy or bureaucratic incompatibilities, there has been little contact between the two disciplines in the past. Having recognized the need for crossover experience, the Department of the Interior is uniquely situated to address the public health need to promote physical activity. Through its existing mission to promote responsible recreational activity and volunteerism on its lands and waters, the Department of the Interior can act as an agent of change to better the lives of Americans.

Connecting this mission with the inherently positive messages that activities such as fishing, rafting, and kayaking are both forms of healthy physical activity and a gateway to greater public participation is consistent with the principles of stewardship upon which the Department of the Interior was founded.

The Department of the Interior also participates in a number of national events that encourage outdoor activities, such as National Trails Day, National Public Lands Day, and Great Outdoors Week. Through the Wonderful Outdoor World, the Student Conservation Association, and other programs, Interior helps introduce young people to the outdoors.

Many people tend to think of Interior's National Parks as the Department's primary resource for outdoor recreation. Or they may envision remote and rugged wilderness areas. But many Interior lands are conveniently located for recreation use in or adjacent to urban areas. For example, national wildlife refuges are located within an hour's drive of almost every major city.

Id., supra note 33, at 32.

The Department of the Interior's ("Interior") 2005 budget request provides $900 million toward the recreation mission. The budget proposes to: "[f]ulfill the President's commitment to a Healthier US through the promotion of recreational physical activity and volunteerism on its lands." 


For information on Interior's wilderness areas, covering more than 70 million acres, see DOI, DOI INITIATIVES, at http://www.doi.gov/initiatives/wilderness.html (last updated Oct. 9, 2003).

Although refuges are managed primarily for wildlife, almost all are open to the public and feature hiking trails. Interior also designates National Recreation Trails, a list that includes more than 800 trails on federal or non-federal lands.\footnote{National Park Service, DOI, National Trails System, at http://www.nps.gov/ncrc/programs/nts/nts.html (last modified May 25, 2004).}

As the physical activity paradigm continues to undergo significant transformation from one of primarily traditional "exercise" activities and environments, a variety of new connections to outdoor activities will emerge. New sports such as "volksmarching\footnote{"A volksmarch is an organized hike or walk which usually covers a distance of 10 or 20 kilometers (6 or 12 miles). It may be conducted in either a rural or urban setting and generally highlights a scenic or historical area. It is designed to appeal to everyone, and is not a contest of speed or endurance. Volksmarching is good exercise and encourages outdoor physical activity for people of all ages and physical conditions." F.S. Family Wanderers, Volksmarching, at http://www.seattlevolksport.org/Pages/volksmarching.htm (last modified July 3, 2004).} and the time-tested act of volunteering on public lands\footnote{Take Pride in America, at http://www.takepride.gov (last visited July 13, 2004); Volunteer.gov/Gov, at http://www.volunteer.gov/gov (last visited July 13, 2004).} will be increasingly viewed as a gateway to a physically active lifestyle and better health. The Department of the Interior and its bureaus are committed to achieving this goal and will continue to work with other agencies in shaping this issue for years to come.\footnote{In June 2002, President Bush launched the HealthierUS Initiative, which is based on the premise that increasing personal fitness and becoming healthier is critical to achieving a better and longer life. Activities to Promote Personal Fitness, Exec.Order No. 13266, 3 C.F.R. 237 (2003). The President's HealthierUS Initiative uses the resources of the federal government to alert Americans to the vital health benefits of simple and modest improvements in physical activity, nutrition, and behavior. In support of HealthierUS, a Memorandum of Understanding was signed by the Secretaries of the Department of the Interior, Department of Agriculture, Department of Health and Human Services, and the U.S. Army. Memorandum of Understanding, To Promote Public Health and Recreation (June 19, 2002), available at http://corpslakes.usace.army.mil/employees/cecwon/pdfs/mou/cdc.pdf.}

Participation in this public health effort will not transform the public lands and waters of the U.S. into a health club outdoors.\footnote{In November 2003, the heads of the seven federal land and water management agencies further pledged to explore the possibilities of collaboration in the creation of a seamless system of services. See Joint Ventures Partners in Stewardship, Joint Ventures Conference Attendees Urged to Serve as Ambassadors for Partnerships, CONFERENCE DAILY NEWSLETTER, Nov. 19, 2003, available at http://www.partnerships2003.org/home.html.} We need not fear that exercise equipment will be placed at the base of Half Dome, or that stadiums will be built at the entrance to Old Faithful. Rather, the exercise paradigm is changing to welcome the world of recreational opportunity that the Department of the Interior has provided for well over a century.

V. CONCLUSION

Perhaps no federal agency has closer ties to the American people than the Department of the Interior. The many historic, cultural and natural resources accessible throughout lands managed by the Department provide public opportunities for respite, reflection and outdoor recreation. This connection of people to these special places provides a rich context within which to engage the public, establish partnerships and promote volunteerism in America.\footnote{Contra Jay D. Wexler, Parks as Gyms? Recreational Paradigms and Public Health in the National Parks, 30 Am. J.L. & MED. 155 (2004).}
As the nexus between public health officials and public lands administrators draws tighter, the Department of the Interior, through its historical mission to provide venues for responsible recreation to all Americans, can be a valuable partner in improving the health of America.