# lssue Brief

NRPA's mission is to advance parks, recreation, and environmental conservation efforts that enhance the quality of life for all people.

# National Recreation and Park Association

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Physical Activity: The Key to Good Health and Reducing Obesity

### INTRODUCTION

By 2030, one in every 10 adults or 552 million people — could have diabetes. Poor diet and lack of opportunities for physical activity are fueling soaring rates of cancer in the middle-aged with the numbers of those in their forties and fifties diagnosed with the illness rising by a fifth in the last 30 years. Physical inactivity and overweight are factors in over 200,000



premature deaths each year. In addition to the extraordinary toll on our nation's health, obesity also poses a tremendous financial burden, with costs estimated at \$117 billion annually.

Even as routine physical activity seems to be declining, recognition of its importance is growing in the public health community. Evidence is mounting that even moderate physical activity

can have a significant impact on health, an impact that goes far beyond weight control. Not only does exercise lead to longer life as demonstrated by longevity statistics and life expectancy tables but it also leads to greater quality of life in one's later years.

Only a few lifestyle choices have as large an impact on health as physical activity. People who are physically active for about 7 hours a week have a 40 percent lower risk of dying early than those who are active for less than 30 minutes a week. Aerobic exercise of any kind has been shown to extend life 12 years beyond the expected life span of those who do not stay active.

The following are a few of the health benefits of routine physical exercise according to the Centers for Disease Control and Prevention:

A minimum of 150 minutes a week of moderateintensity aerobic activity lowers the risk for heart disease and stroke, two of the leading causes of death in the United States

- Lower rates of type 2 diabetes and metabolic syndrome are seen in people who exercise 120 to 150 minutes a week of at least moderate-intensity aerobic activity and the more physical activity one gets, the lower the risk
- Physically active people have a lower risk of colon cancer than do people who are not active
- Physically active women have a lower risk of breast cancer than do people who are not active
- Some findings suggest risk of endometrial cancer and lung cancer may be lower with regular physical activity

#### THE BENEFITS OF PARKS AND RECREATION

Historically, public parks and outdoor recreation areas, particularly in cities, were developed for health purposes. By the 1890's, landscape architects and park planners were concerned about sedentary lifestyles. The 19th-century "Rational Recreation" movements sought to encourage forms of leisure considered superior—and contact with nature was a primary component. The health benefit of exposure to nature was an article of faith. Today, those health benefits are being quantified, and scientific research is documenting the data supporting what 19th-century planners believed.

Even a moderate amount of physical acitivity can have a significant impact on health that goes far beyond weight control.

The thousands of acres of parks can do more to serve the important purpose of helping people become healthier. With a growing clamor about obesity from doctors, parents, researchers and public health officials, it's time for people to understand that parks and recreation are more than simply pretty places, they are places that can help people to become healthier and fit. *continued* >

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# How much physical activity do adults need?

Physical activity is anything that gets your body moving. According to the 2008 Physical Activity Guidelines for Americans, adults need to do two types of physical activity each week to improve health, including aerobic and muscle-strengthening.

For important health benefits, adults need at least:

- Walking 2 hours and 30 minutes (150 minutes) of moderateintensity aerobic activity (i.e., brisk walking) every week and
- Weight training and muscle-strengthening activities for 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms).

#### How much physical activity do children need?

- Toddlers: Preschoolers should accumulate at least 60 minutes of structured physical activity each day and at least 60 minutes -- and up to several hours -- of unstructured physical activity each day, and should not be sedentary for more than 60 minutes at a time, except when sleeping
- Children ages 5-12: Children should accumulate at least 60 minutes, and up to several hours, of age-appropriate physical activity on all, or most days of the week and several bouts of physical activity lasting 15 minutes or more each day

There is increasing evidence that just being close to the natural environment is good for health. One study found that living in a green environment was positively related to such health indicators as levels of stress and amount of physical activity; the relationship between green space and health indicators was somewhat stronger for less educated people.

#### STRATEGIES FOR SUCCESFUL HEALTHY PARKS

#### **Developing a Park Usage Strategy**

Incorporating outdoor recreation into consumers' daily routines by park and recreation administrators should be a priority strategy since the use of local parks and recreation services is more frequent than visits to national parks and they potentially can provide more health benefits to consumers.

Even if parks didn't provide all the benefits they are known for, they would still be critically important because of their potential contribution to public health and wellness. Park agencies can justify the land and tax money they utilize, because their impact on the health and wellness of individuals is on par with that of healthcare practitioners, hospitals, and public health agencies.

#### A Mixture of Uses and a Maximum Amount of Programming

Physical activity is a key to good health and park and recreation managers have the role of "key masters". The more facilities and spaces incorporated into a park, the more use it can get from people with different interests and skills. Mixing uses in park and recreation areas has its challenges and requires planners to incoprorate good design, adequate signage, and set clear rules.

#### **Beauty and Great Design**

To promote physical activity and mental development, parks need great playgrounds, excellent horticulture, art, visual excitement, highquality workmanship and pleasing and effective signage. If all these elements are present, they add up to that memorable result, great design.

#### **Proximity, Accessibility, and Co-Location**

The closer the park and the easier to access, the more likely it will be used. Conversely, people who live far from parks are apt to utilize them less. These obvious truths have implications for public health, but creating new parks can be a slow, arduous, and often expensive task. It can be done and it is being done in almost every region of the country

#### **An Interconnected Park Web**

The better connected parks are, the more a park system can provide healthful recreation and transportation, too. Interconnected trails, greenways, and parks support bicycling, running, walking, skating, skiing, and even wheelchair travel, reaching all the way from home to work for some users.

#### Partnerships for Health

Creating a health-promoting park system requires greater expertise and resources than any park and recreation agency can provide alone. What are needed are partnerships with other public agencies, as well as with private foundations, corporations, citizens' groups, and volunteers.

When the larger cause is advancing health, park systems and recreation programs offer one set of skills but there are also other agencies that share the goal and have their own set of skills to bring. These include:

- Health departments
- Water or sewer departments
- Public works or transportation departments
- Transit agencies

Private companies, individuals, foundations, and nonprofits that could serve as partners include:

- Health insurers and their foundations
- Hospitals and clinics
- Doctors and nurses
- Disease-fighting charities and recreation promoting organizations
- Sporting goods and sportswear companies
- Friends of parks groups



#### POLICIES THAT PROMOTE HEALTH

Outdoor recreation has generally been an auxiliary use of government-managed lands, and federal recreational land often lays a long distance from its potential users. Funding for local recreation and park services varies widely across the states. Given the health contribution of outdoor recreation and the associated health cost savings that could accrue from a

general increase in Americans' outdoor physical activity, it may be appropriate for policy-makers to recognize and rethink the value of local parks and where and how the nation provides its recreational services. Policy-makers can shape policies designed to reduce obesity and promote active living, by:

- Creating age-appropriate recreational programs in park poor neighborhoods that are close to children's homes;
- Encouraging recreation programs at existing public and nonprofit facilities as well as at neighborhood schools can be done at a significantly lower cost than the expense of building new facilities;
- Expanding parks by converting vacant spaces in built-up communities into mini parks, or pocket parks; and
- Additionally, park policies can also address issues of:
  - Smoking cessation
- Community gardens
  Safety in parks
- Healthy vending
  Farmer's markets
  - Park access

#### **PUBLIC FINANCING OF PARKS AND OPEN SPACES**



There are numerous challenges involved in creating parks and open space for public use in environments that are home to many underserved communities. Obstacles include the limited availability and high cost of property, the cost of park and open space maintenance, and the difficulty of dealing with contaminated land,

or brownfields that require significant clean up. Formalized and highly structured ideas of what constitutes a park or recreation area also work against creative use of the open spaces that do exist.

Additionally, competing issues tend to position parks, playgrounds and community gardens as lower, non-essential priorities. The significant time and resources required to overcome these and other obstacles underscore the need for increased public demand, political prioritization and adequate public funding for parks and recreation.

American voters are willing to pay for open space and park and recreation areas because they consider them essential public assets, intrinsically tied to the quality of life and economic vitality of their communities. According to the Trust for Public Land's LandVote database—which tracks state and local conservation finance measures since 1996, voters around the country have approved 77% of 1,404 conservation finance measures, creating some \$27 billion for preserving important lands and creating park space.

It's clear from these statistics that even in this time of anti-tax sentiment and government austerity, consumers place a strong value on the need to have quality parks and recreation facilities available to them.

#### **Measuring Results**

Organizations that manage outdoor park and recreation areas need to plan, manage, lead, and evaluate for health benefits. Much remains to be learned about successful interventions and it is important for park and recreation administrators to qualify the benefits of their obesity-prevention efforts. Park and recreation agencies can partner with organizations such as a local universities/ colleges, or other community based organizations.

#### **CONCLUSION**

Americans need more from park and recreation areas than the benefits an occasional visit may provide. We need parks near our homes, where we can enjoy them and benefit from them in our daily lives. Even if park and recreation areas didn't provide all the benefits they are known for including improving the environment, attracting tourists, creating a sense of place, building community, and enhancing property values, they would still be critically important because of their proven contribution to public health and wellness.

## CASE STUDIES

## **RIVERSIDE PARK**

Location: Milwaukee, Wisconsin

**Description:** Milwaukee has one of the largest and most respected park systems in the Midwest but according to the University of Wisconsin School of Medicine and Public Health, 51% of Milwaukeeans are obese and 19% of the population is considered in fair to poor health.

**Challenge:** One of Milwaukee's park and recreation gems is the 24-acre Riverside Park, once a popular destination on Milwaukee's north side. Over the years the park had become rundown and largely shunned. The community became concerned over its decline and wanted to resurrect the park to provide a place for physical activity and recreational opportunities.

**Outcomes:** Resulting from an increase in visits and interest in the park by science teachers and their students, a fledgling ecology center was created out of a trailer on the park grounds with the support of a private partner, the Urban Ecology Center. In addition to the environmental education the center provides, its activities also promote public health to the 15,000 students and teachers from 45 schools by providing free sports and gardening equipment—including bicycles, snowshoes, crosscountry skis, camping gear, sea kayaks, shovels, and rototillers so participants, about 85 percent of whom are low income, can stretch muscles as well as minds.

Today, the Riverside Park Urban Ecology Center is a neighborhood-based, non-profit community center that in addition to its ecological programs provides physical activity opportunities as well as wellness and health education.

**Lessons Learned:** "For us, the health benefit comes from two directions," explains Ken Leinbach, the center's director. "First, we always make sure the kids go outside. Even if it's 20 below zero we'll throw them in a pair of donated boots and head out for a few minutes. Second, we work to make our parks safe and accessible so that they can be regularly used by the community even beyond our program hours. Raising funds from almost a dozen local, state, federal, and private sources has allowed the center to stretch its \$2 million budget to employ more than 65 full- and part-time staff and interns and to oversee 1,200 volunteers.

Creating a health-promoting park system requires partnerships with other public agencies, as well as with private foundations, corporations, citizens' groups, and volunteers. Partnerships can be immensely powerful by leveraging the strengths of one partner with those of another—financial capacity with legal authority, for instance, or communication outreach capability with large numbers of participants.

As Americans have found new ways to put their bodies and spirits in jeopardy, park and recreation areas will continue to offer solace to people and solutions to public health problems.

## CHILDHOOD OBESITY INITIATIVE

#### Location: San Diego County, California

**Description:** The San Diego County Childhood Obesity Initiative is a public/private partnership whose mission is to reduce and prevent childhood obesity in San Diego County by creating healthy environments for children and families through advocacy, education, policy development, and environmental change.

Challenge: With more than one in four children in San Diego County overweight or obese, and an annual cost of more than \$3 billion to San Diego County, the childhood obesity epidemic has had a significant impact on the health and financial well-being of San Diego and its families. New policies were needed to address the obesity epidemic and required the participation and cooperation of an assortment of San Diego public and private stakeholders including the County of San Diego Department of Parks & Recreation, County of San Diego Health and Human Services Agency Department of Public Health Services (HHSA), and others for their successful implementation.

**Outcomes:** In October 2004, the San Diego County Board of Supervisors unanimously voted to support and fund the creation, coordination and implementation of a Childhood Obesity Master Plan to end childhood obesity. After a year-long process that included a rigorous literature review, key informant interviews, and input from community residents, the San Diego County Childhood Obesity Action Plan was published. Immediately following publication of the Action Plan, the San Diego County Childhood Obesity Initiative (Initiative) was formed to engage community partners and assure effective implementation of the strategies outlined in the plan. The Initiative has developed an infrastructure that includes engagement of volunteer leaders or "champions"; engagement of new and existing partners; ongoing domain meetings; and guarterly domain council meetings. The County of San Diego Department of Parks & Recreation heads up the Government Domain which has as among its objectives to increase the quantity, quality and accessibility of parks, natural open spaces and facilities in order to encourage physical activity among children and families and to establish procurement practices and policies that prioritize the consumption of healthful foods and supporting local agriculture.

Lessons Learned: The Obesity Initiative Action Plan has been revised multiple times and most recently in 2010 has increasingly included the use of parks and recreation areas as an elemental strategy in achieving the health goals of the program. Two examples of such strategies are designed to increase the quantity, quality and accessibility of parks, natural open spaces and facilities in order to encourage physical activity and to prioritize the development of multi-use paths that lead to parks or other venues that provide opportunities for physical activity. The County of San Diego Department of Parks and Recreation has seen its credibility, status and network in the community and among government agencies increase as a result of their participation in the Initiative and now plays an important role in the development of policies and programs to positively affect the health of San Diego's citizens.

## THE MEDICAL MILE

#### Location: Little Rock, Arkansas

Description: In a groundbreaking move to increase awareness and support prevention of obesity and heart disease in Arkansas, two dozen physicians with Heart Clinic Arkansas, the state's largest cardiology clinic agreed to support completion of the Arkansas River Trail and create a "medical mile" of trail in the heart of downtown Little Rock. The inspiration, born of collaboration between the Little Rock Parks and Recreation, National Park Service Rivers Trails and Conservation Assistance Program became the focal point for a unique health and trails partnership that created the nation's first outdoor linear health museum. The extension of the Arkansas River Trail offers a healthful opportunity for running, skating, walking, and cycling while also serving as an educational museum of information and inspiration about health and wellness.

Challenge: Arkansas has the 8th highest overweight/obesity rate (67.2 percent of the population), with the rate for blacks (79.0 percent) much higher than those of non-Hispanic whites (67.2 percent). Arkansas has the 6th highest rate of death from cancer and cardiovascular disease.

While Arkansas has seen some recent improvements in public health, such as reducing the percentage of the population who smoke regularly, the state continues to face major public health challenges such as a child poverty rate of 21.8 percent. Objectives of the Medical Mile project included raising awareness about obesity and heart disease, supporting the Arkansas Department of Health's goal to reduce chronic disease by 70% and provide a recreational space that inspires healthy lifestyle changes and prevents heart disease and obesity.

Outcomes: The Heart Clinic physicians agreed to support the completion of the Arkansas River Trail through a fundraising initiative that exceeded its \$350,000 goal within three months and eventually raised \$2.1 million in two years. Little Rock Parks and Recreation has also established a creative construction fund-raising campaign where donors are encouraged to purchase trail "by the foot" in the city's program.

Today the Medical Mile's location in downtown Little Rock's Riverfront Park not only attracts a vibrant mix of bikers, joggers, skaters, and walkers but also over two million tourists per year while raising awareness on a national and international level of the themes of exercise, smoking cessation, and better nutrition. A 1,300-foot segment of the Medical Mile trail includes trailside benches, exhibits, and kiosks that present information on how exercise benefits personal health and well-being.

Lessons Learned: "The Medical Mile ought to be an example for the future, because it's good for all of us." quoted Richard Davies, Executive Director, Arkansas Department of Parks and Tourism. Little Rock Parks and Recreation successfully engaged the local medical community to procure funding for a trail that highlights the connection between healthy lifestyle choices and prevention of disease. Eventually the project garnered support from over two dozen local physicians, medical practices, hospitals, coalitions and the Arkansas Department of Health to create a public statement about the need to focus attention on preventable chronic disease through lifestyle changes.

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