



## 6

# Communities

As noted in the *Health in the Balance* report, childhood obesity prevention is ultimately about strengthening community capacity and mobilizing community resources and involvement. Whether the community in question is large or small, rural or urban, termed a *neighborhood* or *barrio*, it will inevitably be comprised of smaller relational networks that include faith-based organizations, worksites, schools, and a varying range of government, nonprofit, and voluntary organizations. This chapter uses the term *community* to denote a geographic entity but acknowledges the strengths and opportunities brought about by groups of people who are linked by social ties; share common interests, perspectives, ethnic or cultural characteristics; and engage in joint action in geographic locations or settings (MacQueen et al., 2001).

In communities across the nation there is a growing awareness of the childhood obesity epidemic, and this awareness is being transformed into active efforts to improve community access to foods and beverages that contribute to a healthful diet and increase opportunities for regular physical activity. However, the extent of these changes and the degree to which city councils, local businesses, schools, faith-based organizations,

local health departments, and other organizations with a stake in the health and quality of life of children and youth are actively engaged in this issue may vary widely.

The community-based approach to the prevention of childhood obesity builds on the reality that communities have numerous resources and assets that, if mobilized strategically, can directly impact the health and well-being of children and adolescents—through the nonprofit organizations that work directly with children and youth; planning and community development agencies that determine the physical design and utilization of built environment resources such as paths, parks, and neighborhoods; local businesses, chambers of commerce, trade groups, and civic organizations active in promoting and improving the community; health care professionals and systems through which primary care services are delivered; faith-based organizations, community coalitions, and foundations; and worksites that are increasingly addressing employee health as well as community and family well-being. Schools are also a vital asset that serve as a link between families and communities and have the capacity to strengthen and reinforce childhood obesity prevention strategies and initiatives (Chapter 7).

The committee recommends increased efforts to address the community-based recommendations of the *Health in the Balance* report (Box 6-1) and to incorporate an evaluation component into all policies, programs, and initiatives. This chapter highlights the key actions that need to be taken to activate a community's assets around the common goal of preventing childhood obesity. It begins with a brief review of key strategies associated with effective community-based prevention efforts, followed by examples of progress that focuses on mobilizing communities, improving the built environment, and enhancing the role of health care providers and the health care system in childhood obesity prevention. The chapter concludes with recommendations for guiding communities to assess progress for promising childhood obesity prevention efforts.

**BOX 6-1**  
**Recommendations for Communities**  
from the IOM 2005 report, *Preventing Childhood Obesity:*  
*Health in the Balance*

**Community Programs**

Local governments, public health agencies, schools, and community organizations should collaboratively develop and promote programs that encourage healthful eating behaviors and regular physical activity, particularly for populations at high risk of childhood obesity. Community coalitions should be formed to facilitate and promote crosscutting programs and community-wide efforts.

To implement this recommendation:

- Private and public efforts to eliminate health disparities should include obesity prevention as one of their primary areas of focus and should support community-based collaborative programs to address social, economic, and environmental barriers that contribute to the increased obesity prevalence among certain populations.
- Community child- and youth-centered organizations should promote healthful eating behaviors and regular physical activity through new and existing programs that will be sustained over the long term.
- Community evaluation tools should incorporate measures of the availability of opportunities for physical activity and healthful eating.
- Communities should improve access to supermarkets, farmers' markets, and community gardens to expand healthful food options, particularly in low-income and underserved areas.

**Built Environment**

Local governments, private developers, and community groups should expand opportunities for physical activity including recreational facilities, parks, playgrounds, sidewalks, bike paths, routes for walking or bicycling to school, and safe streets and neighborhoods, especially for populations at high risk of childhood obesity.

To implement this recommendation:

Local governments, working with private developers and community groups should:

- Revise comprehensive plans, zoning and subdivision ordinances, and other planning practices to increase availability and accessibility of opportunities for physical activity in new developments.
- Prioritize capital improvement projects to increase opportunities for physical activity in existing areas.
- Improve the street, sidewalk, and street-crossing safety of routes to school, develop programs to encourage walking and bicycling to school, and build schools within walking and bicycling distance of the neighborhoods they serve.

Community groups should:

- Work with local governments to change their planning and capital improvement practices to give higher priority to opportunities for physical activity.

The Department of Health and Human Services (DHHS) and the Department of Transportation should:

- Fund community-based research to examine the impact of changes to the built environment on the levels of physical activity in the relevant communities and populations.

### **Health Care**

Pediatricians, family physicians, nurses, and other clinicians should engage in the prevention of childhood obesity. Health care professional organizations, insurers, and accrediting groups should support individual and population-based obesity prevention efforts.

To implement this recommendation:

- Health care professionals should routinely track BMI, offer relevant evidence-based counseling and guidance, serve as role models, and provide leadership in their communities for obesity prevention efforts.
- Professional organizations should disseminate evidence-based clinical guidance and establish programs on obesity prevention.
- Training programs and certifying entities should require obesity prevention knowledge and skills in their curricula and examinations.
- Insurers and accrediting organizations should provide incentives for maintaining healthy body weight and include screening and obesity preventive services in routine clinical practice and quality assessment measures.

SOURCE: IOM (2005).

## **KEY ELEMENTS OF COMMUNITY-BASED STRATEGIES**

Although communities may vary widely in their demographics and resources, efforts to engage communities in promoting healthy lifestyles generally involve active grassroots efforts that build on the strengths of the residents and the locale. Mobilizing community participation, developing partnerships, and creating synergistic actions were some of the many themes that emerged out of the discussions at the committee's symposium, *Progress in Preventing Childhood Obesity: Focus on Communities*, held in Atlanta, Georgia on October 6–7, 2005 in collaboration with the Healthcare Georgia Foundation and The Robert Wood Johnson Foundation (RWJF) (Appendix G). Key elements of community-based strategies are discussed below.

### **Leadership**

Committed and sustained leadership is a theme emerging from promising community-based efforts to address childhood obesity. At a minimum, leadership is viewed as the investment of adequate resources and the commitment of the institutions and organizations that engage in obesity prevention efforts. Sustainability of community-improvement initiatives has been attributed to leaders' transition from projects addressing the symptoms of societal problems (e.g., chronic disease outcomes) to changing the underlying cultures, incentives, and settings that give rise to these symptoms (Norris and Pittman, 2000). Because of the multiple sectors and stakeholders involved in childhood obesity prevention, leadership on this issue can come from the private or public sector—from government leaders, health care professionals, school administrators and staff, community residents, and local business leaders. Leaders at the forefront of change in this area often are inspired by a personal health problem or by an interest in health promotion. Individual and organizational leadership are needed as driving forces in sustaining collaborative efforts, dedicating resources, and working to change social norms that support healthier lifestyles.

### **Building Community Coalitions**

Community coalitions consist of public- and private-sector organizations, together with individual citizens, working to achieve a shared goal through the coordinated use and direction of resources, leadership, and action. The synergistic effects of these collaborative partnerships result from the multiple perspectives, talents, and expertise that are brought together to work toward a common goal. However, challenges exist in developing and refining appropriate methods to evaluate the impact of coalition efforts on a variety of outcomes (Fawcett et al., 2000; Lasker et al., 2001; Roussos and Fawcett, 2000; Shortell, 2000). The efforts needed to prevent childhood obesity require a diverse set of skills and expertise—from renovating community recreational facilities to developing multimedia campaigns to promote healthy lifestyles. Because this issue is central to the health of the community's children and youth, childhood obesity prevention is a particularly well-suited and engaging issue for the development of community coalitions.

Characteristics of successful coalitions include focusing on a well-defined and specific issue; determining common goals; and keeping the coalition focused on providing leadership and direction rather than micromanaging the solutions (Kreuter et al., 2000). These are all characteristics that are attainable for community coalitions focused on childhood obesity prevention. The diverse set of community organizations and businesses needed to address childhood obesity exceeds the traditional health-related disciplines and encompasses the building industry, food and beverage companies, restaurant and food retail sectors, entertainment industry and media, education, public safety, transportation, parks and recreation, environmental organizations, community-rights advocates, youth-related organizations, foundations, employers, and universities, among others. Many stakeholders, who might not have considered childhood obesity prevention as an area of interest, now find that they have a critical role to play in working toward healthier communities. Challenges faced by organizations to develop and sustain community coalitions include effectively addressing competing priorities, transforming organizational cultures, and identifying sustainable funding sources.

### **Cultural Relevance**

Building on a community's cultural assets to enhance childhood obesity prevention efforts is fundamental to promoting grassroots involvement and the sustainability of policies, programs, and initiatives. The extent to which culturally competent adaptations are made can greatly affect intervention and policy outcomes (Chapter 3). Culturally appropriate enhancement strategies can be categorized as *peripheral*—developing packaging to appeal to a particular group using certain colors, images, graphics, pictures of group members, or titles; *evidential*—presenting data and information documenting the impact of the relevant health issue on a specific group; *linguistic*—increasing accessibility by using the preferred language or dialect of the group; *constituency-based*—drawing directly on the experience of group members through their inclusion as project staff or their substantive engagement as decision makers; and *sociocultural*—integrating the group's normative attitudes, values, and practices into messages and approaches (Hopson, 2003; Kreuter et al., 2003).

### **Sufficient Resources and Sustained Commitment**

Community-wide childhood obesity prevention efforts require careful planning and coordination, well-trained staff, and sufficient resources. Success is greatly enhanced by community engagement in the issue, which can take a great deal of time and effort to achieve. Insufficient resources may result in messages and other planned campaign interventions that are inadequate to achieve the exposure necessary to change the awareness, knowledge, attitudes, beliefs, or behaviors of target groups over time, especially among high-risk populations. Further, a sustained commitment is needed from community leaders, as implementing the changes necessary to alter the physical environment can be both time- and resource-intensive. For example, changes in city zoning or planning policies may require extensive time to revise including the time required to engage community residents, organizations, and businesses in discussions on the proposed changes.

### **Focus on Safety**

Safety is an important construct of the social environment that is likely to influence childhood obesity prevention efforts (Lumeng et al., 2006). Crime rates and residents' perceptions of neighborhood safety will affect the likelihood of people walking or bicycling in their neighborhoods. These barriers include both "stranger danger" and "traffic danger" and are important influences on the decisions made by parents regarding their children's outdoor play, mode of transportation to school, as well as influencing decisions made by adolescents regarding walking or cycling for transport (Carver et al., 2005). Many of the ongoing walk-to-school efforts (e.g., Safe Routes to Schools) began as efforts to address child safety concerns. It is anticipated that both community safety and obesity prevention would mutually benefit from efforts to enhance the community environment and that other benefits would also ensue.

### **Community-Based Participatory Research**

Developing effective intervention actions in communities involves activating community group members to take ownership of and provide influence on the content and implementation of interventions, the

evaluation process, and dissemination of findings. These concepts are often grouped under the rubric, *community-based participatory research*. This research paradigm recalls the historical roots of public health, where problems were identified and addressed through collaboration with the “public” or community for the common good (Israel et al., 1998). By nature, community-based participatory interventions are culturally competent and congruent with the needs and values of a target group because the methods emerge from affected communities as well as university, government, and foundation partners. As discussed in Chapter 3, this is an area of particular relevance for planning, implementing, and evaluating culturally relevant interventions involving racially, ethnically, and culturally diverse sub-populations at high risk for obesity and related chronic diseases.

### **Building on Multiple Social and Health Priorities**

As discussed in Chapter 3, childhood obesity prevention may not rank high as a priority for some communities and neighborhoods that are facing more immediate concerns such as poverty, crime, violence, underperforming schools, and limited access to health care. The opportunity in these communities is to identify and support efforts that can produce many potential benefits; for example, improving playgrounds and recreational facilities may enhance safety, reduce crime, increase physical activity, and improve quality of life. Finding common ground may serve as a key element in garnering sufficient investment for sustained efforts. The challenge is that many of these efforts are resource-intensive and require significant political commitment and social support to be accomplished. Building and strengthening partnerships between organizations working to empower communities are needed. Collective efficacy has been described as “the willingness of community members to look out for each other and intervene when trouble arises” (Cohen et al., 2006). A recent study found that adolescents living in communities with higher levels of collective efficacy had lower body mass index (BMI) levels than those living in communities without a strong sense of connection, which remained significant even while holding neighborhood disadvantage constant. This suggests that even youth living in higher socioeconomic (SES) neighborhoods may be adversely affected when there is a lack of connection to their community (Cohen et al., 2006).

## **EXAMPLES OF PROGRESS IN PREVENTING CHILDHOOD OBESITY IN COMMUNITIES**

Given that there are approximately 36,000 incorporated cities and towns in the United States and many more locales (U.S. Census Bureau, 2006), the committee can only provide selected examples of the array of positive changes that are occurring throughout the nation in response to childhood obesity. As sufficient outcome data are not yet available in most cases to evaluate the effectiveness of various policies, programs, and interventions, these examples are intended to highlight the many and varied efforts to address the problem. They are characterized here as promising practices rather than best practices because they lack sufficient evidence to directly link the effort with reducing the incidence or prevalence of childhood obesity and related co-morbidities.

### **Mobilizing Communities**

Communities that promote healthy lifestyles and actively engage their citizens in improving access to opportunities for healthful eating and regular physical activity draw on the talents, resources, and energies of multiple community stakeholders. As noted earlier, prevention of childhood obesity competes with many other health and social priorities for scarce resources that are available at the local level. Furthermore, challenges often arise in coordinating programs under completely different administrative structures (e.g., schools and local health departments) within the community, state, and region. However, these challenges can be effectively confronted in many communities. Programs and initiatives at the community level often work to engage children, youth, and adults in obesity prevention efforts focused on all age groups.

#### *Community Programs and Initiatives*

The nature and breadth of community-based programs and initiatives vary widely, and may involve community youth organizations, voluntary health organizations, and public-private partnerships. Programs may also range from multicity and well-resourced efforts sponsored by corporations or national organizations to individual communities engaging in specific projects or programs such as building a playground or expanding bike trails. Likewise, the scope of the evaluation can be

modest or sophisticated and the outcome indicators or performance measures may differ depending on the purpose for which they are intended (Chapter 2). Evaluation methodologies may range from research-based efforts with multiple comparison groups to assessments using more modest outcome measures such as implementing a policy that supports a capital improvement project to build a new community playground where families can engage in physical activity with their children.

A number of national youth-related organizations are working with their multiple local chapters to incorporate obesity prevention efforts and goals into their programs, often with the support of foundation or corporate sponsors. For example, Girl Scout councils have developed partnerships with community parks and recreation departments, sports organizations, as well as schools and colleges for instruction and facilities. Girl Scout programs that are focused on healthy lifestyles include shape UP! and GirlSports (Girl Scouts, 2006). Additionally, the Girl Scouts organization conducted focus group research with online surveys of more than 2,000 8- to 17-year-old girls to explore how they view obesity, define health, and what motivates them to lead healthy lifestyle (Girl Scout Research Institute, 2006). The YMCA has instituted YMCA Activate America™, a long-term commitment to obesity prevention that focuses on improving their programs, providing community leadership, and developing strategic partnerships with universities, government, and corporations (YMCA, 2006). The Boys and Girls Clubs of America feature a number of fitness-related programs including Triple Play: A Game Plan for the Mind, Body and Soul, sponsored by The Coca-Cola Company and Kraft Foods Inc., with the goal of increasing healthy habits, physical activity, and promoting healthful diets (BGCA, 2006). At the committee's Wichita symposium, students presented a local 4-H sponsored mentoring program, Kansas Teen Leadership for Physically Active Lifestyles, in which high school students engage with elementary school children in after-school and summer programs focused on promoting physical activity and healthful eating (Sparke et al., 2005).

Community centers, after-school programs, and summer camps are often used as the sites for obesity-prevention interventions. For example, the GEMS (Girls health Enrichment Multisite Studies) set of research-based studies has examined a variety of approaches (e.g., dance, team building, games, aerobics, nutrition education, reducing television viewing) that are being implemented in community settings to engage 8-

to 10-year-old African-American girls in obesity prevention and management (Baranowski et al., 2003; Beech et al., 2003; Robinson et al., 2003; Story et al., 2003).

Faith-based organizations are also becoming more engaged in promoting healthy lifestyles. Leaders of many faiths are realizing that messages about physical health and spiritual health are congruent. The committee's Atlanta symposium presented several efforts undertaken by different faith-based groups to promote health. This process often starts with the minister addressing his or her own health concerns as well as encouraging congregation members to make healthful nutrition and physical activity choices as a way of demonstrating their concern for others and their church family. Congregations are encouraging members to bring healthier meals to church potluck gatherings and are sponsoring health fairs, cooking and exercise demonstrations, physical activity classes, and informational sessions on how to improve the health of the congregation. Others are partnering with local health departments or other health care providers to offer health screenings at their places of worship, a setting in which people may feel more comfortable than in a health clinic. Some congregations have parish nurses or ministers who provide health information, facilitate health-promotion activities, and conduct health screenings for congregational members (Brudenell, 2003; Chase-Ziolek and Iris, 2002). Research-based efforts—including Healthy Body Healthy Spirit, an NHLBI funded intervention to increase physical activity and consumption of fruits and vegetables among African Americans recruited through churches (Resnicow et al., 2005)—are evaluating the effectiveness of faith-based approaches to obesity prevention.

National efforts that work at the community level often involve successful collaborations among federal agencies, corporations, and community-based, youth-related organizations (Chapters 4 and 5). The numerous ongoing public-private collaborations include Action for Healthy Kids (a collaborative public-private effort focused on changes in schools and involving a number of partners including Aetna Foundation, the American Public Health Association, CDC, the Department of Education, the Kellogg's Fund, the National Dairy Council, the National Football League, the National PTA, the Robert Wood Johnson Foundation, and USDA) (Action for Healthy Kids, 2006) and the 5 A Day for Better Health Program (a national public-private partnership with multiple collaborators including the American Heart Association, American Cancer Society, Association of State and Territorial Directors

of Health Promotion and Public Health Education, CDC, National Alliance for Nutrition and Activity, National Cancer Institute, Produce for Better Health Foundation, Produce Marketing Association, United Fresh Fruit and Vegetable Association, and USDA (PBH, 2006; Chapter 4). Other national initiatives include NikeGO, sponsored by Nike, Inc. (Nike, 2006); Girls on the Run, sponsored by New Balance and the Kellogg Company (Girls on the Run, 2006); America on the Move® (2006), a nonprofit organization that promotes small lifestyle changes to increase physical activity and reduce calorie intake, with multiple sponsors including Pepsico and Cargill; and the WNBA's Be Smart-Be Fit-Be Yourself program for youth (WNBA, 2005). Evaluation efforts for these programs vary in scope. For example, America On the Move Foundation's assessment strategy includes scientific research in clinical environments of America On the Move programs conducted through the University of Colorado's Center for Human Nutrition; evaluation of the national online program for individuals and groups based upon pre- and post-intervention data and on programs customized for specific settings; and survey data collection via national and state-based instruments of individuals' health-related knowledge, beliefs, and behaviors, including actual physical activity levels (via stepometer data) (Wyatt et al., 2004).

Numerous state and federal programs operate at the local level. For example, six cities, five counties, and three American Indian tribes have received funding through the STEPS to a HealthierUS Cooperative Agreement Program (Steps Program) that enables communities to develop an action plan, a community consortium, and an evaluation strategy that supports chronic disease prevention and health promotion (DHHS, 2006; Chapter 4). Cooperative extension services are another example of federal, state, and local partnerships that work through land-grant universities and local extension offices to disseminate information to families and individuals and engage communities to work on a range of nutrition- and agricultural-related issues (CSREES, 2006). Additionally, federal food and nutrition programs, such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), provide opportunities to convey information related to dietary and physical activity changes to parents of young children and to employees working in these programs (Box 6-2; Chapters 4 and 8). Furthermore, worksite efforts focused on improving employee health often have direct and indirect benefits (via parental influence) for children and youth. For example, the National Business Group on Health

(NBGH) has developed a toolkit for employers and fact sheets for parents focused on healthy weight for families (NBGH, 2006).

**BOX 6-2**  
**Engaging Adult Health/Social Services Providers**  
**as Vehicles for Social Norm Changes**

In 1999, USDA funded a childhood obesity prevention initiative called Fit WIC to support and evaluate social and environmental approaches to prevent and reduce obesity in preschool children (USDA, 2005). California was one of the four state WIC programs that participated in the pilot program evaluation. The Fit WIC program, implemented through California WIC clinics and evaluated by the University of California at Berkeley Center for Weight and Health (Crawford et al., 2004), compared six WIC sites (three intervention, three control) that participated in a pilot staff wellness intervention program to improve staff effectiveness in preventing childhood obesity. The intervention approaches focused primarily on supporting beneficial behaviors, rather than on weight loss, and on motivating staff members to eat healthfully and to be more physically active throughout the work day. Offering healthy choices (e.g., fresh fruit or vegetables) when refreshments were served in meetings or celebrations and integrating 10-minute physical activity breaks into regular staff meetings or at certain times of the work day, were among the organizational changes at WIC sites. Compared to control site staff, intervention staff perceived greater worksite environmental support for their efforts to make healthful food choices and engage in physical activity, and reported substitutions in the type of foods served during meetings, and priority placed on physical activity in the workplace. Intervention site staff members were also more likely to counsel WIC participants to engage in physical activity with their children and reported greater sensitivity in handling weight-related issues. This study underscores the potential reach of fitness promotion (Glasgow et al., 1999) in organizations serving high-risk groups, given the “multiplier effect” of the positive influence of healthy provider behavior on clients (Abramson et al., 2000; Frank et al., 2000; Lewis et al., 1986; Thompson et al., 2003).

### *Foundations*

Foundations are active partners in many community-based obesity-prevention efforts. As the funding sources for community and other grassroots grantees, foundations may require that an evaluation plan be submitted in the grant application. For example, The California Endowment’s Healthy Eating/Active Communities (HEAC) initiative funds several community demonstration project grantees to implement

programs promoting physical activity and healthful eating in six low-income communities throughout California (California Endowment, 2006). As part of the HEAC initiative, adolescents involved in the Youth Study are using digital cameras to provide images of their physical activity and eating environments and will engage in discussions about evaluating the need for environmental changes (Craypo et al., 2006). Active Living by Design and Active Living Leadership initiatives through the support of The Robert Wood Johnson Foundation (RWJF) are utilizing the expertise of a diverse group of professions such as urban planners and designers, environmentalists, asthma control activists, leisure and travel industry specialists, economists, and public policy advocates and decision makers to explore the possibilities for greater community efforts to increase physical activity (Active Living Leadership, 2004). Recently, RWJF launched a Healthy Eating Research initiative with a special emphasis on building a field of research that will benefit children in low-income and racial/ethnic populations at highest risk for obesity (RWJF, 2006). Some foundations coordinate their efforts with those of industry, government, and other sectors to fully leverage resources and scale up programs and initiatives. For example, the Alliance for a Healthy Generation, described in Chapters 2, 5, and 7 is designed as an extensive collaborative effort involving foundations, nonprofit organizations, industry, and state government leadership. However, evaluations are needed to assess the effectiveness of the Alliance.

One of the strengths of local, statewide, and regional foundations is their familiarity with the cultural assets and demographic characteristics of the areas they serve and their ability to focus grants and funding opportunities on innovative projects that build on local assets. The committee, through its three regional symposia, had the opportunity to learn more about the community-based obesity prevention programs and initiatives funded by the Kansas Health Foundation, the Sunflower Foundation, the Healthcare Georgia Foundation, the Missouri Foundation for Health, The Robert Wood Johnson Foundation, and the W. K. Kellogg Foundation. Some corporate foundations are also active partners in childhood obesity prevention efforts at the community level (Chapter 5).

As foundations across the nation continue in their commitment to childhood obesity prevention, it is important to build on their strengths and to identify the ways in which foundations can be most effective. For example, foundations often have greater flexibility in their funding

mechanisms than government agencies so that they can more quickly explore untested or promising approaches or respond more rapidly to evaluations of natural experiments (discussed later in this chapter). Further, foundations are often effective in partnering with organizations that can sustain the activity if it is proven efficacious, efficient, and culturally and socially appropriate.

Evaluating the efforts of foundations will include consideration of the long-term sustainability of funding for projects related to obesity prevention and the extent to which obesity prevention initiatives are a funding priority.

#### *Developing and Strengthening Community Coalitions*

As noted earlier, community coalitions are a particularly relevant approach to prevent childhood obesity, as they can synergize the efforts of stakeholders with the many diverse areas of expertise that are needed to move prevention efforts forward. Community coalitions relevant to childhood obesity prevention often focus on broader but related issues such as generally improving healthy lifestyles or preventing chronic diseases such as type 2 diabetes in children, youth, and adults. The healthy communities movement, and its outgrowth, the Coalition for Healthier Cities and Communities, provide an example of an initiative focused on health promotion and disease prevention that measures community-based outcomes including improved cardiovascular health, reductions in crime, reduced teen pregnancy rates, and declines in the numbers of new HIV infections (Norris and Pittman, 2000).

Another example is the Border Health Strategic Initiative (Border Health ¡SI!), a diabetes-prevention intervention that involves several communities along the Arizona–Mexico border, which developed community coalitions focused on building partnerships with local universities, community health workers (*promotores de salud*), and other community stakeholders. The initiative utilized the REACH 2010 community-based participatory research model to focus on implementing policy changes in schools, involving planning and zoning commissions, and encouraging long-range community planning, as well as organizing an annual community forum for elected and appointed local officials to discuss policy changes to promote health (Meister and de Zapien, 2005; Chapter 3).

Examples of community coalitions and initiatives (Boxes 6-3 and 6-4) highlight the range of stakeholders and the importance of leadership in

initiating and sustaining community efforts. Often it is the mayor or another key community leader who can galvanize the political will and multistakeholder support that is needed to build a coalition focused on improving the health of the community. Generally, these efforts focus on all citizens including children and youth.

**BOX 6-3****Sonoma County (California) Family Activity and Nutrition Task Force**

In 1998, the Sonoma County Family Activity and Nutrition Task Force was initiated to bring together individuals, professionals, and community-based organizations to focus on the nutrition health and physical activity levels of children in the county. The task force works through four subcommittees:

- **The farm-to-school subcommittee** promotes increased fruit and vegetable availability in the local schools.
- **The direct service subcommittee** promotes prevention and treatment options in the community.
- **The community outreach and advocacy subcommittee** works to increase public awareness of obesity-related issues and solutions.
- **The child-care subcommittee** works with Head Start and the Community Child Care Council to educate parents and care providers about nutrition and obesity-related issues.

In February 2006, the Task Force received a five-year grant from Kaiser Permanente to implement a Healthy Eating Active Living-Community Health Initiative in two local communities, South Park and Southwest Santa Rosa. Phase 1 of the project will involve developing a community action plan and phase 2 will implement and evaluate the plan over four years.

Source: Sonoma County (2006).

Community coalitions often conduct local surveys and assessments as they get underway to provide baseline information; these assessments can then be followed up along the course of the coalition's work to assess progress. The Bexar County (Texas) Community Health Collaborative began with a baseline health needs assessment in 1998, followed up a comparable effort in 2002 (Health Collaborative, 2003). This assessment, conducted in collaboration with the University of Texas Health Science Center, provided detailed information on a range of health issues in various areas of the county. Follow-up plans have involved using the community health planning tool, MAPP (Mobilizing for Action through Planning and Partnerships) (NACCHO, 2004) to

develop and implement a strategic plan for next steps in improving the county's health status (Health Collaborative, 2003; San Antonio Metropolitan Health Department, 2006).

A number of community initiatives are focused on a specific project, such as building a playground or changing a local school district's policies related to the availability and sale of competitive foods in schools (Chapter 7). Since childhood obesity may be a vast and complex issue for a community group with limited time and resources, it may be necessary for a community to focus on a single manageable project to yield tangible results and measurable outcomes. Even if the group disbands after a project is completed, progress has been made and awareness has increased among all of the stakeholders involved. Although collaboration is difficult to measure, it has important benefits such as empowering community residents and local organizations and increasing the community's capacity to address a problem (Kreuter et al., 2000).

**BOX 6-4****Examples of Community Initiatives and Coalitions**

- **Health and Wellness Coalition of Wichita:** Partners in this community coalition in Wichita, Kansas include nonprofit organizations, local businesses, city and county agencies, and local academic institutions.
- **Fit City Madison:** The mayor of Madison, Wisconsin began this initiative in response to concern about city-wide obesity rates. Fit City is now a coalition effort involving over 50 community organizations that schedule health-related and active living events including regular walks with the mayor.
- **ACTivate Omaha:** A partnership in Omaha, Nebraska of local health officials, city governments, architects, health educators, health care providers, workplace wellness organizations, architects and community groups aimed at fostering active living.
- **Bexar County (Texas) Community Health Collaborative:** This community coalition began with a community health needs assessment sponsored as a joint effort by the San Antonio area health care organizations. It has since expanded to include numerous other partners, including the YMCA of Greater San Antonio and has launched Fit City and Walk San Antonio initiatives.
- **Consortium to Lower Obesity in Chicago Children (CLOCC):** The consortium began as a community-based effort by Children's Memorial Hospital focused on obesity prevention in children ages 3 to 5 years. CLOCC now involves multiple community partners and provides resources and connections for children, their caretakers, and those who work with their parents and caretakers.

SOURCES: Activate Omaha (2006); CLOCC (2006); Fit City Madison (2006); Health and Wellness Coalition of Wichita (2005); Health Collaborative (2006).

**Enhancing the Built Environment**

The built environment represents the man-made elements of the physical environment (e.g., buildings, infrastructure, arrangements in space, and the aesthetic qualities of these elements). Over the past 50 years, our physical environment has changed dramatically, and it is increasingly recognized as a contributing factor to the obesity epidemic (Brownson et al., 2005; IOM, 2005; Sallis and Glanz, 2006). Key features of the built environment include land-use patterns, and the paths, roads, and other means of transport that link one location with another. Additionally, the built environment encompasses the way in which the interior of buildings are structured to accommodate or necessitate movement as well as the structure of the community food environment,

which plays a role in determining access to fruits, vegetables, and other foods and beverages that contribute to a healthful diet (Brownson et al., 2006; Gordon-Larsen et al., 2006; Handy et al., 2002; Handy and Clifton, in press; Kahn et al., 2002; TRB and IOM, 2005; Zimring et al., 2005).

Local zoning boards, city planning commissions, capital improvement committees, and many other entities are involved in decisions regarding land use, transportation, building development, sidewalks, and bicycle and pedestrian paths (Handy and Clifton, in press). Organizations and movements such as Smart Growth and New Urbanism prioritize active travel; livable and sustainable communities; mixed land use (e.g., residential, office, and retail space); and preserving open space (New Urbanism, 2006; Smart Growth Network, 2003). Latino New Urbanism (2006) is a recent outgrowth of these efforts and involves the consideration of Latino culture in the development of urban properties and land-use plans.

#### *Promoting Physical Activity*

Communities are becoming more aware of the need to enhance healthy lifestyles for children and youth by offering safe and attractive places for neighborhood recreation and play and promoting active transport. Numerous issues related to the built environment are particularly critical to populations at high risk for obesity. In many locales there are fewer recreational facilities present in low-income neighborhoods than in more affluent areas (Cradock et al., 2005; Sallis and Glanz, 2006). It is important to identify the extent of disparities in access to opportunities for physical activity so that these issues can be addressed. For example, in Boston, Massachusetts a needs assessment was conducted by the nonprofit organization Play Across Boston, with funding from the CDC, that involved a census of the public recreational facilities, as well as data collection on physical activity programs available to children and youth during nonschool hours (Hannon et al., 2006). Combining this information with household income and population census data provided insights into the areas where recreational opportunities needed to be enhanced.

Many communities are expanding and improving their playground and gymnasium facilities; adding and restoring walking and biking trails; taking pedestrian issues into consideration in planning for new road construction; and involving children, youth, and families in a variety of physical activity-related programs (Sallis and Glanz, 2006). Voters in

Los Angeles have approved a major bond issue that will support upgrading urban parks. Some public school playgrounds in downtown Denver have been converted into community parks (Brink and Yost, 2004).

Examples of nationwide efforts to change the built environment to encourage physical activity include the PedNet Coalition in Columbia, Missouri (Box 6-5); the work of the PATH Foundation and partners to develop a metrowide trail system for Atlanta and DeKalb county (PATH Foundation, 2006); the 1000 Friends of New Mexico initiative that promotes Smart Growth in Albuquerque (1000 Friends of New Mexico, 2006); and the efforts by the Winnebago tribe in Nebraska to increase physical activity and develop plans to improve the built environment (Box 6-6). The Partnership for a Healthy West Virginia offers Walkable Communities Workshops that aim to bring together community stakeholders and help them in organizing efforts to improve pedestrian safety and the walkability of their community (Partnership for a Healthy West Virginia, 2006).

**BOX 6-5**  
**PedNet Coalition, Columbia, Missouri**

The PedNet Coalition is a group of individuals, businesses, and nonprofit organizations working in Columbia, Missouri to develop and restore a network of nature trails and urban "pedways" to connect residential subdivisions, worksites, shopping districts, parks, schools (including local colleges and the University of Missouri-Columbia), public libraries, recreation centers, and the downtown area. The coalition has developed a plan for a 20-year effort to fully implement the network of trails and paths. Additionally, the coalition sponsors the Walking School Bus program and a number of citywide biking and walking events.

Co-founded in April 2000 by the City of Columbia Disabilities Commission and the City of Columbia Bicycle and Pedestrian Commission, there are now over 5,000 individuals and 75 organizations, businesses, and government agencies that are a part of the coalition. In July 2005, Columbia was selected by the Federal Highway Administration to receive a Non-Motorized Transportation Pilot Program grant, and the PedNet Coalition is providing input into the planning process.

Evaluation methods used by the PedNet Coalition include tracking travel mode to school at four elementary schools (twice a year for the past 2.5 years) and tracking the number of participants at the annual Bike, Walk, and Wheel Week events.

SOURCE: PedNet Coalition (2006).

**BOX 6-6**  
**Winnebago Tribe**  
**Winnebago, Nebraska**

The Winnebago tribe, a Native American tribal community in Nebraska, is working to enhance the opportunities for physical activity and improved nutrition in the residential and commercial areas of the community. The nonprofit development arm of the Winnebago tribe has worked with other community and foundation partners to develop a five-year plan, establish biking and walking support groups, develop community gardening programs, and conduct active living events. One of the goals is to create pedestrian-friendly crossings on a highly-traveled highway that separates housing from other areas of the community. The community is involved in planning for mixed-use land development and in implementing other active transport changes.

SOURCE: Winnebago Tribe (2006).

The daily trip that children and youth make to and from school has received considerable attention in many communities as a way to increase students' physical activity levels (WHO, 2002). Community efforts to increase walking and bicycling to and from school focus on improvements to the built environment—intersections, sidewalks, and bike paths—accompanied by programs to encourage parents and children to consider nonmotorized methods of travel. Urban design changes resulting from California's Safe Routes to Schools legislation (e.g., additions and rebuilding of sidewalks and bike paths and improvements in pedestrian crossings) have been found to increase walking or bicycle travel by children in a survey of parents at 10 elementary schools (Boarnet et al., 2005). Schools and communities are also promoting walk- or bike-to-school days through programs such as Safe Routes to Schools and the CDC's KidsWalk-to-School program. In Hinsdale, IL a walk-to-school day in 2000 was the beginning of citywide efforts to build new sidewalks and repair existing sidewalks; provide public education on traffic safety issues; and work with transportation engineers, the police force, and others to improve the walkability of the town (Active Living Network, 2005). The federal Safe Routes to School Program, initiated in August 2005 through the transportation reauthorization legislation, provides funds for states and subsequently

communities, to build safer street crossings and establish programs that encourage walking and bicycling to school (FHWA/DoT, 2006).

#### *Enhancing the Community Food Environment*

Although information is limited about how the community environment affects eating patterns among children and youth, efforts are underway to better understand these relationships (Glanz et al., 2005; Moore and Diez Roux, 2006) and more evaluation is needed. For example, the RWJF Healthy Eating Research Program, mentioned earlier, is encouraging solution-oriented research that explores environmental and policy determinants of healthy eating as strategies for addressing childhood obesity (Story and Orleans, 2006).

Through community advocacy, several cities have shown that it is possible to locate supermarkets in low-income neighborhoods to enhance access to fresh fruits and vegetables (Sallis and Glanz, 2006). The Pennsylvania Fresh Food Financing Initiative—a public–private partnership of the Food Trust of Philadelphia, the Greater Philadelphia Urban Affairs Coalition, the Reinvestment Fund, and the Commonwealth of Pennsylvania—provides financing through grants and loans to increase the number of supermarkets and grocery stores in underserved communities in Pennsylvania (Food Trust, 2006). The outcomes of this initiative are being evaluated through funding from the National Institutes of Health (NIH).

Alternative strategies are also being developed to increase the availability, affordability, and access to foods, beverages, and meals that contribute to healthful diets throughout neighborhoods and communities. Community gardens are moving beyond rural and suburban communities into urban areas. For example, the Harlem Children’s Zone, a program and facility designed to provide safe and healthful educational, social, and recreational opportunities for children and youth, has transformed a vacant lot in New York City into a garden in which children work alongside older residents to cultivate and harvest fresh produce and share it with their community (Garden Mosaics, 2006; Chapter 3). Mobile markets, such as People’s Grocery in West Oakland, California, sell produce in urban neighborhoods and involve youth interns in selling local produce (Flournoy and Treuhaft, 2005). Neighborhood bus systems have been developed to link residents with supermarkets. In East Austin, Texas a bus route provides transportation from a low-income Latino community to two supermarkets (Flournoy and Treuhaft, 2005).

Evaluations of these initiatives are needed to determine whether access to healthier foods has increased, and if it has, whether the consumption of these foods replaces less healthful alternatives, and the effects on long-term behavioral and health outcomes.

Local food policy councils are another strategy relevant to preventing childhood obesity. A food policy council brings together community stakeholders—including consumers, farmers, food processors, distributors, food security advocates, educators, government—to develop policies and projects to improve access to foods that contribute to a healthful diet while also supporting local farmers (Borron, 2003; McCullum et al., 2005; Webb et al., 1998). Municipal or regional food policy councils have been established across the country including in Santa Cruz, California; New Haven, Connecticut; Knoxville, Tennessee; Portland/Multnomah, Oregon; and Seattle/King County, Washington. Some states also have active food policy councils (McCullum et al., 2005). The range of issues that food policy councils or coalitions may focus on include creating and sustaining farm-to-school programs (e.g., local farm fresh produce is used in school salad bars and lunches, promotion of school field trips to local farms); creating youth leadership programs related to developing skills in gardening and marketing such as projects to develop school-based edible landscaping produce stands; improving the availability of healthful and affordable foods in low-income communities (e.g., creating or expanding farmers' markets); working on issues related to land-use policies and local or regional food production and consumption (e.g., community gardens, community-supported agriculture, seasonal eating, food system education); and support of legislation such as zoning laws that either ban or regulate the location, number, and density of fast food outlets, quick serve restaurants, and “drive-through” establishments in cities or municipalities (Borron, 2003; Cohen et al., 2004; Hamilton, 2002; Mair et al., 2005a, b).

Toolkits are available that provide guidance on conducting a community food assessment, defined as “a participatory and collaborative process that examines a broad range of food-related issues and assets in order to inform actions to improve the community's food system” (CFSC, 2004). These include USDA's *Community Food Security Assessment Toolkit* (Cohen, 2002) and the Community Food Security Coalition's (CFSC's) *Community Food Project Evaluation Handbook* and *Community Food Project Evaluation Toolkit* (National Research Center, Inc., 2004a, b). A distinction is made between

program-level tools, which are used to measure the changes in individuals who participate in or receive direct services from a community food project, and system-level tools, which measure changes in the food system of a community, city, state, region, or the nation. System-level tools (e.g., community mapping and geographic information systems [GIS]) can be used to inventory and identify the type and range of local food resources such as supermarkets, corner grocery stores, full serve and quick serve restaurants, food banks, food pantries, farmers' markets, and community gardens (Algert et al., 2006; McCullum et al., 2005; Pothukuchi et al., 2002). System-level tools can also be used to assess changes in the food system to increase the availability of locally grown food in retail stores, increase the availability of supermarkets within walking distance of residents, and increase the presence or expand the activities of food policy councils (National Research Center, 2004a, b).

### **Engaging Health Care Providers and the Health Care System**

The *Health in the Balance* report focused its discussion on the role of health care professionals and organizations in providing counseling, leadership, advocacy, and training. It is difficult to assess progress at the individual provider level; however, there are examples of how certain components of the health care sector have begun to take a more visible role in formulating policies and implementing innovative programs to prevent childhood obesity. A systematic assessment of progress in childhood obesity prevention efforts by the health care sector has not been conducted to the committee's knowledge, and it is important to note that this is one component of a larger effort to engage health care providers in fostering healthy behaviors in their patients (Green, 2005).

Efforts are ongoing to explore the factors that may encourage or hinder pediatricians in counseling their patients on overweight or obesity. A survey of North Carolina pediatricians found that those who classified themselves as thin or overweight had greater difficulty in weight counseling, than pediatricians who classified themselves as average weight (Perrin et al., 2005). A survey of nurse practitioners in the Intermountain area of Utah found that barriers to implementing childhood obesity prevention strategies included perceived parental attitudes regarding a lack of motivation to implement healthful changes; difficulties for families to overcome social norms regarding television, videogames, carbonated soft drinks, and snack foods; and a lack of time

and reimbursement for adequate counseling and patient education (Larsen et al., 2006).

Individual physicians and professional organizations have become involved at the community and state levels in promoting and implementing obesity prevention programs (Box 6-7). The committee noted in the Wichita and Atlanta symposia that physicians who have been elected as state legislators or who hold leadership positions in the state executive branch are often vocal proponents of obesity prevention measures, and actively work to propose relevant legislation. Many professional organizations such as the American Academy of Family Physicians (AAFP) and the American Academy of Pediatrics (AAP) provide evidence-based, online patient and provider toolkits and websites for preventing and managing obesity in children and youth (AAFP, 2004; AAP, 2006; Chapter 8).

#### **BOX 6-7**

##### **Physicians as Advocates for Healthy Communities**

The California Medical Association (CMA) Foundation began its “Physicians for Healthy Communities” Initiative in 2005 to coordinate the obesity prevention efforts of California’s physicians with healthy eating and physical activity programs run by the California Nutrition Network in schools, community organizations, and local and state government. The California Nutrition Network for Healthy, Active Families is a project of the California Department of Health Services funded by the Food Stamp Program. The CMA Foundation enlisted the support of 40 county medical societies, 37 ethnic physician organizations, and several specialty medical societies. During the first year of the project nearly 150 “physician champions” were identified. In 2006, 250 physician champions are being trained to become educators and advocates for healthy eating and physical activity in schools and communities throughout the state. The CMA Foundation provides physicians with training opportunities, toolkits for working with schools and underserved populations, and guidelines for talking about obesity prevention with patients in their office ([www.calmedfoundation.org](http://www.calmedfoundation.org)). The CMA Foundation’s Physicians for Healthy Communities Initiative is supported by the California Department of Health Services, Kaiser Permanente, Blue Shield of California, and LA Care Health Plan.

SOURCE: CMA Foundation (2006).

Obesity-related initiatives by major health plans focused initially on treatment options for adults (such as coverage for weight loss drugs or

bariatric surgery) but are now increasingly emphasizing obesity prevention and include a specific focus on children and youth (Kertesz, 2006b; NIHCM Foundation, 2006). A new effort by America's Health Insurance Plans (AHIP) includes a focus on mini-grants that are awarded to further research on obesity-related interventions. Health plans are developing educational materials and programs for patients and clinicians. For example, CIGNA has developed an online toolkit for physicians to assist them in counseling parents and older youth about childhood obesity (Kertesz, 2006a). Kaiser Permanente has recently instituted BMI as a vital sign that is assessed in clinical visits and as an outcome measure that can be tracked as part of the electronic medical record system (Box 6-8).

Health plans are also involved in community- and school-based programs. In 1998, Blue Cross Blue Shield of Massachusetts began a youth wellness program, Jump Up and Go!, which involves developing partnerships with community-based organizations to provide physical activity programs, school initiatives, health professional educational components, and educational materials to assist pediatric clinicians in counseling children and their parents (Jump Up and Go!, 2006). Other innovative approaches include the Kaiser Permanente worksite farmers' markets in California that offer patients and employees the opportunity to purchase fresh fruits, vegetables, and other foods and beverages that contribute to a healthful diet (Kaiser Permanente, 2004; Box 6-8). Kaiser Permanente has also expanded its Community Benefit Program to focus on obesity prevention efforts through its Healthy Eating, Active Living (HEAL) initiative (Kaiser Permanente, 2006). Coordinating the community benefit efforts of health care organizations within the community are important as is concerted involvement in community coalition efforts. Health care organizations can also demonstrate leadership by serving as organizational role models for physical activity and healthful eating practices by expanding the availability of low-calorie and high-nutrient foods in worksite vending machines and cafeterias as well as creating incentives for employees to engage in physical activity.

**BOX 6-8**  
**Kaiser Permanente's Healthy Eating, Active Living (HEAL) Initiative**

Kaiser Permanente's Healthy Eating, Active Living (HEAL) initiative is a multifaceted approach to promoting healthy lifestyles that integrates prevention-oriented delivery system interventions, community-based initiatives, organizational practice changes, and a media campaign.

***Delivery system interventions*** - In 2002, Kaiser Permanente launched the Weight Management Initiative to introduce and evaluate evidence-based clinical practice changes to support prevention and treatment of overweight. Key elements of this initiative include BMI as a vital sign; physician training programs on counseling strategies; and point-of-care prompts in exam rooms.

***Community health initiatives*** - The multisectoral HEAL initiatives bring together community-based organizations, schools, public health departments and the health sector to work together on change strategies, with an emphasis on making changes in institutional practices, public policy, and the built environment.

***Organizational practice changes*** - Efforts are also focused on increasing access to opportunities for physical activity and offering low-calorie high nutrient foods and beverages within its medical facilities by sponsoring farmers markets held at hospitals and medical office buildings, significantly changing the contents of the vending machines, ensuring that a minimum of 50 percent of vending machine slots supply food and beverages that contribute to a healthful diet, and improving the nutritional quality in hospital and medical center cafeterias.

***Public policy advocacy*** -- Kaiser Permanente has also funded public health advocacy organizations and backed legislation designed to make it easier for people to be more physically active and have increased access to foods that contribute to a healthful diet.

***Media campaign*** - In 2004, Kaiser Permanente launched its "Thrive" advertising campaign. Intended principally to communicate the organization's philosophy of prevention and health promotion to current and prospective members, it has also sought to influence social norms with billboards, television ads, and radio spots.

SOURCES: Kaiser Permanente (2006); Personal communications, Loel Solomon, Kaiser Permanente, June 2006.

Efforts are underway to consider the types of information needed by clinicians and other stakeholders to effectively address childhood obesity (Public Health Informatics Institute, 2005). An example may be found in the All Kids Count program, a national technical assistance program to improve child health and the delivery of immunizations and preventive services through the development of integrated health information

systems (Saarlas et al., 2004). Further, regional health networks and the growing use of electronic health records, may provide sources of data relevant to childhood obesity that would also protect patient confidentiality. For example, Western North Carolina Health Network's Data Link Project provides access to electronic health information for health care providers caring for the same patients across multiple health care institutions. While this system is not being designed to provide regional aggregate health data search capabilities, these could be incorporated into the network's data linkages with the agreement of the participating entities.

Few mechanisms exist to provide accountability for the various components of the health care system in obesity prevention efforts. The committee encourages health care providers and organizations to provide greater leadership in addressing issues related to promoting healthful eating and regular physical activity. The National Initiative for Children's Healthcare Quality is in the process of developing a national recognition program for promising clinical practices and clinical partnerships relevant to reducing childhood obesity (NICHQ, 2006).

#### **WHAT CONSTITUTES PROGRESS IN COMMUNITIES?**

Individual communities across the nation are at different stages of engagement and action in addressing childhood obesity. The committee recognizes that it is not possible to obtain an accurate and systematic assessment of how many communities are fully engaged, how many are only initiating changes, how many recognize the problem but have not begun to address it comprehensively, and how many have not yet prioritized this issue. It is likely that the attention being paid to the issue of childhood obesity in schools has alerted most communities to this issue. However, it remains to be determined how many communities have recognized that additional actions are needed by community stakeholders.

It is important to emphasize the short-term and intermediate outcomes that can be examined in evaluating community-level change. It is not expected or realistic for each community program to reduce children's BMI levels in a short time frame; instead, the focus should be on assessing progress toward short-term outcomes (e.g., changing institutional, local, or state policies to support obesity prevention) and intermediate outcomes such as increasing the proportion of children or youth involved in daily physical activity; increasing the percentage of

physical education or recess periods that children or youth spend in moderate or vigorous physical activity; increasing in the number of miles of bicycle and walking trails; and increasing access to affordable fresh fruits and vegetables for families (e.g., farmer's markets in low-income communities, community or school gardens). Further, communities need to take full advantage of their racial/ethnic diversity and cultural assets by developing programs and opportunities for children and adolescents. Sports activities, dance, foods, and beverages all have distinct cultural relevance that reflect community strength and provide an infrastructure for promoting healthful eating and active living. Issues identified by the committee that are relevant to assessing progress in childhood obesity prevention in communities include:

- Collecting, analyzing, and presenting community data to make the case for action to local decision makers. Challenges include knowing how and from where to gather community-level data.
- Assessing interventions that have evidence of effectiveness and selecting promising initiatives that can be implemented by programs in the community.
- Identifying funding sources despite limited budgets for a new intervention or program and/or having the time and the knowledge to identify, apply, and manage the required reporting for external grants.
- Designing an evaluation plan and having sufficient numbers of knowledgeable staff with the skills and time available to measure and document the outcomes of an intervention.
- Sustaining the intervention, particularly after external grant funding has ended.

### **Applying the Evaluation Framework**

The evaluation framework introduced in Chapter 2 can be used to consider issues in evaluating community policies and interventions. Two examples are provided—one focused on active transport to school and the other on community gardens (Figures 6-1 and 6-2). Because of the diverse stakeholders involved in community-level changes, the responsibility for implementing, evaluating, and sustaining an intervention at any point in the framework can rest with a number of different organizations or entities. Indicators of progress in the

community are varied and usually focus on short-term or intermediate outcomes that can be addressed in creating a community environment that facilitates physical activity and encourages healthful eating (Box 6-9).

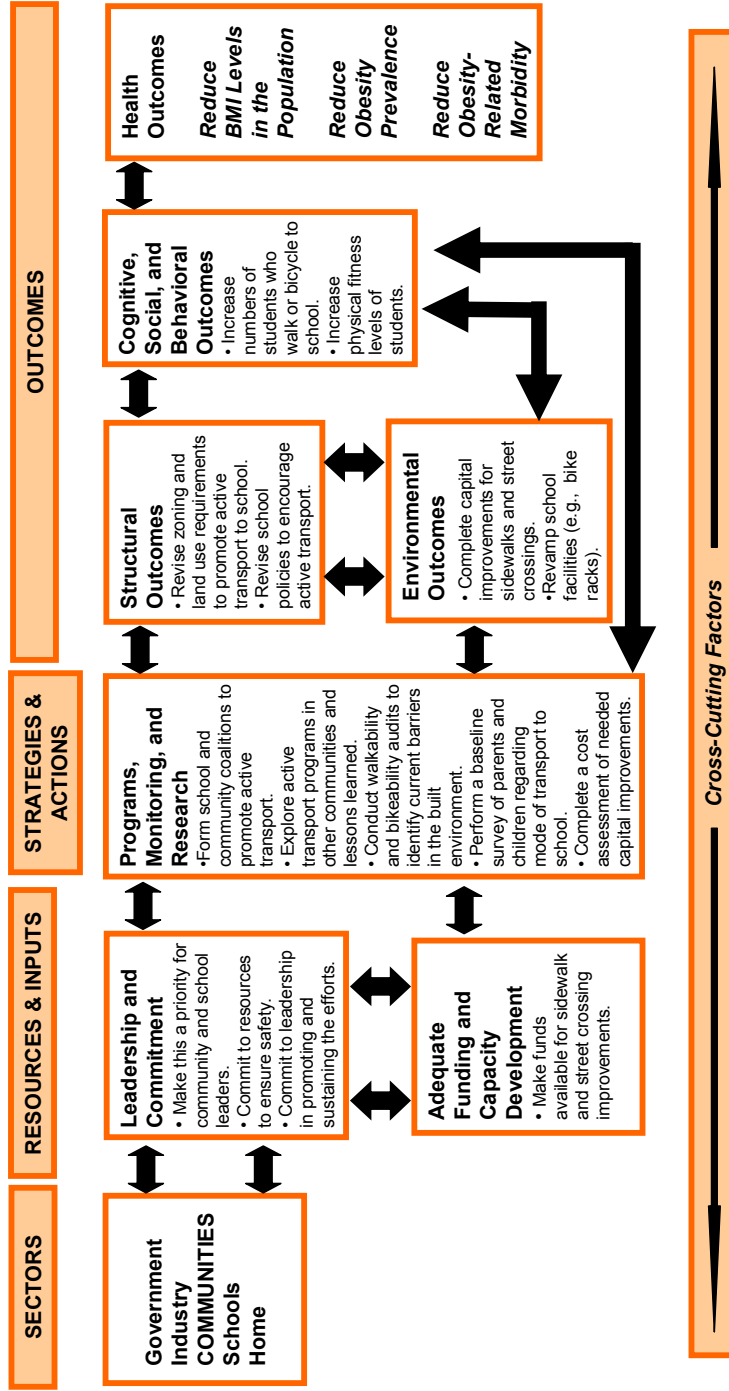


FIGURE 6-1 Evaluating community efforts to increase active transport to school for children and youth.

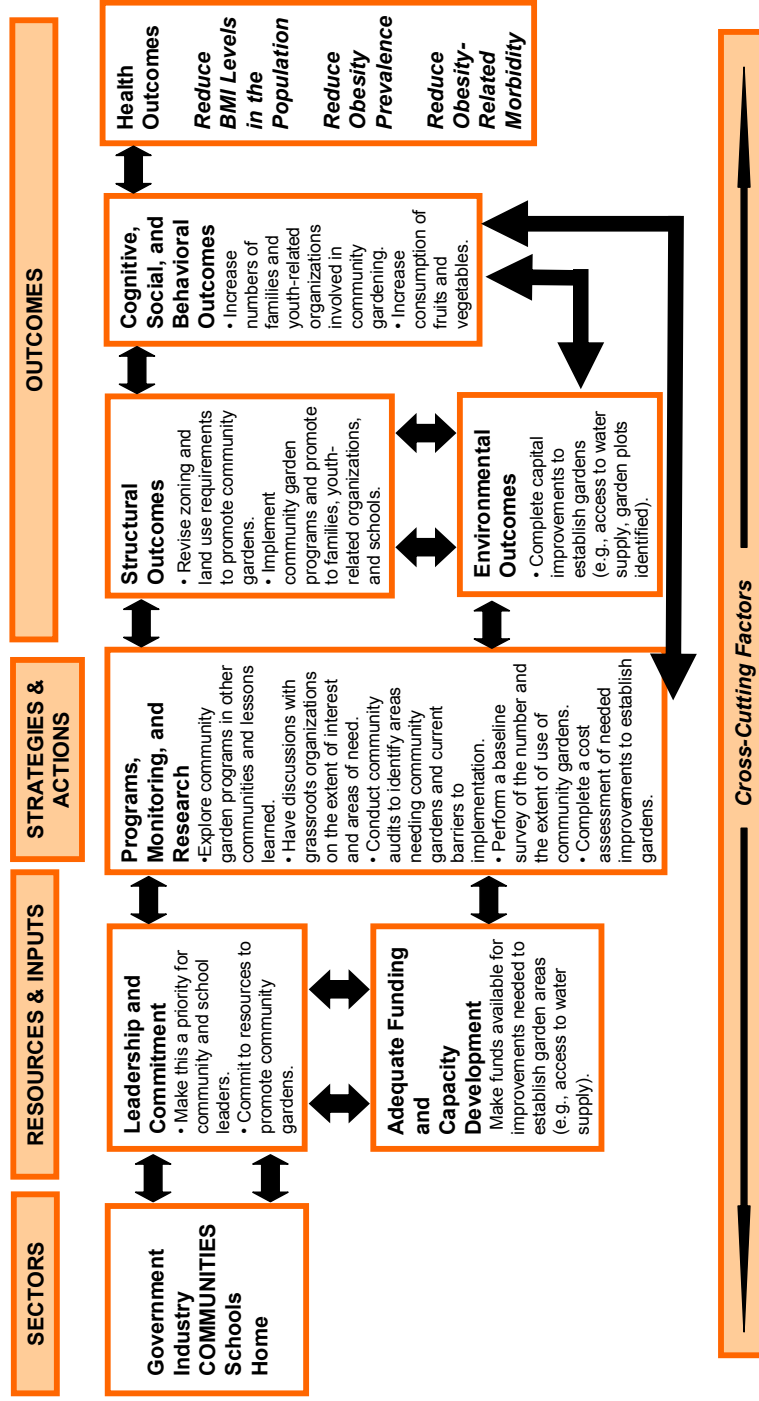


FIGURE 6-2 Evaluating community efforts to increase community gardening.

Applying the framework in evaluating community interventions includes multiple components:

- The leadership, commitment, political will, financial resources, and capacity development crucial as starting points for community change can come from a variety of public and private sector sources at the national, state, regional, and community levels.
- Strategies and actions needed for community change can involve policy and legislative action; coalition building and collaboration; and program implementation.
- Structural, institutional, and systemic outcomes for communities include changes in policies and regulations by the local government to improve and invest in active transport and improved access to foods that contribute to a healthful diet (e.g., Smart Growth initiatives, incentives for farmers markets).
- Environmental outcomes include the addition or enhancement of bicycle or walking paths or playgrounds, changes in traffic intersections or other road-related efforts to improve walkability of community thoroughfares, as well as increased access to fruits and vegetables.
- Cognitive, behavioral, and social outcomes relevant to the community sector include formation of relevant community coalitions, information gained by families regarding how to engage in healthy lifestyles; increases in the level of physical activity; and improved nutritional intake.
- The health outcomes at the community level, as in other sectors, are focused on healthy children and youth and reducing obesity prevalence and associated morbidities.

**BOX 6-9**  
**Examples of Community Indicators**

- Food banks and emergency food outlets actively provide and promote high quality fruits, vegetables, and other foods that contribute to a healthful diet.
- Billboard/outdoor advertising and transit companies restrict advertisements of high-calorie, high fat foods and beverages in neighborhoods, particularly around schools, playgrounds, and other youth-oriented facilities.
- Convenient access to high quality free-for-use parks, playgrounds, outdoor sports facilities (e.g., tennis courts, basketball courts) and green space exists in low income neighborhoods.
- Zoning and land use requirements promote “mixed-use” and mandate sidewalks, trails, recreation facilities, and safe pedestrian and bicycle access to schools, shopping (including food), parks, recreation centers, and worksites, particularly in low income neighborhoods.

SOURCES: California Department of Health Services (2006); Chapter 4.

### **NEEDS AND NEXT STEPS IN ASSESSING PROGRESS**

Although a number of communities around the country are actively involved in improving opportunities for physical activity and healthful eating, there is an urgent need to scale up these efforts and to mobilize many more towns, cities, and counties to become actively involved in childhood obesity prevention. The following section details the next steps and implementation actions for communities.

#### **Promote Leadership and Collaboration**

Civic, social, and faith-based leaders in a community can galvanize action by local residents, businesses, schools, and organizations to improve the quality of life and the focus on nutrition and physical activity in the community. Often many community groups may be working independently on individual projects and initiatives. Greater coordination of and communication about the range of efforts has the potential to leverage these efforts to reach more individuals and families and can also encourage other groups to initiate nutrition and physical activity efforts. Leadership can also be shown in organizational modeling of fitness and nutrition policies and practices. In all of these efforts, it is critically important that evaluation is a priority. Leadership is

demonstrated in the resources and emphasis that is placed on evaluation and on disseminating evaluation results.

### **Develop, Sustain, and Support Evaluation Capacity and Implementation**

#### *Increase Funding and Technical Assistance Support for Evaluation*

Evaluation at the program level often takes a backseat to getting the intervention itself done. Programs may be overwhelmed by what seems like a complex and time-consuming task especially given whatever agency quality assurance reports or grant reporting requirements they may already have to complete. Evaluations are often directed at the process level, i.e., quantifying service or program delivery efforts (number of units, clients) rather than at assessing the influence of the program or service. Because of the need to determine the effectiveness of interventions, it is necessary for programs to design evaluation components into the implementation plan from the outset of the effort.

Evaluation needs to be an essential component of community actions. Clear requirements for evaluation as well as strong technical assistance should be included as part of grant RFAs from both government agencies as well as private foundations. Funding agencies should provide technical assistance to grantees as they develop an evaluation component or establish guidelines and selection criteria requiring community-based organizations to subcontract with academic institutions or other trained and experienced professionals for evaluation services. This was the model utilized by the CDC's Racial and Ethnic Approaches to Community Health (REACH) initiative and is consistent with a community-based participatory research model in that the resources are controlled by the community-based organization rather than the academic institution.

Increasingly it is recognized that tools are needed to assist communities in conducting evaluations. For example, CDC's *Physical Activity Evaluation Handbook* is based on other program evaluation efforts in public health and on the work of the Task Force on Community Preventive Services (CDC, 1999, 2002; Martin and Heath, 2006). Additional straightforward evaluation tools for community-based programs need to be developed and disseminated.

Many organizations can barely summon the resources to implement new efforts and do not include evaluation in their budget planning. In

addition to requiring that evaluation be included from the outset as an integral component of the program or intervention, there is a need for foundations, states, federal agencies and others to provide the funding and resources to ensure that evaluation efforts are implemented. The Healthy Carolinians community microgrants provide one example of a method for providing funds to encourage and catalyze health promotion activities. Organized at the county level, Healthy Carolinians, a state-wide network of public-private partnerships, awarded small grants (of approximately \$2000 each), collected final reports, and conducted surveys to evaluate the program and collate lessons learned (Bobbitt-Cooke, 2005).

#### *Develop and Widely Disseminate Training Opportunities*

The formal training of persons working in public health at the local level is highly variable (IOM, 2003). For example, in the United States, fewer than half of the 500,000 individuals in the public health workforce have had formal training in a public health discipline such as epidemiology or health education (Baker et al., 2005; Turnock, 2001). An even smaller percentage of these professionals have formal graduate training from a school of public health or other public health program. For chronic disease control, there is often low capacity at the local level (Frieden, 2004). This implies there is a significant need for on-the-job training for practitioners including a significant focus on evaluation of chronic disease interventions addressing obesity.

Several practitioner-focused training programs are promising. The CDC has developed a useful six-step evaluation framework, which can guide the process of conducting program evaluation (CDC, 1999, 2002). The Evidence Based Public Health course, developed in Missouri, trains professionals to utilize a comprehensive approach for program development and evaluation from a scientific perspective (Brownson et al., 2003; Franks et al., 2005; O'Neill and Brownson, 2005). Each year CDC also sponsors a set of physical activity and public health courses operated by the University of South Carolina Prevention Research Center. The committee encourages existing training programs to assess their focus on chronic disease and childhood obesity prevention and determine the effectiveness of these programs. Further, federal and state agencies, foundations, and voluntary health organizations should increase the resources needed to widely disseminate and implement effective training programs.

*Develop and Support Community-Academic Partnerships*

Communities and academic institutions have varied knowledge, skills, and strengths that can inform and complement each other when they partner to design, implement, and evaluate interventions to prevent childhood obesity. Academic institutions have strengths in intervention design and evaluation, and familiarity with grant funding as well as expertise in writing and disseminating intervention outcomes. Local partners bring indispensable knowledge of their community's issues, cultures, and worldviews, institutions, resources, and priorities. Successful intervention collaborations respect both types of knowledge. At the committee's Atlanta symposium, a county commissioner in Wilkes County, Georgia, discussed how county officials approached the Medical College of Georgia and the University of Georgia to help them address the county's growing obesity rate. After conducting a community health needs assessment in conjunction with the universities, a community taskforce developed a Wilkes Wild About Wellness community effort that included activities and interventions at local churches, worksites, and other locations (e.g., health fairs, summer day camp, after-school nutrition programs, faith-based wellness classes, and health screenings). The university was involved in the initial assessment of the community's health needs as well as in the design and evaluation of the intervention components (Hardy, 2005; Policy Leadership for Active Youth, 2005). Evaluation outcomes that are being assessed include the number of participants, amount of shelf space in grocery stores devoted to food items that contribute to a healthful diet, extent of print media coverage of health issues, and the addition of walking paths and other environmental changes.

A community-based intervention in Florida with multiple collaborators (including the American Heart Association, Boys and Girls Clubs of Central Florida, the U.S. Food and Drug Administration, and Albertsons, Inc.) utilized the expertise of nursing students and faculty at the University of Central Florida to assist with the implementation of the intervention and to help plan and carry out the evaluation (DeVault and Watson, 2005). In Tarrant County, Texas, a partnership of Texas Christian University and community participants (including partners from the Cornerstone Community Center, the Tarrant Area Food Bank, and the Texas Cooperative Extension Tarrant County) worked together to design a program, Table Talks, that was presented in English and

Spanish and included family meal preparation and participation in physical activity and nutrition classes. Pre- and post-intervention measures included knowledge about nutrition and exercise, physical activity patterns, and dietary intake recall (Frable et al., 2004).

Key components of university-community partnerships relevant to childhood obesity prevention include participatory processes that engage key community members as well as structuring the partnership to ensure that there is equal attention and weight given to university and community contributions (Greenberg et al., 2003; Thompson and Grey, 2002). Many communities with diverse populations are cautious about research conducted on them. However, if the intervention is designed and implemented with the community as partners, this community reluctance can be reduced (Chapter 3). Mechanisms to encourage these types of community-academic partnerships are needed and can be built into federal, state, or foundation grant requirements.

### **Enhance Surveillance, Monitoring, and Research**

The vast number of communities, their varied organizational structures, and the independence of each community organization makes it difficult to assess the extent of community change and the effects of the change on a variety of outcomes. Few national surveys assess community actions and there is limited tracking of policy changes at the local level. Further, tools are only beginning to be fully developed to assist communities in evaluating new programs or conducting self-assessments.

#### *Expand Surveillance for Community and Built Environment Outcomes*

Only limited national surveys or surveillance systems collect information on community-level outcomes, particularly those relevant to the built environment, community collaborations, or involvement of the health care system. The National Household Transportation Survey conducted by the Bureau of Transportation Statistics (BTS) and the Federal Highway Administration (FHWA), is one of the few national surveys that collects information on active transport including daily and long-distance, motorized and non-motorized travel (BTS, 2006; Chapter 4; Appendix D).

Metropolitan planning organizations across the country, which have responsibility for planning and coordinating the use of federal highway

and transit funds, often conduct local travel surveys (through travel diaries or other means) that provide valuable local-level detailed detail on travel patterns, often including travel to school. For example, the Spokane and Kootenai County (Washington) Regional Travel Survey (2005) reported on the travel patterns of 1,828 households.

Efforts are underway to explore the type of data that should be collected relevant to the built environment. Examples could include miles of bicycle lanes per capita; population and employment density; and the number of recreational facilities with the location and condition of those facilities (Brennan Ramirez et al., 2006). Further, efforts to improve the geocoding of data collected on physical activity and health, through surveillance systems such as the National Health and Nutrition Examination Survey (NHANES), could provide further information to assist in examining the impact of changes in the built environment (TRB and IOM, 2005; Chapter 4).

#### *Facilitate Analysis of Local Level Data*

Community decision makers need data relevant to their specific locale in order to make informed decisions about where and to what extent resources should be devoted to relevant obesity prevention efforts. Funding and implementation priorities are often based on available data; as a result, areas with limited or no data are often overlooked because it is difficult to justify a need or make a case for investment in intervention efforts without baseline data. Further, the collection of data requires a level of accountability and follow-up; there is the expectation that data collection will lead to changes and improvements in a community for the public good. Data are often lacking at the community level. Surveys can be expensive to conduct, research and validation of community assessment tools is relatively new, and the intersection of public health and the built environment are only beginning to be explored (Northridge et al., 2003).

Only a limited number of national surveys relevant to childhood obesity prevention provide data that are aggregated at the regional or city level (Chapter 4; Appendix D). For example, the CDC's 2004 School Health Profiles survey had weighted data from 11 school districts that enabled analysis of comparison data at the district level (CDC, 2006a; Appendix C). The Behavioral Risk Factor Surveillance System (BRFSS) conducted by CDC has recently expanded its capabilities to provide local data for several U.S. cities and communities (CDC, 2006b; Appendix C).

The SMART (Selected Metropolitan/Micropolitan Area Risk Trends) BRFSS project provides data for counties, cities, and geographic areas in which there are 500 or more respondents. The SMART BRFSS is a potential model for other systems such as the Youth Risk Behavior Surveillance System (YRBS) to provide more local level data. Currently, the YRBS provides data at the national and state levels with a few specialized datasets such as for the Bureau of Indian Affairs schools. Efforts to provide greater specificity at the local level involve increased sample sizes and are therefore more costly to administer and analyze. However, given the need for local level data for local level decision-making, research efforts focused on accurate methodologies for extrapolating from state or regional data into meaningful community-level data should be explored.

State, regional, and city surveys are also conducted and are highly individualized regarding the funding sources, frequency and consistency with which they are conducted, and the extent of data on topics relevant to childhood obesity prevention. The California Health Interview Survey is one of the more extensive health surveys that provides data at the state and county levels, including representative information for specific racial/ethnic sub-populations. The Indian Health Service can provide tribal and community leaders with local level data through its electronic health information system (IHS, 2004; Chapter 3), which includes data from clinic encounters and, frequently, measurements from school health screenings (Box 6-10).

#### BOX 6-10

##### Providing Local Data to Local Decision Makers

Data regarding local constituents often have important impacts on local decision makers; however local-level measures are frequently not available in many areas of the nation.

**Indian Health Service**—Because of the Indian Health Service's (IHS) central role in providing or contracting for health care services for American Indian and Alaska Native populations, it is in a unique situation to serve as a centralized data source on obesity rates in tribal communities, despite the geographical distances between tribal groups. The Resource and Patient Management System is the IHS patient computerized database which contains clinical and demographic information from outpatient and inpatient encounters from over 300 IHS and tribal health facilities. The result is a stronger measurement and evaluation tool at the local, regional, and national level than is generally available for other high risk groups (IHS, 2004).

**California State Assembly Districts**—The California Center for Public Health Advocacy compared 2001 and 2004 data regarding youth fitness and weight status from the California Department of Education’s Physical Fitness Test and aggregated the results by state assembly district. The resulting local-level fact sheets organized by county and by assembly district have been instrumental in engaging legislators in the issues and in the passage of several assembly bills regarding schools foods and beverages (California Center for Public Health Advocacy, 2005).

Compilations or surveys of municipal policies regarding healthy communities are only beginning to be explored. Librett and colleagues (2003) conducted a survey in Utah of local ordinances relevant to physical activity levels. Trust for America’s Health tracks Smart Growth initiatives at the state level with some information available on specific municipalities (TFAH, 2005). An increased emphasis is needed on tracking policy change at the local level that impact access to foods and beverages that contribute to a healthful diet and opportunities for physical activity (Schmid et al., 2006). The committee encourages greater attention and resources to be devoted to local surveillance, monitoring, and data collection efforts. Innovative approaches to collecting and extrapolating local level data are also needed.

#### *Refine and Disseminate Community Assessment Tools*

One of the challenges for communities and relevant community stakeholders is to assess their own community regarding the strengths and gaps in the community environment for encouraging and promoting healthy lifestyles. Tools are available to assess some of the components of healthy communities (Box 6-11) such as the walkability or bikeability of community streets (Emery et al., 2003; Moudon and Lee, 2003). For example, the prevalence of biking was assessed in 14 elementary schools in Mesa, Arizona. Streets were assessed according to a previously validated bikeability instrument that included average daily traffic, number of through lanes, speed limit, bike-lane width, quality of the pavement, and location (e.g., intersections, curves, grade) (Sisson et al., 2006).

Further, several community health “report cards” and indicators have been developed that could serve as a basis for further efforts. CDC’s Healthy Days Measures focus on health-related quality of life that includes areas related to physical activity and promoting a healthful diet

(CDC, 2000). An example of an innovative approach to community assessment is a community youth-mapping project that involves children and youth in assessing their community's resources and needs regarding specific issues such as access to opportunities for physical activity and to fruits, vegetables, and other foods and beverages that contribute to a healthful diet (National Community Youth Mapping, 2006).

#### BOX 6-11

##### Examples of Community Assessment and Planning Tools

**Community Tool Box**—Developed by the Kansas University Work Group for Community Health and Development, the Community Tool Box provides an array of planning, assessment, and skill-building resources including an action planning guide for communities that focuses on strategies and specific community actions for promoting healthy living and preventing chronic disease (Fawcett et al., 2005; University of Kansas, 2006).

**Michigan Promoting Active Communities Assessment**—In 2000, the Michigan Department of Community Health; the Governor's Council on Physical Fitness; Health, and Sports; the Prevention Research Center of Michigan; and the Michigan State University began recognizing communities that support physical activity. They developed an assessment tool that allows communities to evaluate themselves on a range of policy change and program implementation issues including policies and planning for non-motorized transportation; zoning policies; bike path availability; sidewalk policies; community resources for physical activity; worksites; schools; and public transportation (Promoting Active Communities, 2006).

**MAPP (Mobilizing for Action through Planning and Partnerships)**—Developed by the National Association of County and City Health Officials in collaboration with CDC, MAPP is a set of strategic planning tools and resources (NACCHO, 2004).

**Health Impact Assessments**—Similar to environmental impact assessments, health impact assessments examine the impact that changes in policies, urban planning, transportation modes and other alterations to the built and social environments would have on the health of members of the community (Dannenberg et al., 2006). Health impact assessments may also be particularly useful in bringing potential health impacts to the attention of policy makers. These processes have been in fairly wide use in Canada, Australia, New Zealand and throughout Europe with growing interest in the United States.

**Additional Tools**—A number of tools have been developed and validated that focus on specific attributes of communities. These include measures of walkability or bikeability of communities; street and other urban design issues; and assessments of parks and playgrounds (Moudon and Lee, 2003; Williams et al., 2005).

What is needed is a robust and well-validated tool to promote healthy communities and foster community action. Similar to the School Health Index (SHI) for schools (see Chapter 7), there is a need for CDC, in partnership with other agencies and organizations, to develop a multicomponent well-validated self-assessment tool (or toolkit) that will assist communities in examining multiple factors relevant to healthy communities. This type of community health index tool could include modules on the availability, accessibility, attractiveness, affordability, and safety of places for physical activity and healthier food choices for community members; the involvement of community organizations; and the collective efficacy of a community. Adequate funding is needed to develop this tool and the committee encourages collaborative efforts among DHHS, the Department of Transportation, the Department of the Interior, and other relevant federal agencies and private-sector and nonprofit organizations.

#### *Expand the Use of Spatial Mapping Technologies*

Improving the built environment to provide greater access to opportunities for physical activity and to foods and beverages that contribute to a healthful diet involves identifying underserved areas and modeling potential changes to see if more people can be reached or benefit from the proposed interventions. New technologies, known broadly as geographic information systems (GIS), examine different types of datasets that are spatially referenced (such as road and land-use maps, population census data, housing data, survey data with a corresponding coordinate system) and provide analyses that identify patterns and trends in spatial relationships (Leslie et al., 2005). Use of GIS provides objective measures of the environment and can be used to supplement or replace self-report measures (Porter et al., 2004). GIS technologies are increasingly being used for public health applications and have been used to examine a range of issues of relevance to childhood obesity prevention including the walkability of communities (Handy et al., 2002; Leslie et al., 2005); access to recreational facilities (Gordon-Larsen et al., 2006); and accessibility of stores selling fresh produce to food pantry clients who through most emergency food assistance programs do not have access to fresh fruits and vegetables (Algert et al., 2006).

Largely a tool used by researchers, GIS capabilities are now more easily accessible to community organizations, although much remains to

be learned about how to use GIS most effectively at the community level (Porter et al., 2004). A recent CDC and University of New Mexico effort in partnership with American Indian and Alaskan Native communities, Mapping a Shared Vision of Hope, is using GIS technology to provide data and maps relevant to diabetes prevention (Mapping a Vision, 2006). This tool provides spatial distribution data for a range of health and social variables. As more community information is available in online and mapped formats, increased opportunities become available for mapping multiple facets of community life and identifying strengths and opportunities for promoting physical activity and access to healthful foods in the community (Porter et al., 2004). Presenting the data visually to community stakeholders has the potential to be an important tool in engaging and tracking community obesity prevention efforts, particularly since it can be focused on a local geographic area. The committee encourages increased exploration and use of GIS and other relevant technologies in the development and evaluation of community-level interventions to promote energy balance in youth.

#### *Develop Rapid Response to Natural Experiments*

The realities of the changes that occur in communities pose a challenge for implementing evaluation research. Often changes that are relevant to obesity prevention (e.g., a new school policy, a new park or walking path) are not under the control of researchers and/or are underway before researchers have the time to institute traditional research methodologies or apply for evaluation funding through lengthy funding processes. These events are often called “natural experiments” as they offer a unique opportunity to compare rates of obesity and intermediate indicators before and after the change. To evaluate these natural experiments, mechanisms are needed to quickly allocate resources for evaluation. Quasi-experimental designs (e.g., ecologic studies, time-series designs) are likely to be more useful for these evaluations than are randomized approaches (Chapter 2). Funding mechanisms with rapid review cycles, such as those that are often available from foundations, are needed to foster evaluations of these natural experiments.

*Encourage the Measurement of Risk and Protective Factors*

As discussed in Chapter 3, obesity prevention efforts do not occur in a vacuum and it is important to consider the larger socioeconomic and cultural contexts in implementing programs and conducting evaluations. These contextual factors (e.g., poverty, extent of social capital, cultural assets and barriers, mentoring programs) should be considered in collecting and analyzing baseline and outcome data. Interventions could explicitly target some of these factors, such as collective efficacy, which are known to be associated with childhood obesity (Cohen et al., 2006) and other issues of concern to the community, to increase the likelihood of developing effective interventions by engaging community support and developing partnerships. Interventions that strengthen protective factors, in addition to reducing risk factors, will likely have more resonance in diverse communities.

**Disseminate and Use Evaluation Results**

In addition to the traditional venues of peer-reviewed scientific journals, lessons learned and evaluation results should be disseminated through health education journals and magazines; national organizations including large grant/nonprofit foundations and professional societies; community health center, school, and community action networks; CDC and other commonly accessed websites; community newspapers and other avenues of communication to reach a wide range of locally-based stakeholders. Journals and organizations that represent communities and regions (e.g., NACCHO) should seek out new methods to disseminate and promote evaluation results. Action planning guides that are available to assist communities in planning initiatives that support healthy living (e.g., Fawcett et al., 2005) should be widely disseminated.

A website repository hosted by a credible authority such as NACCHO should be developed to share community-based evaluation results and lessons learned, as well as links to resources, templates, and evaluation tools. Lessons learned should be shared among communities as should examples of community action plans. For example, in Washington state, the Healthy Communities Tool Kit was developed to share the information gained by two communities, Moses Lake and Mount Vernon, in mobilizing their community in promoting healthy lifestyles (Washington State Department of Health, 2006). Community

stakeholders and the relevant government agencies and foundations need to cultivate open communication, identify ways to learn about promising practices in other communities, and focus attention on lessons learned in other locales. The Health and Wellness Coalition of Wichita (2005), for example, commissioned a study to identify obesity prevention efforts in other cities of similar size. Further, focus groups were held with Wichita residents to identify factors that motivate and also those that were barriers to physical activity.

### SUMMARY AND RECOMMENDATIONS

Communities are the location where the efforts of government, industry, health care systems, foundations, schools, nonprofit organizations, and many others come together to provide increased opportunities for physical activity and enhanced access to foods and beverages that contribute to a healthful diet. Communities differ in the extent of resources available to devote to childhood obesity prevention efforts. Limited budgets and competing priorities must be faced, and efforts that result in multiple benefits are encouraged.

Each of the report's four recommendations (Chapter 2) are directly relevant to promoting leadership and collaboration and improving evaluation efforts of community-based interventions, policies, and initiatives. The following text provides the report's recommendations and summarizes the specific implementation actions (detailed in the preceding section) that are needed to improve childhood obesity prevention efforts in communities.

**Recommendation 1: Government, industry, communities, schools, and families should demonstrate leadership and commitment by mobilizing the resources required to identify, implement, evaluate, and disseminate effective policies and interventions that support childhood obesity prevention goals.**

#### **Implementation Actions for Communities**

**Community stakeholders should establish and strengthen the local policies, coalitions, and collaborations needed to create and sustain healthy communities.**

***To accomplish this,***

- Communities should make childhood obesity prevention a priority through the coordinated leadership of local government, community organizations, local businesses, health care organizations, and other relevant stakeholders. These efforts would involve increased resources, an emphasis on collaboration among community stakeholders, and the development and implementation of policies and programs that promote opportunities for physical activity and healthful eating, particularly for high-risk communities.

**Recommendation 2: Policy makers, program planners, program implementers, and other interested stakeholders—within and across relevant sectors—should evaluate all childhood obesity prevention efforts, strengthen the evaluation capacity, and develop quality interventions that take into account diverse perspectives, that use culturally relevant approaches, and that meet the needs of diverse populations and contexts.**

**Implementation Actions for Communities**

**Community stakeholders should strengthen evaluation efforts at the local level by partnering with government agencies, foundations, and academic institutions to develop, implement, and support evaluation opportunities and community-academic partnerships.**

***To accomplish this,***

Federal and state agencies, foundations, academic institutions, community-based nonprofit organizations, faith-based organizations, youth-related organizations, local governments, and other relevant community stakeholders should:

- Increase funding and technical assistance to conduct evaluations of childhood obesity prevention policies and interventions,
- Develop and widely disseminate effective evaluation training opportunities, and
- Develop and support community-academic partnerships.

**Recommendation 3: Government, industry, communities, schools, and families should expand or develop relevant surveillance and monitoring systems and, as applicable, should engage in research to examine the impact of childhood obesity prevention policies, interventions, and actions on relevant outcomes, paying particular attention to the unique needs of diverse groups and high-risk populations.**

**Implementation Actions for Communities**

**Community stakeholders and relevant partners should expand the capacity for local-level surveillance and applied research, and should develop tools for community self-assessment to support childhood obesity prevention efforts.**

*To accomplish this,*

Federal and state agencies, foundations, academic institutions, community-based nonprofit organizations, faith-based groups, youth-related organizations, local governments, and other relevant community stakeholders should

- Expand the surveillance of outcomes of community-level activities and changes to the built environment, as they relate to childhood obesity prevention;
- Facilitate the collection, analysis, and interpretation of relevant local data and information;
- Develop, refine, and disseminate community assessment tools, such as a community health index;
- Develop methods for the rapid evaluation of natural experiments;
- Explore the use of spatial mapping technologies to assist communities with their assessment needs and to help communities make changes that increase access to opportunities for healthy lifestyles; and
- Encourage the evaluation of interventions to examine both the risk and protective factors related to obesity.

**Recommendation 4: Government, industry, communities, schools, and families should foster information-sharing activities and disseminate evaluation and research findings through diverse communication channels and media to actively promote the use**

**and scaling up of effective childhood obesity prevention policies and interventions.**

**Implementation Actions for Communities**

**Community stakeholders should partner with foundations, government agencies, faith-based organizations, and youth-related organizations to publish and widely disseminate the evaluation results of community-based childhood obesity prevention efforts.**

***To accomplish this,***

- Community stakeholders should publish evaluation results using diverse communication channels and media; and develop incentives to encourage the use of promising practices.

**REFERENCES**

- 1000 Friends of New Mexico. 2006. *Grow Smart! 1000 Friends of New Mexico*. [Online]. Available: <http://www.1000friends-nm.org/> [accessed June 3, 2006].
- AAFP (American Academy of Family Physicians). 2004. *Obesity and Children: Helping Your Child Keep a Healthy Weight*. [Online]. Available: <http://www.aafp.org/afp/20040215/928ph.html> [accessed June 2, 2006].
- AAP (American Academy of Pediatrics). 2006. *Overweight and Obesity*. [Online]. Available: <http://www.aap.org/healthtopics/overweight.cfm> [accessed June 2, 2006].
- Abramson S, Stein J, Schaufele M, Frates E, Rogan S. 2000. Personal exercise habits and counseling practices of primary care physicians: A national survey. *Clin J Sport Med* 10(1):40–48.
- Action for Healthy Kids. 2006. *Action for Healthy Kids*. [Online]. Available: <http://www.actionforhealthykids.org/> [accessed July 26, 2006].
- Activate Omaha. 2006. *Welcome to ACTivate Omaha*. [Online]. Available: <http://www.activateomaha.org/> [accessed July 26, 2006].
- Active Living Leadership. 2004. *Healthy Community Design: Success Stories from State and Local Leaders*. San Diego, CA: Active Living Leadership.
- Active Living Network. 2005. *Making Places for Healthy Kids*. [Online]. Available: [http://www.activeliving.org/downloads/aln\\_report\\_final.pdf](http://www.activeliving.org/downloads/aln_report_final.pdf) [accessed May 2, 2006].
- Algert SJ, Agrawal A, Lewis DS. 2006. Disparities in access to fresh produce in low-income neighborhoods in Los Angeles. *Am J Prev Med* 30(5):365–370.

- America on the Move. 2006. *America on the Move Sponsors*. [Online]. Available: <http://aom.americaonthemove.org/site/c.hiJRK0PFJpH/b.1311205/k.DED2/sponsors.htm> [accessed July 23, 2006].
- Baker EL, Potter MA, Jones DL, Mercer SL, Cioffi JP, Green LW, Halverson PK, Lichtveld MY, Fleming DW. 2005. The public health infrastructure and our nation's health. *Annu Rev Public Health* 26:303–318.
- Baranowski T, Baranowski JC, Cullen KW, Thompson DI, Nicklas T, Zakeri IE, Rochon J. 2003. The Fun, Food, and Fitness Project (FFFP): The Baylor GEMS pilot study. *Ethn Dis* 13(1 Suppl 1):S30–S39.
- Beech BM, Klesges RC, Kumanyika SK, Murray DM, Klesges L, McClanahan B, Slawson D, Nunnally C, Rochon J, McLain-Allen B, Pree-Cary J. 2003. Child- and parent-targeted interventions: The Memphis GEMS pilot study. *Ethn Dis* 13(1 Suppl 1):S40–S53.
- BGCA (Boys and Girls Clubs of America). 2006. *Sports, Fitness, and Recreation*. [Online]. Available: <http://www.bgca.org/programs/sportfitness.asp> [accessed June 19, 2006].
- Boarnet MG, Anderson CL, Day K, McMillan T, Alfonzo M. 2005. Evaluation of the California Safety Routes to Schools legislation: Urban form changes and children's active transportation to school. *Am J Prev Med* 28(2 Suppl 2):134–140.
- Bobbitt-Cooke M. 2005. Energizing community health improvement: The promise of microgrants. *Prev Chronic Dis* [Online]. Available: [http://www.cdc.gov/pcd/issues/2005/nov/05\\_0064.htm](http://www.cdc.gov/pcd/issues/2005/nov/05_0064.htm) [accessed March 4, 2006].
- Borron SM. 2003. *Food Policy Councils: Practice and Possibility*. Bill Emerson National Hunger Fellow Congressional Hunger Center Hunger-Free Community Report. Eugene, Oregon. [Online]. Available: [http://www.lanefood.org/pdf/food\\_policy\\_councils/food\\_policy\\_council\\_report\\_february\\_2003.pdf](http://www.lanefood.org/pdf/food_policy_councils/food_policy_council_report_february_2003.pdf) [accessed May 8, 2006].
- Brennan Ramirez, Hoehner CM, Brownson RC, Cook R, Orleans CT, Hollander M, Barker DC, Bors P, Ewing R, Killingsworth R, Petersmarck K, Schmid T, Wilkinson W. 2006. *In press*. Indicators of activity-friendly communities: An evidence-based consensus process. *Am J Prev Med* vol(#):pp–pp.
- Brink L, Yost B. 2004. Transforming inner-city school grounds: Lessons from learning landscapes. *Children, Youth, and Environments* 14(1):208–232.
- Brownson RC, Baker EA, Leet TL, Gillespie KN. 2003. *Evidence-Based Public Health*. New York: Oxford University Press.
- Brownson RC, Boehmer TK, Luke DA. 2005. Declining rates of physical activity in the United States: What are the contributors? *Annu Rev Public Health* 26:421–443.
- Brownson RC, Haire-Joshu D, Luke DA. 2006. Shaping the context of health: A review of environmental and policy approaches in the prevention of chronic diseases. *Annu Rev Public Health* 27(1):341–370.

- Brudenell I. 2003. Parish nursing: Nurturing body, mind, spirit, and community. *Public Health Nurs* 20(2):85–94.
- BTS (Bureau of Transportation Statistics). 2006. *National Household Travel Survey*. [Online]. Available: [http://www.bts.gov/programs/national\\_household\\_travel\\_survey/](http://www.bts.gov/programs/national_household_travel_survey/) [accessed May 16, 2006].
- California Center for Public Health Advocacy. 2005. *Rates of Childhood Overweight in California Counties, Cities and Communities*. [Online]. Available: [http://www.publichealthadvocacy.org/policy\\_briefs/overweight\\_2004.html](http://www.publichealthadvocacy.org/policy_briefs/overweight_2004.html) [accessed July 31, 2006].
- California Department of Health Services. 2006. *Communities of Excellence in Nutrition, Physical Activity, and Obesity Prevention (CX<sup>3</sup>)*. [Online]. Available: <http://www.ca5aday.org/CX3> [accessed July 14, 2006].
- California Endowment. 2006. *Healthy Eating, Active Communities*. [Online]. Available: [http://www.calendow.org/program\\_areas/heac.stm](http://www.calendow.org/program_areas/heac.stm) [accessed May 12, 2006].
- Carver A, Salmon J, Campbell K, Baur L, Garnett S, Crawford D. 2005. How do perceptions of local neighborhood relate to adolescents' walking and cycling? *Am J Health Promot* 20(2):139–147.
- CDC (Centers for Disease Control and Prevention). 1999. Framework for program evaluation in public health. *MMWR* 48(RR-11):1–40.
- CDC. 2000. *Measuring Healthy Days: Population Assessment of Health-Related Quality of Life*. [Online]. Available: <http://www.cdc.gov/hrqol/pdfs/mhd.pdf> [accessed July 31, 2006].
- CDC. 2002. *Physical Activity Evaluation Handbook*. [Online]. Available: <http://www.cdc.gov/nccdphp/dnpa/physical/handbook/pdf/handbook.pdf> [accessed May 2, 2006].
- CDC. 2006a. *School Health Profiles: Surveillance for Characteristics of Health Education Among Secondary Schools (Profiles 2004)*. Atlanta, GA: Centers for Disease Control and Prevention, 2006. [Online]. Available: <http://www.cdc.gov/healthyyouth/profiles/index.htm> [accessed May 12, 2006].
- CDC. 2006b. *SMART: Selected Metropolitan/Micropolitan Area Risk Trends: Frequently Asked Questions for SMART BRFSS*. [Online]. <http://www.cdc.gov/brfss/smart/faqs.htm> [accessed July 31, 2006].
- CFSC (Community Food Security Coalition). 2004. *Community Food Security News. Special Issue on Community Food Assessments*. Spring. Venice, CA: Community Food Security Coalition.
- Chase-Ziolek M, Iris M. 2002. Nurses' perspective on the distinctive aspects of providing nursing care in a congregational setting. *J Comm Health Nurs* 19(3):173–186.
- CLOCC (Consortium to Lower Obesity in Chicago Children). 2006. *Welcome to CLOCC*. [Online]. Available: [www.clocc.net](http://www.clocc.net) [accessed July 26, 2006].

- CMA (California Medical Association) Foundation. 2006. *Physicians for Healthy Communities*. [Online]. Available: <http://www.calmedfoundation.org/projects/phyChampion.aspx> [accessed July 26, 2006].
- Cohen B. 2002. *Community Food Security Assessment Toolkit*. Washington, DC: USDA, Economic Research Service. E-FAN-02-013. [Online]. Available: <http://www.ers.usda.gov/publications/efan02013/efan02013.pdf> [accessed June 8, 2004].
- Cohen DA, Finch BK, Bower A, Sastry N. 2006. Collective efficacy and obesity: The potential influence of social factors on health. *Soc Sci Med* 62(3):769–778.
- Cohen L, Larijani S, Aboelata M, Mikkelsen L. 2004. *Cultivating Common Ground: Linking Health and Sustainable Agriculture*. Oakland, CA: Prevention Institute. [Online]. Available: [http://www.preventioninstitute.org/pdf/Cultivating\\_Common\\_Ground\\_112204.pdf](http://www.preventioninstitute.org/pdf/Cultivating_Common_Ground_112204.pdf) [accessed May 10, 2006].
- Cradock AL, Kawachi I, Colditz GA, Hannon C, Melly SJ, Wiecha JL, Gortmaker SL. 2005. Playground safety and access in Boston neighborhoods. *Am J Prev Med* 28(4):357–363.
- Crawford PB, Gosliner W, Strode P, Samuels SE, Burnett C, Craypo L, Yancey AK. 2004. Walking the talk: Fit WIC wellness programs improve self-efficacy in pediatric obesity prevention counseling. *Am J Public Health* 94(9):1480–1485.
- Craypo L, Schwarte L, Samuels S. 2006 (April 3). *Evaluating Youth Engagement and Leadership in a Multi-Site Initiative to Change Community Food and Physical Activity Environments*. Abstract 526.3. Experimental Biology, San Francisco, April 1-5, 2006.
- CSREES (Cooperative State Research, Education, and Extension Service). 2006. *Cooperative State Research, Education, and Extension Service*. [Online]. Available: [www.csrees.usda.gov](http://www.csrees.usda.gov) [accessed May 10, 2006].
- Dannenberg AL, Bhatia R, Cole BL, Dora C, Fielding JE, Kraft K, McClymont-Peace D, Mindell J, Onyekere C, Roberts JA, Ross CL, Rutt CD, Scott-Samuel A, Tilson H. 2006. Growing the field of health impact assessment in the United States: An agenda for research and practice. *Am J Pub Health* 92(2):262–270.
- DeVault N, Watson S. 2005. *Healthy Kids Partnerships*. Presentation at the IOM Regional Symposium Progress in Preventing Childhood Obesity: Focus on Communities. October 6. Atlanta, Georgia.
- DHHS (U.S. Department of Health and Human Services). 2006. *Steps to a Healthier U.S. Initiative: Community Fact Sheets*. [Online]. Available: <http://www.healthierus.gov/steps/grantees.html> [accessed May 3, 2006].
- Emery J, Crump C, Bors P. 2003. Reliability and validity of two instruments designed to assess the walking and bicycling suitability of sidewalks and roads. *Am J Health Prom* 18(1):38–46.

- Fawcett SB, Francisco VT, Paine-Andrews A, Schultz JA. 2000. A model memorandum of collaboration: A proposal. *Public Health Reports* 115(2-3):174–179.
- Fawcett SB, Carson V, Lloyd J, Collie-Akers VL, Schultz JA. 2005. *Promoting Healthy Living and Preventing Chronic Disease: An Action Planning Guide for Communities*. Lawrence, Kansas: University of Kansas. [Online]. Available: [www.communityhealth.ku.edu](http://www.communityhealth.ku.edu) [accessed May 15, 2006].
- FHWA/DoT (Federal Highway Administration/Department of Transportation). 2006. *Safe Routes to School*. [Online]. Available: <http://safety.fhwa.dot.gov/saferoutes/> [accessed May 2, 2006].
- Fit City Madison. 2006. *Welcome to Fit City Madison!* [Online]. Available: <http://www.fitcitymadison.com/> [accessed July 26, 2006].
- Flournoy R, Treuhaft S. 2005. *Healthy Food, Healthy Communities: Improving Access and Opportunities Through Food Retailing*. Oakland, CA: PolicyLink and The California Endowment. [Online]. Available: <http://www.policylink.org/pdfs/HealthyFoodHealthyCommunities.pdf> [accessed August 1, 2006].
- Food Trust. 2006. *Fresh Food Financing Initiative*. [Online]. Available: <http://www.thefoodtrust.org/php/programs/super.market.campaign.php#1> [accessed July 26, 2006].
- Frale PJ, Dart L, Bradley PJ. 2004. The Healthy Weigh/El Camino Saludable: A community campus partnership to prevent obesity. *J Interprof Care* 18(4):447–449.
- Frank E, Breyan J, Elon L. 2000. Physician disclosure of healthy personal behaviors improves credibility and ability to motivate. *Arch Fam Med* 9(3):287–290.
- Franks AL, Brownson RC, Bryant C, McCormack Brown K, Hooker SP, Pluto DM, Shepart DM, Pate RR, Baker EA, Gillespie KN, Leet TL, O’Neill MA, Simoes EJ. 2005. Prevention Research Centers: Contributions to updating the public health workforce through training. *Prev Chronic Dis* 2(2):A26.
- Frieden TR. 2004. Asleep at the switch: Local public health and chronic disease. *Am J Public Health* 94(12):2059–2061.
- Garden Mosaics. 2006. *TRUCE Carrie McCracken Community Garden*. New York, NY. [Online]. Available: <http://www.gardenmosaics.cornell.edu/pgs/data/inventoryread.aspx?garden=84> [accessed June 3, 2006].
- Girl Scouts. 2006. *Health and Wellness*. [Online]. Available: [http://www.girlscouts.org/program/program\\_opportunities/health\\_wellness/](http://www.girlscouts.org/program/program_opportunities/health_wellness/) [accessed May 12, 2006].
- Girl Scout Research Institute. 2006. *The New Normal? What Girls Say About Healthy Living*. [Online]. Available: [http://www.girlscouts.org/research/publications/original/healthy\\_living.asp](http://www.girlscouts.org/research/publications/original/healthy_living.asp) [accessed April 13, 2006].
- Girls on the Run. 2006. *Girls on the Run*. [Online]. Available: <http://www.girlsontherun.org/> [accessed July 26, 2006].
- Glanz K, Sallis JF, Saelens BE, Frank LD. 2005. Healthy nutrition environments: Concepts and measures. *Am J Health Prom* 19(5):330–333.

- Glasgow RE, Vogt TM, Boles SM. 1999. Evaluating the public health impact of health promotion interventions: The RE-AIM framework. *Am J Public Health* 89(9):1322–1327.
- Gordon-Larsen P, Nelson MC, Page P, Popkin BM. 2006. Inequality in the built environment underlies key health disparities in physical activity and obesity. *Pediatrics* 117(2):417–424.
- Green LA. 2005. Prescription for health: Round 1 initial results. *Ann Fam Med* 3(Suppl 2):S2–S3.
- Greenberg JS, Howard D, Desmond D. 2003. A community-campus partnership for health: The Seat-Pleasant-University of Maryland Health Partnership. *Health Promot Pract* 4(4):393–401.
- Hamilton N. 2002. Putting a face on our food: How state and local food policies can promote the new agriculture. *Drake Journal of Agricultural Law* 7:408–443. [Online]. Available: <http://www.statefoodpolicy.org/faceon.pdf> [accessed May 8, 2006].
- Handy S, Boarnet MG, Ewing R, Killingsworth RE. 2002. How the built environment affects physical activity: Views from urban planning. *Am J Prev Med* 23(2S):64–73.
- Handy S, Clifton K. 2007. *In press*. Planning and the built environment. *Obesity Epidemiology and Prevention: A Handbook*. In: Kumanyika S, Brownson. R, eds. New York: Springer Publishing Company.
- Hannon C, Cradock A, Gortmaker SL, Wiecha J, El Ayadi A, Keefe L, Harris A. 2006. Play Across Boston: A community initiative to reduce disparities in access to after-school physical activity programs for inner-city youths. *Prev Chronic Dis* 3(3):A100.
- Hardy D. 2005. *Washington Wilkes County/Medical College of Georgia Partnership*. Presentation at the IOM Regional Symposium Progress in Preventing Childhood Obesity: Focus on Communities. October 6. Atlanta, GA.
- Health and Wellness Coalition of Wichita. 2005. *Community Comparisons and Common Language*. [Online]. Available: <http://www.hwcwichita.org/images/Health%20Wellness%20Rprt.pdf> [accessed May 12, 2006].
- Health Collaborative. 2003. *2002 Community Health Assessment and Health Profiles*. San Antonio, TX. [Online]. Available: <http://www.healthcollaborative.net/Assessment/AssessmentHome.html> [accessed May 10, 2006].
- Health Collaborative. 2006. *The Health Collaborative*. [Online]. Available: <http://www.healthcollaborative.net/> [accessed July 26, 2006].
- Hopson R. 2003. *Overview of Multicultural and Culturally Competent Program Evaluation*. Oakland, CA: Social Policy Research Associates. [Online]. Available: [http://www.calendow.org/reference/publications/pdf/evaluations/TCE0509-2004\\_Overview\\_of\\_Mu.pdf](http://www.calendow.org/reference/publications/pdf/evaluations/TCE0509-2004_Overview_of_Mu.pdf) [accessed April 18, 2006].

- IHS (Indian Health Service). National Diabetes Program, Department of Health and Human Services. 2004. *Interim Report to Congress: Special Diabetes Program for Indians*. Indian Health Service.
- IOM (Institute of Medicine). 2003. *The Future of the Public's Health in the 21<sup>st</sup> Century*. Washington, DC: The National Academies Press.
- IOM. 2005. *Preventing Childhood Obesity. Health in the Balance*. Washington, DC: The National Academies Press.
- Israel BA, Schulz AJ, Parker EA, Becker AB. 1998. Review of community-based research: Assessing partnership approaches to improve public health. *Annu Rev Public Health* 19(1):173–202.
- Jump Up and Go! 2006. *About Jump Up and Go!* [Online]. Available: <http://jumpupandgo.com/about.htm> [accessed July 26, 2006].
- Kahn EB, Ramsey LT, Brownson RC, Heath GW, Howze EH, Powell KE, Stone EJ, Rajab MW, Corso P. 2002. The effectiveness of interventions to increase physical activity. A systematic review. *Am J Prev Med* 22(4 Suppl 1):73–107.
- Kaiser Permanente. 2004. *Kaiser Permanente Farmers' Market Resource Guide*. [Online]. Available: <http://www.noharm.org/details.cfm?ID=1112&type=document> [accessed July 31, 2006].
- Kaiser Permanente. 2006. *Kaiser Permanente's Comprehensive Approach to the Obesity Epidemic*. [Online]. Available: [http://www.calwic.org/docs/kaiserbroch\\_feb06.pdf](http://www.calwic.org/docs/kaiserbroch_feb06.pdf) [accessed July 31, 2006].
- Kertesz L. 2006a. Weighing in on obesity. *AHIP Coverage* January/February pp. 16–20.
- Kertesz L. 2006b. Reaching out on obesity. *AHIP Coverage* March/April.
- Kreuter MW, Lezin NA, Young LA. 2000. Evaluating community-based collaborative mechanisms: Implications for practitioners. *Health Promot Pract* 1(1):49–63.
- Kreuter MW, Lukwago SN, Bucholtz RD, Clark EM, Sanders-Thompson V. 2003. Achieving cultural appropriateness in health promotion programs: Targeted and tailored approaches. *Health Educ Behav* 30(2):133–146.
- Larsen L, Mandelco B, Williams M, Tiedeman M. 2006. Childhood obesity: Prevention practices of nurse practitioners. *J Am Acad Nurse Pract* 18(2):70–79.
- Lasker RD, Weiss ES, Miller R. 2001. Partnership synergy: A practical framework for studying and strengthening the collaborative advantage. *Milbank Q* 79(2):179–205.
- Latino New Urbanism. 2006. *Latino New Urbanism*. [Online]. Available: <http://www.latinonewurbanism.org/> [accessed May 16, 2006].
- Leslie E, Coffee N, Frank L, Owen N, Bauman A, Hugo G. 2005. Walkability of local communities: Using geographic information systems to objectively assess relevant environmental attributes. *Health & Place*. Dec 29 (epub). [Online]. Available: [www.elsevier.com/locate/healthplace](http://www.elsevier.com/locate/healthplace) [accessed May 16, 2006].

- Lewis CE, Wells KB, Ware J. 1986. A model for predicting the counseling practices of physicians. *J Gen Intern Med* 1(1):14–19.
- Librett JJ, Yore MM, Schmid TL. 2003. Local ordinances that promote physical activity: A survey of municipal policies. *Am J Public Health* 93(9):1399–1403.
- Lumeng JC, Appugliese D, Cabral HJ, Bradley RH, Zuckerman B. 2006. Neighborhood safety and overweight status in children. *Arch Pediatr Adolesc Med* 160(1):25–31.
- MacQueen KM, McLellan E, Metzger DS, Kegeles S, Strauss RP, Scotti R, Blanchard L, Trotter RT 2nd. 2001. What is community? An evidence-based definition for participatory public health. *Am J Public Health* 91(12):1929–1937.
- Mair JS, Pierce MW, Teret SP. 2005a. *The City Planner's Guide to the Obesity Epidemic: Zoning and Fast Food*. [Online]. Available: <http://www.publichealthlaw.net/Zoning%20City%20Planners%20Guide.pdf> [accessed May 11, 2006].
- Mair JS, Pierce MW, Teret SP. 2005b. *The Use of Zoning to Restrict Fast Food Outlets: A Potential Strategy to Combat Obesity*. [Online]. Available: <http://www.publichealthlaw.net/Zoning%20Fast%20Food%20Outlets.pdf> [accessed May 11, 2006].
- Mapping A Vision. 2006. *Mapping A Shared Vision of Hope*. <http://mappingavision.unm.edu/> [accessed June 9, 2006].
- Martin SL, Heath GW. 2006. A six-step model for evaluation of community-based physical activity programs. *Prev Chronic Dis* 3(1): epub. [Online]. Available: [www.cdc.gov/pcd/issues/2006/jan/05\\_0111.htm](http://www.cdc.gov/pcd/issues/2006/jan/05_0111.htm) [accessed May 2, 2006].
- McCullum C, Desjardins E, Kraak VI, Lapido P, Costello H. 2005. Evidence-based strategies to build community food security. *J Am Diet Assoc* 105(2):278–283.
- Meister JS, de Zapien JG. 2005. Bringing health policy issues front and center in the community: Expanding the role of community health coalitions. *Prev Chronic Dis* 2(1). [Online]. Available: [http://www.cdc.gov/Pcd/issues/2005/jan/04\\_0080.htm](http://www.cdc.gov/Pcd/issues/2005/jan/04_0080.htm) [accessed August 4, 2006].
- Moore LV, Diez Roux AV. 2006. Associations of neighborhood characteristics with the location and type of food stores. *Am J Public Health* 96(2):325–331.
- Moudon AV, Lee C. 2003. Walking and bicycling: An evaluation of environmental audit instruments. *Am J Health Promot* 18(1):21–37.
- NACCHO (National Association of County and City Health Officials). 2004. *Achieving Healthier Communities Through MAPP. A User's Handbook*. [Online]. Available: [http://mapp.naccho.org/MAPP\\_Handbook.pdf](http://mapp.naccho.org/MAPP_Handbook.pdf) [accessed May 11, 2006].
- National Community Youth Mapping. 2006. *National Community Youth Mapping*. [Online]. Available: <http://www.communityyouthmapping.org/Youth/> [accessed June 9, 2006].

- National Research Center, Inc. 2004a. *Community Food Project Evaluation Handbook*. Venice, CA: Community Food Security Coalition. [Online]. Available: <http://www.foodsecurity.org/Handbook2005JAN.pdf> [accessed May 11, 2006].
- National Research Center, Inc. 2004b. *Community Food Project Evaluation Toolkit*. Venice, CA: Community Food Security Coalition. [Online]. Available: <http://www.foodsecurity.org/CFPTOOLKIT030805.pdf> [accessed May 11, 2006].
- NBGH (National Business Group on Health). 2006. *An Employer Toolkit: Reducing Child & Adolescent Obesity — Addressing Healthy Weight For Employees and Their Children*. [Online]. Available: [http://www.wbgh.org/prevention/et\\_childobesity.cfm](http://www.wbgh.org/prevention/et_childobesity.cfm) [accessed May 1, 2006].
- New Urbanism. 2006. *New Urbanism: Creating Livable Sustainable Communities*. [Online]. Available: <http://www.newurbanism.org/> [accessed June 2, 2006].
- NICHQ (National Initiative for Children's Healthcare Quality). 2006. *Accelerating Improvement in Childhood Obesity*. [Online]. Available: <http://www.nichq.org/NICHQ/Programs/ConferencesAndTraining/2006ObesityCongressSummit.htm?TabId=8> [accessed April 28, 2006].
- NIHCM Foundation. 2006. *Prevention Corner*. [Online]. Available: [http://www.nihcm.org/finalweb/pg\\_prevention.htm](http://www.nihcm.org/finalweb/pg_prevention.htm) [accessed July 26, 2006].
- Nike. 2006. *NikeGo*. [Online]. Available: <http://www.nike.com/nikebiz/nikego/index.jsp> [accessed July 26, 2006].
- Norris T, Pittman M. 2000. The Healthy Communities Movement and the Coalition for Healthier Cities and Communities. *Pub Health Rep* 115(2-3):118–124.
- Northridge ME, Sclar ED, Biswas P. 2003. Sorting out the connections between the built environment and health: A conceptual framework for navigating pathways and planning healthy cities. *J Urban Health* 80(4):556–568.
- O'Neill MA, Brownson RC. 2005. Teaching evidence-based public health to public health practitioners. *Ann Epidemiol* 15(7):540–544.
- Partnership for a Healthy West Virginia. 2006. *Walkable Communities Workshop*. [Online]. Available: [http://www.healthywv.com/community/walkable\\_communities.aspx](http://www.healthywv.com/community/walkable_communities.aspx) [accessed June 20, 2006].
- PATH Foundation. 2006. *About the PATH Foundation*. [Online]. Available: <http://www.pathfoundation.org/about/index.cfm> [accessed June 3, 2006].
- PBH (Produce for Better Health Foundation). 2006. *National 5 a Day Partnership Structure*. [Online]. Available: <http://www.5aday.org/html/background/partners.php> [accessed July 23, 2006].
- PedNet Coalition. 2006. *PedNet*. [Online]. Available: <http://www.pednet.org/> [accessed April 28, 2006].
- Perrin EM, Flower KB, Ammerman AS. 2005. Pediatricians' own weight: Self-perception, misclassification, and ease of counseling. *Obes Res* 13(2):326–332.

- Policy Leadership for Active Youth. 2005. *Addressing Overweight: Interventions Tailored to the Rural South*. Atlanta, GA: Georgia State University. [Online] Available: <http://publichealth.gsu.edu/pdf/PLAY%20Policy%20Brief%20II%20Community%20-%20Readers%20Layout%206-05.pdf> [accessed May 8, 2006].
- Porter DE, Kirtland KA, Neet MJ, Williams JE, Ainsworth BE. 2004. Considerations for using a geographic information system to assess environmental supports for physical activity. *Prev Chronic Dis* 1(4):A20. Epub. [Online]. Available: [http://www.cdc.gov/pcd/issues/2004/oct/04\\_0047.htm](http://www.cdc.gov/pcd/issues/2004/oct/04_0047.htm) [accessed April 28, 2006].
- Pothukuchi K, Joseph H, Burton H, Fisher A. 2002. *What's Cooking in Your Food System? A Guide to Community Food Assessment*. Venice, CA: Community Food Security Coalition.
- Promoting Active Communities. 2006. *Welcome to the Promoting Active Communities Award Website*. [Online]. Available: <http://www.mihealthtools.org/communities> [accessed July 27, 2006].
- Public Health Informatics Institute. 2005. *Charting the Information and Systems Needed to Support Effective Response to Childhood Obesity*. [Online]. Available: <http://www.phii.org/Obesity.html> [accessed February 21, 2006].
- Resnicow K, Jackson A, Blissett D, Wang T, McCarty F, Rahotep S, Periasamy S. 2005. Results of the healthy body healthy spirit trial. *Health Psychol* 24(4):339-348.
- Robinson TN, Killen JD, Kraemer HC, Wilson DM, Matheson DM, Haskell WL, Pruitt LA, Powell TM, Owens AS, Thompson NS, Flint-Moore NM, Davis GJ, Emig KA, Brown RT, Rochon J, Green S, Varady A. 2003. Dance and reducing television viewing to prevent weight gain in African-American girls: The Stanford GEMS pilot study. *Ethn Dis* 13(1 Suppl 1):S65-S77.
- Roussos ST, Fawcett SB. 2000. A review of collaborative partnerships as a strategy for improving community health. *Annu Rev Public Health* 21:369-402.
- RWJF (Robert Wood Johnson Foundation). 2006. *Healthy Eating Research: Building Evidence to Prevent Childhood Obesity*. [Online]. Available: <http://www.healthyeatingresearch.org/> [accessed May 16, 2006].
- Saarlal KN, Hinman AR, Ross DA, Watson WC Jr, Wild EL, Hastings TM, Richmond PA. 2004. All Kids Count 1991-2004: Developing information systems to improve child health and the delivery of immunizations and preventive services. *J Public Health Manag Pract* (Suppl):S3-S15.
- Sallis J, Glanz K. 2006. The role of built environments in physical activity, eating, and obesity in childhood. In: Paxon C, ed. *The Future of Children* 16(1):89-108.
- San Antonio Metropolitan Health Department. 2006. *Overview of MAPP Process in San Antonio and Bexar County*. [Online]. Available: <http://www.sanantonio.gov/health/MAPP/progress.asp?res=1024&ver=true> [accessed June 2, 2006].

- Schmid TL, Pratt M, Witmer L. 2006. A framework for physical activity policy research. *J Phys Act Health* 3(Suppl 1):S20–S29.
- Shortell SM. 2000. Community health improvement approaches: Accounting for the relative lack of impact. *Health Services Research* 35(3):555–560.
- Sisson SB, Lee SM, Burns EK, Tudor-Locke C. 2006. Suitability of commuting by bicycle to Arizona elementary schools. *Am J Health Promot* 20(3):210–213.
- Smart Growth Network. 2003. *Getting to Smart Growth II: 100 More Policies for Implementation*. [Online]. Available: <http://www.smartgrowth.org/library/articles.asp?art=870&res=1024> [accessed June 2, 2006].
- Sonoma County. 2006. *Family Activity and Nutrition Task Force*. [Online]. Available: <http://www.sonoma-county.org/health/prev/fantf.htm> [accessed July 26, 2006].
- Sparke A, Walters C, Byram M. 2005. *Kansas Teen Leadership for Physically Active Lifestyles*. Presentation at the IOM Regional Symposium Progress in Preventing Childhood Obesity: Focus on Schools. June 29. Wichita, Kansas.
- Spokane and Kootenai Counties. 2005. *Spokane and Kootenai Regional Travel Survey*. [Online]. Available: <http://www.srtc.org/HTCS%20final%20report.pdf> [accessed June 20, 2006].
- Story M, Orleans CT. 2006. Building evidence for environmental and policy solutions to prevent childhood obesity: The healthy eating research program. *Am J Prev Med* 30(1):96–97.
- Story M, Sherwood NE, Himes JH, Davis M, Jacobs DR Jr, Cartwright Y, Smyth M, Rochon J. 2003. An after-school obesity prevention program for African-American girls: The Minnesota GEMS pilot study. *Ethn Dis* 13(1 Suppl 1):S54–S64.
- TFAH (Trust for America's Health). 2005. *F as in Fat: How Obesity Policies are Failing America 2005*. Washington, DC: The Trust for America's Health. [Online]. Available: <http://healthyamericans.org/reports/obesity2005/Obesity2005Report.pdf> [accessed July 23, 2006].
- Thompson LS, Grey M. 2002. Fighting childhood obesity with university-community partnerships. *Nurs Leadersh Forum* 7(1):20–24.
- Thompson PD, Buchner D, Pina IL, Balady GJ, Williams MA, Marcus BH, Berra K, Blair SN, Costa F, Franklin B, Fletcher GF, Gordon NF, Pate RR, Rodriguez BL, Yancey AK, Wenger NK. 2003. Exercise and physical activity in the prevention and treatment of atherosclerotic cardiovascular disease. A statement from the Council on Clinical Cardiology (Subcommittee on Exercise, Rehabilitation, and Prevention) and the Council on Nutrition, Physical Activity, and Metabolism (Subcommittee on Physical Activity) of the American Heart Association. *Circulation* 107:3109–3116 and *Arterioscler Thromb Vasc Biol* 23(8):E42–E49.
- TRB (Transportation Research Board) and IOM. 2005. *Does the Built Environment Influence Physical Activity? Examining the Evidence*. Washington, DC: TRB. TRB Special Report 282. Washington, DC: The

- National Academies Press. [Online]. Available: <http://books.nap.edu/html/SR282/SR282.pdf> [accessed December 29, 2005].
- Turnock BJ. 2001. *Public Health: What it is and How it Works*. Second ed. Gaithersburg, MD: Aspen Publishers.
- University of Kansas. 2006. *Community Tool Box*. [Online]. Available: <http://ctb.ku.edu> [accessed July 27, 2006].
- U.S. Census Bureau. 2006. County, municipal, and township governments by population size: 2002, Table 417. In: *Statistical Abstract of the United States, 2006*. U.S. Census Bureau.
- USDA (U.S. Department of Agriculture). 2005. *Fit WIC: Programs to Prevent Childhood Overweight in Your Community*. Special Nutrition Program Report Series, No. WIC-05-FW. USDA Food and Nutrition Service. Alexandria, VA: Office of Analysis, Nutrition, and Evaluation. [Online]. Available: <http://www.fns.usda.gov/oane/MENU/Published/WIC/FILES/fitwic.pdf> [accessed July 23, 2006].
- Washington State Department of Health. 2006. *Healthy Communities Tool Kit*. [Online]. Available: [http://www.doh.wa.gov/cfh/NutritionPA/healthy\\_communities\\_tool\\_kit.htm](http://www.doh.wa.gov/cfh/NutritionPA/healthy_communities_tool_kit.htm) [accessed June 2, 2006].
- Webb KL, Pelletier D, Maretzki AN, Wilkins J. 1998. Local food policy coalitions: Evaluation issues as seen by academics, project organizers, and funders. *Agriculture and Human Values* 15(1):65–75.
- WHO (World Health Organization). 2002. *A Physically Active Life through Everyday Transport*. [Online]. Available: <http://www.euro.who.int/document/e75662.pdf> [accessed June 20, 2006].
- Williams JE, Evans M, Kirtland KA, Cavnar MM, Sharpe PA, Neet MJ, Cook A. 2005. Development and use of a tool for assessing sidewalk maintenance as an environmental support of a physical activity. *Health Promot Pract* 6(1):81–88.
- Winnebago Tribe. 2006. *Ho-Chunk Community Development Corporation (HCCDC)*. [Online]. Available: <http://www.hochunkcdc.org/aboutus.html> [accessed July 26, 2006].
- WNBA (Women's National Basketball Association). 2005. *WNBA Launches New Fitness Initiative*. [Online]. Available: [http://www.wnba.com/community/fitnesseventtourrelease\\_050517.html](http://www.wnba.com/community/fitnesseventtourrelease_050517.html) [accessed May 12, 2006].
- Wyatt HR, Peters, JC, Reed GW, Grunwald GK, Barry M, Thompson H, Jones J, Hill JO. 2004. Using electronic step counters to increase lifestyle physical activity: Colorado on the Move™. *J Phys Activ Health* 1:178–188.
- YMCA. 2006. *YMCA Activate America*. [Online]. Available: <http://www.ymca.net/activateamerica/> [accessed June 19, 2006].
- Zimring C, Joseph A, Nicoll GL, Tsepas S. 2005. Influences of building design and site design on physical activity: Research and intervention opportunities. *Am J Prev Med* 28(2 Suppl 2):186–193.