



Environmental, Systems, and Policy Change

Although ultimately it is individuals who must change their behavior, many barriers to that change exist in their environments. When we remove those barriers, either by providing circumstances in which good nutrition or physical activity choices are easier to make or by offering incentives for such choices, we support people's personal efforts to change.

RATIONALE

To prevent disease, we ask people to do things that they have not previously done, to stop doing things they have been doing for years, and to do more of some things and less of other things. It is unreasonable to expect that people will change their behaviors easily when so many forces in the social, cultural, and physical environment conspire against such change. If successful programs are to be developed to

prevent disease and improve health, then attention must be given not only to the behavior of the people but also to the environment in which they live.

Interventions are most effective when strategies that address individual-level change are (a) implemented concurrently with changes in environments, systems, and policies at the family, community, organization, and societal levels and (b) delivered through a variety of settings.

Intervention efforts should address not only "downstream" individual-level phenomena (e.g., physiologic pathways to disease, individual and lifestyle factors) and "midstream" factors (e.g., population-based interventions), but also "upstream" societal-level phenomena (e.g., public policies).

To create environments, systems, and policies that promote and support behavioral change, we must do the following:

- Eliminate barriers to physical activity—for example, ensure safe, well-maintained recreational areas or support opportunities for physical activity breaks during the workday.
- Eliminate barriers to healthy eating by offering appealing, low-cost fruit and vegetable choices in cafeterias or vending machines.
- Provide explicit support, reinforcement, and inducements for those who make healthy changes or those who are contemplating change.
- Increase resource allocation to areas and populations with greater need (i.e., ensure equitable access to resources for nutrition and physical activity in disadvantaged communities and populations at greater risk for chronic diseases).
- Allocate resources and design policy, environment, and systems strategies for physical activity and nutrition into overall program and chronic disease prevention plans.
- Place emphasis on policy strategies that have broad and sustainable impact across populations and communities.

SAMPLE ACTIVITIES

1. Initiate policy and environmental support in various public places to promote improved nutrition and regular physical activity. Consider the following examples:

- Provide and competitively price nutrient-dense, low-calorie foods in schools, worksites, restaurants, and other food service outlets.
- Alter the choices in food and beverage vending machines to increase the proportion of nutrient-dense, low-calorie foods, such as fruits and vegetables.
- Establish after-hours access to schools for community members to use for indoor recreation.
- Promote stairwell use instead of elevators in the workplace.
- Pass legislation or policy requiring daily physical activity for grades K-12.

2. Promote healthful food advertising and the availability of healthful food, especially in children's environments.

3. Design transportation infrastructure and public policy that supports active modes of transportation, such as walking and biking for both utilitarian and recreational purposes.

4. Form partnerships to ensure that recreation areas and playgrounds in all neighborhoods are safe and in working repair.

Sample Practices and Programs

Safe Routes to School—This California legislation became effective in 2000 and is operated under the Department of Transportation. Projects include installation of sidewalks, crosswalks, bikeways, curbs and gutters, traffic signals, safety lighting, pavement marking, signage, and other improvements to enhance pedestrian and bicycle safety and access near or en route to schools. **Contact:** California Department of Transportation, www.dot.ca.gov/hq/LocalPrograms/saferoute.htm.

California Senate Bill 19 (2001)—This limits high-fat and high-sugar-content food and drink in schools. This historic movement exemplified the process of moving legislation forward with community support. The legislation, however, suffered from compromises to child health, but the process is still the best lesson. **Contact:** Harold Goldstein, HG@PublicHealthAdvocacy.org, 530-297-6000.

Kids Walk to School—The Walkable South Carolina Committee awarded small grants to 58 schools to promote environmental and policy changes that make walking and bicycling a year-round activity for everyone. Each school uses the *Kids Walk to School* guide to address problems that make walking to school difficult or unsafe. **Contact:** University of South Carolina Prevention Center, www.prevention.sph.sc.edu.

Families in Good Health Program—Promotion of physical activity and healthy eating among sedentary residents of Cambodian, Hmong, and Lao communities in Long Beach, California. Barriers to access for fitness were eliminated through collaboration with city government, police, the YMCA, the California Pool for the Handicapped, Buddhist temples, and many other local resources. **Contact:** Southeast Asian Health Project, 310-491-9100.

City of Portland “Reclaiming our Streets”—

This project encourages neighborhood livability, alternative transportation, traffic safety, and responsible driver behavior through a traffic-calming program. The Portland Office of Transportation works with neighborhood residents in planning and education efforts. A variety of solutions are used to mitigate the impacts of automobile traffic on neighborhood streets.

Contact: Transportation Systems Management

Portland Office of Transportation,
www.trans.ci.portland.or.us/Traffic_Management/Trafficcalming/Default.htm,
503-823-5185.

TV-Turnoff Network—Emphasizes reduction of television viewing by children and adults. Sponsors a national “TV Turnoff Week” annually with suggestions for alternative activities. Also offers a six-week “More Reading, Less TV” program to encourage children to read instead of watch television. **Contact:** TV-Turnoff Network, **email@TVturnoff.org**, 202-518-5556.

10,000 Steps—This project, developed through a social marketing approach, uses prompts and a pedometer as motivational tools to promote more activity through increasing the number of steps taken daily. It is based on awareness, motivational approaches, and elimination of barriers to move people through stages of achievement from low activity (about 4,000 steps) to a higher daily level of activity (about 10,000 steps). **Contact:** HealthPartners, **www.healthpartners.com**.

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