

PENNSYLVANIA NUTRITION AND PHYSICAL ACTIVITY PLAN TO

Prevent Obesity Related Chronic Diseases

COMMUNITY VERSION



DEPARTMENT OF
HEALTH

... in pursuit of good health

Edward G. Rendell, Governor





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Introduction

The Pennsylvania Nutrition and Physical Activity Plan (PaNPA Plan) is a statewide plan to improve nutrition and physical activity through policy and environment interventions to promote healthy weight and prevent related chronic diseases. This plan presents strategies and activities necessary for community-based interventions to increase healthy eating and physical activity opportunities. Fulfilling the mission of the PaNPA Plan depends on broad partnerships among organizations, communities and individuals across the state that embrace the perspectives, expertise and a collective voice.

History

The Pennsylvania Department of Health received funding from the Centers for Disease Control and Prevention to develop a State Nutrition and Physical Activity Program to Prevent Obesity and Related Chronic Diseases in July 2001. Only 12 states received this funding. The Department convened a multi-disciplinary group of stakeholders to develop a comprehensive and coordinated nutrition and physical activity plan from July 2001–May 2002. The following document provides an overview of the reports, recommendations and outcomes of the planning process. The PaNPA Plan is to be used by local communities and organizations as a guide for planning effective intervention strategies to promote healthy eating and physical activity in the priority areas of community environments, youth and families and health care.

Pennsylvania Nutrition and Physical Activity Plan Vision

A Pennsylvania that supports and values healthy lifestyle behaviors.

Pennsylvania Nutrition and Physical Activity Plan Mission

The mission of the PaNPA Plan is to create a Pennsylvania where individuals, communities and public and private entities share the responsibility for developing an environment to support and promote active lifestyles and access to healthy food choices.

Medical Conditions Related to Physical Inactivity and Poor Diet

- HEART DISEASE AND STROKE
- LUNG DISEASE
- OBESITY
- DIABETES
- CANCER
- ARTHRITIS
- OSTEOPOROSIS
- MENTAL DISTURBANCES
- HORMONAL PROBLEMS
- RISK OF FALLS

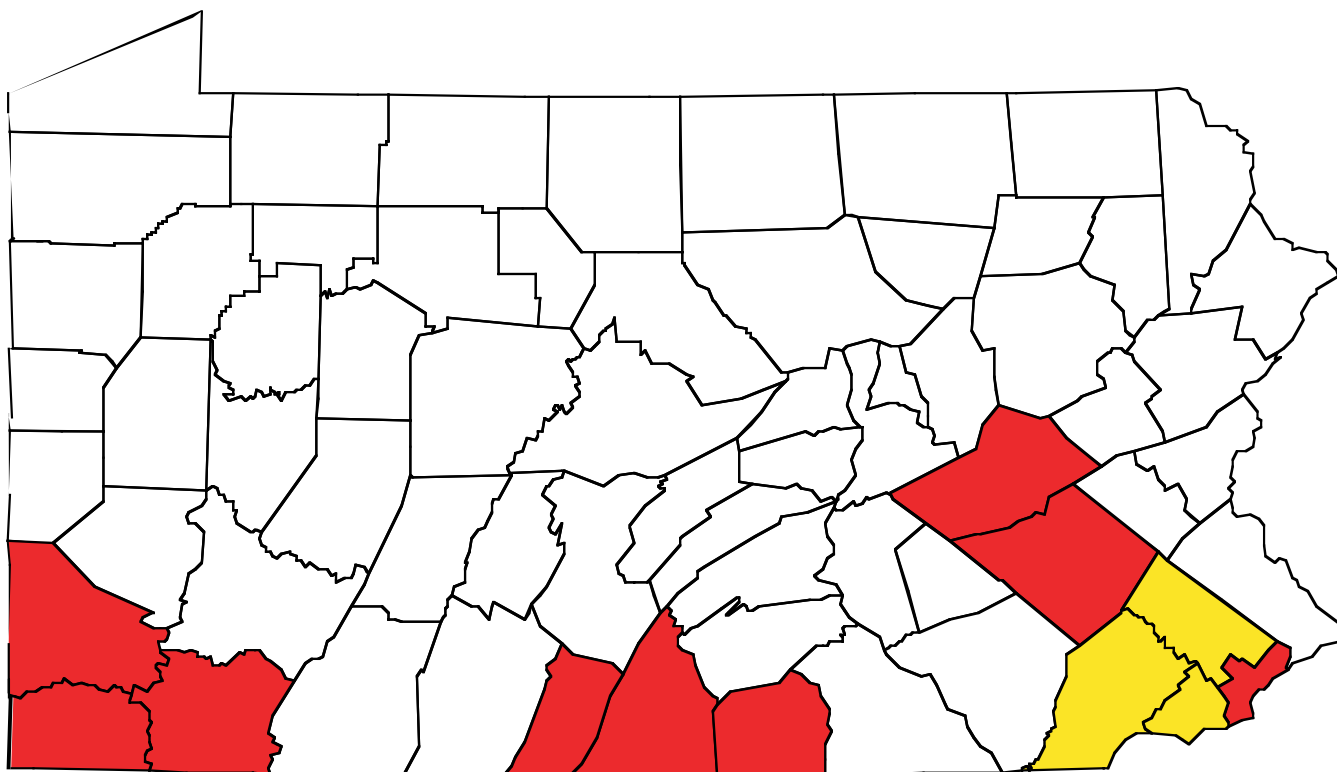


Assessment of Current Situation

Research indicates that the situation is worsening rather than improving among adults and children. Two important Healthy People 2010 objectives are to increase the proportion of adults at a healthy weight to 60 percent and to reduce the proportion of youth who are overweight to five percent. In 2001, 40 percent of Pennsylvania adults were at a healthy weight, and one study found that 18 percent of Pennsylvania youth were overweight.

Percentage of Adults Who Are Overweight

Pennsylvania Counties or County Groups, 1996–2000



■ Significantly Higher ■ Significantly Lower □ No Significant Difference

Note: Counties or county groups designated as "Higher" in the "Significant Difference" column have a p -value less than 0.05 and percentages greater than the Pennsylvania percentages. Those regions designated as "Lower" have a p -value less than 0.05 but have percentages that are less than the Pennsylvania percentage. See "Technical Notes" for



According to the 2001 Pennsylvania Behavioral Risk Factor Surveillance System (BRFSS) 60 percent of adult Pennsylvanians were overweight, having a body mass index (BMI) of 25 or more, and 12 percent of Pennsylvania children enrolled in the Women, Infants and Children (WIC) program were overweight as reported in the 2001 Pediatric Nutrition Surveillance System (PedNSS). Twenty percent of adults were found to be obese with a BMI of 30 or more. The prevalence of overweight and obese adults tends to increase with age. Among Pennsylvania adults who reported being overweight, most said they were trying to lose or maintain their current weight. However, only one in five reported being told they should lose weight by a health professional and approximately one quarter of overweight adults reported engaging in no leisure time physical activity.

The prevalence of overweight for black (63.5%) and white males (64.3%) and black females (62.5%) is about 40 percent higher than that for white females (44.8%) (BRFSS 1995–1999).

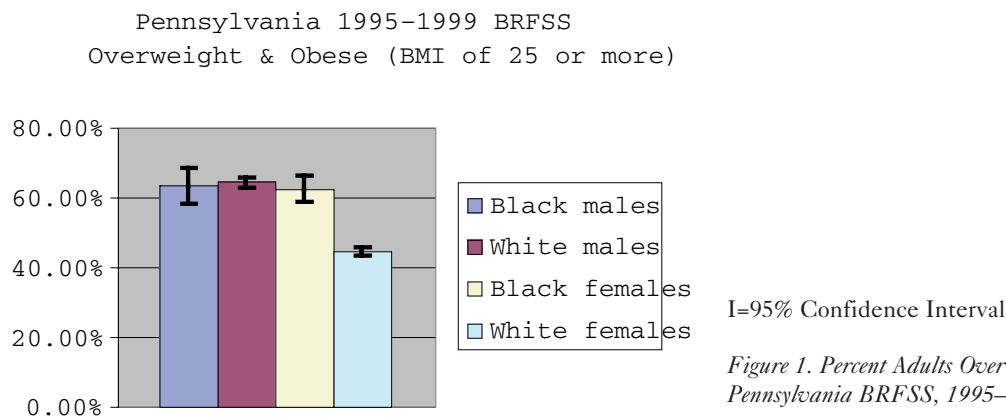


Figure 1. Percent Adults Overweight and Obese by Gender and Race, Pennsylvania BRFSS, 1995–1999

Preventable Deaths in PA Through Healthy Eating and Physical Activity

DISEASE	NUMBER OF DEATHS PER YEAR*	PERCENT PREVENTABLE THROUGH HEALTHY EATING AND PHYSICAL ACTIVITY**	DIET-AND INACTIVITY-RELATED DEATHS PER YEAR***
Heart Disease	40,446	16-30%	9,303
Cancer	29,989	35%	10,496
Stroke	8,885	23-39%	2,754

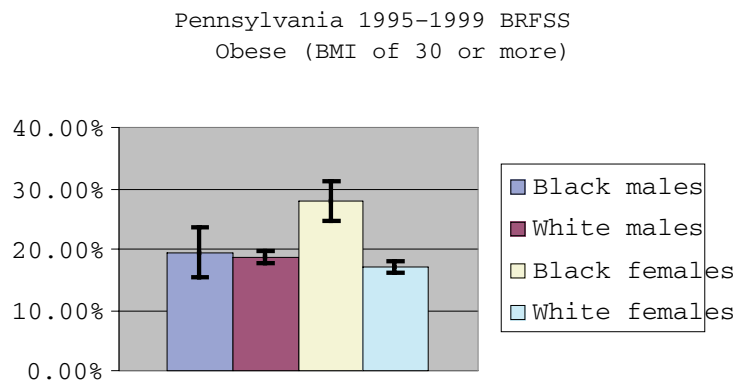
* Pennsylvania Department of Health, Pennsylvania Vital Statistics 2000

**McGinnis, J.M., Foege, W.H. Actual causes of death in the United States. *Journal of the American Medical Association*. 1993;270:2207.

*** Number of deaths per year X average percent preventable through healthy eating and physical activity



When the data was examined for obesity (Body Mass Index 30.0 and above), the distribution changed (Figure 2). White and black men and white women show no significant difference in the prevalence of obesity (18.7%, 19.5%, and 17.1% respectively). However, over time, black women show a much higher prevalence of obesity at 28 percent. The prevalence of obesity among black women is approximately 50 percent greater than for other adults.



I=95% Confidence Interval

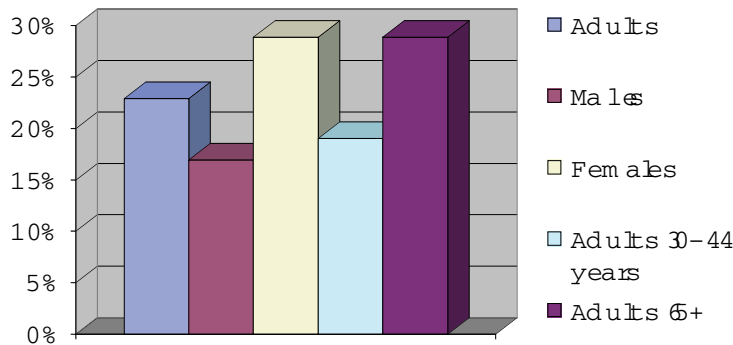
Figure 2. Percent Adults Who are Obese by Gender and Race, Pennsylvania BRFSS, 1995–1999

Pennsylvania adults have not made significant gains in adopting health promoting behaviors to maintain a healthy weight, such as consuming five or more servings of fruits and vegetables each day and participating in regular, moderate physical activity. In 2000, only 23 percent of Pennsylvania adults consumed five servings of fruits and vegetables a day (BRFSS 2000). Females (29%) were more likely than males (17%) to consume five servings a day. Significantly more adults aged 65 and older (29%) said that they were eating fruits and vegetables five or more times a day compared to those aged 30–44 (19%). There were no significant differences in the percentages of adults eating more fruits and vegetables by income level or race although there was a difference in intake by education level. Twenty-seven percent of college graduates and those with some college were eating fruits and vegetables five or more times a day – higher than those with a high school education (20%).





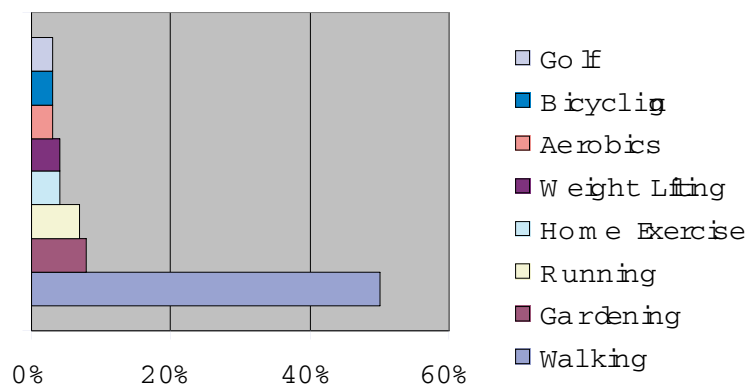
Pennsylvania 2000 BRFSS Five or More Servings of Fruit & Vegetables a Day



I=95% Confidence Interval

Thirty-seven percent of Pennsylvania adults participated in at least regular moderate physical activity in 2000, although 23 percent had reported no leisure time physical activity. There were significant differences in the percentage of adults participating in regular light to moderate physical activity by age, education and income. The 18–29 age group (28%) was significantly higher than the 65 and older age group (19%); those with some college had significantly higher percentage (27) compared to those with a high school education (17%); and those earning from \$50,000–\$74,999 were significantly higher (28%) compared to adults with incomes below \$15,000 (15%). There were no significant differences in physical activity levels by gender or race. The most frequent type of physical activity, by far, was walking (51%). Other major types of physical activity included gardening (8%), running (7%), home exercise and weight lifting (both 4%), and aerobics, bicycling and golf (3% each).

Pennsylvania 2000 BRFSS Most Frequent Type of Physical Activity among Adults



Technical note related to the inability to compare physical activity data from the 1984–2000 BRFSS and future BRFSS reports:

Historically, there have been two sets of physical activity questions in BRFSS. Between 1984 and 2000, the questions focused on measurement of only one domain of physical activity — specifically leisure time — using open-ended questions. Beginning in 2001, a new set of BRFSS questions was implemented to capture data on three key physical activity domains: leisure time, domestic and transportation. Occupational physical activity also is queried in the BRFSS survey but, because of technical reasons, does not contribute to a physical activity summary score. The main results from the 2001 survey and future surveys are the proportions of American adults that are sufficiently active, insufficiently active and inactive.

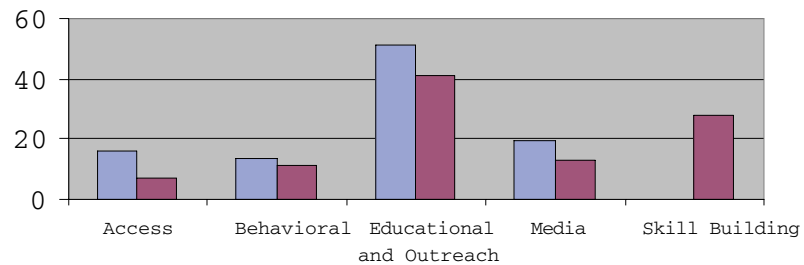


Assessment of Activities to Promote 5 A Day and Physical Activity in Pennsylvania

A statewide assessment was conducted in 2002 to determine the current level of promotion of nutrition and physical activity in community settings. A Partner Profile survey was developed by the Pennsylvania Department of Health's 5 A Day Planning Group. The Partner Profile assessed previous and potential interest in promoting fruit and vegetable consumption and physical activity. The Partner Profile survey was mailed to 120 selected community agencies across the Commonwealth to help determine this baseline information. Sixty surveys were completed and returned, thus yielding a response rate of 50 percent. The majority (62%) of respondents to this survey represented organizations focusing on state, regional and community programs. Figure 3 represents the categories of initiatives implemented among the survey participants to promote the 5 A Day and physical activity.

Figure 3. 5 A Day and Physical Activity Promotional Activities, Pennsylvania, 2002

5 A Day and Physical Activity Promotional Activities



Physical Activity
5 A Day





Examples of Promotional Activities include:

ACCESS	BEHAVIORAL	EDUCATIONAL AND OUTREACH	MEDIA	SKILL BUILDING
Expanded vending machine selections	Provided individual or small group counseling	Distributed brochures or recipes	Submitted article in local paper	Provided a Cooking demonstration
Placed fruit and/or vegetable in very prominent location	Conducted multiple session behavior change class	Taught a nutrition or fitness class	Submitted article in trade or professional publication	Held a healthy lifestyle contest/game
Lowered the financial cost of fruits and vegetables		Posted an exhibit or display	Participated in program/interview on local cable or radio station	Led field trip or tour of farm market, orchard, greenhouse, supermarket
Safe, walkable routes identified and accessible		Distributed pedometers	Implemented public service announcements (e.g., encouraging participation in physical activity or nutrition)	Conducted taste test
Lowered the financial cost for fitness facilities (swimming pool, gym, indoor courts, etc.)		Led an organized activity (walk, run, hike, bike ride, etc.)		Organized a pedometer program
Made bike racks, showers, lockers available at worksite, school, etc.				





Participating organizations were asked to identify the typical target population reached with their 5 A Day and physical activity promotional programs. Most of the respondents reported reaching over 5,000 individuals with their efforts. As a matter of fact, several organizations reported reaching upwards of an astonishing 100,000 to 200,000 individuals. White, Black and Latino audiences were most likely to be impacted through promotional activities (see Figure 4.). More than half of the time, activities reached low-income and mixed income adults between the ages of 19–40 years of age. Males and females were almost equally reached.

Race/Ethnicity of Populations Reached with 5 A Day and Physical Activity Promotional Activities

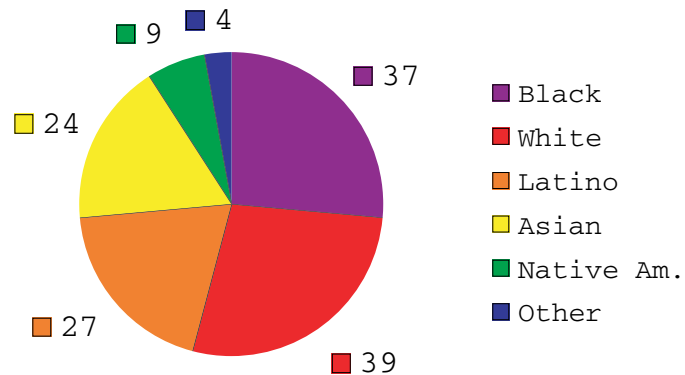


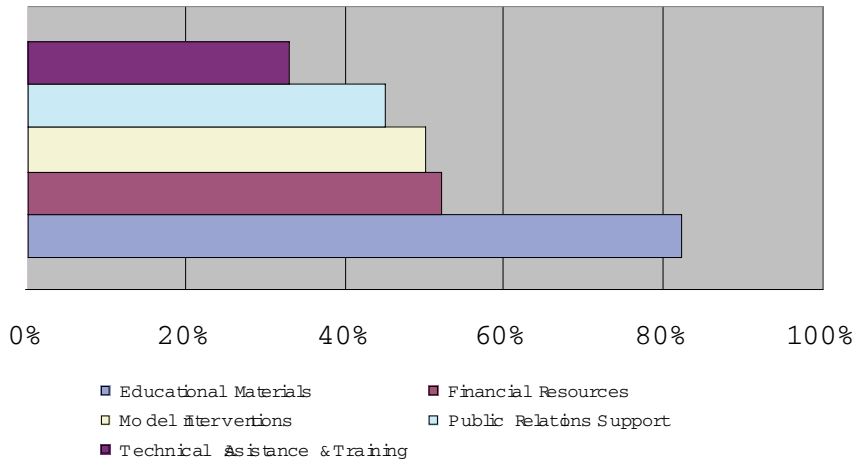
Figure 4. Race/Ethnicity of Population Reached with 5 A Day and Physical Activity Promotional Activities, Pennsylvania, 2002



Organizational respondents were questioned about what they thought their institution could offer Pennsylvania's Get Moving with 5 A Day Campaign that would help to encourage the consumption of fruits and vegetables and physically active lifestyles among Pennsylvanians. The five most commonly offered services were: the capacity to implement model 5 A Day programs (57%), linkages to other organizations (55%), the capacity to implement model strategies to increase physical activity (48%), public relations support (48%) and advocacy and policy support (37%). On the flipside, organizational respondents were asked what they thought the Pennsylvania Get Moving with 5 A Day Campaign could provide that would enable their institution to encourage the consumption of fruits and vegetables and physically active lifestyles among Pennsylvanians. The five most commonly requested services were: educational materials (82%), financial resources (52%), model interventions (50%), public relations support (45%) and technical assistance and training (33%).



5 A Day and Physical Activity Partner Profile, 2002 Requested Services



**Additional questions and responses to these questions are found in Appendix A.*





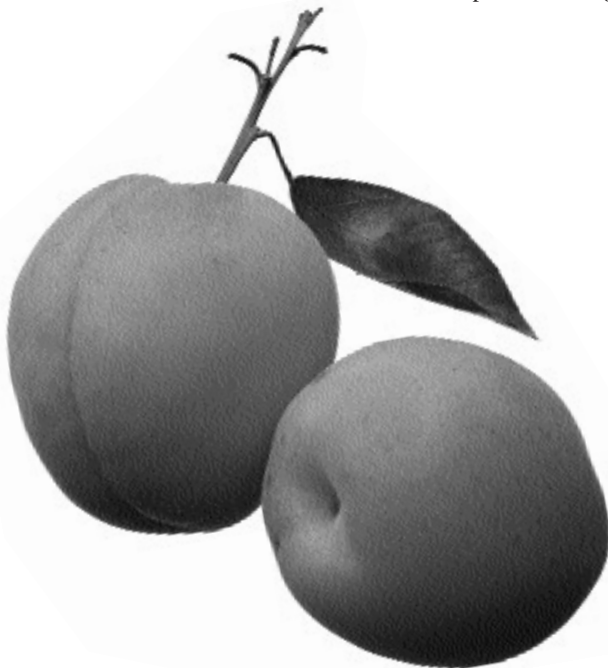
National Guidelines

The PaNPA Plan stakeholders investigated national objectives, guidelines, recommendations and tools including the Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity (2001); Healthy People 2010; and the Guide to Community Preventive Services – Physical Activity Recommendations. An inclusive list of the national guidelines, recommendations and tools is found in Appendix B. National Guidelines and Resources.

The stakeholders embraced the overarching principles of the Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity as key concepts in the development of the PaNPA Plan.


- ① Promote the recognition of overweight and obesity as major public health problems.
- ② Assist Americans in balancing healthful eating with regular physical activity to achieve and maintain a healthy or healthier body weight.
- ③ Identify effective and culturally appropriate interventions to prevent and treat overweight and obesity.
- ④ Encourage environmental changes that help prevent overweight and obesity.
- ⑤ Develop and enhance public-private partnerships to help implement this vision.

The full report of the Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity can be found online at <http://www.surgeongeneral.gov/topics/obesity/>.





Healthy People 2010 (HP 2010) is the prevention agenda for the Nation (www.health.gov/healthypeople) developed by leading federal agencies with the most relevant scientific expertise. The development process was informed by the Healthy People Consortium — an alliance of more than 350 national membership organizations and 250 state health, mental health, substance abuse and environmental agencies. It is a statement of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats. Healthy People 2010 identified ten Leading Health Indicators on the basis of their ability to motivate action, the availability of data to measure progress and their importance as public health issues. “Physical Activity” and “Overweight and Obesity” are two of the ten Leading Health Indicators.

The Guide to Community Preventive Services evaluates evidence on the effectiveness of population-based interventions that have been used in communities to increase physical activity (www.thecommunityguide.org). The Task Force on Community Preventive Services has issued recommendations for interventions to increase physical activity (Table 1. Physical Activity Recommendations). Each recommendation is based on the strength and effectiveness of the evidence found during systematic reviews. Decision makers should consider these evidence-based recommendations and local needs, goals and constraints when choosing appropriate interventions. A summary of the national Task Force on Community Preventive Services recommendations was published in the October 26, 2001 issue of *CDC MMWR Recommendations and Reports*. A full report, including commentaries and detailed evidence reviews, has been published in the May 2002 supplement to the *American Journal of Preventive Medicine*. The recommended interventions designated with a  are incorporated into the PaNPA Plan.

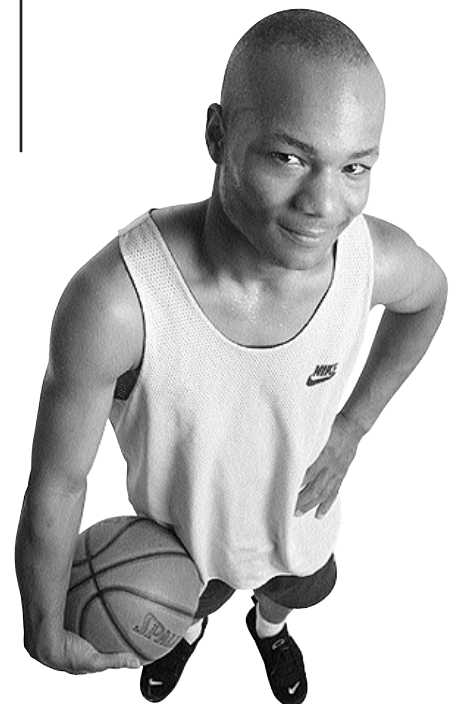




Table 1. Physical Activity Recommendations


INTERVENTION

INFORMATIONAL APPROACHES TO INCREASING PHYSICAL ACTIVITY

Community-wide campaigns 

“Point-of-decision” prompts to encourage stair use 

Classroom-based health education focused on information provision

Mass media campaigns 

BEHAVIORAL AND SOCIAL APPROACHES TO INCREASING PHYSICAL ACTIVITY

School-based physical education (PE) 

Social support interventions in community settings 

Individually-adapted health behavior change programs


Classroom-based health education focused on reducing television

viewing and video game playing

College-age health education and PE

Family-based social support

ENVIRONMENTAL AND POLICY APPROACHES TO INCREASING PHYSICAL ACTIVITY

Creation of or enhanced access to places for physical activity combined with informational outreach activities 

Transportation policy and infrastructure changes to promote non-motorized transit 

Urban planning approaches – zoning and land use 



The Pennsylvania Nutrition and Physical Activity Plan Focuses on Policy and Environmental Changes

In recent years, there has been increasing interest in policy and environmental change interventions as effective tools for health promotion and disease prevention. Policies and environmental changes can affect the chronic disease risk of many people simultaneously (e.g., by eliminating exposure to second-hand smoke in public buildings), while more traditional health promotion interventions focus on changing the behavior of single individuals or small groups of individuals (e.g., by helping individual smokers to quit). The major issues of physical inactivity and poor nutrition will not be solved solely by individual actions and health choices.

Individuals, communities and public and private entities must share the responsibility for developing an environment and policies to support and promote active lifestyles and access to healthy food choices in order to impact large segments of the population simultaneously.

Public health professionals and local organizations can play many roles in addressing policy and environmental change, including the following:

- Providing data
- Convening interested parties
- Conducting needs assessments and evaluations
- Educating the public
- Advocating for specific policy and environmental change strategies

Using A Social-Ecological Approach for Environment and Policy Change

The social-ecological approach to change focuses on the nature of people's transactions with their physical, social and cultural surroundings. Behavior settings are the social and physical situations in which behaviors take place. The behavior setting influences behaviors by promoting or discouraging actions. For example, the availability of a variety of healthy food choices at a school or workplace cafeteria can enable healthy dietary behaviors. The national guidelines set by the U.S. Department of Health and Human

POLICY CHANGE:

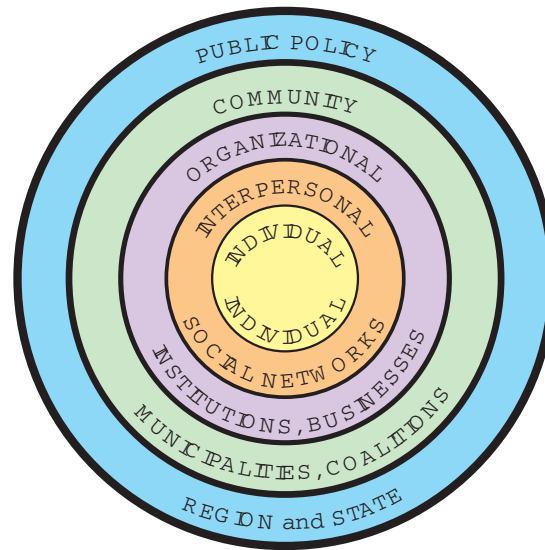
Modifications to laws, regulations, formal and informal rules, as well as standards of practice. This includes fostering written and unwritten practices and incentives that provide new or enhanced supports for healthy behaviors and lead to changes in or to community and societal norms. Policy changes can be implemented at the organizational, communal, or societal level.

ENVIRONMENT CHANGE:

Changes to physical and social environments that provide new or enhanced supports for healthy behaviors. An environmental change makes it easier for people to incorporate healthy behaviors as part of their daily routines. Changes in the environment can also include regular and consistent messages promoting health behaviors (labeling, signage, advertising, etc.)



“While individual-based intervention programs have been widely used to address nutrition and physical activity, there is a great need to design, implement and evaluate interventions focused on the institutional, community and policy levels to effect change among large populations,”
Nutrition and Physical Activity Work Group, Guidelines for Comprehensive Programs to Promote Healthy Eating and Physical Activity, 2002.



Services recommend changing the environmental context of health behaviors as a central element of health promotion strategies. These national guidelines influence planning priorities, funding opportunities and the actions of health promotion efforts.

Therefore, stakeholders reviewed national guidelines (Appendix B. Resources) along with several health behavior models and published research (Appendix C. References) to develop the PaNPA Plan. As a result, the Social-Ecological Approach (SEA) was adopted by the stakeholders as a framework for comprehensive planning. At the center of the SEA is the individual surrounded by increasingly larger spheres of influence: interpersonal, institutions and organizations, community and policy. Alcaay and Bell (2000) explain the SEA in simple terms as, “The SEA provides a way of thinking about the planning of health promotion interventions that places a spotlight on the relationship between the environmental and behavioral determinants of health.” The relationship is thought to be reciprocal; the environment affects health-related behaviors, and people can, through their actions, affect the environment. The PaNPA Plan is designed to systematically target public policy changes; changes to the physical environment; community changes; and organizational changes to ultimately impact group and individual behaviors. The application of the SEA model to the PaNPA Plan is demonstrated in Table 2. The asterisk (*) indicates approaches targeted in PaNPA Plan.



Table 2. A Social-Ecological Approach to Promote Nutrition and Physical Activity

Adapted from Welk, G. Iowa State University and North Carolina Blueprint for Physical Activity and Healthy Eating.

INDIVIDUAL

Motivating change in individual behavior by increasing knowledge and influencing attitudes and beliefs.

EXAMPLES: Offering classes in fitness and nutrition; offering one-on-one counseling; targeting behavior change through pedometer programs and 5 A Day activities.

INTERPERSONAL/ GROUP

Recognizing that groups provide social identity and support.

EXAMPLES: Promote family and peer interactions that facilitate healthy behaviors; written information given to parents; training lay health advisors; developing walking clubs.

INSTITUTIONAL / ORGANIZATIONAL *

Changing the policies, practices, and physical environment of an organization (e.g., a workplace or school) to support physical activity and healthy eating.

EXAMPLES: Schools instituting coordinated school health programs through school health councils; sponsoring physical activity events within a faith organization; physicians and their staff adopting a policy of educating patients about physical activity and nutrition.

COMMUNITY *

Coordinating the efforts of all members of a community (organizations, community leaders and citizens) to bring about change. Developing and enforcing local environment and policy changes that support physical activity and healthy eating.

EXAMPLES: Work of local healthy community partnerships to influence social norms and policies about physical activity and nutrition; forming a community coalition to assess opportunities for physical activity and healthy eating.

SOCIETAL OR PUBLIC POLICY *

Developing and enforcing state policies and laws that can increase beneficial health behaviors. Developing media campaigns that promote public awareness of health needs and advocacy for change.

EXAMPLES: Partnering with government agencies to increase facilities (sidewalks, greenways, bike lanes) for walking and bicycling; regulating competitive foods sold in schools; improving the quantity and quality of physical education in schools; developing statewide media campaigns promoting the need for environments that encourage physical activity and healthy eating.

The Social-Ecological Approach Applied to Nutrition and Physical Activity

The SEA is a useful tool to assess the complex factors that influence eating patterns and physical activity levels. For example, most interventions to date have used health education, awareness and behavior change approaches to improve individual and small group behaviors with minimal long-term success. In order to foster sustainable behaviors, the environments and policies that promote sedentary activities and unhealthy eating must change. Consideration should be given to supportive factors such as bicycle lanes, showers at work, sidewalks and alternatives to sedentary entertainment. This framework recognizes the fact that no organization can accomplish change alone. Effective implementation of the continuum of strategies necessary for a social-ecological approach requires multi-sector collaboration at the national, state and local level.



The mission of PANA is to build statewide capacity for developing an environment to support and promote active lifestyles and healthy food choices through collaboration and coordinated communication.

PANA's Goals:

Goal 1: Serve as a communication clearinghouse and expert resource for nutrition and physical activity

Goal 2: Facilitate the implementation of the PA Nutrition and Physical Activity Plan

Goal 3: Conduct statewide surveillance of initiatives and information related to nutrition and physical activity.

For more information contact:

**PANA at the Institute for
Healthy Communities**

717-561-5256

<http://www.panaonline.org>

Pennsylvania Advocates for Nutrition and Activity (PANA)

An initial outcome of the planning process was the creation of The Pennsylvania Advocates for Nutrition and Activity (PANA), a statewide, multi-sector coalition that will coordinate the implementation and evaluation of the PaNPA Plan. Using the plan as a guide, PANA will focus efforts around community environments, youth and families and healthcare practices. The goals of the PaNPA Plan are organized by the highest level of influence (societal or public policy) to the most central level of influence (individual). The PaNPA Plan is designed to systematically target public policy changes; changes to the physical environment; community changes; and organizational changes to ultimately impact group and individual behavior change. A complete list of PaNPA Plan goals is found on pages 21–35.

PANA also will coordinate communication, information advocacy and research and evaluation for the priority areas. PANA is positioned as a central clearinghouse and expert resource for physical activity and nutrition-related research reports, advocacy materials, best practice models and programs and services of statewide partners (<http://www.panaonline.org>; www.health.state.pa.us). PANA will develop a website and database system to monitor the interests, needs and activities of local communities and to inform partners of new resources – toolkits, research, funding, trainings, etc.

Structure of PANA

PANA is housed at the Institute for Healthy Communities in Harrisburg, Pennsylvania. PANA has a full-time Coordinator, Allison Topper, MS, and an Executive Committee (Appendix D. Executive Team Members). PANA programs and services will be planned and delivered through the collaborative work of state-level partners focusing on interventions for youth and families; community environment and food systems; and health care. In addition, PANA convenes a Research and Evaluation Advisory Committee and a Communication and Advocacy Team. Additional information on PANA's structure can be found in Appendix E.



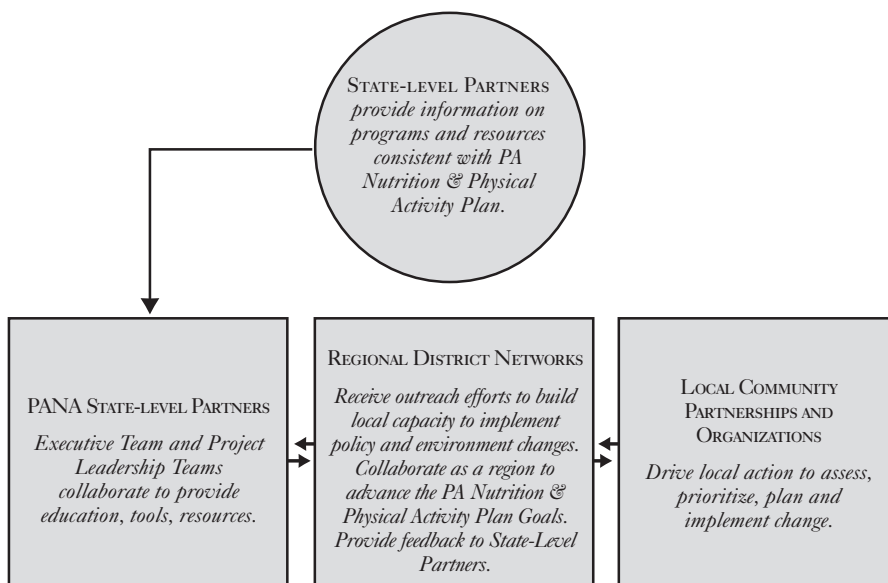
The Role of Community Partners

Adapted from Working Together for Healthier Communities: A Research-Based Memorandum of Collaboration, by Stephen B. Fawcett, Vincent T. Francisco, Adrienne Paine-Andrews, and Jerry Schultz. In Public Health Reports, Supplement on Healthy Cities/Healthy Communities.

A community refers to those who share a common place, such as a rural community or urban neighborhood, or experience, including being an adolescent or a member of an ethnic minority group.

To improve our communities — to make them places where people are healthy, safe and cared for — takes a lot of work. The ability to partner effectively with other individuals and organizations both inside and outside the community is essential to building healthy communities. Building healthier communities requires a process of people working together to address what matters to them. Civic engagement must be promoted among all of the members of the community.

To address important concerns to community members, we must change the conditions in which we live, with the hope that changing those conditions will result in positive changes in people’s behavior and more distant outcomes.



The Institute for Healthy Communities

The mission of the Institute for Healthy Communities is to serve as a catalyst to improve the health and quality of life of communities in Pennsylvania. (<http://www.haponline.org/ihc/>)

What is a Healthy Community?

All aspects of the community... health care, human services, education, business/industry, faith/spiritual, cultural, economic, government, residents and others... working together to continually improve their environment to:

Nurture and protect its people

Share knowledge and pool its resources

Enable people to achieve their maximum potential

State Health Improvement Plan Partnerships (SHIP)

In July 2001, the Department of Health issued the State Health Improvement Plan - SHIP 2001–2005 (<http://www.health.state.pa.us>), a model for health planning in Pennsylvania. SHIP emphasizes the prevention of disease and disability, the coordination of resources, interagency cooperation and improved government responsiveness to community health planning priorities.

The Pennsylvania Department of Health and The Institute for Healthy Communities are partners in implementing the State Health Improvement Plan (SHIP).



COMMUNITY:

Community is a group of people who share a common place, experience or interest (e.g., people who live in the same area: the same neighborhood, the same city or town, and even the same state or country).

COMMUNITY HEALTH:

Community health refers to the well-being of everyone in a community.

PARTNERSHIPS:

Collaborative partnerships are alliances that are used to improve the health of a community. They encourage people to get together and make a difference. For example, an effort to improve education might involve school officials, teachers, business people, youth and older adults.

COMMUNITY CAPACITY:

Community capacity refers to the ability of community members to make a difference over time and across different issues.

Collaborative partnerships have the potential to bring about community and systems changes that modify local conditions. These changes are an intermediate outcome in the long process of community health improvement. Community and systems changes fall in to one of three categories, all of which should relate back to community-determined goals:

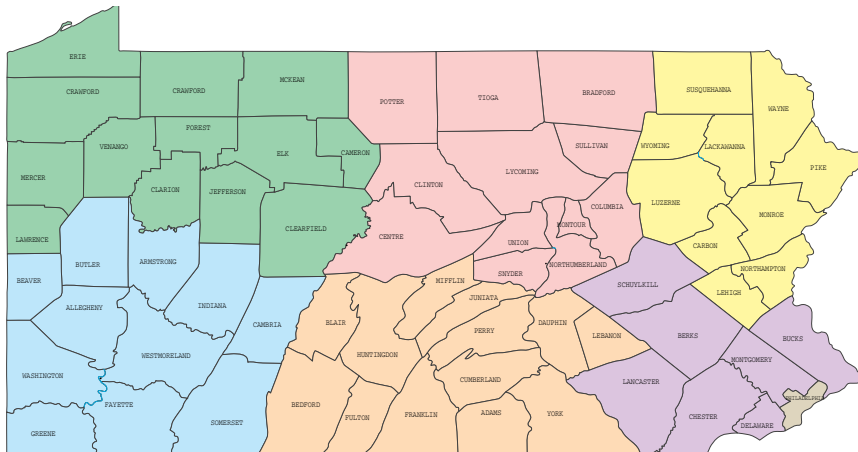
- ① Public awareness and support for policy and environment changes
- ② Environments or facilities (physical supports that promote physical activity or healthy eating)
- ③ Policies, practices and incentives (community or organizational supports for physical activity and healthy eating through ordinances, written policies, protocols, etc.)

Building Local Capacity for Improved Nutrition and Physical Activity

PANA will use a social-ecological approach for strategic planning and evaluation with local community empowerment and grassroots change at the core of all activities. PANA will offer programs and services at a regional level in order to provide local communities and organizations with the information and tools necessary to implement policy and environmental changes that will support and promote active lifestyles and healthy food choices.

PANA's regional outreach efforts will include:

- ① Training and education (research, rationale, best practice models)
- ② Tools to identify and prioritize opportunities for change
- ③ Resources for technical assistance
- ④ Incentives and recognition for implementing change



Regional Networks

PANA's intervention strategies will be translated to local communities through the development of seven Regional District Networks of PANA.

A District Network will be developed in each of the Pennsylvania Department of Health six districts and one in Philadelphia. In each District, there are Department of Health offices and community health improvement partnerships. The Institute for Healthy Communities has a direct working relationship with each of the community health improvement partnerships. This relationship and knowledge of local issues is key to provide information and resources for local community action. The District Networks will be provided with training, technical assistance and toolkits to advance the PaNPA Plan. In order to meet the needs of local community partnerships, the development of PANA's programs and services will involve community-level input through meetings, surveys, interviews and focus groups, where possible.

Community Systems Change - What makes it work?

- Clear vision and mission
- Action planning
- Leadership
- Resources
- Documentation and communication of change efforts
- Technical assistance
- Making outcomes matter





Existing Surveillance Systems

Behavioral Risk Factor Surveillance System
www.health.state.pa.us

Youth Risk Behavior Surveillance
<http://www.cdc.gov/nccdphp/dash/yrbs/index.htm>

National Household Transportation Survey
<http://www.fhwa.dot.gov/ohim/nptspage.htm>

Measuring Success

PANA will provide routine process and outcome evaluation reports on the implementation of the PaNPA Plan to the Pennsylvania Department of Health. These evaluation efforts will focus on the degree to which PANA programs and services have facilitated changes to support and promote physical activity and healthy eating throughout Pennsylvania and the increase in the number of local efforts and activities that support and promote physical activity and healthy eating.

In order to supply progress reports, PANA will conduct ongoing evaluation of its programs and services and track participation and utilization of outreach efforts. PANA will monitor the implementation of new and existing state, regional and local nutrition and physical activity initiatives through a web-based tracking tool. It also will compile results of existing surveillance systems related to physical activity and nutrition in Pennsylvania.

Sustainability

PANA received a seed grant from the Department of Health to assist in developing a sustainable statewide coalition. The Department utilized two sources of Centers for Disease Control and Prevention funding for the seed grant – the Cooperative Agreement to develop a *State Nutrition and Physical Activity Program to Prevent Obesity and Related Chronic Diseases* and the *Preventive Health and Health Services Block Grant (PHHSBG)*. PANA partners continue to work to secure funding for sustainability and to increase capacity to provide programs and services throughout the state.

Goals of the Pennsylvania Nutrition and Physical Activity Plan

The following is an overview of the long-term goals for the PA Nutrition and Physical Activity Plan coordinated by the Pennsylvania Department of Health with input from selected stakeholders from July 2001–June 2002. PANA will use these long-term goals as a guide for all activities. The goals of the PaNPA Plan are organized into four sections focusing on PANA and its three priority areas. The goals in each priority area are organized to follow the social-ecological approach.



PANA COMMUNICATION, ADVOCACY, RESEARCH AND EVALUATION

PANA is recognized by practitioners, organizations and policy makers as the primary source of research and information on nutrition and physical activity.

COMMUNITY ENVIRONMENT AND FOOD SYSTEMS

MISSION: To build capacity among communities to implement policy and environmental changes for increased physical activity and access to healthy food choices.

Societal or Public Policy Goals

Establish transportation policy and infrastructure changes to promote non-motorized transit.

Implement urban planning approaches – zoning and land use that promote active community environments.

Community Goals

Conduct community-wide campaigns to increase levels of physical activity.

By 2004, increase participation in the Great Pennsylvania Workout Month by 25 percent.

Increase the financial, professional and physical resources mobilized and targeted on nutrition and physical activity through community planning and health professional partnerships.





SYSTEMS CHANGE

Development of active community environments shall be a key community planning issue.

There will be increased resources mobilized and targeted on nutrition and physical activity through community planning and health professional partnerships.

Municipalities will have safe walkable routes.

There will be safe routes for children to walk to school.

Communities will be able to access a healthy food supply through restaurants, grocery stores, and farmer's markets.

BEHAVIOR CHANGE

Individuals will increase physical activity through use of walkable routes.

Individuals will improve the nutritional quality of their diets by having increased access to a healthier food supply.

Organizational Goals

Increase the proportion of public and private schools that provide access to their physical activity spaces and facilities for all persons outside of normal school hours (HP 2010 Objective 22-12).

Provide point-of-decision prompts to take the stairs in public buildings.

Improve the overall nutritional quality of foods provided in restaurants.

Interpersonal (Group) Goal

Community planners regularly consider the positive or negative impacts of their decisions on obesity.

Individual Goals

Increase the proportion of trips made by walking (HP 2010 Objective 22-14).

Increase the proportion of trips made by bicycling (HP 2010 Objective 22-15).

YOUTH AND FAMILIES

MISSION: Public and private entities share the responsibility for developing policies and environmental strategies to support and promote active lifestyles and access to healthy food choices for youth and families.

Societal or Public Policy Goals

Advocate for policy changes to the Academic Standards for Health, Safety, and Physical Education to mandate daily physical education classes in primary schools in Pennsylvania.

Organizational Goals

Increase the percentage of schools and daycare facilities that have school/daycare health councils to 50 percent (HP 2010 Objective 7-2).

Increase the percentage of schools that provide coordinated school health programs to 40 percent. This includes physical education, nutrition education and food services (HP 2010 Objectives 7-2, and 22-10).



Improve nutritional quality of food and beverage choices on school campuses (HP 2010 Objective 19-16).

Establish positive eating behaviors such as eating five servings of fruits and vegetables during pre-school years.

Increase parent and guardian awareness of the BMI-for-age measure as a screening tool to assess growth patterns in children and youth.

Interpersonal (Group) Goals

Increase the proportion of parents that accept the use of BMI-for-age measure as a screening tool to assess weight status in children and youth.

Increase the proportion of middle and high schools that have Student Nutrition Advisory Councils.

Individual Goals

Increase the proportion of mothers who initiate breastfeeding their babies (HP 2010 Objective 16-19).

Limit television viewing to 2 hours or less per day for children and adolescents (HP 2010 Objective 22-11).

Increase the proportion of children who walk to school within a distance of one mile or less. (HP 2010 Objective 22-14b).

HEALTH CARE

MISSION: The healthcare providers and payors will follow guidelines to promote nutrition and physical activity for prevention and treatment of overweight, obesity and related chronic diseases.

Societal or Public Policy Goals

Advocate for insurance companies to institute policies requiring BMI assessment.

Advocate for insurance companies to provide payment for prevention of obesity (HP 2010 Objective 1-2).

Advocate for insurance companies to provide payment for treatment of obesity.

SYSTEMS CHANGE

40 percent of schools will implement the comprehensive health education program.

50 percent of schools/daycare will have health councils.

75 percent of middle/high schools will have nutrition advisory councils.

BEHAVIOR CHANGE

40 percent of adults will participate in physical activities with families.

33 percent of adults will eat five servings of fruits and vegetables a day.

10 percent increase in breastfeeding incidence.



SYSTEMS CHANGE

The healthcare community follows “best practice” guidelines to promote nutrition and physical activity for prevention and treatment of overweight/obesity and related chronic diseases.

The insurance industry is actively engaged in the prevention and treatment of obesity.

BEHAVIOR CHANGE

Patients expect nutrition and physical activity information from their healthcare provider.



Organizational Goals

Ensure that healthcare provider training programs include core competencies in health promotion, assessment of weight status and weight management (HP 2010 Objective 1-7).

Ensure that licensed healthcare providers have opportunities for continuing medical education in health promotion, assessment of weight status, and weight management (HP 2010 Objective 1-7).

Mobilize community health improvement partnerships to provide nutrition and physical activity promotion activities and campaigns (HP 2010 Objective 7-9).

Individual Goals

Increase the proportion of healthcare providers that assess and communicate BMI in adults and BMI-for-age in children (HP 2010 Objective 11-6).

Increase the proportion of healthcare providers that initiate preventive counseling to promote healthy weight management (HP 2010 Objective 1-3).

Increase the proportion of healthcare providers that institute nutrition and weight management treatment where indicated (HP 2010 Objective 19-17).



A Call to Action: Implementation of the Pennsylvania Physical Activity and Nutrition Plan

PANA is working to provide resources for local communities to assess, plan and implement policy and environmental changes that support and promote physical activity and healthy eating. Community partnerships and organizations are the true catalyst for sustainable change. Although the activities throughout Pennsylvania will be unique to each community, PANA is working to provide a consistent format for communication and evaluation so that we can share our successes and build from each others' strengths. We ask that you work as a PANA partner to create the vision of a more active and healthy Pennsylvania by:

- Visiting the PANA website for information, resources and updates.
- Sharing your local nutrition and physical activity initiatives on PANA's website and through meetings.
- Participating in PANA programs and services (posted on the PANA website) such as meetings, conferences and workshops.

The first step in creating sustainable change is to get physical activity and nutrition issues on your local agenda. The local agenda is the issue your community sees as necessary to address. Getting issues into the minds of the public officials and policy makers often requires a series of steps. You may want to select a specific issue such as a Walk to School Program or advocate community-wide change for environments and policies that support physical activity and healthy eating. Use the information provided in this plan and the following action steps to get started.





Getting physical activity and nutrition on your local agenda

Adapted from the University of Kansas Community Toolbox

- **EDUCATE PEOPLE ABOUT THE EXISTENCE OF THE ISSUE.** More often than not, citizens and officials in the community don't know the issue exists. The first step in getting it addressed is raising public consciousness about it.
- **MAKE SURE PEOPLE UNDERSTAND THE ISSUE AND ITS GENERAL IMPORTANCE.** Awareness of an issue is only the beginning. People may understand that it exists, but may not understand its implications. They may feel that it doesn't really matter, that it only affects a few people or places far away, or that there's really no proof of its effects. So the next step is to explain the issue clearly. People need to know whom it affects and its significance. If they have good information, they'll at least realize that the issue is serious.
- **GENERATE REAL LOCAL CONCERN ABOUT THE ISSUE.** Once people are aware of and understand issues, the next step is to foster concern about them. This involves making sure that people understand how issues affect them directly or indirectly, and how they play out in their communities. It's when they realize their own link to the issue that they'll begin to see it as something that's not only serious, but that needs to be addressed locally.
- **GET THE ISSUE ON THE LOCAL AGENDA.** Placing the issue on the local agenda really means a number of things.

Literally placing it on the local agenda, in the form of a potential or actual bylaw, regulation, referendum or policy statement, is the ultimate goal.

Influencing public opinion. Issues become items on the local agenda when they reach a certain level of public consciousness, and the community starts to consider them worthy of attention. Stories about them will start to appear in the media, speakers and programs that refer to them will be sponsored by mainstream institutions and organizations (service clubs, churches, universities), and ordinary citizens will talk about them in their daily conversation.

Changing individual responsibility. Get the issues on the agendas of most individual community members.



Who should plan for getting physical activity and nutrition issues on the local agenda?

Making a plan for getting your issues on the local agenda can be part of your strategy. Planning is the first step not only toward action, but also toward recruiting help and support for what you'll do. Choosing a planning group carefully can contribute a great deal to the eventual success of your effort.

A planning group should involve everyone who might be affected by the issue, or who might have a hand in addressing it:

- Stakeholders - This includes those with a direct interest in the issue (those directly affected or those who deal with the issue).
- Policy makers - Those who make formal policy those who make informal policy and funders.
- Influential people and other interested citizens – If you include people whose opinions are respected in the community, you are more likely to get community support for your effort. Such people might include business leaders; leaders of the groups most affected by the issue; clergy and other leaders of the faith community; community activists and advocates; and people with no official position, but with widespread community respect and credibility.

More important is that all of these groups feel some ownership of the plan and the efforts that your initiative makes to alert the community of your issue, bring it to the fore, and deal with it. They can bring both information, and, ultimately, an action plan back to their segments of the community, and help to gain support for your initiative. Without their support, there is less chance of actually getting your issue into public consciousness and onto the local agenda.

Visit the PANA website (<http://www.panaonline.org>) for up to date information and resources to help build community support and drive local action for nutrition and physical activity initiatives.





Appendix A. Opportunities and Obstacles

Opportunities to Increase Fruit and Vegetable Consumption

Working with supermarkets and dietitians. Dietitian-led cooking demos. Salad and fruit bars in all schools. More healthy fast food choices. More healthy choices in school nutrition. Successful supermarket advertising. Increased fruit and vegetable offerings in convenience stores. Media campaigns. Funding support for local initiatives. Change food in hospital cafeterias. Less snack food in schools. Advocacy with local restaurants for more healthful menu items. General campaign recommending 5 A Day. Fostering buying co-ops for those interested. Recruit a sports figure and a figure from the arts as spokespersons. Education. Attendance at agricultural progress days . Access to farmers' markets. Traveling displays promoting common messages. Expansion of network of campaign advocates in all ages & in all settings. Make it a major and joint emphasis of the Depts. Of Health, Education, & Aging. Recipe ideas. Store sampling demos. Expansion of lifestyle modification courses. Healthy food-focused events. Add fruits and vegetables as part of WIC food package . Increased enrollment in WIC Promote "cultural" recipes. Promote urban gardening . Target low-income housing. Promoting community gardens. Promotions at county fairs. Acceptance of frozen or canned food .

Obstacles to Prevent an Increase in Fruit and Vegetable Consumption

Price. Availability of quality produce. Lack of choice. Lack of public awareness of new fruit offerings. Lack of fruit and vegetable sales space in convenience stores. Poor quality restaurants. Poor quality snacks in schools and vending machines. Freshness. Lack of knowledge . Lack of development and proper lifestyle choices in school. Drought. Bad publicity in the perception of cost of produce as well as pesticide usage. Availability of fast food. Peer pressure. Resistance to change. Preparation time for fresh foods. Private contracts in school districts. Failure to address underserved populations. Concerns with biohazard terrorism. Funding for food voucher programs. Apathy.

Opportunities to Increase Physical Activity Levels

Working with schools and worksites. Provide speakers and models of other programs. Advocate for continued recess time in schools. Employer-sponsored wellness programs. Brief interventions by medical professionals. Integration of physical activity into the workday. Promotion of schools involved in American Heart Association's school site. Media campaigns. Sidewalks, bikeways, and trails and zoning to support these. Advocacy with schools to increase physical education classes. Increased funding for river-trails and rails-to-trails. Create competition between government subdivisions at the local level. Create competition between employers. Education. Free or low-cost group-oriented fitness programs. Family walk-a-thons similar to read-a-thons. Restricting driving access to work. More convenient public transportation. More emphasis on safe and easy activity to do at home, school, or work. Increased access to safe sites. Motivational Public Service Announcements. Role modeling. Expansion of lifestyle modification courses. Promote walking clubs in neighborhoods. Local coverage of physical activity interest groups. Overcome "all or nothing" mentality. Increased personal income. Fitness equipment for high rises. Promotion of summer and after-school programs. Realization of cost of prevention vs. cost of care.

Obstacles to Prevent an Increase in Physical Activity Levels

Lack of time. Lack of motivation. Lack of walking friendly infrastructure - sidewalks, trails. Cold climate. Lack of knowledge. Lack of funding. Increased sit-down activities (i.e., videogames and computers). Public perception of exercise taking more time than it is worth. Messages sometimes not appropriate for physically restricted segments of the public. Lifestyle stressors. Poor diet, leading to increased lethargy. Peer pressure. Misconception that exercise is just for weight loss. Long working hours. Charging admission to state parks. Concerns of personal safety. Urbanization. Staffing to implement objectives. Community design.



Appendix B. National Guidelines and Resources

5 A Day for Better Health Program

CENTERS FOR DISEASE CONTROL AND PREVENTION, DIVISION OF NUTRITION AND PHYSICAL ACTIVITY
<http://www.cdc.gov/nccdphp/dnpa/5aday/>

AMERICAN CANCER SOCIETY GUIDELINES ON NUTRITION AND PHYSICAL ACTIVITY FOR CANCER PREVENTION
www.cancer.org

AMERICAN HEART ASSOCIATION, OBESITY IMPACT ON CARDIOVASCULAR DISEASE
<http://circ.ahajournals.org/cgi/content/full/98/14/1472>

ASSOCIATION OF STATE AND TERRITORIAL DIRECTORS OF HEALTH PROMOTION AND PUBLIC HEALTH EDUCATION, CENTERS FOR DISEASE CONTROL AND PREVENTION'S POLICY AND ENVIRONMENTAL CHANGE: NEW DIRECTIONS FOR PUBLIC HEALTH
<http://www.astdhphe.org/healthpolicyfinalreport.pdf>

ASSOCIATION OF STATE AND TERRITORIAL PUBLIC HEALTH NUTRITION DIRECTORS, NUTRITION AND PHYSICAL ACTIVITY WORK GROUP, GUIDELINES FOR COMPREHENSIVE PROGRAMS TO PROMOTE HEALTHY EATING AND PHYSICAL ACTIVITY
<http://www.astphnd.org/programs/00Nupawgfm.pdf>

CENTERS FOR DISEASE CONTROL AND PREVENTION GROWTH CHARTS, 2000
<http://www.cdc.gov/nccdphp/dnpa/growthcharts/training.htm>

DIETARY GUIDELINES FOR AMERICANS, 2000
<http://www.cnpp.usda.gov/DietGd.pdf>

EVIDENCE REPORT/TECHNOLOGY ASSESSMENT: NUMBER 25, EFFICACY OF INTERVENTIONS TO MODIFY DIETARY BEHAVIOR RELATED TO CANCER RISK
<http://www.ahrq.gov/clinic/epcsums/dietsumm.htm>

FIT, HEALTHY, AND READY TO LEARN
http://www.nasbe.org/Educational_Issues/Safe_Healthy.html

THE GUIDE TO COMMUNITY PREVENTIVE SERVICES, PROMOTING PHYSICAL ACTIVITY
http://www.thecommunityguide.org/home_f.html

HEALTHY PEOPLE 2010
<http://www.healthypeople.gov/>

NATIONAL INSTITUTES OF HEALTH, NATIONAL HEART, LUNG, AND BLOOD INSTITUTE'S CLINICAL GUIDELINES ON THE IDENTIFICATION, EVALUATION, AND TREATMENT OF OVERWEIGHT AND OBESITY IN ADULTS
http://www.nhlbi.nih.gov/guidelines/obesity/ob_home.htm

NATIONAL NUTRITION SUMMIT
<http://www.nns.nih.gov/>

THE SURGEON GENERAL'S CALL TO ACTION TO PREVENT AND DECREASE OVERWEIGHT AND OBESITY
<http://www.surgeongeneral.gov/topics/obesity/>



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Appendix D

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ELLEN FULLER, RD
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Mid-Atlantic Dairy Association

LINDA WOODS HUBER
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HELEN MAHAN
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National Parks Service

CAROLINE PUGH
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Regional Director of Advocacy
Member - National Scientific Council on Nutrition,
Physical Activity and Metabolism

MICHAEL RIOS
Director, Assistant Professor
Hamer Center for Community Design Assistance
Pennsylvania State University

TOM SEXTON (CO-CHAIR)
Director, Northeast Regional Field Office
Rails to Trails Conservancy

CRAIG ZUMBRUN
Executive Director
South Central Assembly for Effective Governance

ALLISON TOPPER, MS
PANA Coordinator
Institute for Healthy Communities



Appendix E

Structure of PANA

PANA will develop a statewide infrastructure by coordinating state-level partners and establishing six district networks in each of the Department of Health Districts and one in Philadelphia. The coalition consists of diverse organizations at the national, state, and local level and in private and public sectors.

MEMBERSHIP: Anyone who agrees with the mission and wants to take part in PANA activities is invited to be a member.

MEETING FREQUENCY: PANA partners will meet formally four times a year. State-level partners will convene in Harrisburg. Regional district networks will convene at one of seven video-conference sites throughout the state (six health districts and one in Philadelphia).

State-level Partners

EXECUTIVE TEAM: The PANA Executive Team will consist of 15–20 people who can commit to the work needed to move the coalition forward toward meeting its goals. It will include those who represent interested organizations or specific interest groups. The Executive Team will select co-chairs to coordinate efforts and represent the team for decision-making regarding PANA operations.

PROJECT LEADERSHIP TEAMS: PANA partners will carry out the work of the coalition through organized project teams. Project teams will be developed to address specific education and outreach efforts as needed in PANA priority areas (Community Environments, Youth and Families and Health Care).

RESEARCH AND EVALUATION ADVISORY TEAM: PANA will work with research and evaluation professions to: (1) Identify gaps in statewide surveillance and evaluation, (2) Provide guidance to project teams (community environments, youth and families, and healthcare) in selecting effective interventions and (3) Assist in choosing evaluation measures for PANA's projects and services.

INFORMATION COMMUNICATIONS AND ADVOCACY TEAM: PANA partners will identify key issues and develop information advocacy materials for state and local governments.

CORPORATE SPONSORS: Organization, corporation or foundation interested in partnering with PANA to sponsor physical activity and nutrition projects and materials.

DISTRICT NETWORKS/ LOCAL COMMUNITIES: Training and education for PANA priorities will be provided in each of the Department of Health's six Districts and one in Philadelphia within the first year of operation. District networks will be provided with PANA resources and materials. Community organizations will be encouraged to promote PANA materials/resources to respective networks, participate in PANA activities; provide information about programs and services to PANA. The networks also will facilitate regional collaboration and communication around PANA priority areas.



Appendix F. Stakeholders for Obesity Prevention

Lisa Bailey-Davis, M.A., R.D., Pennsylvania Department of Health
Susan George, Pennsylvania Department of Health
Emilie Tierney, Pennsylvania Department of Health
Brian Wyant, Pennsylvania Department of Health
Bonnie Mellott, Pennsylvania Department of Health
Sandra Knoble, Pennsylvania Department of Health
Stacey Schwartz, Pennsylvania Department of Health
Robert Muscalus, D.O., Pennsylvania Department of Health
Gregory Bogdan, Dr.P.H., Pennsylvania Department of Health
William Cochran, M.D., Pennsylvania Chapter of the American Academy of Pediatrics
Christopher Still, M.D., Geisinger Medical Center
Gwen Foster, City of Philadelphia
Christine Munchak, R.D., Pennsylvania Parent Teacher Association
Tomi Waters Boylstein, M.A., Pennsylvania Parent Teacher Association
Allison Topper, M.S., WellSpan Health
Flavius Lilly, M.S., Hanover Healthcare Plus Network
Thomas Sexton, Mid-Atlantic Rails-to-Trails Conservancy
Helen Mahan, National Park Service
Dorrie Lisle, Pennsylvania Nutrition Education Network
Michael Laudenberg, Allentown YMCA/YWCA
Michael Rios, Pennsylvania State University
Elizabeth Nagle, Ph.D., University of Pittsburgh
Deborah Aaron, Ph.D., University of Pittsburgh
Eileen Zinchiak, Erie Center on Health and Aging
Stefani McAuliffe, Institute for Healthy Communities

Ad Hoc Stakeholders:

Shriki Kuminyaka, Ph.D., R.D., University of Pennsylvania
Patrick Conway, Pennsylvania Restaurant Association
Jan Scholl, Ph.D., Pennsylvania State University
Krista Braymar, 4H Club
Freddy Cuevas, Youth as Resources
Carolyn Gilles, Pennsylvania Expanded Food and Nutrition Education Plan
Cindy Javor, R.D., Allegheny County Cooperative Extension
Cynthia Maki, M.S., R.D., Pennsylvania Women, Infants, and Children Program
Barbara Sterne, M.S., R.D., Pennsylvania Women, Infants, and Children Program
Patricia Birkenshaw, M.S., Pennsylvania Department of Education
Shirley Black, M.Ed., Pennsylvania Department of Education
Sandra Sherman, Ed.D., The Food Trust
Allison Harmon, Ph.D., R.D., Pennsylvania State University
Karen Devine, Pennsylvania School Board Association
Gary Foster, Ph.D., University of Pennsylvania