North Carolina Blueprint

For

Changing Policies And Environments

In Support Of

INCREASED PHYSICAL ACTIVITY
For decades, it has been intuitively known that healthy eating and physical activity are “good for you.” Historically, physical activity occurred in activities of daily living, such as household chores and recreational pursuits. Additionally, meals were typically prepared and eaten at home. However, our lifestyles have changed over the past decades. Laborsaving devices, such as the automobile and remote control, have replaced a more active way of living, and less nutritious foods have become more accessible through vending machines and “fast food” restaurants. Modern conveniences have contributed to a sedentary lifestyle and increase in chronic disease.

Despite tremendous medical advances, North Carolina faces the devastating human and financial costs of chronic diseases and disabilities. Overweight, obesity, and diabetes are at epidemic proportions. Heart disease, stroke, and cancer claim, prematurely, the lives of thousands and reduce quality of life.

Traditional health promotion efforts have focused on educating the individual about the benefits of a healthy lifestyle and strategies for adopting and maintaining healthy habits. These efforts have been moderately successful in achieving their goals. However, without policies and environments to support these behaviors, they are difficult to initiate and maintain. Individuals who want to become more active may be unable to do so due to a lack of opportunities in their community. Similarly, those who wish to eat a healthy diet may have limited food choices and social support.

The Eat Smart, Move More...North Carolina initiative was developed to address these significant health issues. The North Carolina Blueprint For Changing Policies And Environments In Support Of Healthy Eating and the North Carolina Blueprint For Changing Policies And Environments In Support Of Increased Physical Activity are the cornerstones of the initiative. The Blueprints can assist local communities in enhancing public awareness of the importance of healthy eating and physical activity and the need for supportive policies and environments. They provide strategies and activities for implementing policy and environmental change interventions that support these behaviors.

The Blueprints have been developed for all who are working to increase healthy eating and physical activity opportunities locally and statewide. We hope that you accept the challenge of making North Carolina a healthier place to work and live.
The process of developing the North Carolina Blueprint For Changing Policies And Environments In Support Of Healthy Eating and the North Carolina Blueprint For Changing Policies And Environments In Support Of Increased Physical Activity has drawn upon the collective wisdom of many state and national individuals.

Proudly, the Physical Activity and Nutrition Unit (PAN) Unit, North Carolina Division of Public Health share the Blueprints, the cornerstones of the Eat Smart, Move More…North Carolina initiative.

We believe that fostering policies and environments supportive of healthy eating and physical activity will enhance North Carolinians’ ability to live healthier lives.

The Blueprints Leadership Team wishes to thank all the persons and their organizations that contributed to the Blueprints, especially those who reviewed draft segments (Appendix VII).

The Physical Activity and Nutrition (PAN) Unit also thanks the Health Promotion Branch and our sister units within the North Carolina Division of Public Health, for their ongoing support. We also gratefully acknowledge the Centers for Disease Control and Prevention funded North Carolina Cardiovascular Health Program, the North Carolina Heart Disease and Stroke Prevention Task Force and the North Carolina Advisory Committee on Cancer Coordination and Control for their financial support of the North Carolina Blueprints.

We hope the Blueprints will assist you in your efforts to help address the challenges of healthy eating and physical activity in your sphere of influence.

The lives of countless North Carolinians will be improved significantly when we integrate healthy eating and physical activity into our day-to-day lives.
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What is Eat Smart, Move More... North Carolina?

Eat Smart, Move More...North Carolina is a statewide initiative that promotes increased opportunities for healthy eating and physical activity through policy and environmental change interventions and enhanced public awareness of the need for such changes. Two companion documents were created through the Eat Smart, Move More...North Carolina initiative: the North Carolina Blueprint For Changing Policies And Environments In Support Of Increased Physical Activity and the North Carolina Blueprint For Changing Policies And Environments In Support Of Healthy Eating. The Blueprints provide the strategies and activities necessary for community-based interventions to increase opportunities for healthy eating and physical activity.

Staff of the Physical Activity and Nutrition (PAN) Unit, North Carolina Division of Public Health guide the initiative, but the success of Eat Smart, Move More...North Carolina depends upon broad partnerships among organizations, communities, and individuals across the state. In addition to current partners within the North Carolina Department of Health and Human Services and the Division of Public Health, the initiative embraces the perspectives, expertise, and collective voice of diverse local community groups, health departments, colleges and universities, schools, hospitals, nonprofit organizations, and professional organizations, among many others. The initiative and Blueprints support community partnerships for local and statewide organizations that together can make the vision of healthy communities a reality. Figure 1 illustrates the mission, goals, and objectives of Eat Smart, Move More...North Carolina.
**MISSION STATEMENT:**
To foster policies and environments supportive of healthy eating and increased physical activity.

**GOALS AND OBJECTIVES:**

**Goal 1:** Increase public awareness of the importance of healthy eating and physical activity and the need for supportive policies and environments.

**Objectives:**
1. Increase yearly the number of regular and consistent messages promoting healthy eating and physical activity (e.g., signage posted at elevators to encourage stair use and menu labels indicating healthy food items).
2. Increase yearly the amount of mass media coverage about the importance of healthy eating and physical activity and the need for supportive policies and environments (e.g., newspapers, television, radio, billboards).
3. Increase yearly the number of organizational communications about the importance of healthy eating and physical activity and the need for supportive policies and environments (e.g., newsletters, email messages, flyers).

**Goal 2:** Increase opportunities for healthy eating and physical activity by fostering supportive policies and environments.

**Objectives:**
1. Increase yearly the number of facilities and/or environments that promote healthy eating and physical activity.*
2. Increase yearly the number of policies, practices, and incentives to promote healthy eating and physical activity.*

* This objective also includes enhancing or maintaining existing supports for healthy eating and physical activity.

While the focus of the Blueprints is on fostering policies and environments supportive of healthy eating and physical activity, increasing public awareness of the importance of these behaviors for good health is key to the success of the initiative. It heightens the visibility and credibility of healthy eating and physical activity as public health issues and the need for policies and environments that support these behaviors. Increasing public awareness of the need for policy and environmental changes should be coupled with the strategic use of media to frame the issue and the changes that are needed.
Why policy and environmental change?

It has become increasingly apparent how closely an individual’s health is linked to the social and physical environments (Pan American Health Organization, 1996). Comprehensive efforts to change health behavior must foster supportive policies as well as social and physical environments that encourage healthy lifestyles. Several national tools, including the following documents, emphasize the impact of policies and environments on individual health:

- Association of State and Territorial Directors of Health Promotion and Public Health Education (ASTDHPPHE), Centers for Disease Control and Prevention’s (CDC) *Policy and Environmental Change: New Directions for Public Health* (ASTDHPPHE & CDC, 2001)
- Partnership for Prevention’s *Nine High Impact Actions Congress Can Take to Protect and Promote the Nation’s Health* (Partnership for Prevention, 2000)
- Nutrition and Physical Activity Work Group’s (NUPAWG) *Guidelines for Comprehensive Physical Activity and Nutrition Programs* (Gregory, 2002)
- Centers for Disease Control and Prevention’s *Increasing Physical Activity: A Report on Recommendations of the Task Force on Community Preventive Services* (CDC, 2001)

The North Carolina *Blueprints* are consistent with these national publications in promoting policy and environmental changes to increase opportunities for healthy lifestyles.

In his announcement of the *Call to Action to Prevent and Decrease Overweight and Obesity, 2001*, former Surgeon General David Satcher stated that the growing epidemic of obesity in youth and adults, if not reversed, could wipe out the gains made in reducing heart disease, diabetes, cancer, and other chronic health problems. He goes on to say that addressing overweight and obesity is a community responsibility that requires a multifaceted approach capable of producing long-term results (USDHHS, 2001).

North Carolina is among the first states to create blueprints to increase the healthy eating and physical activity behaviors of its residents through policy and environmental change interventions. Many states share the common health concerns of rising obesity rates, increasing Type 2 diabetes in children, and a high prevalence of cardiovascular disease (CVD). However, few ‘how-to’ manuals for policy and environmental change interventions exist for local efforts. Tools such as the North Carolina Prevention Partners Report Card and
The continuing epidemic of obesity is a critical public health problem. As a nation, we need to respond as vigorously to this epidemic as we do to an infectious disease epidemic. Widespread efforts are needed to encourage physical activity and better nutrition through effective educational, behavioral, and environmental approaches to control and prevent obesity. North Carolina is one of our nation’s leaders in developing an initiative to move communities to adopt healthy eating and physical activity policy and environmental changes in an effort to prevent and combat rising trends in obesity and other chronic diseases.”

William H. Dietz, M.D., Ph.D. Director of the Division of Nutrition and Physical Activity, Centers for Disease Control and Prevention, 2002

The North Carolina Healthy Carolinians’ Community Assessment process may prompt local communities to address healthy eating and physical activity issues. Additionally, there are several North Carolina plans to address specific chronic diseases, such as heart disease, stroke, cancer, and diabetes with recommendations relevant to the Blueprint, which can be found in Chapter 6 and Appendix I. The Blueprints support these and other efforts by seeking to increase opportunities for healthy lifestyles and enhance public awareness of the importance of healthy eating and physical activity.*

Traditional health promotion programs addressing physical activity teach individuals about the benefits of exercise and how to engage in, as well as maintain, an exercise routine. They provide guidelines related to the recommended frequency, intensity, duration, and mode of exercise. Many of these efforts are directed toward generally healthy individuals who have access to physical activity facilities. Though these programs may be reasonably effective for the selected population, they do not reach those who lack access to facilities, who are uninterested in a structured exercise routine, or who are not at least moderately active. Policy and environmental change interventions however, can impact a broad audience and produce long-term changes in health behaviors. These interventions are supported by enhanced public awareness of the need for physical activity opportunities and their influence on health.

What are policy and environmental changes?

The concepts of policy and environmental interventions may be confusing to health professionals as well as to the public. These interventions are designed to improve the health of all people, not just small groups of motivated or high-risk individuals. The following explanations are based on literature addressing policy and environmental interventions and from practical experience of experts in the field.

POLICY CHANGE generally describes modifications to laws, regulations, formal and informal rules, as well as standards of practice. It includes fostering both written and unwritten policies, practices, and incentives that provide new or enhanced supports for healthy behaviors and lead to changes in community and societal norms. Policy changes can occur at different levels, such as the organizational level (a single worksite), the community level, (an entire school system), or at the society level (state legislation) and can often bring about environmental changes. Examples of policy changes related to physical activity include an informal faith organization policy to regularly include physical activity in meetings and events; subdivision ordinances and land use plans with provisions for sidewalks; or state legislation for daily physical education in schools.

* The North Carolina Healthy Weight Initiative’s plan, Moving Our Children Toward A Healthy Weight...Finding The Will and The Way, provides recommendations to affect policy, environmental, and individual/interpersonal change that supports healthy eating and physical activity to address the epidemic of childhood overweight.
Media advocacy is an example of strategic use of media. It is an essential aspect of policy change and stimulates community involvement in addressing a particular issue. Garnering media coverage that focuses attention on health-related policy issues can influence a community’s attitudes and increase the demand for conditions that support physical activity, potentially leading to policy and environmental changes.

**ENVIRONMENTAL CHANGE** describes changes to physical and social environments that provide new or enhanced supports for healthy behaviors. Examples of changes to the physical environment include new or enhanced sidewalks and the addition of regular and consistent messages promoting physical activity. These on-site messages include signs posted at elevators encouraging the use of stairs or signage promoting walking or bicycle trails in the community. Changing the social environment requires altering individuals’ attitudes and perceptions about a particular behavior. It is a gradual process but can be accomplished in part by routine efforts to increase public awareness of the problem as well as potential solutions. Social environmental change includes adopting a behavior as the norm rather than the exception or discouraging a particular behavior. For example, designing a ‘walkable’ community encourages walking or biking as primary means of transportation.

Environmental changes may be the result of policy changes. The creation of a subdivision ordinance requiring sidewalks (policy change) may result in new sidewalks being built (physical environmental change). A worksite that begins to provide flextime for physical activity (policy change) may create a culture in which being physically active is the norm (social environmental change).

**What is considered success?**

This Blueprint identifies a wide variety of intervention strategies and activities in which the outcomes support increased physical activity opportunities for North Carolinians. A detailed list of potential outcomes is provided in Appendix II. Potential outcomes of interventions are identified in the following settings: community environment, schools/childcare, faith communities, worksites, community groups, and health care. Outcomes may be physical changes at facilities and in the environment or changes in a common practice, a policy, etc. The different types of outcomes can be categorized by settings and are depicted in Figure 2. Each community must assess its own needs and potential for change, and, therefore, the outcomes are not prioritized.
Figure 2.
Goal 2: Increase opportunities for healthy eating and physical activity by fostering supportive policies and environments.

Objective 1: Increase yearly the number of facilities and/or environments that promote healthy eating and physical activity.

Potential Outcomes:
- parks and playground facilities
- equipment for physical activity
- walking trails, sidewalks, and designated bike lanes
- well-maintained stairwells

Objective 2: Increase yearly the number of policies, practices, and incentives to promote healthy eating and physical activity.

Potential Outcomes:
- municipal policies to dedicate a portion of funds for pedestrian and/or bicycle facilities on an annual basis
- flextime policies allowing employees opportunities for physical activity
- policies requiring daily physical education/activity for all students
- guidelines or practice to regularly incorporate physical activity in patient or family education

“Many people believe that dealing with overweight and obesity is a personal responsibility. To some degree they are right, but it is also a community responsibility. When there are no safe, accessible places for children to play or adults to walk, jog, or ride a bike, that is a community responsibility.”

David Satcher, M.D.
Former Surgeon General,
Call to Action to Prevent and Decrease Overweight and Obesity, 2001

Focusing on policy and environmental changes acknowledges that collectively individuals can reduce or eliminate the barriers to physical activity. This document, along with its companion, the North Carolina Blueprint For Changing Policies And Environments In Support Of Healthy Eating, provide strategies and activities to aid local organizations in enhancing public awareness of the importance of healthy eating and physical activity and implementing policy and environmental change interventions that support these behaviors.
References and Resources


North Carolina faces several significant health challenges: over half of the state’s residents are either overweight or obese; one in every four North Carolinians has some form of cardiovascular disease; and the prevalence of diabetes has increased 42 percent since 1995. Physical inactivity is a major behavioral risk factor for these and other chronic disabling diseases.

Defining physical activity

In everyday speech, the words “physical activity” and “exercise” are often used interchangeably. However, there are important differences in the meaning of these terms. Physical activity is defined as any bodily movement resulting in energy expenditure; whereas exercise is defined as physical activity that is planned, structured, repetitive, and designed to improve or maintain one or more components of physical fitness. Physical activity is a part of many daily activities, such as household chores, sports, hobbies, and job-related duties. The term “exercise,” however, implies a specific amount of continuous time set aside for structured activity. According to the US Surgeon General’s 1996 Report on Physical Activity and Health, individuals need at least 30 minutes of moderate to vigorous intensity physical activity on preferably all days of the week. This activity does not need to be completed all at once, but can be accumulated throughout the day, ideally in at least 10 minute segments. Specific activities could include walking to the store or mailbox, gardening, or parking your car further away from your destination.

The distinction between these terms is important as it directly influences how likely individuals are to incorporate physical activity into their daily routines. They may be more likely to participate in shorter bouts of moderate activity than longer durations of more vigorous activity. Both physical activity and exercise can contribute to overall physical fitness levels and health. However, individuals who maintain a regular activity routine that is more vigorous and of a longer duration

<table>
<thead>
<tr>
<th>Moderate-Intensity Physical Activity:</th>
<th>Vigorous-intensity Physical Activity:</th>
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<tbody>
<tr>
<td>Any activity performed at 50 to 69 percent of maximum heart rate. It is equivalent to sustained walking, is well within most individuals’ current physical capacity, and can be sustained comfortably for a prolonged period of time (at least 60 minutes). Examples can include gardening, yardwork, or dancing.</td>
<td>Hard or very hard physical activity requiring sustained, rhythmic movements and performed at 70 percent or more of maximum heart rate. Examples can include running, swimming laps, and jumping rope.</td>
</tr>
</tbody>
</table>
are likely to receive greater benefits (US DHHS, 2000). Appendix III provides further information about the distinction between physical activity and exercise.

It is equally important to distinguish the difference between the concepts of physical fitness and health. Physical fitness is defined as the ability to carry out daily tasks with vigor and alertness, without undue fatigue, and with ample energy to enjoy leisure-time pursuits and to meet unforeseen emergencies. Components of physical fitness include cardiorespiratory endurance, muscular strength and endurance, and flexibility. Health, as defined by the World Health Organization, is “a complete state of physical, mental, and social well-being and not merely the absence of disease or infirmity.” It has also been defined in less abstract terms by the Pan American Health Organization (1996) as “the ability to achieve one’s potential and to respond positively to challenges of the environments.” Moderate amounts of physical activity can substantially improve health and quality of life. For those who are currently moderately active, additional benefits can be gained by further increasing activity levels.

Why physical activity is important

Physical activity helps to enhance the quality of life for people of all ages and abilities. Sedentary individuals can substantially reduce the risk of developing heart disease, diabetes, osteoporosis, and colon cancer just by becoming moderately physically active on most days of the week (US DHHS, 1998). Regular physical activity can also help reduce other heart disease risk factors such as high cholesterol, hypertension, and overweight, as well as protect against stroke. It helps to build a healthier body by strengthening bones, muscles, and joints; aids in reducing depression and anxiety; and enhances the immune response system. Physical activity can reduce falls among the elderly by improving balance and strength as well as help relieve the pain of arthritis. Health-related behavior patterns are established during childhood (CDC, 1997). Therefore, it is essential to encourage youth to establish physical activity-related habits in order to obtain lifelong health benefits.

Many people do not understand how even small amounts of physical activity can significantly improve their health and quality of life, especially if they have never been active. The term exercise may suggest a rigorous and highly structured fitness program, which may discourage them from becoming more physically active. Farmers may not see any value in physical activity after retiring from long years of farm labor; parents may not be aware that many schools do not allot adequate time for physical activity on a regular basis; and residents of counties without physical activity opportunities may see little need for finding resources to create them when there are other pressing concerns.
Modern lifestyles include many laborsaving devices and conveniences, such as the automobile and the remote control, that have reduced daily physical activity (Epstein, 1998). Figure 3 demonstrates that an estimated 10,000 deaths in North Carolina were due to unhealthy eating and physical inactivity during 2000 alone, with only tobacco use causing more deaths (NC DHHS, 2000). In order to prevent deaths and disabilities attributed to physical inactivity, it is important to first understand the extent to which the people in our state are physically inactive. The Youth Risk Behavior Surveillance System (YRBSS) and the Behavioral Risk Factor Surveillance System (BRFSS) are two main sources of data on physical activity among youth and adults in both North Carolina and the United States. These data show that not enough North Carolinians are getting the recommended amounts of physical activity needed to promote health.

North Carolina Prevention Partners Report Card

Data for the measures in the Year 2000 Prevention Report Card was gathered by the North Carolina Prevention Partners Report Card Working Group, involving epidemiologists, evaluators, and program staff of agencies working in various health sectors. The working group obtained the adult and youth behavioral data from the Centers for Disease Control and Prevention, in partnership with the Division of Public Health, NC DHHS, and the Department of Public Instruction. National and state data were also obtained by program staff using internal data sources, State Center for Health Statistics information and/or contacting national program offices.
YOUTH

North Carolina youth are not getting enough physical activity to ensure their health. The 2001 North Carolina Youth Risk Behavior Surveillance System (NC YRBSS) showed that only 68 percent of high school students participated in regular physical activity (Figure 4). Another 21 percent engaged in some physical activity (but not enough to be considered regular), and 11 percent did not engage in any physical activity. Although this is very similar to the 2001 national YRBSS data (69 percent of U.S. high school students engaged in regular activity, 22 percent in some activity, and 9 percent in no activity), the fact remains that too few North Carolina youth are getting enough physical activity. The 2001 NC YRBSS also showed that some groups of high school students were less physically active than other groups. High school girls were less active than boys; only 60 percent of girls engaged in regular physical activity compared to 76 percent of boys, and 14 percent of girls did not engage in any physical activity, which was double the 7 percent among boys (Figure 5).

Participation in all forms of physical activity declines dramatically as youths mature (US DHHS, 1996). Figure 6 shows that physical activity levels among North Carolina students decreases between the 9th and 12th grades (NC YRBSS, 2001). This drop in physical activity levels was more pronounced among girls than boys, creating increasingly wide gaps in physical activity levels between girls and boys. For example, in the 9th grade, 81 percent of boys and 73 percent of girls engaged in regular activity, a difference of 8 percent. But in the 12th grade, 70 percent of young men and only 49 percent of young women engaged in regular activity, a difference of 20 percent. Physical activity levels among North Carolina high school students also varied by race and ethnicity. African American and Hispanic students were less physically active than White students; only 63 percent of African American students and 65 percent of Hispanic students engaged in regular physical activity compared to 71 percent among White students (Figure 7). Many of the patterns seen in the NC YRBSS data are consistent with those seen at the national level and in research studies. Other reports have consistently shown that girls are less active than boys, teenagers are less active than younger children, and African American girls are the least active of all (CDC, 1997).
Findings from the Centers for Disease Control and Prevention (1997) indicate that environmental factors, including access to convenient play spaces and sports equipment as well as transportation to sports or fitness programs, influence levels of physical activity among youth. The amount of physical education required in schools is another important environmental influence. Because many schools offer physical education classes, it is often incorrectly assumed that children achieve adequate levels of physical activity.

In North Carolina during 2001, less than half of middle and high school students attended physical education classes daily, with the exception of 9th graders where 59 percent of students attended daily physical education classes. This percentage declines substantially after 9th grade, with only 20 percent of 11th and 12th grade students attending physical education daily (Figure 8).

Attendance in physical education classes does not ensure adequate time for physical activity. The current state physical education requirement is a total of one credit between the 9th and 12th grades. This credit is divided between health education and physical education, and physical education is further divided between instruction and participation in physical activity. Local Education Agencies (LEA’s) have the authority to increase physical education requirements locally and requirements vary throughout the state. Time for physical activity during lunch breaks and/or recess has virtually been eliminated in schools, creating a greater need for physical activity within the school setting. This need is widely recognized (CDC, 1997; Partnership for Prevention, 2000; National Governors’ Association, 2002) and is one of the six physical activity interventions recognized by the Task Force on Community Preventive Services (CDC, 2001).

Physical inactivity has obvious implications for youth. According to the North Carolina Nutrition and Physical Activity Surveillance System, the prevalence of overweight increased dramatically among all age groups of North Carolina children between 1995 and 2001 (Figure 9). The North Carolina Healthy Weight Initiative and its 100-member Task Force have developed an action plan titled Moving Our Children Toward A Healthy Weight... Finding The Will and The Way. This plan provides recommendations to affect policy, environmental, and individual/interpersonal change that supports increased physical activity to address the epidemic of childhood overweight.

Figure 7. Physical Activity Levels by Race/Ethnic Group, North Carolina High School Students, 2001

<table>
<thead>
<tr>
<th>Race/Ethnic Group</th>
<th>No Activity</th>
<th>Some Activity</th>
<th>Regular Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>8.4</td>
<td>21.1</td>
<td>70.5</td>
</tr>
<tr>
<td>Black</td>
<td>15.4</td>
<td>21.3</td>
<td>63.3</td>
</tr>
<tr>
<td>Hispanic</td>
<td>9.6</td>
<td>25.5</td>
<td>64.9</td>
</tr>
</tbody>
</table>


Figure 8. Percentage of North Carolina Students Who Attend Physical Education Daily, 2001

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>58.7</td>
</tr>
<tr>
<td>10th</td>
<td>27.8</td>
</tr>
<tr>
<td>11th</td>
<td>20.2</td>
</tr>
<tr>
<td>12th</td>
<td>20.2</td>
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</tbody>
</table>


Figure 9. Prevalence of Overweight (BMI ≥ 95th Percentile) in Children by Age Group, NC-NPASS*, 1995 to 2001

* North Carolina Nutrition and Physical Activity Surveillance System (NC-NPASS) includes data on children seen in North Carolina Public Health Sponsored WIC and Child Health Clinics and some School Based Health Centers. Percentiles were based on the CDC/NCHS Year 2000 Body Mass Index (BMI) Reference.
In North Carolina, adult participation in physical activity is below the already low national average. In 2000, only 18 percent of adults reported participating in regular and sustained physical activity (30 minutes of physical activity at least five times per week)—the best estimate of the percentage of North Carolina adults meeting the 1996 Surgeon General’s recommendations for physical activity (Figure 10). This means that 82 percent of adults were not achieving the recommended level of physical activity (NC DHHS, 2000). (The data collected through this survey focuses on leisure activity that is unrelated to occupation, so it will most likely underestimate physical activity for those in physically demanding jobs.) The percentage of North Carolina adults engaging in regular and sustained physical activity has been below 20 percent since 1987.

Physical inactivity contributes to overweight and obesity, which are major contributors to many preventable causes of death. Overweight is defined by the National Institutes of Health (NIH) as a body mass index (BMI) greater than 25; obesity is defined as a BMI greater than 30. Overweight and obesity raise the risk of illness from high blood pressure, high cholesterol, diabetes, heart disease, and stroke, among other illnesses. Since 1990, the percentage of North Carolina adults who are overweight has increased from 33 percent to 37 percent in 2000. During the same time, the prevalence of obesity has nearly doubled from 13 percent to 22 percent (Figure 11). Combined, this means that the majority of adults (59 percent) in North Carolina are now either overweight or obese. Figures 12 and 13 depict the national obesity epidemic throughout the past decade.

The number of people with diabetes in North Carolina has exceeded one half million (approximately 1 in 13 people). Since 1995 the percentage of North

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**Body Mass Index (BMI)**

is an indicator of body size based on height and weight with good correlation to body fat. It is calculated as weight in kilograms divided by height in meters squared. The standard adult categories are underweight (BMI less than 18.5 kg/m²), normal (18.5-24.9 kg/m²), overweight (25-29.9 kg/m²), and obese (30 or more). For children (ages 2-20), a BMI below the 5th percentile for age and gender is underweight; between the 85th and 95th percentile is at risk for overweight; at or above the 95th percentile is overweight.

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**Figure 10. Physical Activity Levels Among North Carolina Adults, 2000**

<table>
<thead>
<tr>
<th>Activity Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Activity</td>
<td>30.4%</td>
</tr>
<tr>
<td>Some Activity</td>
<td>51.3%</td>
</tr>
<tr>
<td>Regular &amp; Sustained</td>
<td>18.3%</td>
</tr>
</tbody>
</table>


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**Figure 11. Percentage of North Carolina Adults Who Are Overweight or Obese, 1990-2000**

- Overweight
- Obese

Data Source:
North Carolina Behavioral Risk Factor Surveillance System,
Carolina adults who have diabetes has increased 42 percent (Figure 14). As this disease continues to increase, so do its modifiable risk factors: physical inactivity, overweight and obesity, and unhealthy diet. Increasing physical activity levels and losing 10-15 pounds for individuals who are overweight can decrease the risk of developing Type 2 diabetes in 30-60 percent of those who are at risk of developing the disease. Additionally, weight control and daily activity can assist in managing diabetes and preventing complications. Diabetes is a contributing factor to heart disease, blindness, hypertension, stroke, and kidney failure and its prevalence increases with age. Prevalence rates are 1.5 times higher among African Americans (9 percent) than Whites (6 percent), while American Indians have the highest rates (10 percent). (North Carolina Diabetes Prevention and Control Program, 2001)

Reaching the North Carolina 2010 Objective of increasing the proportion of adults (18 years and older) who engage in physical activity for at least 30 minutes on 5 or more days of the week to 20 percent will be a challenge, but is certainly attainable. Refer to Appendices IV and V for outlines of the North Carolina 2010 and the Healthy People 2010 Objectives. One way to increase physical activity levels is to incorporate activity into people’s daily lives; for example, taking the stairs instead of the elevator, parking further away from the destination, or walking or bicycling instead of driving for short trips. Characteristics of the community environment can also influence physical activity levels. A neighborhood with high crime levels or busy streets with no sidewalks or crosswalks can create barriers to physical activity for its residents. Data on these types of environmental factors in North Carolina are limited, but one survey of adults in six North Carolina counties (Cabarrus, Henderson, Pitt, Robeson, Surry, and Wake) found that only 39 percent had sidewalks in their neighborhood; only 25 percent had a biking, walking, or jogging trail; and 11.5 percent said they did not have access to any place (indoor or outdoor) to be physically active. The survey also addressed the issue of neighborhood safety, and 13 percent of the respondents said that their neighborhood was not at all safe or only slightly safe; 39 percent said there was heavy traffic in

“The majority of North Carolina adults (59 percent) are either overweight or obese.”


Figure 12. Obesity* Prevalence Among U.S. Adults, 1990

![Map of U.S. Adults, 1990](source: BRFSS, CDC)

Figure 13. Obesity* Prevalence Among U.S. Adults, 2000


No Data  <10%  10%-14%  15%-19%  ≥20%

*BMI≥30.0 or ~ 30 lbs. overweight for 5'4" person
their neighborhood; and 31 percent reported that there were unattended
dogs in their neighborhood (North Carolina 6-County Cardiovascular Health
Survey, NC DHHS, 2000). All of these neighborhood characteristics may
influence the physically activity levels of residents.

OLDER ADULTS

People 65 years of age and older are one of the fastest growing population
groups and carry the greatest proportion of chronic disease burden, disability,
and utilization of health care services. Impaired physical functions can
become evident as early as the fifth decade of life. (King, Rejeski, & Buchner,
1998). Because of this, promoting health and limiting disability should be a
lifelong effort. In 2000, over one third of American men and women ages 65-
74 years reported no physical activity. Figure 15 shows the level of physical
activity across age groups for North Carolina adults during 2000: only 19
percent of North Carolina adults age 65 and older engaged in regular and
sustained physical activity, and only 64 percent engaged in any physical
activity. While the percentage of adults engaging in regular and sustained
physical activity was similar across age groups, generally the percentage
engaging in any physical activity decreased as age increased. However, there
is an increase in activity between the 55-64 and over 65 age groups that may
be attributed to retirement and increased leisure time. Formal classes and activities may not be of interest to
some older adults. One review of physical activity interventions targeting older adults showed that
many older adults prefer to be physically active through individual activities and not through formal
group classes (King, et. al., 1998). However, these individuals may also feel unsafe walking in their
community or lack accessible places to walk.
RACIAL AND ETHNIC GROUPS

Some racial and ethnic populations are more likely to have preventable chronic diseases related to sedentary lifestyles. Interventions that increase levels of physical activity can significantly impact their health, quality of life, and health care costs. Programs have been designed to address the specific cultural and health behavioral issues of African American and Mexican American populations, but very few interventions have explored the specific cultural needs of other groups such as Latinos, Asians, and American Indians (Taylor, Baranowski, & Young, 1998). Figure 16 compares the levels of physical activity between Hispanics, non-Hispanic African Americans, and non-Hispanic Whites in North Carolina. Only 62 percent of African Americans reported engaging in any leisure activity, lower than the 71 percent among whites and 67 percent among Hispanics. Information on physical activity levels among American Indians in North Carolina is limited, but one survey of Robeson County, North Carolina residents conducted in 2000 found that American Indians were less likely to report any leisure-time physical activity (50 percent) than whites (62 percent) or African Americans (64 percent) (North Carolina 6-County Cardiovascular Health Survey, NC DHHS, 2000).

PEOPLE WITH DISABILITIES

According to the 2000 NC BRFSS, 25 percent of North Carolina adults, more than 1.4 million people, are living with some type of disability. This is possibly an underestimate due to the sampling methods used by the BRFSS, which does not include people living in institutional settings or people with hearing impairments who rely on text telephones, often called Telecommunications for the Deaf (TTY/TDD). Furthermore, the data also excludes people who are unable to complete the phone interview. Figure 17 shows that North Carolina adults who have a disability are less likely to be physically active than those who do not have a disability; only 61 percent of those with any disability reported any physical activity in the past month, compared with 73 percent of those with no disability. Individuals who have disabilities may not be encouraged to engage in physical activity. However, all health risks due to physical inactivity apply to people with disabilities. Physical activity is an important component of health promotion for persons with disabilities and is linked to the prevention of disease and further medical complications (Fletcher & Vassallo, 1993). Being physically active can also contribute to an increased ability to live independently and to an improved quality of life (US DHHS, 1996).
**The financial cost**

A preliminary cost analysis of physical inactivity, which included workers’ compensation conditions and lost productivity measures, revealed that the annual cost of physical inactivity for North Carolina is approximately $6.2 billion (Health Management Associates, 2001). Lost productivity measures include on the job injuries, absenteeism, and presenteeism (present at work, but less productive). This cost will inevitably rise due to the state’s aging population, population growth, high prevalence of physical inactivity, and medical care cost inflation. If medical care costs continue to rise at 11.6 percent per year; workers’ compensation costs continue to rise at least 9.3 percent per year; and employment cost index components continue to rise at least 3.8 percent per year, then physical inactivity costs could increase from $6.2 billion in 2000 to more than $9.3 billion in 2005 (Health Management Associates, 2001).

If the current percentage of physically inactive residents (59.6 percent) could be reduced 5 to 10 percent, the statewide financial toll from this modifiable risk factor could be substantially reduced. Even a 5 percent reduction in the percentage of physically inactive adults could save approximately $2 billion over a 5-year time frame or approximately $400 million per year (Health Management Associates, 2001).

This cost analysis illustrates the impact of physical activity on the health, productivity, and economic status of North Carolina residents and employers. Residents have a stake in reversing the physical inactivity epidemic as their taxes pay for many related illnesses through Medicare and Medicaid. Additionally, employers provide health care benefits for many of North Carolina’s 3.8 million workers, and thereby pay for the cost incurred due to physical inactivity and other potentially modifiable risk factors. The financial cost of physical inactivity can reduce industry and business growth, salaries and wages, and governmental services. Overall, efforts to promote wide-scale physical activity can lead to a healthier, more productive North Carolina.

**The social and environmental costs**

Beyond the more specific health care and employment costs due to physical inactivity, there are broad environmental and social costs that are often not considered. Environmental costs due to physical inactivity include expenditures such as gasoline for short trips that could have been traveled on foot or by bicycle. According to the North Carolina BRFSS, only 15 percent of North Carolina adults bicycle or walk at all for transportation (Figure 18). These data were based on the hours in the past week that respondents reported walking or biking for transportation, such as to and from work or shopping. The environmental impact of additional exhaust emissions is also a significant issue (Garrett & Wachs, 1996). These emissions contribute to the formation of ground-level ozone, which is detrimental to human health as well as natural resources.
The savings in environmental costs could be dramatically increased if more people chose alternative modes of travel like bicycling and walking for short trips. Not only do these actions increase physical activity opportunities, but they also protect the environment.

The social costs related to transportation issues include decreased social interaction and community involvement. As individuals are increasingly required to use automobiles as a primary means of transportation, their contact with others decreases. Driving to their destination does not provide an appropriate opportunity to interact with other individuals. Additionally, long commutes to and from work decreases time spent with family and involvement in community activities. These factors combine to minimize social integration at both the individual and societal level. This lack of social capital often impacts the economic and health status of the community. More socially integrated communities have a higher overall quality of life as well as lower rates of crime, suicide, and mortality from all causes. (Institutes Of Medicine, 2001). Exhaust emissions contribute to ground-level ozone, or urban smog, which can increase susceptibility to respiratory infection and impair lung functioning. Children, the elderly, and individuals with respiratory illnesses, such as asthma, are most susceptible to these pollutants. Individuals who exercise outdoors are also impacted by air pollution. They tend to process larger quantities of air and breathe through their mouths, bypassing the filtering mechanisms of the nasal passages. Reducing exposure to air pollution includes restricting time outdoors when ozone levels are high, thereby decreasing physical activity opportunities as well as social interaction.

References and Resources

http://www.cdc.gov/nccdphp/dash/guidelines/physact.htm


A multi-level approach to change

Many factors affect individuals’ decisions and abilities to practice positive behaviors or to make needed lifestyle changes (such as incorporating physical activity into their daily routines). These factors include the physical and social environments of their communities and organizations, the policies, practices, and norms within their social and work settings, and their access to information. The Eat Smart, Move More...North Carolina initiative bases its approach to health promotion on a multi-level model, also called a socio-ecological model. This framework for implementing health promotion programs acknowledges the various factors that influence an individual’s ability to change (Figure 19). It emphasizes that everyone lives within physical environments and social systems, sometimes called “social ecology”, that influence individual health. Lasting changes in health behaviors require physical environments and social systems that support positive lifestyle habits (McLeroy, 1988).

Traditionally, health behavior interventions have focused primarily on individual and interpersonal levels of the multi-level model. These interventions, including education, counseling, screenings, and displays at health fairs, have been moderately successful in educating individuals about the benefits of healthy lifestyles. However, successful behavior change is difficult to achieve and sustain without changes in the surrounding organizational, community, social, and physical environments. Interventions implemented at the upper three levels of the model depicted in Figure 19 help to support those at the individual and interpersonal levels. According to the US DHHS (1999), “environmental interventions contribute to behavior change by...implementing measures that will make it easier for people to engage in the desirable behaviors...while making it more difficult to
engage in competing and less desirable behaviors.” Confidence in adopting and maintaining a behavior may be strengthened when the environment supports the new behavior. Policies can assist in behavior change by stimulating changes in the physical environment that make physical activity possible, safer, and easier in addition to altering behavioral norms.

People who do not have opportunities to pursue physical activity in their school, work, or community environments often are unable to act on the information provided by more traditional programs. In order for people to effectively use and act on information about physical activity, their environments must be supportive. For example, community members may understand the benefits of physical activity and want to begin walking more frequently. However, they may be unable to do so because there are no sidewalks, the traffic is dangerous, or the walking trail is not well maintained. Others may want to ride their bicycles to work, but do not have a safe route on which to travel, a place to store their bicycles at their worksites, or the facilities to shower and change their clothing.

The use of mass media and tools such as media advocacy and social marketing not only effectively convey physical activity messages, but they also help to frame issues and focus on policy and environmental 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.”

Nutrition and Physical Activity Workgroup (NUPAWG), 2002
Centers for Disease Control and Prevention
Division of Nutrition and Physical Activity

The North Carolina Blueprint For Changing Policies And Environments In Support Of Increased Physical Activity is designed to facilitate environmental and policy change by focusing primarily on the upper three levels of the multi-level approach: the organizational, community, and societal levels as depicted in Table 1. Enhanced public awareness of the need for such changes is essential to gaining community support for these efforts. Sample interventions are provided for each level, and Appendix VI contains sample action plans for specific projects.
Table 1. Demonstrating the Multi-Level Approach to Improving Physical Activity

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Society</strong></td>
<td>Developing and enforcing state policies and laws that can increase beneficial health behaviors. Developing media campaigns that promote public awareness of the health need and advocacy for change.</td>
</tr>
<tr>
<td><strong>Community</strong></td>
<td>Coordinating the efforts of all members of a community (organizations, community leaders, and citizens) to bring about change. Developing and enforcing local policies and ordinances that support beneficial health behaviors.</td>
</tr>
<tr>
<td><strong>Organizational</strong></td>
<td>Changing the policies, practices, and physical environment of an organization (e.g., a workplace or school) to support behavior change.</td>
</tr>
<tr>
<td><strong>Interpersonal</strong></td>
<td>Recognizing that groups provide social identity and support, interpersonal interventions target groups, such as family members or peers.</td>
</tr>
<tr>
<td><strong>Individual</strong></td>
<td>Motivating change in individual behavior by increasing knowledge, influencing attitudes, or challenging beliefs.</td>
</tr>
</tbody>
</table>

**Examples:**
- Partnering with North Carolina Department of Transportation to increase facilities (sidewalks, greenways, bike lanes) for walking and bicycling; improving the quantity and quality of physical education in North Carolina schools; developing statewide media campaigns promoting the need for environments that encourage physical activity.
- Collaboration among community leaders to influence social norms and policies about physical activity; forming a community coalition to assess physical activity facilities; Local Physical Activity and Nutrition Coalitions (LPANs) to develop educational presentations for other groups; community groups to demand zoning for “greenspace” or bike lanes.
- Designating time for employees to work out; sponsoring physical activity events within a faith organization; including physical activity messages in school/childcare newsletters, physicians and their staff adopting a policy of educating patients about physical activity.
- Written information given to parents; training lay health advisors; developing buddy systems and support groups like walking clubs.
- Offering aerobic exercise and cooking classes; developing booths and displays for county fairs; offering one-on-one counseling; targeting behavior change through media campaigns (posters, billboards, newspaper stories, and radio/television/newspaper advertisements).
Intervention settings

Settings, also referred to as channels, are the sites where interventions occur. They include worksites, faith organizations, health care settings, schools/childcare, community groups, and the physical environment of local communities (e.g., universal access to sidewalks and physical activity facilities). Individuals can be impacted in multiple intervention settings. Therefore, achieving the Eat Smart, Move More...North Carolina goals and objectives requires intervening concurrently in several settings. This necessitates a comprehensive approach to addressing the policies and environments of organizations and communities that affect individuals’ health behaviors.

Building a foundation for healthier communities

Six critical factors in implementing policy and environmental change interventions have been identified through a nationwide assessment. They include (1) meaningful collaborations, (2) community support, (3) support of decision makers, (4) science-based support of the intervention, (5) adequate funding and resources, and (6) skilled staff (Association of State and Territorial Directors of Health Promotion and Public Health Education, Centers for Disease Control and Prevention, 2001).

First, implementing policy and environmental interventions requires meaningful collaborations. A coalition is an effective means of convening individuals and organizations interested in promoting physical activity. It is an alliance of varied organizations and groups united around salient issues or common interests or problems addressing their goals through cooperation, advocacy, capacity building, social change, or community action (US DHHS, 1999). By joining together, agencies and organizations can maximize their resources and avoid duplicating efforts. Over half of the 100 counties in North Carolina have formed Local Physical Activity and Nutrition Coalitions (LPANs) to increase opportunities for healthy lifestyles in their communities.

The first step in building a coalition is to identify potential partners. These partners may share a common vision, have previously attempted a similar project, or represent a population that would enhance the coalition. A diverse membership that participates in planning, action, and maintenance is essential, though individuals who participate in the planning process are sometimes different from those who serve well in the implementation phase. The Local Physical Activity and Nutrition Coalition Manual: Guide for Community Action provides further information for member recruitment.
The Centers for Disease Control and Prevention (1997) has established the following principles in developing partnerships: public health decisions must be based on sound science and public good; benefits to society must be a higher goal than benefits to any partner in the collaboration; the participating agencies must be diligent stewards of public trust and funds; and the agencies and their employees should conduct business according to the ethical standards that govern each respective agency. Whether you are part of a private organization or working with one, these guidelines provide direction for developing and maintaining partnerships.

A coalition takes time to develop and undergoes a general process. Typically, the developmental stages are formation, implementation, maintenance, and achieving goals and objectives (Butterfoss, 1993). The coalition’s mission and objectives are established during the formation stage. The goals of the coalition should be defined from the outset, along with the members’ roles and responsibilities. Developing an action plan will assist the coalition in designing effective interventions to help reach its goals. These activities are initiated in the implementation stage and expanded during the maintenance stage. Evaluation is critical during the implementation and maintenance stages to determine if the interventions are being implemented as planned. Chapter V provides further detail on action planning and evaluation methods.

In addition to meaningful collaborations, the support of community members and decision-makers is essential to policy and environmental change interventions. Community efforts designed by a diverse group of citizens are likely to be representative of and supported by the community. The support of key decision-makers can be gained by inviting them to participate in the coalition or sharing information about the coalition and its activities.

Accurate data are necessary to guide the development of policy and environmental interventions. Conducting a needs assessment will aid in identifying a community’s health needs and determining priorities. Interventions are designed based on this information, and their impact can be evaluated through further data collection. Sound data help guide the progression of an intervention and provide credibility for the coalition as well as the intervention.

Most communities have resources that can assist the coalition in initiating and sustaining its efforts. Financial resources can be attained through grants, donations, or fundraising efforts. In-kind contributions are equally important and may include administrative resources for the coalition in general as well as project-specific contributions. Examples of administrative resources are meeting space, telephone access, computer and photocopier usage, postage, and administrative assistance. Project-specific contributions can include donations of goods or services such as trees to line a new trail, or the construction of park benches by volunteers. Coalition members,

“Local Physical Activity and Nutrition Coalitions have a unique opportunity and obligation to create public opportunities for healthy lifestyles. When committed citizens rally behind their common goals, through an organized plan of action, great things can happen in a community.”

Carolyn Crump, Ph.D.
Lead Consultant,
School of Public Health,
UNC-Chapel Hill
Local Physical Activity and Nutrition Coalition Manual, 2001
“Across the nation, many communities are undergoing a renaissance. Together, citizens, businesses, and governments are making their communities more walkable and bikeable.”

Creating Communities for Active Aging: A Guide to Developing a Strategic Plan to Increase Walking and Biking by Older Adults in Your Community, 2001

Community businesses, or local organizations may donate these resources. Additional in-kind resources may include the skills and expertise of coalition members. For example, individuals in the health care field may provide medical credibility and information for the coalition and its initiatives. Participation of local media personnel is also valuable to the coalition. They can assist in developing strategies for increasing public awareness about the need for policies and environments that are supportive of increased physical activity. They may also provide media coverage for the coalition and its activities. The Local Physical Activity and Nutrition Coalition Manual: Guide for Community Action provides further information for planning and implementing Local Physical Activity and Nutrition Coalition (LPAN) interventions.

Finally, skilled staff are necessary for implementing policy and environmental change interventions. This is a new concept for many individuals working in the health field. Capacity building efforts and staff training may be necessary prior to initiating such interventions.

Once a coalition has developed its capacity to implement policy and environmental interventions and identified its specific needs within the local community, it is ready to address the goals and objectives of the Eat Smart, Move More...North Carolina initiative. These goals and objectives are discussed in detail in Chapter IV.

References and Resources


The North Carolina Blueprint For Changing Policies And Environments In Support Of Increased Physical Activity and its companion document, the North Carolina Blueprint For Changing Policies And Environments In Support Of Healthy Eating were developed to assist local health promotion efforts in increasing opportunities for healthy behaviors. The Blueprints provide the strategies and activities necessary to achieve the Eat Smart, Move More...North Carolina goals: (1) increase public awareness of the importance of healthy eating and physical activity and the need for supportive policies and environments; and (2) increase opportunities for healthy eating and physical activity by fostering supportive policies and environments. These goals complement each other and, together with the objectives, provide the framework for implementing policy and environmental change.*

GOAL 1: Increase public awareness of the importance of healthy eating and physical activity and the need for supportive policies and environments.

Increasing public awareness of the importance of physical activity is a critical step in getting the issue of physical activity on the public agenda. A public awareness campaign informs the public about why they should be concerned about a particular issue. Media can provide visibility and credibility for an issue as well as aid in reaching opinion leaders, policy makers, and the public. The use of social marketing techniques moves efforts beyond increasing knowledge to stimulating action on the part of the selected audience. Social marketing uses commercial marketing techniques to promote the adoption of a behavior that will improve the health or well being of a specific audience (Weinreich, 1999). It uses a consumer-oriented approach as well as identifies and responds to the needs of the audience.

Social Marketing:
Applying advertising and marketing principles and techniques (e.g., applying the planning variables of product, promotion, place, and price) to health or social issues with the intent of bringing about behavior change. The social marketing approach is used to reduce the barriers to and increase the benefits associated with the adoption of a new idea or practice within a selected population.

Public Awareness: The public’s knowledge of a particular issue.

* See companion document North Carolina Blueprint For Changing Policies And Environments In Support Of Healthy Eating for a description of goals and objectives as they relate to healthy eating.
Objective 1: Increase yearly the number of regular and consistent messages promoting healthy eating and physical activity.

Regular and consistent messages encourage healthy behaviors within various intervention settings. They can serve as point of decision prompts or as ongoing reminders for physical activity. For example, physical activity messages can be regularly incorporated into patient education materials distributed through health care settings. Additionally, signs promoting local physical activity opportunities could be strategically posted throughout the community. Regular and consistent messages encourage individuals to become more physically active, which can assist in changing social norms. Consistent cues promoting physical activity opportunities throughout various settings reinforce the “move more” message and facilitate the adoption of that behavior.

Objective 2: Increase yearly the amount of mass media coverage about the importance of healthy eating and physical activity and the need for supportive policies and environments (e.g., newspapers, television).

Promoting public awareness about the importance of physical activity and the need for supportive policies and environments requires a clearly defined media strategy. Social marketing techniques are useful tools for increasing public awareness. These techniques can be used to increase awareness of the importance of physical activity as well as to frame the issues and stimulate action.

Social marketing uses commercial marketing techniques to promote the adoption of a behavior that will enhance health or well-being. Its process entails five general steps: (1) planning, (2) message and materials development, (3) pretesting, (4) implementation, and (5) evaluation and feedback (Weinreich, 1999). Planning provides the foundation on which the rest of the process is built. It includes understanding the problem and determining the appropriate audience. The second step, message development, is based on information gathered in the planning stage. It includes identifying appropriate channels for reaching the selected audience and developing effective messages for that audience. The third step of the social marketing process involves pretesting the messages and materials within a selected audience. This may involve the use of focus groups, interviews, or questionnaires. Based on the feedback gathered from such methods, the messages are refined and prepared for implementation. The implementation stage requires the determining how the messages will be sent, what type of media will be used (paid vs. free), and how publicity will be generated. The final step in the social marketing process is evaluation and feedback. This step provides feedback as to whether the program objectives have been met and helps shape future improvements to the process.
**Objective 3: Increase yearly the number of organizational communications about the importance of healthy eating and physical activity and the need for supportive policies and environments (e.g., newsletters, email messages).**

Internal communication sources can assist in changing the social and physical environments of organizations. Examples of organizational communications include newsletters, sermons, classes, lectures, posters, videos, announcements, training materials, employee benefits literature, and websites. These communication sources can be used to help organizational leaders and members understand the need for increasing physical activity and fostering policies to create supportive environments. For example, faith organizations could regularly include physical activity messages in sermons, and health care settings could distribute physical activity messages to patients and their families on a regular basis. These messages can facilitate the development of practices to regularly include physical activity in organizational events or activities. Organizational communication exist in various intervention settings (e.g., worksites, community groups), and messages disseminated through multiple organizations (and settings) reinforce the physical activity message.

**Goal 2: Increase opportunities for healthy eating and physical activity by fostering supportive policies and environments.**

Media advocacy is an integral part of policy and environmental change interventions. It is strategic use of the media to frame an issue around a social or policy initiative and to stimulate involvement of community members in defining and advocating for change. In planning for media advocacy, the use of media should be considered in relation to, and in support of, coordinated efforts directed toward social or policy change. Consideration should be given first to clearly defining the problem (e.g., the lack of accessible physical activity opportunities). Proposing a solution to the problem is the next step in the process. The third step includes identifying who has the power or authority to make the change, such as planning board members, county commissioners, etc. The fourth step entails identifying individuals, groups, associations, businesses, etc. who can be mobilized to influence and persuade those with the power to create change. This group could include community and business leaders, volunteer organizations, professional associations, or members of the local PTA. The fifth step involves framing the issue and developing a set of consistent messages that would convince those in power to take action. It is important to understand how the selected audience perceives the issue in order to properly frame the message. The sixth step is determining the most credible messengers for the intended audience. (e.g., a key stakeholder, an expert in the field, a person who can speak from personal experience). The same message can have a very different impact depending on who communicates it.

www.EatSmartMoveMoreNC.com
Media advocacy techniques, when used very strategically, include holding press conferences, writing letters to the editors of local papers, contacting editorial writers to explain the need for policy and environmental change to support physical activity, and alerting the media to potential feature or news stories. Suggestions for topics can be given to local radio and television talk shows, and callers can then be organized to phone-in during those talk shows. If a community cable access channel is available (frequently at community colleges and universities) short programs can be developed that frame the issues. Local community groups and organizations can develop events that will attract news media coverage to frame the issues for both policy makers and community members. Events can highlight the need for physical activity facilities and opportunities in underserved areas. For example, events can be designed that emphasize improvements needed to make a ‘walkable community’. When events are carefully designed, the resulting news media stories promote awareness of what is needed, identify what must be changed, and help mobilize people to advocate for policy change.

**Objective 1: Increase yearly the number of facilities and/or environments that promote healthy eating and physical activity.**

Environmental changes occur in both the social and physical environments of organizations and communities. Interventions may focus on one specific organization (e.g., a school or worksite), a whole system (e.g., a school district), or an entire community. For example, a faith organization may create a garden or walking trail on its property. A school district may allow community members to use its facilities after hours. A community may construct a park or playground that is accessible to individuals of all abilities. These examples illustrate changes to the physical environment. Altering the social environment entails changing social norms within an organization or community to include healthy behaviors. Public awareness efforts can facilitate changes in social norms, which can ultimately lead to policy and environmental changes.

**Objective 2: Increase yearly the number of policies, practices, and incentives to promote healthy eating and physical activity.**

Changes in the actual number of policies, practices, and incentives that promote physical activity occur in various intervention settings. Policies are the laws, formal regulations, and informal operating procedures within a setting. Practices are the decisions and behavior of organizations, groups, and individuals and the ways that policies are implemented within a particular setting. Incentives can be used as

**Too many of our children are sitting around, and their inactivity is leading to serious health problems such as overweight, obesity, and diabetes. Our kids need to be kids and be active. We need to get our children away from the Play Station and onto the playground. By doing so, our children will live healthier and grow into stronger adults.”**

Tommy Thompson, Secretary U.S. Department of Health and Human Services, 2001

“Youngsters are most likely to develop physically active lifestyles if they are provided with physical activity experiences they enjoy and with which they can be successful.”

Russell Pate, Ph.D. Department of Exercise Science, University of South Carolina, 1998

“Too many of our children are sitting around, and their inactivity is leading to serious health problems such as overweight, obesity, and diabetes. Our kids need to be kids and be active. We need to get our children away from the Play Station and onto the playground. By doing so, our children will live healthier and grow into stronger adults.”

Tommy Thompson, Secretary U.S. Department of Health and Human Services, 2001
motivational tools for individuals to adopt particular behaviors, such as discounted health insurance for those who are regularly physically active. Implementing policy strategies in both public and private sectors can improve social and physical environments by increasing opportunities for physical activity in organizations and communities and can lead to changes in social norms.

Policy changes can be made at the organizational level as well as throughout the community. For example, worksites can provide flextime options and physical activity incentives for employees, while community groups can incorporate physical activity into meeting times and include information on healthy lifestyles in newsletters. Potential policy strategies within the community environment could include establishing zoning and construction regulations that provide opportunities for walking, bicycling, and trail use wherever new roads, neighborhoods, and commercial areas are developed. Communities can also expand the accessibility of their physical activity programs and events by developing free and ‘sliding-scale’ opportunities and designing physical activity opportunities to include people with limited incomes or disabilities.

These goals and objectives support each other and provide the basis for the Eat Smart, Move More...North Carolina initiative. The use of tools such as media advocacy and social marketing increase public awareness of the need for policies and environments that support healthy behaviors. Carefully designed media advocacy efforts can lead to policy and environmental changes. These goals and objectives guide the action planning and evaluation processes, which are outlined in Chapter V.

“The public health community is beginning to return to its roots, once again partnering with architects, planners and engineers to better understand how to build healthier communities and lifestyles.”

William L. Roper, M.D., MPH
Dean, School of Public Health, UNC–Chapel Hill, 2002
“Everything shows that children are more attentive after recess—as the kids would say, ‘Well, duh!’”

Tom Pelligrini
_**New York Times**, April 7, 1988_

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**References and Resources**


Why develop an action plan?

Preparing an action plan is essential for any individual or group working to increase local opportunities for physical activity. An action plan can help coalitions increase public awareness of the importance of healthy eating and physical activity and the need for supportive policies and environments as well as develop the strategies and steps for policy and environmental change interventions. Whether you are part of a Local Physical Activity and Nutrition Coalition (LPAN); a subcommittee of a local Healthy Carolinians Task Force; a North Carolina Cooperative Extension agent; a county partner implementing the Color Me Healthy program; or a Health Promotion Program Coordinator preparing to address local health disparities, you can benefit by developing a Community Action Plan.

In addition to guiding the development of strategies and action steps, an action plan helps local organizations assess their progress by providing measurable reference points. The evaluation of activities and outcomes is necessary to determine whether Eat Smart, Move More...North Carolina’s goals and objectives contribute to increasing healthy eating and physical activity opportunities. Evaluation processes in the Blueprint utilize the monitoring and surveillance mechanisms developed by the Health Promotion Branch within the North Carolina Division of Public Health (DPH). Evaluation takes place at both the state and local levels.
Where to start

The LPANs, local health departments, North Carolina Cooperative Extension Service, and other community groups and organizations supporting the efforts of Eat Smart, Move More...North Carolina have varying capabilities and resources. Therefore, it may be appropriate to begin by addressing the critical factors for implementing policy and environmental change interventions identified in Chapter III. They include forming meaningful collaborations, building community support, garnering the support of key decision-makers, developing science-based support for the intervention, identifying funding sources, and obtaining skilled staff.

Understanding the action planning process will help local groups and organizations get started. This process includes assessing the issue, developing specific project details, identifying necessary resources, implementing the project, and evaluating the process and outcomes. An initial assessment of the environments and policies within the community provides the basis for action plan development. Prioritizing community needs and focusing the action plan may involve activities such as surveying the number of regular and consistent messages that prompt physical activity in local organizations and throughout the community; identifying gaps in opportunities (including physical activity facilities) and services; and assessing existing policies and practices that facilitate or create barriers to physical activity.

There are several tools that can be used to assess the current level of policy and environmental support for physical activity. Examples include the Centers for Disease Control and Prevention (CDC) School Health Index, the North Carolina Faith Organization Survey, and the North Carolina Worksite Survey. These assessments can assist in action planning and be used to monitor the degree of policy and environmental change locally. These tools can be found on the Eat Smart, Move More...North Carolina website (http://www.EatSmartMoveMoreNC.com).

A needs assessment helps identify potential projects that will enhance physical activity opportunities in the community. After a project has been selected, specific details can be planned. These details include the specific tasks to be accomplished, the individuals responsible for each task, time frames, and necessary resources. Project implementation is based on the action plan, but flexibility is essential. Time frames may be adjusted and task responsibilities may be shifted. The project is evaluated through both process and outcome evaluations as described later in this chapter.
Structuring your action plan

An Eat Smart, Move More...North Carolina action plan should address both goals of the initiative. It should include clearly defined strategies and action steps that are time oriented. Strategies can be used to address both policy and environmental changes as well as to increase public awareness of the need for change. Sample action plans addressing the initiative’s two goals and five objectives are provided in Appendix VII. The Health Promotion Branch team of Specialists, Physical Activity and Nutrition Regional Consultants, and Regional Cardiovascular Health Coordinators can assist local groups in developing an action plan. Additional information on developing an action plan, can be found in the North Carolina Statewide Health Promotion Program’s Program Planning Guide on the Eat Smart, Move More...North Carolina website: http://www.EatSmartMoveMoreNC.com

Evaluation of Eat Smart, Move More...North Carolina

The Progress Check system, an electronic activity (data) reporting system developed by the Health Promotion Branch, collects information about the amount and types of efforts taken to facilitate policy and environmental changes that support physical activity. It was initially designed for local health departments that receive North Carolina Statewide Health Promotion Program and North Carolina Cardiovascular Health Program funds to report relevant health promotion events and activities within their county and/or region. This system is used to report groundwork activities, such as planning products, assessments, and training received. It also tracks local efforts to create change through capacity building by providing training and technical assistance within a community. Advocacy efforts supporting initiatives, such as presentations to elected officials, media events, and actual changes in policies and environments are also documented in Progress Check.

One way to measure effort is through conducting a process evaluation that collects information related to the quantity and quality of local interventions. These efforts, documented on the local level, help to determine if the initiative is implemented as planned. Process evaluation also provides information to determine the best way to modify and improve collaboration and implementation of the initiative. The Progress Check System tracks process information through activities and accomplishments reported by local health departments and their partners. All reported activities across various population groups, specific risk factors, and intervention settings are centrally located for analysis throughout the state. Activity and outcome reports will be available for local, regional, and state review. Success stories that are results of local efforts along with common indicators of community change can be identified through this system.

“If you clearly define your destination and accurately chart your course, you will be able to compare where you are with where you want to be.”

Evaluation of environmental and policy changes

Outcome evaluation conveys the results of local efforts and activities and the degree to which Eat Smart, Move More...North Carolina efforts have created or facilitated changes to increase physical activity opportunities. The initiative has defined two types of policy and environmental change interventions, which are tracked using the Progress Check system. They reflect increased numbers of facilities and environments as well as policies, practices, and incentives that support the initiative. Facility and environmental changes are new or enhanced physical supports for physical activity. Policies, practices, and incentives are new or enhanced community or organizational supports for physical activity in the form of ordinances, written policies, protocols, and informal policies. Appendix II contains an extensive list of environmental and policy change examples.

Evaluating local public awareness efforts

The Eat Smart, Move More...North Carolina initiative uses three methods for enhancing public awareness of the importance of physical activity and the need for supportive policies and environments. They include regular and consistent messages promoting physical activity, mass media coverage, and organizational communications. Regular and consistent messages are ongoing prompts that promote physical activity. They can include signage posted near elevators encouraging the use of stairs and signage in parking lots encouraging visitors to park further away from the building. Mass media includes newspapers, television, radio, and billboards. Public awareness efforts using mass media will be tracked using measures such as the number of column inches in a newspaper article, the number of minutes of a television or radio spot, and the number and duration of billboard displays. Organizational communications can also be used to increase awareness of the need for policies and environments that support physical activity. These efforts will be assessed through the number of distributed print media units (e.g., brochures, email recipients). Community partners will also be able to report public awareness efforts in their local communities through Progress Check.

Evaluation begins in the action-planning phase of an intervention. An action plan must incorporate evaluation measures from the onset to provide feedback on intervention implementation and outcomes.

Long-term surveillance of environments and policies

In addition to the information documented in the Progress Check system, Eat Smart, Move More...North Carolina will benefit from other data sources that are coordinated or supported by the North Carolina Division of Public Health.
Health. While Progress Check is sufficient for capturing changes facilitated by local health departments and their community partners, the system cannot provide community-level or state-level estimates of environmental and policy supports for physical activity. For example, Progress Check cannot provide information on the proportion of communities with ordinances requiring sidewalks in new neighborhoods. If the initiative’s goals and objectives are met long term behavior changes could be documented in the Behavioral Risk Factor Surveillance System (BRFSS) and the Youth Risk Behavior Surveillance System (YRBS). The following data sources can provide information on the current status of statewide environmental and policy changes.

**Data sources on the current status of statewide environmental and policy changes**

<table>
<thead>
<tr>
<th>Statewide Worksite Health Promotion Survey</th>
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<tbody>
<tr>
<td>Employers can be instrumental in helping workers be more physically active. North Carolina Division of Public Health (DPH) has conducted a survey of private and public worksites in North Carolina to determine the degree of support for employee health promotion. Important supports within worksites are: establishing and supporting a wellness or health promotion committee, flextime scheduling allowing for physical activity, and signage encouraging the use of stairs or parking further away from the building. This survey was conducted in 2000, and DPH intends to conduct the worksite survey every four years.</td>
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<tr>
<th>School Health Education Profile (SHEP)</th>
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<tbody>
<tr>
<td>The North Carolina Division of Public Health and the North Carolina Department of Public Instruction have collaborated to conduct a survey of middle school and high school policies and supports for health. Physical activity supports in schools/childcare include the following: indoor and outdoor facilities, policies on the use of these facilities by the public, and school physical education policies and practices. This survey was conducted in spring 2002, and DPH intends to support the School Health Education Profile every two years.</td>
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</table>

<table>
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<tr>
<th>North Carolina Bicycle and Pedestrian Planning and Policy Survey</th>
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</thead>
<tbody>
<tr>
<td>Local planners play a crucial role in helping to create communities that support pedestrian and bicycle transportation. DPH has collaborated with North Carolina Department of Transportation and North Carolina State University’s Institute for Transportation Research and Education to study municipalities’ commitment to bicycling and walking. This is accomplished through a survey of planners on the actions taken by local governments to provide for pedestrian and bicycle transportation. Critical items in the planner survey are pedestrian and bicycle transportation provisions in master plans, municipal staff responsible for pedestrian and bicycle transportation, municipal funding for pedestrian and bicycle transportation projects, the presence of citizen advisory groups related to pedestrian and bicycle transportation, and selected policy issues. This survey was conducted in 2002, and DPH intends to support the planner survey every four years.</td>
</tr>
</tbody>
</table>
This system collects data on individuals who receive services in public health sponsored clinics. It has the capacity to generate sophisticated reports on the prevalence of overweight in children and youth in North Carolina, including county-level reports. These are available on the North Carolina Healthy Weight Initiative’s website, http://www.nchealthyweight.com. With funding from the CDC Division of Nutrition and Physical Activity, the system is being enhanced to collect behavioral data in addition to anthropometric data. This will allow tracking over time of key behaviors of children and youth that are related to childhood overweight.

Every North Carolina municipality receives a yearly allocation from a state trust fund dedicated to maintenance of municipal roads, known as Powell Bill funds (a.k.a. State Street Aid). Within certain guidelines, municipalities determine how Powell Bill funds are used; sidewalk and bikeway construction and improvements are legitimate projects for this funding. The North Carolina Department of Transportation regularly tracks spending of Powell Bill funds and collaborates with DPH to identify municipalities using the funds for sidewalks and bikeways. Powell Bill data are available on a yearly basis. See http://www.ncdot.org/planning/development/enhancement/Powell_Bill/powellbill.htm for more information.

Community-based interventions require the participation of multiple local partners. Chapter VI gives an overview of potential partners at the state level, and Appendix I provides a more extensive list of other state and local partners and their plans as they relate to physical activity.

References and Resources


There is significant interest and activity throughout the state in engaging communities in policy and environmental change. The Health Promotion Branch of the Division of Public Health (DPH) in the North Carolina Department of Health and Human Services (DHHS) leads statewide efforts in these areas, which includes the participation of multiple state and community organizations. The Branch has a Physical Activity and Nutrition (PAN) Unit, a Cardiovascular Health (CVH) Unit, a Statewide Health Promotion Program, and an Injury and Violence Prevention Unit to assist in building healthy communities and promoting healthy living throughout North Carolina. The units, which are described below, strive to implement the Branch’s goals of increasing physical activity, improving nutrition, and ensuring comprehensive, community-based approaches to cardiovascular health and the prevention of cancer, diabetes, and other chronic diseases. In addition to other programs in the Division of Public Health, the Branch partners with multiple state, regional, and community organizations and groups to reduce identified health and behavioral risks for cardiovascular disease and other chronic diseases (See Appendix I).

The Health Promotion Branch

<table>
<thead>
<tr>
<th>Physical Activity and Nutrition (PAN) Unit</th>
<th>North Carolina Statewide Health Promotion Program</th>
<th>Cardiovascular Health (CVH) Unit</th>
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<tr>
<td>NC Governor’s Council on Physical Fitness and Health</td>
<td>NC S A Day Coalition</td>
<td>NC Cardiovascular Health Program</td>
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<tr>
<td>NC S A Day Coalition</td>
<td>Local Physical Activity and Nutrition Coalitions (LPANS)</td>
<td>The NC Heart Disease and Stroke Prevention Task Force</td>
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<td>Tri-State Stroke Network</td>
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Numerous state and community organizations are involved in this work, including the NC Governor’s Council on Physical Fitness and Health, the North Carolina Statewide Health Promotion Program, and the Cardiovascular Health Program. These organizations work together to promote healthy living throughout North Carolina.
The Physical Activity and Nutrition (PAN) Unit oversees the health promotion goals specific to healthy eating and physical activity. It focuses on providing tools, resources, and technical assistance to local health departments, Local Physical Activity and Nutrition Coalitions (LPANs), and community partners in developing and implementing policy and environmental strategies with an emphasis on healthy eating and physical activity. The PAN Unit is the lead agency in the Eat Smart, Move More...North Carolina initiative.

The PAN Unit provides leadership to, and partners with, a variety of lead agencies in promoting programs, projects, and initiatives focused on healthy eating and physical activity. The PAN Unit Head also serves as the Executive Director of the North Carolina Governor’s Council on Physical Fitness and Health. The PAN Unit works closely with the Cardiovascular Health (CVH) Unit to promote multi-level policy changes that will increase healthy eating and physical activity opportunities in community environments. The Unit has a Physical Activity Specialist and a Nutrition Specialist to help provide content-specific technical support for physical activity and healthy eating interventions. Three Physical Activity and Nutrition Regional Consultants provide technical assistance to local health department programs funded by the Statewide Health Promotion Program and work with the CVH Regional Program Consultants in the media regions across the state.

NORTH CAROLINA GOVERNOR’S COUNCIL ON PHYSICAL FITNESS AND HEALTH

The North Carolina Governor’s Council on Physical Fitness and Health was created in 1979 by legislative mandate with the mission of promoting interest in and sponsorship of programs that encourage physical fitness and healthy lifestyles for all North Carolinians. The Governor’s Council has 10 members; eight appointed by the Governor and one each appointed by the House of Representatives and the Senate. Members of the Council, as well as other state and local partners, serve on one of three committees: Legislation and Resource Development, Public Awareness, and Best Practices.

NORTH CAROLINA 5 A DAY COALITION

The North Carolina 5 A Day Coalition promotes better health for all North Carolinians by encouraging them to eat more fruits and vegetables. The Coalition has over 160 members who represent multiple governmental and industry partners. Members work collaboratively in spreading the 5 A Day message. The PAN Unit, in conjunction with the 5 A Day Coalition Steering Committee, provides direction for the North Carolina 5 A Day Program. The Coalition has four...
committees that support its efforts. The committees are Resource Development, Communications and Marketing, Local Interventions for Children and Adults, and Special Events.

**LOCAL PHYSICAL ACTIVITY AND NUTRITION COALITIONS**

The Physical Activity and Nutrition Unit supports the establishment and development of Local Physical Activity and Nutrition Coalitions (LPANs). LPANS provide voluntary, grassroots support to promote healthy eating and physical activity interventions through policy and environmental change at the community level. These coalitions may assess community needs and barriers, inventory facilities, and advocate for policies in their communities to increase opportunities for healthy eating and physical activity.

**Statewide Health Promotion Program**

The North Carolina Statewide Health Promotion Program in the Health Promotion Branch provides funding for health promotion programs at local health departments. The Statewide Health Promotion Program’s goal is to support Local Health Promotion Coordinators and their community partners in planning and implementing community-based programs addressing policy and environmental change interventions that promote cardiovascular health and reduce risk of chronic disease due to tobacco use, physical inactivity, and poor nutrition.

**Cardiovascular Health Unit**

The Cardiovascular Health (CVH) Unit houses the North Carolina Cardiovascular Health Program, and the CVH Data Unit. The Unit also provides administrative and technical support for the North Carolina Heart Disease and Stroke Prevention Task Force and the Tri-State Stroke Network.

**NORTH CAROLINA CARDIOVASCULAR HEALTH PROGRAM**

In 1998, North Carolina was one of the first two states in the country to receive comprehensive grant funding from the Centers for Disease Control and Prevention (CDC) to address the burden of cardiovascular disease. CDC is establishing a national cardiovascular health program and, as of 2001, 28 states have been funded at various levels. These state grants are primarily focused on
promoting physical activity and heart-healthy nutrition through policy and environmental change. Some funds are also dedicated to other risk factors.

The North Carolina CVH Program funds six regional CVH Coordinators located in the counties of Cabarrus, Henderson, Pitt, Robeson, Surry, and Wake (regions defined by major media markets). The Regional CVH Coordinators work with the state Physical Activity and Nutrition (PAN) Regional Consultants to 1) convene regional meetings that focus on collaboration, planning, and networking, and 2) serve as a resource to their region for technical assistance on policy and environmental change strategies.

In 1999, North Carolina received additional grant funding to address the racial disparities in cardiovascular disease rates. Craven County and Nash/Edgecombe Counties have North Carolina CVH Programs that focus on implementing policy and environmental change interventions with a focus on African American communities.

THE NORTH CAROLINA HEART DISEASE AND STROKE PREVENTION TASK FORCE

The North Carolina Heart Disease and Stroke Prevention Task Force was established by the state legislature in 1995. Its mission is to prevent premature death and disability due to heart disease and stroke. The Task Force’s initial charge was to:

1. develop a profile of the burden of cardiovascular disease in North Carolina
2. publicize that burden and its preventability, and
3. develop a comprehensive statewide plan to prevent it.

The North Carolina General Assembly appropriated funds in 1997 for a CVH Data Unit to develop and coordinate the cardiovascular health data necessary for planning, implementing, and evaluating the North Carolina Heart Disease and Stroke Prevention Task Force’s Plan to Prevent Heart Disease and Stroke. Since 1997, these funds have been used to expand knowledge of cardiovascular health in North Carolina through supporting new analyses of existing data; collecting and analyzing new data to fill gaps in knowledge; integrating and interpreting information from multiple sources for dissemination and use; and developing partnerships with key people and organizations involved in CVH-related data activities.

The Task Force completed its charges by June 1999 with the publication and dissemination of the North Carolina Plan to Prevent Heart Disease and Stroke. The Task Force remains in effect to oversee funding for and implementation of the plan. “Start with Your Heart” is the tag line of the Task Force’s Public Awareness Campaign. The campaign focuses on the state’s most at-risk counties and uses a strategy that includes outdoor advertising, bus wraps, direct mail/newsletters, radio spots, and a web page. The campaign has been able to greatly extend its reach through partnerships with the North Carolina Nutrition Network, Subway Sandwich Stores, Inc. and Lowes Foods, Inc.
THE NORTH CAROLINA PLAN TO PREVENT HEART DISEASE AND STROKE

This statewide plan was developed to promote community-based prevention activities to improve the cardiovascular health of North Carolinians. The North Carolina Plan to Prevent Heart Disease and Stroke provides a comprehensive vision that builds upon the capacity of existing services and promotes new strategies for preventing cardiovascular disease. The Plan addresses eight risk factors: unhealthy eating, physical inactivity, tobacco use, high blood pressure, elevated blood cholesterol, overweight, diabetes, psychosocial factors, and stress. The Plan will be updated and the new version released in 2004.

The following list of objectives from the Plan are relevant to the North Carolina Blueprint For Changing Policies And Environments In Support Of Increased Physical Activity.

1. To increase the proportion of persons 18 and older who participate in adequate physical activity from 18 percent (1994) to 28 percent in 2003 (BRFSS).
2. To decrease the proportion of persons 18 and older who participate in no physical activity from 41 percent (1996) to 31 percent in 2003 (BRFSS).
3. To increase the proportion of youth who report participating in vigorous physical activity in the previous 7 days from 55 percent (1997) to 65 percent in 2003 (YRBS).
4. To increase the proportion of persons in the six lead CVH counties, who routinely walk or use a bicycle for transportation (Six-county population survey).
5. Among adolescents aged 12-17, reduce from 20 percent (1997) to 15 percent the proportion who are overweight. Within this objective, increase to at least 50 percent the proportion of overweight adolescents who have adopted sound dietary practices combined with physical activity that should lead to an appropriate body weight (YRBS).
6. Among those 18 and older, reduce from 32 percent (1997) to 20 percent the proportion who are overweight. Within this objective, increase to at least 50 percent the proportion of overweight adolescents who have adopted sound dietary practices combined with physical activity that should lead to an appropriate body weight (BRFSS).

The following objectives are taken from North Carolina’s proposal to the Centers for Disease Control and Prevention for the next five years of funding for the State Cardiovascular Health Program:

1. By 2010, reduce to no more than 15 percent the proportion of adults who engage in no leisure-time physical activity. (Source: BRFSS; Baseline: 30.4 percent in 2000)
2. By 2010, increase to at least 35 percent the proportion of adults who engage in moderate physical activity 5 or more days per week for at least 30 minutes per day or who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion. (Source: BRFSS; Baseline: 21.5 percent in 2000).
3. By 2010, increase to at least 25 percent the proportion of adults who walked or bicycled for transportation at least once in the previous week. (Source: BRFSS; Baseline: 14.6 percent in 2000).

“North Carolina carries more than its share of suffering, death, and expense from cardiovascular disease (CVD). It is high time that we take on the challenge of becoming as good at preventing CVD as we are at treating it.”

Ed N. Warren
North Carolina Senate Chair, North Carolina Heart Disease and Stroke Prevention Task Force, 1999
4. By 2010, increase to at least 30 percent the proportion of high school students who engage in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days. (Source: YRBSS; Baseline: 23.5 percent in 2001).

5. By 2010, increase to at least 75 percent the proportion of high school students who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion. (Source: YRBSS; Baseline: 64.0 percent in 2001).

6. By 2010, increase to at least 60 percent the proportion of high school students who participate daily in school physical education. (Source: YRBSS; Baseline: 34.4 percent in 2001).

7. (Developmental) By 2010, increase the proportion of high school students who walk or bicycle to school at least once a week. (Source: YRBSS; Walking: 5.0 percent in 2001; Bicycling: 2.9 percent in 2001).

For more information on the Plan, the Task Force, and the Cardiovascular Health Program, log on to www.startwithyourheart.com

TRI-STATE STROKE NETWORK

The Tri-State Stroke Network grew out of a Tri-State Stroke Summit sponsored by the North Carolina Heart Disease and Stroke Prevention Task Force and co-sponsored by the State Health Directors of North Carolina, South Carolina and Georgia in September 1999. North Carolina was subsequently funded by CDC to establish and staff the Network. The Network includes public health and medical professionals, policy makers, and advocates and has strives to increase public awareness of stroke symptoms and the need to treat stroke as a medical emergency. The Network advocates for

1. increased funding for stroke research, prevention, and control,
2. development of a research initiative designed to discover the reasons for the geographic disparity in stroke deaths that affects the Tri-State Area, and
3. development and implementation of stroke prevention and control programs in the Tri-State area.

The Health Promotion Branch Programs described above are just a few examples of potential partners and resources. Each community has its own unique resources and potential collaborators for addressing healthy eating and physical activity. Many more state public (North Carolina Department of Health and Human Services and Division of Public Health) and private partners are described in Appendix I. Examples of successful partnerships at the state and community levels can be found in Chapter VII.

References and Resources

Imagine North Carolina moving more where...

...people of all ages and abilities easily enjoy walking, bicycling, and other forms of recreation.

...frequently used sidewalks and greenways connect neighborhoods to each other and to the center of town.

...schools offer opportunities for daily physical activity—before, during, and /or after school.

...country roads and neighborhood streets are designed so cyclists can pedal, hikers can hike, and those in wheel chairs can roll along sidewalks and trails easily and safely.

...children play in front yards all through the day and families get fresh air and physical activity in parks and on trails that are near and accessible to their workplace and home.

...busy moms and dads get physical activity in their everyday routine by playing with their children and taking an extra stroll around the mall when shopping.
...schools and religious centers host dance, movement, yoga, and stretching classes along with other community events where youth, adults, and seniors learn skills to make physical activity a life-long passion.

...signs are posted in public buildings reminding people to get a quick dose of exercise by taking the stairs instead of the elevator.

...employees use lunch breaks and flextime to take a walk, work out at a gym, or play a quick pick-up game of their favorite sport.

The *Community Change Chronicles* are local, regional, and state success stories based on community policy and environmental changes supporting physical activity. The following *Community Change Chronicles* were developed using an information collection tool designed to capture success stories in a uniform way from partners across North Carolina. These success stories occur in different settings across our state and represent a variety of policy and environmental changes in support of increased physical activity. For additional success stories visit http://www.EatSmartMoveMoreNC.com.

1The staff of the North Carolina Cardiovascular Health (CVH) Program developed and began in 2001 the *Community Change Chronicles* for Start With Your Heart.
The following programs and organizations are potential partners for local health promotion efforts. There are several programs and plans from North Carolina public health agencies that recognize the importance of physical activity for prevention and management of chronic disease. A brief comment about the plans is included to demonstrate the common themes and encourage synergy.
The Division of Public Health covers a wide range of public health programs and services, all aimed toward protecting and improving the health of the people who live and work in North Carolina. http://www.dhhs.state.nc.us/dph

The purpose of the Health Promotion and Chronic Disease Prevention Section is to fulfill, through leadership and community capacity building, the promotion of healthful living, disease prevention, and reduction of the risk and consequences of the leading causes of death.

Cancer Prevention and Control Branch

The Cancer Prevention and Control Branch works to develop and implement effective strategies to prevent, detect, and control cancer. The Branch promotes activities that enhance comprehensive cancer initiatives, including professional and public education. The Cancer Prevention and Control Branch also provides funding for communities to conduct screening for the early detection of cancer and to assist with treatment services and has provided funding to support physical activity and nutrition community-based efforts. The Branch collaborates with communities to foster cancer control through advisory councils and coalitions and promotes partnerships to deliver high quality comprehensive cancer services.

http://www.communityhealth.dhhs.state.nc.us/cancer.htm

The Advisory Committee on Cancer Coordination and Control has developed The North Carolina Cancer Control Plan in conjunction with the Cancer Prevention and Control Branch. The following three targets and six objectives of this plan are relevant to the North Carolina Blueprint For Changing Policies And Environments In Support Of Increased Physical Activity:

1. Increase the proportion of North Carolina adults 18 and older who report participating in any leisure time physical activity to more than 85 percent.
2. Increase the proportion of North Carolina adults 65 and older who report participating in any leisure time physical activity to more than 71 percent.
3. Increase the proportion of North Carolina youth grades 9-12 who report participating in either moderate or vigorous physical activity.
4. Increase the number of North Carolina adults who are aware of and practice the Surgeon General’s recommendations on physical activity (an accumulation of 30 minutes per day of moderate physical activity on most days of the week to produce health benefits).

5. Increase the number of worksites that provide opportunities for physical activity and policies that promote physical activity.

6. Increase the number of local communities that provide physical activity opportunities and adopt policies that promote physical activity.

7. Increase the number of schools that provide physical activity opportunities and adopt policies that promote physical activity.

8. In collaboration with faith communities, to increase opportunities for physical activity within those communities.

9. To eliminate disparities in reported physical activity by improving health related factors and norms of populations more adversely affected by inadequate physical activity.

**Diabetes Branch**

The Diabetes Branch is responsible for helping North Carolina citizens reduce the impact of diabetes through leadership, education, communication, community involvement, and capacity building, advocacy, and policy development. The Branch currently serves the citizens of North Carolina by increasing awareness of diabetes and enhancing community-based efforts to reduce the burden of diabetes in the state. [http://www.communityhealth.dhhs.state.nc.us/diabetes.htm](http://www.communityhealth.dhhs.state.nc.us/diabetes.htm)

**Health Promotion Branch**

Programs are described in Chapter VI. This includes the Physical Activity and Nutrition Unit which is the lead unit for the Eat Smart, Move More...North Carolina initiative. [http://www.communityhealth.dhhs.state.nc.us/](http://www.communityhealth.dhhs.state.nc.us/)

**Older Adults Branch**

The Older Adults Health Branch helps promote the health and quality of life of North Carolina’s older adults. North Carolina’s aging population is one of the fastest growing in the country. Prevention and intervention to keep this population healthy and vital are essential to maintaining quality of life and controlling health care costs. The Older Adult Health Promotion Program serves as a resource on older adult health promotion; provides technical assistance and training on health promotion and aging; identifies, develops, and disseminates program information; and serves as a liaison with other state agencies and organizations. [http://www.communityhealth.dhhs.state.nc.us/oldadult.htm](http://www.communityhealth.dhhs.state.nc.us/oldadult.htm)
The mission of the Women’s and Children’s Health Section is to assure, promote, and protect the health and development of families with emphasis on women, infants, children, and youth. Women’s and Children’s Health programs place a major emphasis on the provision of preventive health services beginning in the pre-pregnancy period and extending throughout childhood. The Section also administers several programs serving individuals who are developmentally disabled or chronically ill. Branches of the Section include Women’s Health, Immunization, Children and Youth, Nutrition Services, and Developmental Evaluation Centers. http://wch.dhhs.state.nc.us

Children and Youth Branch
The Children and Youth Branch strives to enhance the health, growth, and development of all children through health promotion, prevention, early identification, treatment, and intervention. Whenever possible, services are offered within family-centered, community-based systems of care.

North Carolina Healthy Weight Initiative
The North Carolina Healthy Weight Initiative, funded by an obesity prevention grant from the Centers for Disease Control and Prevention, has established partnerships and developed a broad network of stakeholders. It is based in the Children and Youth Branch of the Women’s and Children’s Health Section. The North Carolina Healthy Weight Initiative has three major components that promote increased healthy eating and physical activity: (1) planning for comprehensive nutrition and physical activity programs to prevent overweight and related chronic disease in children 2-18 years of age; (2) enhancement of a statewide nutrition and physical activity surveillance system; and (3) implementation of a multi-level pilot intervention that targets pre-school children and their families.

The Initiative established a Task Force of 100 persons from throughout the state that has developed an action plan titled Moving Our Children Toward A Healthy Weight...Finding The Will and The Way. The plan provides recommendations and strategies for individual and group action to affect policy, environmental, and individual/interpersonal change that supports increased healthy eating and physical activity in a variety of settings.

Six of the plan’s 12 key recommendations are relevant to the North Carolina Blueprints For Changing Policies And Environments In Support Of Increased Physical Activity:

1. Ensure that all children and youth participate in at least 60 minutes of physical activity every day.
2. Limit TV/video time to no more than 1-2 hours a day.
3. Establish state policies to ensure adequate time for physical activity in schools, including quality daily physical education, recess, and after school activities.
4. Provide more community-based opportunities for leisure-time/recreational physical activity for all children and youth.

5. Create an environment that makes healthy eating and active lifestyles the norm rather than the exception.

6. Ensure a comprehensive, continuous, and reliable system for monitoring body mass index (BMI), weight-related chronic diseases, and nutrition and physical activity behaviors in children and youth.

The plan is available in print and on the Initiative’s web site. The web site also has other resources to promote local and state action to reduce childhood overweight, including updates on policy, environmental, and educational interventions, and surveillance. Among these are reports from the North Carolina Nutrition and Physical Activity Surveillance System (NC-NPASS) that include overweight prevalence by age, ethnicity, race and gender. County specific data is available for most counties. The website also has information on Color Me Healthy, an education intervention for pre-school children that is a partnership effort with the North Carolina Cooperative Extension Service and the Physical Activity and Nutrition Unit, with funding from USDA through the North Carolina Nutrition Network. A nutrition and physical activity environmental rating scale for child care centers is being piloted and information will be posted on the website as it becomes available. http://www.nchealthyweight.com

**North Carolina Office on Disability and Health**

The North Carolina Office on Disability and Health (NCDOH) is a partnership between the Women’s and Children’s Health section of the North Carolina Division of Public Health and the Frank Porter Graham Child Development Institute at the University of North Carolina at Chapel Hill. It works to reduce the health disparities experienced by persons with disability in North Carolina and to promote health and wellness of persons through an integrated program of policy, practice, and research. The goals of the North Carolina Office on Disability and Health are to: (1) increase awareness and understanding of the health related needs of individuals with disabilities; (2) improve access and inclusion; (3) develop health promotion interventions and educational materials for persons with disability, families, and professionals; (4) conduct and report on research and data collection; and (5) affect policy related to these areas. The North Carolina Office on Disability and Health focuses its activities in the following areas: access to health care, women’s health, physical activity and recreation, research and surveillance, and information dissemination and technical assistance. http://www.fpg.unc.edu/~ncodh
Local Health Services exists to strengthen the capacity of North Carolina local health departments who, through local programs and services, strive to create healthy people and communities in North Carolina. Local Health Services serves as liaison with local health departments for general problem solving and technical support. http://www.communityhealth.dhhs.state.nc.us/lochlth.htm

Office of Healthy Carolinians

The Office of Healthy Carolinians was established in 1992 upon the recommendation of the Governor’s Task Force on Health Objectives for the Year 2000. This office oversees certification of local Healthy Carolinian task forces. These local task forces share the common mission of improving the health and safety of citizens of North Carolina. The local task forces serve as an umbrella for programs to assure effective use of resources, to build community consensus to mobilize and respond to health risks and to establishing public/private partnerships. The Healthy Carolinians website and the 2010 Healthy Carolinians 2010: North Carolina’s Plan for Health and Safety objectives can be reached at http://www.healthycarolinians.org.

The Division of Aging seeks to promote independence and enhance the dignity of North Carolina’s older persons and their families and to ready younger generations to enjoy their later years. Partnering with Area Agencies on Aging, local services and programs, senior leaders, and other public and private interests, the Division is the state agency responsible for planning, administering, coordinating, and evaluating a community-based system of opportunities, services, and protections to advance the social, health, and economic well being of older North Carolinians. The Division is currently revising the State Plan for Older Adult Health/Healthy Aging. Physical activity is addressed as it relates to quality of life and lifestyle disease prevention. The Division is also a primary sponsor of the Senior Games. http://www.dhhs.state.nc.us/aging

North Carolina Cooperative Extension Service

The North Carolina Cooperative Extension Service (NCCES), Department of Family and Consumer Sciences (FCS) has a 70+ year history of serving as the outreach arm for The Cooperative Extension Service of North Carolina State University (NCSU). The focus of the NCCES and FCS is to improve the health and quality of life of North Carolinians and their communities through education. The infrastructure for FCS exists in all 100 counties and on the Cherokee Indian Reservation. It includes one or more Family and Consumer Educators (FCE), who are part of the County Extension Center. The FCEs interact with county residents to assess educational needs and issues. The staff delivers training for childcare providers and public school teachers, conduct parent workshops, and provides informal educational opportunities for families. Specialists from NCSU develop nutrition and physical activity education materials for individuals and families. For more information on North Carolina Cooperative Extension and FCS, visit http://www.ces.ncsu.edu
DIVISION OF PARKS AND RECREATION

The North Carolina State Parks System exists for the enjoyment, education, health, and inspiration of all citizens and visitors. The mission of the state parks system is to conserve and protect examples of the natural beauty, ecological features, and recreational resources of statewide significance; to provide outdoor recreational opportunities in a safe and healthy environment; and to provide environmental education opportunities that promote stewardship of the state’s natural heritage.
http://ils.unc.edu/parkproject/ncparks.html

HEALTHFUL LIVING SECTION

The Healthful Living Section at the North Carolina Department of Public Instruction focuses on improving the health and physical education of students K-12. Health education and physical education combine to form a broad based Healthful Living Curriculum that allows students to establish positive responses to negative risk behaviors. This curriculum enables students to develop lifelong health behaviors that will also improve attendance and performance in school.
http://www.ncpublicschools.org/curriculum/health/index.html

PLANNING AND ENVIRONMENTAL DIVISION

The North Carolina Department of Transportation’s (NCDOT) mission is to provide and support a safe and integrated transportation system that enhances the state. It fulfills this mission through two major thrusts. First, the North Carolina Department of Transportation directs, plans, constructs, maintains, and operates the second largest state-maintained transportation system in the nation to include aviation, ferry, public transportation, rail, and highway systems. Second, it licenses and regulates the citizens and motor vehicles that utilize these transportation systems. http://www.ncdot.org

North Carolina Healthy Schools is a partnership between the Department of Public Instruction and the Department of Health and Human Services. It focuses on improving the health of students and staff by providing coordination and resources in eight component areas of school health. These areas include health education, safe environment, mental and social, staff wellness, health services, nutrition services, physical education, and family involvement. With all of these components in place and working together, students will be healthier; in school, in class, and ready to learn. http://www.nchealthyschools.org

North Carolina Department of the Environment and Natural Resources

North Carolina Department of Public Instruction

North Carolina Department of Transportation

North Carolina Healthy Schools

Health is Academic!
COMMUNITY PARTNERS

Voluntary Organizations – NORTH CAROLINA AFFILIATE AMERICAN CANCER SOCIETY

The American Cancer Society is the nationwide community-based voluntary health organization dedicated to eliminating cancer as a major health problem by preventing cancer, saving lives, and diminishing suffering from cancer, through research, education, advocacy, and service. http://www.cancer.org

NORTH CAROLINA AFFILIATE AMERICAN HEART ASSOCIATION

The American Heart Association is a national voluntary health agency whose mission is to reduce disability and death from cardiovascular diseases and stroke. The American Heart Association supports public policies that promote health and prevent disease. Research has clearly illustrated that tobacco use, lack of physical activity, and poor nutrition are major risk factors for heart disease, stroke, and other cardiovascular diseases. Research also demonstrates that much of the disease resulting from these behaviors can be prevented. The American Heart Association supports policies that translate this research into action. http://www.americanheart.org
NORTH CAROLINA PREVENTION PARTNERS

North Carolina Prevention Partners (NCPP), a statewide nonprofit organization housed in the Public Health Institute at the University of North Carolina at Chapel Hill, is working to improve health across the state and to assist employers in identifying the leading prevention issues in order to contain health care spending and boost employee productivity. NCCP leads the North Carolina BASIC Preventive Benefits Initiative that aims to create voluntary changes within the health insurance industry to voluntarily offer preventive benefits beginning with physical activity, nutrition, and tobacco use. NCPP has also led the effort to develop Winner’s Circle, a healthy dining options program, and Quit Now North Carolina to strengthen the tobacco cessation infrastructure available to North Carolinians wishing to quit smoking. http://www.ncpreventionpartners.org

NORTH CAROLINA RECREATION AND PARKS SOCIETY

The mission of the North Carolina Recreation and Parks Society is: (1) to encourage and assist in the advancement and development of recreation and parks services in the state of North Carolina, (2) to aid and promote the growth of professional recreators, citizen board members, and volunteers by providing information and training opportunities, and (3) to support the progress of recreation and parks programs, services, and facilities, thereby shaping a better life and future for North Carolina. http://www.ncrps.org

NORTH CAROLINA ALLIANCE FOR ATHLETICS, HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE

The North Carolina Alliance for Athletics, Health, Physical Education, Recreation, and Dance (NCAAHPERD) is a professional organization that provides advocacy, professional development and unity for health, physical education, recreation, dance, and athletics professionals and students in order to enhance the health of North Carolinians. The non-profit, incorporated, educational organization, along with six related associations, initiates legislation and advocates for quality curricula for health and movement education. http://www.ncaahperd.org

References and Resources


“All children should have the opportunity to learn to be physically competent and to gain health-related fitness through regular, developmentally appropriate physical activity.”

Judith Young, Ph.D.
Executive Director, National Association for Sport and Physical Education, 1996
APPENDIX II

Examples of Physical Activity Environmental/Policy Change Outcomes

This Appendix contains potential outcomes within the following intervention settings: community environment, schools/childcare, faith communities, worksites, community groups, and health care. The outcomes are categorized by the initiative’s objectives: (1) increase yearly the number of regular and consistent messages promoting physical activity; (2) increase yearly the number of facilities and/or environments that promote physical activity; and (3) increase yearly the number of policies, practices, and incentives to promote physical activity within each of the settings.* Each community must assess its own needs and potential for change; therefore, the outcomes for any given setting are not prioritized.

Community Environment

This setting includes the physical and social environments within the community.

Regular and Consistent Messages: Increase yearly the number of regular and consistent messages promoting physical activity.

• materials promoting facility use, available in community establishments (e.g., free trail maps in stores)
• media messages regularly featuring physical activity
• signage promoting facility use (e.g., trail marking, signs indicating walking trail)
• other regular and consistent messages supporting physical activity

Facilities and Environments: Increase yearly the number of facilities and/or environments that promote physical activity.

• bicycle facility (e.g., bike lane, wide shoulder, outside lane)
• bicycle signage (e.g., share the road)
• greenway/trail (e.g., construction, maintenance, improvement, paving)
• park facility (e.g., construction, maintenance, improvement, expansion)
• pedestrian signage
• playground facility (e.g., maintenance, improvement, expansion)
• sidewalk (e.g., construction, maintenance, improvement, widening)
• swimming pool facility
• other pedestrian safety provision (e.g., pedestrian signal, crosswalk)
• other facility or environmental support for physical activity

* See companion document North Carolina Blueprint For Changing Policies And Environments In Support Of Healthy Eating for sample outcomes for healthy eating interventions.
**Policies, Practices, and Incentives:** Increase yearly the number of policies, practices, and incentives to promote physical activity.

- bicycle plan
- health or pedestrian/bicycling advocate appointed to policy making board (e.g., planning board, transportation advisory committee)
- funding for pedestrian/bicycling facilities (e.g., Powell Bill, federal urban area direct allocation funds, municipal funds)
- master plan incorporating pedestrian or bicycle provisions (e.g., land use, greenway, transportation, thoroughfare)
- municipal or county ordinance, policy or guidelines to promote pedestrian or bicycle movement (e.g., sewer easements for trails, roadway design guidelines for pedestrians/bicycle)
- pedestrian or sidewalk plan
- policy to dedicate a portion of funds for pedestrian/bicycle facilities on regular basis (e.g., Powell Bill, federal urban area direct allocation funds, municipal funds)
- subdivision ordinance to accommodate pedestrians, bicycles, or other physical activity (e.g., sidewalk, greenspace set-aside, acreage for recreation)
- community coalitions as catalyst for change
- other policy, practice, or incentive to promote physical activity

**Regular and Consistent Messages:** Increase yearly the number of regular and consistent messages promoting physical activity.

- regularly featured physical activity topics and messages in school/childcare media (e.g., bulletins, newsletters, bulletin boards)
- signage promoting physical activity (e.g., signage encouraging stair use)
- other regular and consistent messages supporting physical activity

**Facilities and Environments:** Increase yearly the number of facilities and/or environments that promote physical activity.

- equipment for physical activity (e.g., exercise equipment)
- physical improvement promoting physical activity
- facilities for physical activity (e.g., gym, fields, track, playground)
- other facility or environmental support for physical activity or nutrition

**Policies, Practices, and Incentives:** Increase yearly the number of policies, practices, and incentives to promote physical activity.

- policy requiring certified physical education teacher
- policy requiring physical education for all students
- policy prohibiting substitution of other subjects for physical education
- policy increasing physical education requirements for students
- policy requiring equivalent grades for physical education
- physical activity guidelines for after-school/childcare programs
- policy allowing community members access to indoor school facilities after hours (e.g., gym, weight room)
- policy allowing community members access to outdoor school facilities after hours (e.g., ball fields, playgrounds)
- policy prohibiting use of physical activity as disincentives (e.g., withholding physical education as punishment)

**Schools/Childcare**

This setting includes public, private, and home schools and childcare facilities.
• policy requiring physical education or physical activity question(s) on end-of-year tests
• practice to incorporate physical activity into daily routine (e.g., teachers walking with students)
• student advocacy groups for physical activity or enhanced physical activity advocacy role of existing groups
• other policy, practice, or incentive to promote physical activity

Regular and consistent messages: Increase yearly the number of regular and consistent messages promoting physical activity.

• physical activity messages regularly incorporated into sermons
• physical activity messages regularly included in faith organization media (e.g., bulletin, newsletter, bulletin board, website)
• other regular and consistent messages supporting physical activity

Facilities and Environments: Increase yearly the number of facilities and/or environments that promote physical activity.

• garden for faith community members
• indoor facility for physical activity (exercise room, exercise equipment)
• outdoor facility for physical activity (e.g., basketball court, ball field, etc.)
• playground facility
• walking trail
• other facility or environmental support for physical activity and nutrition

Policies, Practices, and Incentives: Increase yearly the number of policies, practices, and incentives to promote physical activity.

• faith organization-affiliated discount for health club
• faith organization-supported walking classes, sports teams, and aerobics classes
• faith organization-supported weight control support groups
• other policy, practice, or incentive to promote physical activity

Worksites

This setting includes all places where individuals are employed.

Regular and consistent messages: Increase yearly the number of regular and consistent messages promoting physical activity.

• physical activity messages regularly included in organizational media (e.g., newsletter, payroll stuffers, bulletin board, company intranet)
• signage encouraging stair use or parking further distance from building
• other regular and consistent messages supporting physical activity

Facilities and Environments: Increase yearly the number of facilities and/or environments that promote physical activity.

• indoor facility for physical activity (e.g., exercise room, exercise equipment)
• outdoor facility for physical activity (e.g., on-site trail, ball field, basketball court, etc.)
• stair environment suitable for physical activity

Policies, Practices, and Incentives: Increase yearly the number of policies, practices, and incentives to promote physical activity.
• flex-time policy allowing for physical activity
• physical activity incentives for employees (e.g., contests, awards)
• policy allowing paid work time for physical activity
• worksite-sponsored walking clubs, sports teams, and aerobics classes
• policy subsidizing health club membership
• other physical activity-related supports/opportunities

**Regular and consistent messages:** Increase yearly the number of regular and consistent messages promoting physical activity.

• physical activity messages regularly included in organizational media (e.g., newsletter, bulletin board)
• other regular and consistent messages supporting physical activity

**Facilities and Environments:** Increase yearly the number of facilities and/or environments that promote physical activity.

• indoor facility for physical activity (exercise room, exercise equipment)
• outdoor facility for physical activity (e.g., walking trail, basketball court, etc.)

**Policies, Practices, and Incentives:** Increase yearly the number of policies, practices, and incentives to promote physical activity.

• policy to incorporate physical activity into a specific group sponsored function
• other policy, practice, or incentive to promote physical activity

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**Community Groups**

This setting includes all social and civic groups for all ages within the community.

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**Health Care**

This setting includes hospitals, health departments, primary care facilities, physicians offices, and health insurance companies.
Defining the differences between the recommendations made in the Surgeon General’s Report on Physical Activity and Health and other guidelines such as those issued from the American College of Sports Medicine (ACSM) can be confusing. Both recommendations can contribute to overall health and enhanced fitness levels.

**SURGEON GENERAL’S RECOMMENDATIONS**
The Centers for Disease Control and Prevention (CDC), with partners such as the Presidents Council on Physical Fitness and Health (PCPFH), several institutes from the National Institutes on Health (NIH), and others prepared recommendations for the *1996 Surgeon General’s Report on Physical Activity and Health*. The Surgeon General’s Report recommends at least 30 minutes of at least moderate activity on most, preferably all, days of the week. This 30 minutes or more may be accumulated in several shorter bouts (at least 10 minutes) of activity.

This report and its recommendations grew out of an emerging consensus among epidemiologists, experts in exercise science, and health professionals that physical activity need not be of vigorous intensity for it to improve health. Moreover, health benefits appear to be proportional to the amount of activity; thus, within reason, every increase in activity adds some benefit. Emphasizing the amount rather than the intensity of physical activity offers more options for people to select from in incorporating physical activity into their daily lives. It is hoped that this different emphasis on moderate amounts of activity, and the flexibility to vary activities according to personal preference and life circumstances, will encourage more people to make physical activity a regular and sustainable part of their lives.

**AMERICAN COLLEGE OF SPORTS MEDICINE (ACSM) GUIDELINES**
The ACSM guidelines were first established in the 1970’s coinciding with the ‘fitness revolution’, focusing on cardiorespiratory fitness. These guidelines originally focused on 20 minute sessions of vigorous activity 3 times per week. The guidelines were modified in 1995 and now include recommendations for muscular strength and flexibility and embrace the moderate activity recommendations. They essentially recommend at least 20 minutes of...
vigorous endurance exercise three or more times per week, in addition to resistance and flexibility exercises and are designed to enhance one or more of the following components of physical fitness: cardiovascular endurance, muscular strength and endurance, and flexibility.

The ACSM guidelines use clinical measures, such as target heart rates, to determine relative intensity levels for each individual and are considered the gold standard for individual exercise prescriptions.

**SUMMARY OF GUIDELINES**

To summarize the differences, the Surgeon General’s Report:

- Emphasizes health rather than fitness
- Emphasizes a greater frequency (5-7 days/week rather than 3 or more)
- Emphasizes a greater minimum duration (30 minutes rather than 20)
- Emphasizes moderate intensity rather than moderate to vigorous
- Allows for the duration to be accumulated rather than continuous.

While these differences exist, the two recommendations do not contradict each other. The Surgeon General’s report indicates that “additional health benefits can be gained through greater amounts of physical activity. People who can maintain a regular regimen of activity that is of longer duration or of more vigorous intensity are likely to derive greater benefits.” While the ACSM guidelines emphasize fitness, they also recognize the inherent health benefits of more moderate levels of activity.

The discussion of benefits from one recommendation versus the other comes down to an issue of dose response. Dr. William Haskell sums up the issue by saying, “many of the health benefits are provided by moderate intensity activity—including brisk walking. In some, but not all cases, more vigorous exercise produces greater benefits—but with increased risk of injury. The total amount of activity accumulated appears more important than either the specific duration or frequency of each bout or session.” He adds that there is “no systematic data on (the benefits of) light activity.”

**HOW DOES THIS RELATE TO EAT SMART, MOVE MORE...NORTH CAROLINA?**

The initiative promotes increased physical activity opportunities for residents of all activity levels. In order to accomplish this, a clear, single message advocating for public opportunities and education across all socio-economic levels and settings must be presented. This message should be consistent across all agencies—health, transportation, education, sport, and recreation while being readily “sub-themed” for specific populations (A. Bauman, Whistler 2001).

The Surgeon General’s Report on Physical Activity and Health provides a deliverable, easy to understand, non-intimidating message. Its basic components provide the foundation for the Eat Smart, Move More... North Carolina initiative and the North Carolina Blueprint For Changing Policies And Environments In Support Of Increased Physical Activity.
North Carolina 2010 Health Objectives—Physical Activity

**YOUTH**
- Increase the proportion of middle and high school students who report participating in vigorous physical activity for at least 20 minutes on 3 or more of the previous seven days.
- Increase the proportion of middle and high school students who report participating in moderate physical activity for at least 30 minutes on 5 or more of the previous seven days.

**ADULTS**
- Increase the proportion of adults (18 years and older) who engage in physical activity for at least 30 minutes on 5 or more days of the week.
- Reduce the proportion of adults (18 years and older) who engage in no leisure-time physical activity.

**References and Resources**

Healthy People 2010
Physical Activity Objectives

YOUTH
22-6 Increase the proportion of adolescents who engage in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days.
22-7 Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.
22-8 Increase the proportion of the Nation’s public and private schools that require daily physical education for all students.
22-9 Increase the proportion of adolescents who participate in daily school physical education.
22-10 Increase the proportion of adolescents who spend at least 50 percent of school physical education class time being physically active.
22-11 Increase the proportion of children and adolescents who view television 2 or fewer hours per day.

ADULTS
22-1 Reduce the proportion of adults who engage in no leisure-time physical activity.
22-2 Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.
22-3 Increase the proportion of adults who engage in vigorous physical activity that promotes the development and maintenance of cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.
22-4 Increase the proportion of adults who engage in vigorous physical activities that enhance and maintain muscular strength and endurance.
22-5 Increase the proportion of adults who engage in vigorous physical activities that enhance and maintain flexibility.
ACCESS
Developmental (no data source assigned)

22-12 Increase the proportion of the Nation’s public and private schools that provide access to their physical activity spaces and facilities for all persons outside of normal school hours (that is, before and after the school day, on weekends, and during summer and other vacations).

22-13 Increase the proportion of worksites offering employer-sponsored physical activity and fitness programs.

22-14 Increase the proportion of trips made by walking.

22-15 Increase the proportion of trips made by bicycling.

References and Resources


## APPENDIX VI
### COMMUNITY ACTION PLAN

**Division of Public Health**  
**NC Department of Health & Human Services**

**PROGRAM(S):**

**AGENCY:**

**PREPARED BY:**

**PHONE:**

**E-MAIL:**

**FOR PERIOD COVERING:** TO

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### Healthy Carolinians 2010 Health Objective Addressed

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### LOCAL COMMUNITY OBJECTIVE

Number ________

<table>
<thead>
<tr>
<th>Is this a policy and/or environmental change objective?</th>
<th>Objective’s Target Population:</th>
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<td>Estimated Size:</td>
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<td>□ no</td>
<td>Targeted Health Disparities Population:</td>
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<td></td>
<td>Estimated Size:</td>
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### STRATEGIES & Steps

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<tr>
<th>TARGET GROUP</th>
<th>SETTING (channel)</th>
<th>COMMUNITY PARTNERS—THEIR ROLES &amp; RESPONSIBILITIES</th>
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This plan addresses Goal #1, Objective #1 of the Eat Smart, Move More...North Carolina initiative

COMMUNITY ACTION PLAN

<table>
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<tr>
<th>AGENCY: Carolina County Health Dept.</th>
<th>PROGRAM(S): Carolina County Physical Activity and Nutrition</th>
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<tr>
<td>PREPARED BY: Johnny Movemore</td>
<td>FOR PERIOD COVERING: July 1, 20XX TO June 30, 20XX</td>
</tr>
<tr>
<td>PHONE: MOV-EMO-RENC</td>
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<tr>
<td>E-MAIL: <a href="mailto:johnnymovemore@carolinacounty.nc.org">johnnymovemore@carolinacounty.nc.org</a></td>
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</table>

Healthy Carolinians 2010 Health Objective Addressed

Increase the proportion of adults (18 years and older) who engage in physical activity for at least 30 minutes on 5 or more days of the week.
Reduce the proportion of adults (18 years and older) who engage in no leisure-time physical activity.

LOCAL COMMUNITY OBJECTIVE

| Number | |
|--------||

Is this a policy and/or environmental change objective? ✔ yes □ no

**Develop and implement a stairwell initiative at a local business or corporation (with high potential user impact) by April 15, 20xx.**

<table>
<thead>
<tr>
<th>STRATEGIES &amp; Steps</th>
<th>TARGET GROUP</th>
<th>SETTING (channel)</th>
<th>COMMUNITY PARTNERS—THEIR ROLES &amp; RESPONSIBILITIES</th>
</tr>
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<tbody>
<tr>
<td>Strategy 1: Identify appropriate company for stairwell initiative.</td>
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<tr>
<td>Step 1: By May 30, 20xx, determine criteria for selection (e.g., number of employees, number of levels/floors, perceived corporate willingness, etc.).</td>
<td>Local business</td>
<td>Worksite</td>
<td>Health Promotion Coordinator and/or Coalition members—determine criteria for worksite selection.</td>
</tr>
<tr>
<td>Step 2: By June 10, 20xx, select desired compan(ies) to approach with stairwell initiative proposal.</td>
<td>Business Administrators</td>
<td>Worksite</td>
<td>Health Promotion Coordinator and/or Coalition members—determine businesses to pursue for stairwell initiative.</td>
</tr>
</tbody>
</table>

<p>| Strategy 2: Introduce Project to company decision-makers and employees. | | |
| Step 1: By June 30, 20xx, contact managers to introduce project &amp; provide Eat Smart, Move More...NC literature. | Administrators, Employees | Worksite | Health Promotion Coordinator and/or Coalition coordinator—identify and contact administrators to schedule meeting. |
| Step 2: By August 15, 20xx, obtain permission from company decision-makers to proceed with project. | Administrators, Employees | Worksite | Health Promotion Coordinator and/or Coalition Coordinator—meet with business administrators to discuss project potentials and proposed processes. |
| Step 3: By August 15, 20xx obtain, from decision-makers, a recommended list of persons to contact within company to begin stairwell initiative. | Administrators, Employees | Worksite | Health Promotion Coordinator and/or Coalition Coordinator—meet with business administrators to develop employee task force for project. |
| Step 4: By September 15, 20xx create volunteer task force within organization to address issue. | Administrators, Employees | Worksite | Coalition partners—develop fliers explaining project. Worksite administrators—distribute to employees, identify those who are interested. |</p>
<table>
<thead>
<tr>
<th>STRATEGIES &amp; Steps</th>
<th>TARGET GROUP</th>
<th>SETTING (channel)</th>
<th>COMMUNITY PARTNERS—THEIR ROLES &amp; RESPONSIBILITIES</th>
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</thead>
<tbody>
<tr>
<td>Step 5: By April 30, 20xx and ongoing, brief organizational decision-makers about task force actions and evaluation results (from strategy 3) to determine future actions needed.</td>
<td>Business Administrators</td>
<td>Worksite</td>
<td>Health Promotion Coordinator and Task Force Representative—coordinate meeting(s) and make recommendations for future actions.</td>
</tr>
<tr>
<td><strong>Strategy 3:</strong> Assess stairwell usage within organization.</td>
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<tr>
<td>Step 1: By October 30, 20xx identify or develop assessment tool to determine stairwell and/or elevator usage.</td>
<td>Employees</td>
<td>Worksite</td>
<td>Employee Task Force—develop survey/assessment tool.</td>
</tr>
<tr>
<td>Step 3: By December 15, 20xx compile and present data to company decision-makers.</td>
<td>Administrators</td>
<td>Worksite</td>
<td>Health Promotion Coordinator and/or Coalition Coordinator—compile results of assessment. Employee task force—present data to worksite administrators.</td>
</tr>
<tr>
<td>Step 4: By April 15, 20xx and ongoing, reassess stairwell usage (e.g., surveys, counting device) to evaluate project.</td>
<td>Administrators, Employees</td>
<td>Worksite</td>
<td>Employee Task Force—survey employees on stairwell usage.</td>
</tr>
<tr>
<td><strong>Strategy 4:</strong> Enhance stairwells.</td>
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<tr>
<td>Step 1: By February 1, 20xx determine specific enhancements and resources needed.</td>
<td>Administrators, Employees</td>
<td>Worksite</td>
<td>Employee Task Force, Coalition Partners—determine specific needs.</td>
</tr>
<tr>
<td>Step 2: By March 1, 20xx begin stairwell enhancement.</td>
<td>Administrators, Employees</td>
<td>Worksite</td>
<td>Administrators—contract services to enhance stairwells.</td>
</tr>
<tr>
<td><strong>Strategy 5:</strong> Promote usage of stairwells.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1: By April 1, 20xx post signage promoting health benefits of using stairwells.</td>
<td>Administrators, Employees</td>
<td>Worksite</td>
<td>Employee Task Force—post signs.</td>
</tr>
<tr>
<td>Step 2: By April 15, 20xx hold ‘grand opening’ of stairwells for media, employee’s and company executives.</td>
<td>Administrators, Employees, Media</td>
<td>Worksite</td>
<td>Employee Task Force—plans event Health Promotion Coordinator—invite media.</td>
</tr>
<tr>
<td>Step 3: By April 30, 20xx, promote stairwell usage through organizational media.</td>
<td>Administrators, Employees</td>
<td>Worksite</td>
<td>Employee Task Force—prepares and distributes messages for and through organizational media.</td>
</tr>
</tbody>
</table>
Community Action Plan

This plan addresses Goal #1, Objective #2 of the Eat Smart, Move More...North Carolina initiative

**Division of Public Health**
NC Department of Health & Human Services

**AGENCY:** Carolina County Health Dept.
**PREPARED BY:** Johnny Movemore
**PHONE:** MOV-EMO-RENC
**E-MAIL:** johnnymovemore@carolinacounty.nc.org

**PROGRAM(S):** Carolina County Physical Activity and Nutrition

**FOR PERIOD COVERING:** July 1, 20XX TO June 30, 20XX

---

**Healthy Carolinians 2010 Health Objective Addressed**

*Increase the proportion of adults (18 years and older) who engage in physical activity for at least 30 minutes on 5 or more days of the week.*

*Increase the proportion of middle and high school students who report participating in moderate physical activity for at least 30 minutes on 5 or more of the previous seven days.*

---

**LOCAL COMMUNITY OBJECTIVE**

Number _________

Is this a policy and/or environmental change objective? Yes [x] No [□]

**Objective’s Target Population:**
- Est. Size: 57,000
- Targeted Health Disparities Population:
- Est. Size: 21,000

---

**STRATEGIES & STEPS**

<table>
<thead>
<tr>
<th>STRATEGY 1: Advocate, through media, the overall need for Active Community Environments in Carolinaville.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong> By August 15, 20xx, have interview with local health reporter to discuss relationship between physical activity and the community environment providing relevant impact statistics.</td>
</tr>
<tr>
<td><strong>TARGET GROUP:</strong> General community</td>
</tr>
<tr>
<td><strong>SETTING (channel):</strong> Community environment</td>
</tr>
<tr>
<td><strong>COMMUNITY PARTNERS—THEIR ROLES &amp; RESPONSIBILITIES:</strong> Health Promotion Coordinator—schedule and participate in interview.</td>
</tr>
</tbody>
</table>

| **Step 2:** By August 20, 20xx, send letters to editor (in response to article) expressing support and echoing need for active community environments. |
| **TARGET GROUP:** General community |
| **SETTING (channel):** Community environment |
| **COMMUNITY PARTNERS—THEIR ROLES & RESPONSIBILITIES:** LPAN coalition members—write and send correspondence. |

<table>
<thead>
<tr>
<th><strong>STRATEGY 2: Advocate, through media, the need for walkable communities around schools facilities.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong> By September 10, 20xx, plan annual “Walk to School Day” activities for at least 5 local schools including poster contest published in newspaper.</td>
</tr>
<tr>
<td><strong>TARGET GROUP:</strong> Schools and community</td>
</tr>
<tr>
<td><strong>SETTING (channel):</strong> Community environment</td>
</tr>
<tr>
<td><strong>COMMUNITY PARTNERS—THEIR ROLES &amp; RESPONSIBILITIES:</strong> HP Coordinator and LPAN Representatives—plan overall event in coordination with school representatives and volunteers. School representatives—plan individual site activities.</td>
</tr>
</tbody>
</table>

| **Step 2:** By September 15, 20xx, begin promoting Walk to School Event through media. |
| **TARGET GROUP:** Schools and community |
| **SETTING (channel):** Community environment |
| **COMMUNITY PARTNERS—THEIR ROLES & RESPONSIBILITIES:** HP Coordinator and LPAN Representatives—promote overall event and assist individual schools with planning. Schools Representatives—promote individual site activities. |

| **Step 3:** By September 15, 20xx, invite local media to attend event and continue to follow up throughout month. |
| **TARGET GROUP:** Schools and community |
| **SETTING (channel):** Community environment |
| **COMMUNITY PARTNERS—THEIR ROLES & RESPONSIBILITIES:** HP Coordinator and LPAN Representatives—communicate planned events to local media with request for coverage.
### STRATEGIES & Steps

<table>
<thead>
<tr>
<th>Step</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 4:</strong> By September 30, 20xx, display poster contest entries prominently throughout community with winners in newspaper and local television.</td>
<td>Schools and community (channel) Community environment</td>
</tr>
<tr>
<td><strong>Step 5:</strong> During first week in October 20xx, hold “Walk to School Event” and press conference.</td>
<td>Schools and community (channel) Community environment</td>
</tr>
<tr>
<td><strong>Step 6:</strong> By second week in October 20xx, follow up with media with community wide impacts of the event.</td>
<td>Schools and community (channel) Community environment</td>
</tr>
</tbody>
</table>

#### Strategy 3: Advocate, through media, the need for sidewalks and bicycle facilities in the Pine Forrest neighborhood surrounding the school.

<table>
<thead>
<tr>
<th>Step</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1:</strong> By October 15, 20xx, community members (parents of school kids) send letters to the editor and to County planning board requesting specific “walkability” improvements in the Pine Forrest neighborhood.</td>
<td>Community members (channel) Community environment</td>
</tr>
<tr>
<td><strong>Step 2:</strong> By October 15, 20xx, provide the media with testimonials and photographs of kids trying to walk or use wheelchair in area’s needing improvements.</td>
<td>Community members (channel) Community environment</td>
</tr>
<tr>
<td><strong>Step 3:</strong> By November 1, 20xx, and ongoing attend County Planning Board Meeting to discuss improvements needed in the Pine Forrest neighborhood.</td>
<td>Planning Board, community members (channel) Community environment</td>
</tr>
<tr>
<td><strong>Step 4:</strong> December 1, 20xx, and ongoing, follow up with media to provide updates on neighborhood improvements.</td>
<td>Community members (channel) Community environment</td>
</tr>
</tbody>
</table>
This plan addresses Goal #1, Objective #3 of the Eat Smart, Move More...North Carolina initiative

**COMMUNITY ACTION PLAN**

| AGENCY: Carolina County Health Dept. |
| PHONE: MOV-EMO-RENC |
| E-MAIL: johnnymovemore@carolinacounty.nc.org |
| FOR PERIOD COVERING: July 1, 20XX TO June 30, 20XX |

**Healthy Carolinians 2010 Health Objective Addressed**

- Reduce the proportion of adults (18 years and older) who engage in no leisure-time physical activity.
- Increase the proportion of middle and high school students who report participating in moderate physical activity for at least 30 minutes on 5 or more of the previous seven days.

**LOCAL COMMUNITY OBJECTIVE**

Number _________

Is this a policy and/or environmental change objective? ☑️ yes □ no

| Objective’s Target Population: |
| Estimated Size: 700 |
| Targeted Health Disparities Population: |
| Estimated Size: 350 |

<table>
<thead>
<tr>
<th>STRATEGIES &amp; Steps</th>
<th>TARGET GROUP</th>
<th>SETTING (channel)</th>
<th>COMMUNITY PARTNERS—THEIR ROLES &amp; RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy 1: Identify potential faith organizations for project.</strong></td>
<td>Faith organizations</td>
<td>Faith community</td>
<td>Coalition partners—identify local faith organizations. Coalition Coordinator—contact association.</td>
</tr>
<tr>
<td>Step 1: By February 20xx, contact local faith organizations association to identify potential sites.</td>
<td>Faith organizations</td>
<td>Faith community</td>
<td>Coalition partners—identify local faith organizations. Coalition Coordinator—contact association.</td>
</tr>
<tr>
<td>Steps 2: By March 20xx, contact individual local faith organization leaders to assess interest and discuss need.</td>
<td>Faith community</td>
<td>Faith community</td>
<td>Coalition partners—identify local faith organizations. Coalition Coordinator—contact local faith organization leaders.</td>
</tr>
<tr>
<td><strong>Strategy 2: Develop and disseminate health messages.</strong></td>
<td>Faith organization</td>
<td>Faith community</td>
<td>Health Promotion Coordinator and Coalition Coordinator—work with Faith Community Leader(s) to identify potential Lay Health Ministry Team Members.</td>
</tr>
<tr>
<td>Step 2: By May 20xx, create (or work with existing) Lay Health Ministry Team within each Faith Organization.</td>
<td>Faith organization</td>
<td>Faith community</td>
<td>Health Promotion Coordinator and Coalition Coordinator—work with Faith Community Leader(s) to identify potential Lay Health Ministry Team Members.</td>
</tr>
<tr>
<td>Step 2: By June 20xx, develop culturally relevant health messages to disseminate through faith organization media.</td>
<td>Faith organization</td>
<td>Faith community</td>
<td>Coalition Coordinator, Lay Health Ministry Team members—develop messages to be disseminated in newsletter and sermons.</td>
</tr>
<tr>
<td>Step 3: By June 20xx, begin to disseminate messages through faith organization media.</td>
<td>Faith organization</td>
<td>Faith community</td>
<td>Faith Community leaders—share information in sermons. Lay Health ministry Team—share information through newsletters and word or mouth.</td>
</tr>
<tr>
<td><strong>Strategy 3: Assess impact of messages on congregation.</strong></td>
<td>Faith Organization</td>
<td>Faith community</td>
<td>Health Promotion Coordinator and/or Coalition Coordinator—develop survey. Lay Health Ministry Team members—Administer survey.</td>
</tr>
<tr>
<td>Step 1: By September 20xx, develop and implement survey.</td>
<td>Faith Organization</td>
<td>Faith community</td>
<td>Health Promotion Coordinator and/or Coalition Coordinator—develop survey. Lay Health Ministry Team members—Administer survey.</td>
</tr>
<tr>
<td>Step 2: By November 20xx, share results with faith community members and association.</td>
<td>Faith Organization</td>
<td>Faith community</td>
<td>Health Promotion Coordinator and/or Coalition Coordinator—compile results. Faith Community Leaders—share information with faith community members.</td>
</tr>
</tbody>
</table>
This plan addresses Goal #2, Objective #1 of the Eat Smart, Move More...North Carolina initiative

COMMUNITY ACTION PLAN

Division of Public Health
NC Department of Health & Human Services

AGENCY: Carolina County Health Dept.
PREPARED BY: Johnny Movemore
PHONE: MOV-EMO-REN
E-MAIL: johnnymovemore@carolinacounty.nc.org

PROGRAM(S): Carolina County Physical Activity and Nutrition

FOR PERIOD COVERING: July 1, 20XX TO June 30, 20XX

Healthy Carolinians 2010 Health Objective Addressed

Increase the proportion of adults (18 years and older) who engage in physical activity for at least 30 minutes on 5 or more days of the week.
Increase the proportion of middle and high school students who report participating in moderate physical activity for at least 30 minutes on 5 or more of the previous seven days.

LOCAL COMMUNITY OBJECTIVE

Number _________

Is this a policy and/or environmental change objective?   Estimated Size: 41,000
☑ yes     Targeted Health Disparities Population: Estimated Size: 12,000
☑ no

STRATEGIES & Steps

Strategy 1: Inventory town walking environments.

Step 1: By February 20xx, attend “Walking and Biking Suitability Assessment” training.

Step 2: By March 20xx, train LPAN members and community volunteers (including students, parents and seniors) on use of assessment tool.

Step 3: By May, 20xx, meet with local planners, director of public works, elected officials to describe project and get buy-in.

Step 4: By May 20xx, develop relationship with GIS staff.

Step 5: By June 20xx, begin to inventory 50 percent of town sidewalks and 100 percent of business district and school areas as evidenced by GIS maps.

Increase, by 2,500 feet (~ 1/2 mile), the linear footage of safe and convenient sidewalks in Pleasantville by 20xx.

Objective’s Target Population:
Estimated Size: 41,000
Targeted Health Disparities Population:
Estimated Size: 12,000

COMMUNITY PARTNERS— THEIR ROLES & RESPONSIBILITIES

<table>
<thead>
<tr>
<th>STRATEGY GROUP</th>
<th>SETTING (channel)</th>
<th>COMMUNITY PARTNERS— THEIR ROLES &amp; RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td>Community</td>
<td>Project Leader/HP Coordinator—attend state training.</td>
</tr>
<tr>
<td>Community</td>
<td>Community</td>
<td>Project Leader/HP Coordinator—Plan and conduct local assessment training. LPAN members/community volunteers—attend local assessment training.</td>
</tr>
<tr>
<td>Community</td>
<td>Community</td>
<td>Project Leader/HP Coordinator—schedule and participate in meetings. LPAN representatives—participate in meetings.</td>
</tr>
<tr>
<td>Community</td>
<td>Community</td>
<td>Project Leader/HP Coordinator—schedule and participate in meetings. LPAN representatives—participate in meetings.</td>
</tr>
<tr>
<td>Business</td>
<td>Community</td>
<td>Volunteers—assist with inventory. Town Planner—assists with GIS mapping. Town Manager—assist with budgetary, legal, and safety issues. Elected Officials—public support, budgetary and legal issues. Health Promotion Coordinator—coordinates data collection, promotes inventory, collects and collate data, updates officials on progress and needs.</td>
</tr>
<tr>
<td>STRATEGIC &amp; Steps</td>
<td>TARGET GROUP</td>
<td>SETTING (channel)</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------</td>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Strategy 2:</strong> Analyze current local policies on related walkability issues.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1: By February 20xx, meet with town planner to learn current policies and their implications for “walkability.”</td>
<td>Community</td>
<td>Community environment</td>
</tr>
<tr>
<td>Step 2: By March 20xx, complete Active Community Environment (ACE’s) assessment from Walking and Bicycling Suitability Assessment manual.</td>
<td>Community</td>
<td>Community environment</td>
</tr>
<tr>
<td>Step 3: By March 20xx, meet with developers to learn opportunities and barriers within current policies with implications for walkability.</td>
<td>Community</td>
<td>Community Environment</td>
</tr>
<tr>
<td><strong>Strategy 3:</strong> Advocate for sidewalk ordinance.</td>
<td>Business employees/customers, school employees/students, families</td>
<td>Community environment</td>
</tr>
<tr>
<td>Step 1: By March 20xx and ongoing, plan media advocacy efforts around LPAN assessment training, sidewalk inventory data, health issues related to community environments and need for “walkable” communities.</td>
<td>Business employees/customers, school employees/students, families</td>
<td>Community environment with worksites and schools emphasis</td>
</tr>
<tr>
<td>Step 2: By July 20xx, share results of assessment with government staff and elected officials.</td>
<td>Local government staff and elected officials</td>
<td>Community environment</td>
</tr>
<tr>
<td>Step 3: By October 20xx (following year), work to incorporate data into existing land use and transportation plans to appropriate facilities for walking (and cycling) by collaborating with town board and evidenced by county data, GIS mapping, and revised land use plan.</td>
<td>Local government staff and elected officials</td>
<td>Community environment</td>
</tr>
<tr>
<td>Step 4: By April 20xx (following year), contribute to requirement of town subdivision ordinance for sidewalks in all new subdivisions as evidenced by Town Zoning Ordinance.</td>
<td>Local officials</td>
<td>Community Environment</td>
</tr>
</tbody>
</table>
This plan addresses Goal #2, Objective #2 of the Eat Smart, Move More...North Carolina initiative

COMMUNITY ACTION PLAN

<table>
<thead>
<tr>
<th>Division of Public Health NC Department of Health &amp; Human Services</th>
<th>PROGRAM(S): Carolina County Physical Activity and Nutrition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGENCY: Carolina County Health Dept.</td>
<td></td>
</tr>
<tr>
<td>PREPARED BY: Johnny Movemore</td>
<td></td>
</tr>
<tr>
<td>PHONE: MOV-EMO-RENC</td>
<td></td>
</tr>
<tr>
<td>E-MAIL: <a href="mailto:johnnymovemore@carolinacounty.nc.org">johnnymovemore@carolinacounty.nc.org</a></td>
<td></td>
</tr>
<tr>
<td>FOR PERIOD COVERING: July 1, 20XX TO June 30, 20XX</td>
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</tr>
</tbody>
</table>

Healthy Carolinians 2010 Health Objective Addressed

Increase the proportion of adults (18 years and older) who engage in physical activity for at least 30 minutes on 5 or more days of the week.

Increase the proportion of middle and high school students who report participating in moderate physical activity for at least 30 minutes on 5 or more of the previous seven days.

LOCAL COMMUNITY OBJECTIVE

Number _________

<table>
<thead>
<tr>
<th>Is this a policy and/or environmental change objective?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

Objective's Target Population:
Estimated Size: 32,000
Targeted Health Disparities Population:
Estimated Size: 18,000

STRATEGIES & Steps

<table>
<thead>
<tr>
<th>STRATEGY 1: Build support among local medical association to promote physical activity and healthy eating as preventive medicine.</th>
<th>TARGET GROUP</th>
<th>SETTING (channel)</th>
<th>COMMUNITY PARTNERS—THEIR ROLES &amp; RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: By October 20xx and following, participate in local medical association meetings to network, learn methods of possible approach, and opportunities to enhance patient education by physicians and their staff.</td>
<td>Association and physicians</td>
<td>Health care</td>
<td>Health Promotion Coordinator—participate in association. Association members—participation as normal.</td>
</tr>
</tbody>
</table>

**Strategy 2:** Identify needed materials and resources for patients and for the health care professionals.

<table>
<thead>
<tr>
<th>Step 1: By January 20xx, send relevant materials (such as journal articles and medical studies) on health benefits of physical activity and healthy eating to local physicians and medical associations.</th>
<th>Association and physicians</th>
<th>Health care</th>
<th>Health Promotion Coordinator—research, collect and send materials. Medical Association—provide names and contact information for members. LPAN and Community Volunteers—advocate for increased physical activity and healthy eating education.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: By May 20xx, identify or develop materials to facilitate and prompt physicians to promote physical activity and healthy eating during patient visits.</td>
<td>Association and physicians</td>
<td>Health care</td>
<td>Health Promotion Coordinator, in communication with staff nurses and medical association liaison—to lead identification or development of materials. LPAN and Community Volunteers—assist.</td>
</tr>
<tr>
<td>STRATEGIES &amp; Steps</td>
<td>TARGET GROUP</td>
<td>SETTING (channel)</td>
<td>COMMUNITY PARTNERS—THEIR ROLES &amp; RESPONSIBILITIES</td>
</tr>
<tr>
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<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Step 3: By July 20xx, develop incentives for physicians as well as for patients (to be distributed by physicians).</td>
<td>Association and physicians</td>
<td>Health care</td>
<td>Health Promotion Coordinator—lead and coordinate with Medical Association Liaison—determine incentives for physicians as well as for patients. LPAN and Community Volunteers—assist.</td>
</tr>
</tbody>
</table>

### Strategy 3: Determine which primary care facilities will implement physical activity and healthy eating messages.

| Step 1: By August 20xx, present physical activity and healthy eating material to local medical association. | Association and physicians | Health care | Health Promotion Coordinator—prepare and present material to Medical Association. |
| Step 2: By September 20xx, get confirmation from at least 6 physicians that they will routinely provide physical activity and healthy eating materials to their patients. | Physicians | Health care | Health Promotion Coordinator—call physicians for confirmation and to ask if additional assistance is needed. |
| Step 3: By October 20xx, determine which staff member, at the health care facility, will be a liaison to the health promotion coordinator for these efforts. | Physicians and staff | Health care | Health Promotion Coordinator—confirm staff liaison. |

### Strategy 4: Follow up with health care liaisons to confirm implementation of project, and seek new patient care facilities to commit to promoting.

| Step 1: By October 20xx and ongoing, follow up with physicians and/or liaisons to confirm promotion of physical activity and healthy eating as preventive medicine and increase utilization of material and incentives. | Association, physicians, and liaisons | Health care | Health Promotion Coordinator—lead follow-up and ongoing advocacy efforts. LPAN and Community Volunteers to assist with follow-up and ongoing advocacy efforts. |
| Step 2: By December 20xx, ask liaisons for recommendations to additional providers that may be willing to promote healthy lifestyles on a dedicated basis. | Association, physicians, and liaisons | Health care | Health Promotion Coordinator—lead follow-up and ongoing advocacy efforts. LPAN and Community Volunteers to assist with follow-up and ongoing advocacy efforts. |
This plan addresses Goal #2, Objective #2 of the Eat Smart, Move More...North Carolina initiative

COMMUNITY ACTION PLAN

Division of Public Health
NC Department of Health & Human Services

AGENCY: Carolina County Health Dept.
PREPARED BY: Johnny Movemore
PHONE: MOV-EMO-RENC
E-MAIL: johnnymovemore@carolinacounty.nc.org

FOR PERIOD COVERING: July 1, 20XX TO June 30, 20XX

PROGRAM(S): Carolina County Physical Activity and Nutrition

Healthy Carolinians 2010 Health Objective Addressed

Increase the proportion of middle and high school students who report participating in vigorous physical activity for at least 20 minutes on 3 or more of the previous seven days.

Increase the proportion of middle and high school students who report participating in moderate physical activity for at least 30 minutes on 5 or more of the previous seven days.

LOCAL COMMUNITY OBJECTIVE

Number _________

Is this a policy and/or environmental change objective? [x] yes [□] no

Objective’s Target Population:
Estimated Size: 500

Targeted Health Disparities Population:
Estimated Size: 160

STRATEGIES & Steps

<table>
<thead>
<tr>
<th>TARGET GROUP</th>
<th>SETTING (channel)</th>
<th>COMMUNITY PARTNERS—THEIR ROLES &amp; RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy 1: Build community support for physical education.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1: By September 20xx, Meet with school Parent/Teacher associations or organizations to discuss need for physical education.</td>
<td>Parents and teachers</td>
<td>Schools</td>
</tr>
<tr>
<td>Step 2: By September 20xx, meet with School Administrators and School Board to discuss need for physical education.</td>
<td>School administrators</td>
<td>Schools</td>
</tr>
<tr>
<td>Strategy 2: Work with County Healthful Living Coordinator to assess physical education program in schools.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1: August 20xx, identify and gain approval (from school administrators) for assessment of schools using School Health Index (SHI).</td>
<td>School administrators</td>
<td>Schools</td>
</tr>
<tr>
<td>Step 2: By November 20xx, complete implementation of SHI in approved schools.</td>
<td>Schools</td>
<td>Schools</td>
</tr>
<tr>
<td>Step 3: By December 20xx, share results of SHI with School Administrators.</td>
<td>School administrators</td>
<td>Schools</td>
</tr>
<tr>
<td>STRATEGIES &amp; Steps</td>
<td>TARGET GROUP</td>
<td>SETTING (channel)</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Step 4: By January 20xx, work with school administrators and healthful living coordinator to determine resources needed to support recommended changes (e.g., daily physical education).</td>
<td>School administrators</td>
<td>Schools</td>
</tr>
<tr>
<td><strong>Strategy 3:</strong> Advocate for improvements to physical education program (to include daily requirement).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1: By February 20xx and following, meet with School Board to request and find support for needed improvements in physical education.</td>
<td>School board and administrators</td>
<td>Schools</td>
</tr>
<tr>
<td>Step 2: By July 20xx, share successful changes with media and discuss need for community wide change.</td>
<td>Community</td>
<td>Schools</td>
</tr>
</tbody>
</table>


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(listed in alphabetical order)

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GRAPHIC DESIGN
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Glossary of Terms*

Action Steps are steps outlined in a Community Action Plan that describe how and when a strategy, used to meet an objective, will be accomplished.

Accessibility means that buildings, structures, programs, transportation services, etc. are designed or modified to enable persons with activity limitations and disabilities to utilize them without undue difficulty.

Accessible Communication refers to computers and technology used by people with disabilities to assist them in communication. For example, many people who are hard of hearing or have speech difficulties use a telecommunications device (TTY) instead of a standard telephone.

Activity limitation refers to limitations an individual may experience when performing everyday functions or tasks, such as communication, self-care, and mobility.

Adaptation means modifying activity equipment or techniques so that an individual with a limitation or disability can participate in an activity. For example, in golf, placing large flags to mark pin placement on the green for those with low vision or strapping a grip surface onto a club so that an individual with limited grasp due to arthritis or finger amputations can use the club.

Advocacy Efforts are efforts used to create a shift in public opinion and mobilize the necessary resources and forces to support an issue, policy, or constituency.

Americans with Disabilities Act (ADA) is a civil rights law that prohibits discrimination against, or segregation of, persons with disabilities in all activities, programs, or services offered by state and local government and goods and services offered by private companies and in commercial facilities. Some ADA features related to physical activity include adequate space for wheelchairs to move between fitness equipment; accessible pool entrances; accessible trails and sidewalks.

* For use in this documents as well as the North Carolina Blueprint For Changing Policies And Environments In Support Of Healthy Eating.
At-Risk-For-Overweight describes children and youth with BMI ≥85th and ≤95th percentile for age and gender. Children over the 85th percentile at age 6 can be expected to be overweight adults; 70-80 percent of overweight teens can expect to be overweight adults.

Barrier Free Design refers to architectural design that is accessible and accommodates people with a variety of abilities, (eg. ramps for wheelchairs and strollers and delivery personnel).

Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing data collection program sponsored by the Centers for Disease Control and Prevention to monitor the prevalence of major behavioral risks among adults associated with premature morbidity and mortality.

Body Mass Index (BMI) is an indicator of body size based on height and weight with good correlation to body fat. It is calculated as weight in kilograms divided by height in meters squared. The standard adult categories are underweight (BMI less than 18.5 kg/m²), normal (18.5-24.9 kg/m²), overweight (25-29.9 kg/m²), and obese (30 or more). For children (ages 2-20), a BMI below the 5th percentile for age and gender is underweight; between the 85th and 95th percentile is at risk for overweight; at or above the 95th percentile is overweight. For more information on BMI or to calculate your BMI, visit www.nhlbisupport.com/bmi.

Body Mass Index Formula: \[ \text{BMI} = \frac{\text{Weight (kg)}}{\text{Height (m)}^2} \]

Capacity Building is a process to enhance the ability of a group or institution to manage change, resolve conflict, enhance coordination, foster communication, and ensure that data and information are shared.

Cardiovascular Disease is any abnormal condition of the heart or blood vessels. Cardiovascular disease includes coronary heart disease, stroke, peripheral vascular disease, congenital heart disease, endocarditis, and many other conditions.

Childhood Overweight describes children with greater than a 95th percentile BMI for age and gender for youth over 2 years of age.

Chronic Disease is an illness that is prolonged, does not resolve spontaneously, and is rarely cured completely.

Coalition describes an alliance of organizations to achieve a common purpose or joint action. The underlying concept behind coalitions is collaboration and resource sharing.

Color Me Healthy is a program designed to reach limited resource children ages four and five with fun, innovative, interactive learning opportunities on physical activity and healthy eating. It is developed for use in family day care homes, Head Start classrooms, and childcare centers during “Circle Time.”
**Community Action Plan** is a plan that counties and districts develop and submit yearly to the North Carolina Statewide Health Promotion program to describe how the local health department will utilize Statewide Health Promotion funds to meet the program requirements. The Plan aids local agencies in focusing objectives, determining strategies to meet objectives, identifying staff and critical community partners, and determining target population, setting, resources, and time frame to meet objectives.

**Community Environment** is the built and/or social environment (e.g., public spaces, retail, senior centers, and community policies).

**Community Groups** are groups within a community with a service or social mission (e.g., garden club, civic club, etc.)

**Community Partners** are individuals and/or groups in the community which work together for a common goal. This may include key contacts, community-based organizations, county agencies, policy makers, and advocacy groups.

**Competitive Foods** are any foods offered at school (e.g., a la carte, vending, or school store) other than meals served through USDA’s school meal programs: school breakfast, school lunch, or after-school snack programs. These foods and beverages often are, but need not be, high fat, high calorie and high sugar containing (e.g., soda, sport and fruit drinks, ice cream products, salty snack foods).

**County Planning Guide** is a document for local health departments and districts receiving funds from the Statewide Health Promotion Program to assist them and their community partners in developing an effective annual plan for their health promotion program.

**Dietary Guidelines for Americans** are ten evidenced based dietary recommendations that were issued in 2000 and are now national policy.

**Disability** refers to a functional limitation that interferes with a person’s major life activities, such as the ability to walk, hear, learn, see, and communicate. Disability is a social phenomenon, resulting not just from medical or health considerations, but from interactions with society and the environment. An adult with spina bifida is able to work and swim competitively. However the individual may be limited in their physical activity options by the lack of accessibility to the pool and locker room. Disability should not discourage people from striving for the benefits of physical activity and engaging in an array of physical activity opportunities.

**Eat Smart, Move More...North Carolina** is a statewide initiative focused on fostering policies and creating environments supportive of healthy eating and physical activity. The initiative is supported by the Physical Activity and Nutrition Unit, North Carolina Division of Public Health.

**Environment** is the entirety of the physical, biological, social, cultural, and political circumstances surrounding and influencing a specified behavior.
Exercise is planned, structured, and repetitive bodily movement done to improve or maintain one or more components of physical fitness. This is one type of physical activity.

Facilities/Environmental Change describes changes to physical and social environments that provide new or enhanced supports for healthy behaviors.

5 A Day Campaign is a nationwide campaign to encourage the consumption of five servings of fruits and vegetables each day to reduce risks for chronic conditions.

Food Insecurity describes limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.

Health Disparities describes differences in health status among distinct segments of the population including differences that occur by gender, race or ethnicity, education or income, disability, or living in various geographic localities. Usually implies that one group (e.g., African Americans, women) have poorer indicators of health or receive less aggressive treatment.

Healthy Eating describes following a dietary pattern consistent with the Dietary Guidelines for Americans.

Healthy Food has no single best description. See Appendix III of North Carolina Blueprint For Changing Policies And Environments In Support Of Healthy Eating for examples of food items or consumption patterns considered healthy.

Incentives are rewards for achieving a level of performance or goal.

Inclusion means having the same choices and opportunities that others have and is a process in which persons with disabilities have the opportunity to participate fully in the community activities offered to others. Inclusion is what results when people with and without disabilities live, learn, work, play, and exercise together.

Indicator refers to measures of specific environments and policies related to physical activity and healthy eating on which information is systematically and routinely collected and used to monitor changes in these environments and policies over time.

Intervention is an organized or planned activity that interrupts a normal course of action within a selected group of individuals or the community at large in order to diminish an undesirable behavior or to enhance or maintain a desirable one. In health promotion, interventions are linked to improving the health of the population or to diminishing the risks of illness, injury, disability, or death.

Levels of Impact is a method of reporting an event or activity in the Progress Check Evaluation system. Levels are environmental or policy action (EPA), environmental or policy outcome (EPO), or media coverage (MC). Level of potential impact could be: state, region, county, municipality, neighborhood, multiple organizations, single organizations, or other.
LHD stands for a Local Health Department.

LPAN stands for a Local Physical Activity and Nutrition Coalition.

Mass Media is a medium of communication (such as newspapers, radio, or television) that is designed to reach a vast number of people.

Media Advocacy is the strategic use of mass media as a resource for advancing social or public policy initiatives. One of the main purposes of media advocacy is to stimulate community involvement in defining policy initiatives and to use their voices in order to be heard and seen.

Medical Nutrition Therapy is a food and beverage-based plan designed for management of a specific condition such as diabetes, hypertension, or metabolic syndrome. A registered or licensed dietitian usually provides medical nutrition therapy. This may be referred to as a therapeutic diet.

Moderate Activity is an amount of activity sufficient to burn approximately 150 kilocalories of energy per day, or 1000 kilocalories per week. The duration of time it takes someone to achieve a moderate amount of activity depends on the intensity of the activities chosen.

Moderate-Intensity Physical Activity is any activity performed at 50 to 69 percent of maximum heart rate. For most people, it is equivalent to sustained walking, is well within most individuals’ current physical capacity, and can be sustained comfortably for a prolonged period of time (at least 60 minutes). A person should feel some exertion but also should be able to carry on a conversation comfortably during the activity.

Multi-Level Model is an adapted version of the Socio-Ecological Model, that portrays the multiple factors that influence (either positively or negatively) the health behavior of an individual. The levels of influence are: individual, interpersonal, organizational, community and society.

North Carolina 2010 Health Objectives are a comprehensive and ambitious statewide agenda that provides a direction for improving the health and well being of North Carolinians over the next decade. The entire document can be viewed at www.healthycarolinians.org

North Carolina Healthy Weight Initiative is a statewide initiative that has three major components to promote increased healthy eating and physical activity: (1) planning for comprehensive nutrition and physical activity programs to prevent overweight and related chronic disease in children 2-18 years of age; (2) enhancing a statewide nutrition and physical activity surveillance system; and, (3) implementing a multi-level pilot intervention that targets pre-school children and their families.

Nutrient Density is a term used to describe the nutritional value of a food based on its nutrient to calorie level. A soda, which provides many calories but limited other nutrients, is considered a low nutrient density food. Skim milk, a beverage that provides protein and many vitamins and minerals in a small number of calories and fat is considered a high nutrient density food.
Obesity is defined as a Body Mass Index (BMI) $\geq 30$ kg/m$^2$ for adults and is considered a disease by the National Institutes of Health. Obesity is linked to higher incidences of type 2 diabetes, hypertension, cardiovascular disease, gout, osteoarthritis, and some cancers in adults.

Organizational Media is internal communication (such as a company newsletter) designed to reach organizational members.

Outcome Evaluation is a process of reviewing actions to determine whether the program met the stated long-term goals and objectives.

Overweight is defined by the National Institutes of Health as a Body Mass Index (BMI) $>25-29.9$ kg/m$^2$. Individuals with risk factors for chronic disease would medically benefit from a 10 percent weight reduction. In children (age 2-20 years) overweight has been defined as a gender and age specific BMI at or above the 95th percentile, based on the Centers for Disease Control and Prevention revised growth charts.

PAN is the Physical Activity and Nutrition Unit, North Carolina Division of Public Health, home of Eat Smart, Move More...North Carolina initiative.

Physical Activity describes any bodily movement that is produced by the contraction of skeletal muscle and that results in energy expenditure.

Physical Fitness is a set of attributes that persons have or achieve that relates to the ability to perform physical activity. Performance-related components of fitness include agility, balance, coordination, power, and speed. Health-related components of physical fitness include body composition, cardiorespiratory function, flexibility, and muscular strength/endurance.

Planning Products describes a tangible product that is a result of planning activities within the North Carolina Statewide Health Promotion Program. These are actual “tools” or “products” used to promote the health promotion initiatives. (This will be reported in Progress Check) Examples: an action plan, grant applied for and submitted, a new staff position (not turnover), survey tool developed, resource guide, policy/practice change materials, (such as a guide for healthy vending options).

Policies are laws, regulations, and rules (both formal and informal) within a setting.

Policy Change is modifications to laws, regulations, formal and informal rules as well as standards of practice. Policy change may occur at the organizational, community, or societal levels.

Pouring Rights are the rights established by a contract to serve a specific brand of products (usually soft drinks) exclusively without competition (e.g., vending machines in schools).

Practices describes the decisions and behavior of organizations, groups, and individuals and the ways that policies are implemented within a particular setting.
**Process Evaluation** provides documentation during program implementation in order to make adjustments for improvement of the program.

**Progress Check Evaluation System** is an electronic system developed to monitor activities and accomplishments reported by local health departments receiving Statewide Health Promotion funds. This system measures, through quarterly reports, the effort necessary for policy and environmental changes that support healthy eating and physical activity. Reporting into the Progress Check system can be done at any time.

**Proportionate Risk Factor Cost Appraisal** is an appraisal about the impact of sedentary lifestyle on medical and workers compensation costs in the State of North Carolina.

**Public Awareness** is the public’s knowledge of a particular issue.

**Regular and Consistent Messages** are prompts that encourage healthy behaviors. They may occur at the point of decision or be ongoing reminders for healthy eating and physical activity.

**Regular Physical Activity** is a level of physical activity done frequently enough to reap some health benefit (e.g., an accumulated 30 minutes or more of moderate-intensity activity on 5 or more days of the week or an accumulated 20 minutes or more of vigorous-intensity activity on 3 or more days of the week).

**Sedentary Lifestyle** describes a lifestyle characterized by little or no physical activity.

**Settings** describes the site where interventions occur. This would also include what was formerly called the channel (e.g., community, faith, schools/childcare, worksites).

**Social Marketing** is applying advertising and marketing principles and techniques (e.g., applying the planning variables of product, promotion, place, and price) to health or social issues with the intent of bringing about behavior change. The social marketing approach is used to reduce the barriers to and increase the benefits associated with the adoption of a new idea or practice within a selected population.

**Start With Your Heart Campaign** is the North Carolina Cardiovascular Health Program’s social marketing campaign that encourages healthy eating and physical activity and reduces heart disease and stroke.

**Strategies** describe plans to achieve a local community objective. They are used in North Carolina Statewide Health Promotion Program’s Community Action Plans.

**Target Audience** is a group of individuals or organization, community, or society that is the focus of a specific health promotion effort.
Universal Design is an approach to accessibility that concentrates on making all aspects of an environment accessible to all people, regardless of ability. It increases the overall usability of the environment, accommodates a wide range of individual preferences and abilities, minimizes hazards and adverse consequences, is easy to understand, and communicates necessary information effectively. Examples include a power door at facility entrance, uncluttered fitness space, multi-station exercise equipment.

Winner’s Circle Healthy Dining Program is a collaborative program designed by North Carolina Prevention Partners in cooperation with the North Carolina Cardiovascular Health and Physical Activity and Nutrition Units designed to encourage eating establishments to provide healthy food items as well as menu cues to those healthy foods and beverages. For specific nutrient criteria, visit http://www.ncwinnerscircle.org

Vigorous Intensity Physical Activity is described as hard or very hard physical activity requiring sustained, rhythmic movements and performed at 70 percent or more maximum heart rate according to age. Vigorous activity is intense enough to represent a substantial physical challenge to an individual and results in significant increases in heart and respiration rate.

Youth Risk Behavior Surveillance System (YRBSS) is a program developed to monitor priority health-risk behaviors that contribute to the leading causes of mortality, morbidity, and social problems among youth in the United States. It is sponsored by the Centers for Disease Control in Atlanta.

References and Resources


North Carolina Office on Disability and Health (1999). Removing Barriers: Tips
and Strategies to Promote Accessible Communication. Raleigh, NC: Woodward Communications.


Want to Make a Difference?

Do you want to create an environment supportive of physical activity and healthy eating in your community? Please contact the Physical Activity and Nutrition (PAN) Unit staff to learn more about the Eat Smart, Move More...North Carolina initiative or visit www.EatSmartMoveMoreNC.com.