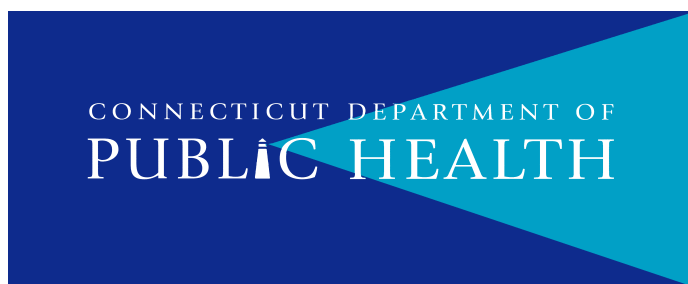


HEALTHY EATING *and* ACTIVE LIVING

Connecticut's Plan for Health Promotion



Keeping Connecticut Healthy

2005

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Healthy People 2010 Objectives

Executive Summary

A diverse group of partners concerned about the issues of obesity and inactivity came together under the leadership of the Connecticut Department of Public Health (DPH) to create this plan to increase general awareness of the crisis of obesity and overweight in Connecticut, and to provide recommendations and intervention strategies for the management and prevention of obesity and overweight for Connecticut residents.

Obesity is a public health crisis in Connecticut and the nation. Only smoking exceeds obesity in its contribution to total mortality rates in the U.S. Obesity is at the forefront of public health issues in Connecticut. In fact, over half of Connecticut adults are either overweight or obese, and over 80% are not getting the proper exercise to maintain good health. A health problem itself, obesity is a contributing risk factor in other chronic health diseases such as diabetes and heart disease, and emotional problems such as depression. Obesity impacts the health of individuals as well as health expenditures. The DPH responded by applying for and receiving funding to design a plan of intervention to prevent and control obesity in the state.

March 2004 –

CDC announces that the second leading cause of death in 2000 was poor diet and physical inactivity.

Source: <http://www.ncsl.org>

In September 2000, the Centers for Disease Control and Prevention funded Connecticut to develop the Connecticut Obesity Prevention and Control Program (OPCP). The initial objectives of the program were to build capacity and to develop a strategic State plan for obesity prevention and control. Through a collaborative planning process, representative members of five sectors (community, schools, healthcare delivery, worksite, and industry/institutions) developed recommendations that serve as the basis of the strategic State Plan. This plan identifies strategies to implement nutrition and physical activity interventions, particularly through population-based strategies such as: 1) policy-level change, 2) environmental supports, and 3) a social marketing approach, all applied in the following venues: communities, schools, healthcare delivery, worksites and industry.

The plan proposes a framework and process through which Connecticut communities and institutions will join together to implement strategies to promote health through healthy eating and active living.

Vision: Connecticut residents are eating healthy foods and engaging in physical activity for better health.

Mission: To promote a stronger social norm for healthy nutrition behaviors and increased physical activity.

Program Goal 1. Develop a comprehensive state infrastructure for obesity prevention and control

- ❖ *Develop state infrastructure to provide support and technical assistance*
- ❖ *Design a statewide surveillance system for tracking indicators related to nutrition and physical activity behavior*

Program Goal 2. Develop, implement, and evaluate a community-level model for obesity prevention and control

- ❖ *Pilot test a community model that applies a systems-based approach to policy and environmental change for replication in other communities*

Program Goal 3. Create a mechanism for promoting and tracking environmental and policy changes and outcomes related to promotion of increased physical activity and improved nutrition practices

- ❖ *Develop Connecticut-based “best practice and process” recommendations and resources for school, worksite, community, and health care delivery settings, to promote prevention and management of obesity*

The Plan:

Statewide Infrastructure and Interventions

1. *Attain a strong statewide partnership to address the obesity issue*
2. *Increase personal and general awareness of the need for prevention and intervention to reduce obesity through ongoing communication*
3. *Develop data and surveillance capabilities*
4. *Ensure that state and local policies and actions across all government departments support healthy nutrition and increased physical activity*

Community Level Intervention

1. *Increase collaboration of nutrition and physical activity professionals between state and community to present consistent and effective messages within and across communities*
2. *Identify and promote best practices to help communities statewide to change their environment to support healthy choices*
3. *Support the development of comprehensive community plans that change policy in the community environment to support healthy choices in municipalities across the state*

Schools

1. *Provide healthy school nutrition environments – from cafeteria lines to concessions at sports games*
2. *Develop state and local school district policies that increase physical activity opportunities and healthy eating habits*
3. *Communicate the positive correlation between child health, physical activity, and academic performance*
4. *Provide tools to help educators make changes in their own classroom/education environments*

Health Care

1. *Coordination: Develop common practices, standards, and referral mechanisms for addressing overweight and obesity across MCOs, Health Plans, and Public Health Systems and disease management programs*
2. *Quality Improvement: Adopt, recognize and use best practice guidelines related to a) prevention, screening, assessment, treatment and referral for overweight and obesity, b) nutrition services for related chronic diseases such as cardiovascular disease and diabetes, and c) promotion of physical activity*
3. *Coverage: Address health plan coverage and reimbursement issues related to service provision, interventions, education and counseling programs, and referral processes*

Industry/Institution

1. *Promote healthier nutritional practices*
2. *To promote participation in physical activities*

Worksite

1. *Promote wellness programs and policies in worksites that encourage improved nutritional practices, physical activity opportunities, and chronic disease management and prevention*
2. *Promote worksite initiatives that support lactating mothers in the workplace*

Connecticut's Plan for Health Promotion through Healthy Eating and Active Living

Section I. Introduction

Obesity is a public health crisis in Connecticut and the nation. Only smoking exceeds obesity in its contribution to total mortality rates in the U.S. Closely linked to obesity is the increasingly sedentary lifestyle of many residents. Results of the National Health and Nutrition Examination Survey (NHANES) 1999–2002 indicate that an estimated 65 percent of U.S. adults are either overweight or obese, defined as having a body mass index of 25 or more.¹

Currently, 56.2% of Connecticut's adult population are either overweight (36.5%) or obese (19.7%). Overweight refers to increased body weight in relation to height, when compared to some standard of acceptable or desirable weight. Obesity is defined as an excessively high amount of body fat or adipose tissue in relation to lean body mass.² Between 1994 and 2002, Connecticut experienced a 52% increase in the prevalence of obesity. The majority of Connecticut adult residents (80%) are at risk for health problems due to lack of physical activity.³

A diverse group of partners concerned about the issues of obesity and inactivity came together under the leadership of the Connecticut Department of Public Health (DPH) to create this plan to increase general awareness of the crisis of obesity and overweight in Connecticut, and to provide recommendations and intervention strategies for the management and prevention of obesity and overweight for Connecticut residents.

While scant scientific evidence exists on effective interventions to turn back this epidemic, one thing is certain: the obesity crisis will not be solved by a single intervention, approach or sector. The Centers for Disease Control and Prevention state that intervention strategies need to focus on policy, practice and environmental changes to encourage and support healthy lifestyle behaviors.⁴ Interventions will be required at the state, regional and community levels.

How the Plan was developed

A successful strategy to combat the crisis will require collaborative effort across multiple sectors that have the most impact on the problem: the healthcare system, education, the workplace and the food and fitness industries. Other key stakeholders include the community, legislators, government-based institutions and philanthropic organizations.

This plan is designed by stakeholders to encourage prompt action, at all levels and sectors, to control and reduce the prevalence of obesity and overweight in Connecticut and improve the overall health of our residents. Many intervention models and promising programs exist across Connecticut and the nation.

¹ BMI stands for **B**ody **M**ass **I**ndex. It is a number that shows body weight adjusted for height. BMI can be calculated with simple math using inches and pounds, or meters and kilograms. For adults aged 20 years or older, BMI falls into one of these categories: underweight, normal, overweight, or obese. <http://www.cdc.gov/nccdphp>

² <http://www.cdc.gov/nccdphp/dnpa/obesity/defining.htm>, These sources are consistent with the U.S. Dietary Guidelines and with the National Heart, Lung, and Blood Institute's Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults.

³ CDC Behavioral Risk Factors Survey S November 2003, <http://apps.nccd.cdc.gov/brfss>

⁴ The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity, 2001, <http://www.surgeongeneral.gov/topics/obesity/calltoaction/CalltoAction.pdf>

The plan focuses particular attention on intervention strategies for communities, the systematic evaluation of pilot interventions to build our base of knowledge of what works and why it works, and on surveillance activities to enable us to understand the scope and pattern of the obesity epidemic and our progress in addressing it.

Section II presents our understanding of trends in obesity and overweight in Connecticut, overall and within vulnerable population groups. It outlines a conceptual framework for understanding the issue and identifies the most prominent environmental and policy-related contributors to these trends. Section III recommends policy and practice changes at the local and state levels and within the school, healthcare, worksite, and institutional sectors. The changes can be implemented to influence not only Connecticut's practices related to physical activity and nutrition, but the environment within which residents make their choices. Section IV discusses resources available or needed and Section V presents an implementation plan.

Obesity Prevention and Control Program (OPCP) Purpose: To develop a comprehensive statewide plan that promotes a stronger social norm for healthy nutrition behaviors and increased physical activity.

Program Goals

- A comprehensive state infrastructure for obesity prevention and control.
- A community-level model for obesity prevention and control developed, implemented, and evaluated.
- A mechanism for tracking environmental and policy changes and outcomes related to promotion of increased physical activity and improved nutrition practices.

Program Objectives

- Develop state infrastructure to provide support and technical assistance to prevent and control obesity.
- Design a statewide surveillance system for tracking indicators related to nutrition and physical activity behaviors.
- Pilot test a community model that applies a systems-based approach to policy and environmental change.
- Refine and expand the model to other communities.
- Develop Connecticut-based "best practice and process" recommendations and resources for school, worksite, community, and health care delivery settings, to promote prevention and management of obesity.

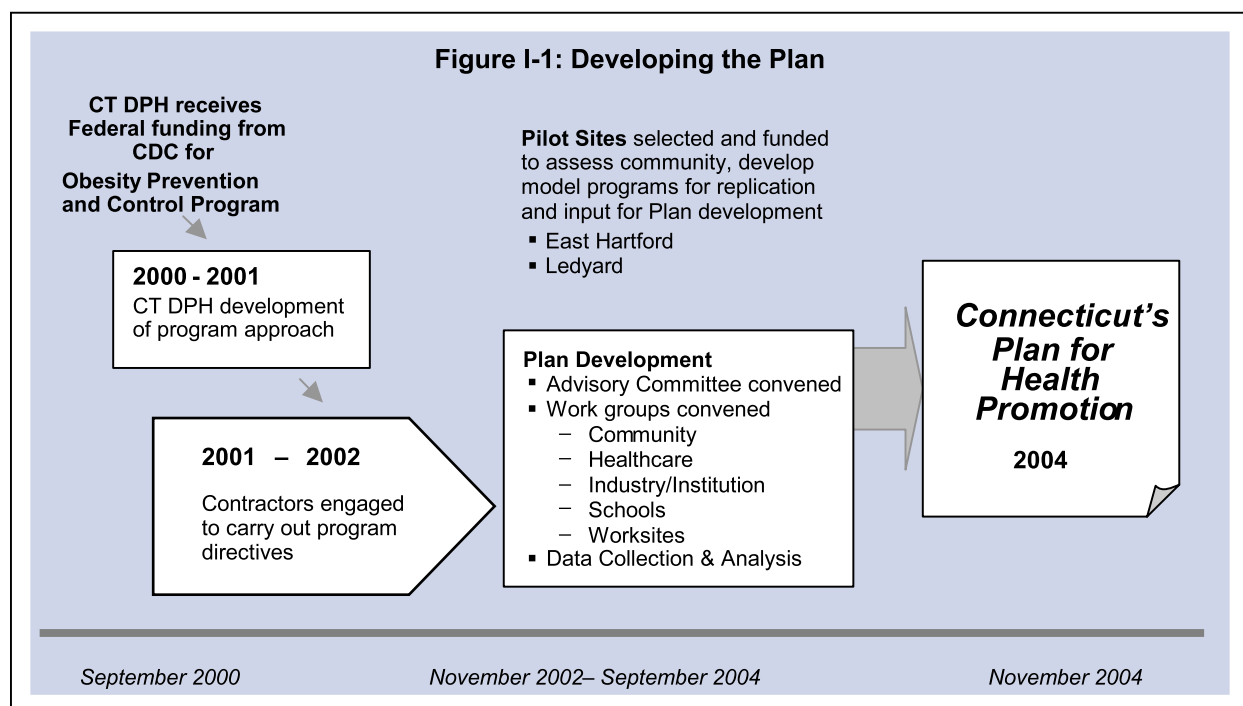
Process

In September 2000, Connecticut received three-year funding from the U.S. Centers for Disease Control and Prevention to develop the Connecticut Obesity Prevention and Control Program (OPCP) within the Department of Public Health. To achieve this goal, the OPCP identified a set of program goals and objectives as a guide for the work groups. The DPH anticipates a three-year timeline to establish and enhance links and partnerships that provide the framework to support this plan while seeking continued funding to support the infrastructure. One of the primary objectives of the program was the development of Connecticut-based best practice recommendations and intervention strategies related to prevention, screening, assessment, treatment and referral for overweight and obesity in the worksite, school, community, industry and institutions, and health care delivery settings. These settings were chosen as sites that encompass Connecticut residents within all stages of the lifespan. Interventions can be launched through working with partners, leaders, and champions within those settings.

The obesity program recognizes that most effective efforts to prevent chronic disease are conducted at a local level, based upon relationships already established in the community. Two Connecticut

communities, East Hartford and Ledyard, were selected as pilot sites to develop a community-based model, using environmental and policy change interventions to support and enhance healthy lifestyle practices.⁵ The DPH Office of Local Health Administration and the Connecticut Association of Directors of Health have been instrumental in assisting with these efforts.

At the state level, DPH staff coordinated and supported planning and implementation across multiple sectors and communities. A statewide forum of collaborators, including representatives from private businesses, healthcare institutions, communities, non-profit organizations and government-based institutions participated in the development of the plan.. Their commitment to the process and development of the strategic plan is commendable, and they are identified and duly recognized in the opening pages of this document.⁶ Figure I-1 illustrates the three-year process.



A subgroup of collaborators was formed as the Obesity Prevention Advisory Committee, which served a visionary and strategic planning role within the Obesity Prevention and Control Program. The committee provided direction and technical guidance in developing best practice guidelines and surveillance mechanisms. Five work groups were created to identify best practices in nutrition and physical activity interventions for the community, school, health care delivery, work site and industry, and institutional settings. Each of the work groups met four or more times to identify problems and barriers, and then developed goals, objectives and initial strategies. Large group meetings were convened to get broad range input not only from OPCP participants, but from other stakeholders including policy makers and funders. The industry/institution work group enabled the program to broaden its reach to the fitness industry, food industry, government and privately-based institutions, foundations and commissions that have a connection to public health advocacy, health policy and environmental concerns related to nutrition and physical activity. Concurrently a report was developed on obesity in Connecticut; a summary of formative research conducted on existing efforts related to obesity prevention in the state of Connecticut through

⁵ The pilots were selected as examples of urban and rural settings.

⁶ See members & affiliation lists in the Appendix

focus groups, surveys, informant interviews and existing data. The findings, located in Section II, are intended to inform and support the implementation of the State Strategic Plan and best practices for obesity prevention.

Expertise and guidance in the strategic planning process, data collection and research, web site development, provider training and the development of a community assessment tool were provided through key contractors. The contractors included Holt, Wexler and Farnam, LLP, Yale-Griffin Prevention Research Center, Area Health Education Center, Qualidigm, East Hartford Department of Health and Social Services, Ledge Light Health District, and Pita Communications.

A Connecticut Obesity Prevention and Control web site will be created to provide the public with information on Connecticut specific programs and services that support and enhance healthy lifestyles (link to be available through www.dph.state.ct.us). The web site will also have survey capabilities to poll the general public on a variety of obesity-related topics; to date, web site surveys have included only health planners.

Section II: Obesity in Connecticut & Nationally

Statement of the problem

The prevalence of obesity among adults in the U.S. has been steadily increasing over the past several decades. National estimates from the fourth National Health and Nutrition Examination Survey 1999-2002 (NHANES) indicate that 65% of adults in the U.S. are overweight or obese. A similar trend has occurred among U.S. children.

According to a report from the Prevention of Pediatric Overweight and Obesity, Pediatrics, 2003: 112:424, “prevalence of overweight and its co-morbidities in pediatric populations has rapidly increased and reached epidemic proportions.”⁷ The report further emphasizes the need for advocacy in the areas of physical activity and food policy for children, research on pathophysiology, risk factors and early recognition and management of overweight and improved health coverage. The policy statement issued by the Committee on Nutrition of the American Academy of Pediatrics emphasizes the importance of prevention. It states, “The dramatic increase in the prevalence of childhood overweight and its resultant comorbidities are associated with significant health and financial burdens, warranting strong and comprehensive prevention efforts.”⁸ Across the nation, prevalence among children and adolescents has doubled in the past 20 years. As of 2003, 15.3% of 6 – 11 year olds and 15.5% of 12 to 19 year olds are at or above the 95th percentile for Body Mass Index (BMI), with higher rates among subpopulations of children that are minority and economically disadvantaged.

In Connecticut, obesity prevalence increased from 10.9% in 1991 to 18.0% in 2002, nearly doubling in a just over a decade. The most significant rise in obesity prevalence is seen in the 18-34 age group, with an increase from 6.6% in 1991 to 12.6% in 2002.⁹ Figure II-1 illustrates the impact of the epidemic in Connecticut. According to DPH, studies among kindergarten, 6th, and 11th graders in Hartford (2000) and Bridgeport (2003) showed rates of overweight at between 19% and 24%. Because childhood obesity is a health condition that has a tendency to continue into adulthood, providers in the healthcare work group repeatedly stressed the importance of early intervention. Problem behaviors or practices significantly involve parental influence and the environment. A study conducted in 2001 revealed that 77% of children with a BMI of greater than the 95th percentile remained obese as adults.¹⁰

Figure II-1. Connecticut Health Facts, 2003

- 54.8 % of Connecticut's adults are either overweight or obese
- 35.7% are overweight
- 19.1% are obese
- A BMI of 25 to 29.9 is considered overweight.
- A BMI of 30 or more is considered obese.
- 11.6% of **high school students** are overweight (2003 YRBS)
- 52% obesity increase between 1994-2002
- 80% of CT's adult population are at risk for health problems due to lack of physical activity
- Since the 1970's the proportion of obese **children** has risen from 5% to 15%

Source: Connecticut DPH 2002 & 2003 BRFSS, YBRS, CDC BRFSS and YBRFSS
[www://apps.nccd.cdc.gov/brfss](http://apps.nccd.cdc.gov/brfss)

⁷ American Academy of Pediatrics, <http://www.aap.org/obesity/summary>

⁸ PEDIATRICS Vol. 112 No. 2 August 2003, pp. 424-430

⁹ Prevalence is the number of obese individuals in the population divided by total number of individuals in the population.
http://www.cdc.gov/nccdphp/dnpa/obesity/trend/prev_reg.htm

¹⁰ Harvey EL, Glenn A-M, Kirk SFL, Summerbell CD, Improving health professionals' management and the organization of care for overweight and obese people, 2001 updated: 04/01/2003 Freedman DS, Bowman BA, Otvos JD, Srinivasan SR, Berenson GS; and, Differences in the relation of obesity to serum triacylglycerol and VLDL subclass concentrations between black and white children: the Bogalusa Heart Study. *American Journal of Clinical Nutrition* 2002;75:827-33.

The Task Force to Reduce/Prevent Obesity in Children in New Haven reports that recent studies have shown that up to 50% of adolescents are obese.¹¹ Childhood obesity is associated with significant morbidity and mortality, including risks for Type 2 diabetes and cardiovascular disease, which are reaching epidemic proportions in inner city children. In New Haven, Type 2 diabetes is being diagnosed as young as age 5, and 40% of newly diagnosed cases of diabetes in youth are Type 2. These children will be at risk for complications of diabetes by the time they reach their mid-twenties and the costs for health care will be devastating. Childhood obesity is also associated with lower self-esteem, altered body image, decreasing physical activity, and depression. The social and economic consequences of obesity during childhood and adolescence persist into adulthood. Effective intervention is needed to reduce risk from chronic diseases.¹²

Influence of Lifestyles

Experts surmise that several changes in the U.S. diet and replacement of physical activity with sedentary diversions both in the workplace and in leisure time have facilitated this new epidemic.¹³ The article "The Escalating Pandemics of Obesity and Sedentary Lifestyle: A Call to Action for Clinicians," which appears in the February 9, 2004 issue of *Annals of Internal Medicine*, has generated a set of clinical guidelines on obesity and lifestyle. (See American Family Physician, a journal of the American Academy of Physicians.)¹⁴ Changes in food manufacturing, production, marketing, availability, and consumption have been identified as key factors in elevating the fat and calorie content of the American diet. The rapid proliferation of fast food franchises, increased production and marketing of "junk foods," easy-to-prepare high fat foods, and the increased variety and availability of numerous soft drinks have been linked to this epidemic in books, scientific literature, and media reports. In addition to the convenience that these foods provide, they are well packaged, inexpensive, and readily available at an increasing number of venues (for example the proliferation of food markets at gas stations). These are some of the changes in how food is delivered and consumed that are thought to contribute to expanding waistlines.

In contrast, so called "healthy foods" such as raw fruits and vegetables, or even prepared foods with lower fat content are comparatively difficult to find, more expensive, less strategically marketed or packaged, and are infrequently sold at fast food establishments or gas stations. A recent article indicates that America's food and beverage industries and restaurant companies are beginning to address childhood obesity by providing more nutritious products.¹⁵

Diet, however, is not the only culprit. Americans are also increasingly sedentary at home, in the workplace, and at school. The proliferation of technology in the workplace has led to machines and robotics carrying out an increasing proportion of our labor and reduction of physical activity. More workers spend their day in front of computers with very little physical activity. This trend toward inactivity continues in our leisure time in front of the television, computer, and video games. Advances in technology have even taken the activity out of our leisure time chores. Few people stand in lines in the bank, more and more people shop on the Internet rather than on foot. At the same time we have neglected to ensure inclusion of physical activity into our daily routines. Estimates from national surveys indicate that less than one third of U.S. adults get the recommended 30 minutes of moderate physical activity on most days of the week, and that 40 percent do not engage in physical activities.

"Exercise as the foundation of good health at any age is a message [that would change people's levels of physical activity]."

A Local CT Health Director

¹¹ In September 2001, Connecticut State Senator Toni N. Harp (D-New Haven), co-chair of the legislature's Public Health Committee, YSN Associate Dean for Research Affairs, Dr. Margaret Grey, and activists from a number of New Haven's community organizations formed The Task Force to Reduce/Prevent Obesity in Children.

¹² <http://nursing.yale.edu/Community/task-obesity.html>

¹³ <http://healthlink.mcw.edu/article/1031002183.html>

¹⁴ <http://www.aafp.org/afp/20040515/clinical.html>

¹⁵ New York Times, "Is the Food Industry the problem or solution?" Dale Buss, September 9, 2004

Children spend less time in school-related physical education than ever before, and the increasing level of competitiveness in organized sports creates barriers for less coordinated or athletic children from participating. In addition, mechanisms to increase activity are rarely considerations in urban planning, and driving or riding has replaced walking in nearly every aspect of modern life. The result is a sedentary population consuming more calories than can be burned off.

The Burden of Obesity

The burden of obesity among U.S. adults has been well described with regard to widespread associated co-morbidity, and health care and societal costs: see Figure II-2. Obesity among adults has been shown to dramatically increase risk of mortality, risk of heart disease, risk of diabetes, and risk of many forms of cancer. These health consequences have a substantial financial impact.

A recent report, *State Level Estimates of Annual Medical Expenditures Attributable to Obesity*, outlines an econometric model that predicts medical expenditures.¹⁶

The authors used this and state-representative data to quantify these estimated expenditures. According to this report, obesity drains health care resources in the nation, averaging over 5% of adult medical expenditures, approximately half of which are financed by Medicare and Medicaid. In the U.S., obesity prevalence and expenditures for Medicare are similar to privately insured. Yet, the Medicaid program enrolls a population with a higher prevalence of obesity and thus a greater proportion of its costs are attributable to obesity.

In Connecticut, an estimated 4.3% of adult medical expenditures are attributable to obesity. This is equivalent to \$846 million dollars. This estimate is based on BRFSS data from 1998 – 2000. Medicare and Medicaid finance approximately 78% of these medical expenditures in Connecticut. The estimated medical expenditures for Medicare are \$246 million for 6.5% of adult Medicare expenditures and \$419 million for 11% of adult Medicaid expenditures.

Although the consequences of **obesity among children** are less well understood, there is mounting evidence of increased prevalence of serious health conditions, such as hypertension, lipid disorders, diabetes, and pre-diabetic conditions among overweight children and adolescents.

Additional studies are needed to quantify the numbers of overweight children with these health conditions and to better describe health risk among overweight youth. Currently the best-known predictor of a child's risk of obesity is maternal BMI. The relationship between maternal and child obesity is thought to be in part genetic but largely due to a home or family environment that promotes intake of excessive calories and inactivity. Given that the burden of co-morbidity is poorly described in children, we cannot estimate the potential economic burden. It is essential, however, that we begin to examine the influence of obesity on health risk and the economic burden on vulnerable populations, such as children, chronically disabled adults, and the elderly, as these populations may be particularly susceptible to obesity-related health consequences and are largely dependent upon publicly funded health care services.

Racial/ethnic disparities in obesity and related co-morbidity may also have important consequences. Figure II-3 indicates the overweight and obesity rate by race/ethnicity in Connecticut in 2002. Prevalence of obesity and related diseases has been shown to be higher among racial and ethnic minority groups compared with whites, in particular among certain Hispanic groups and blacks. Economic disparities have also been found, particularly among adult women. Understanding the burden of obesity and obesity-

Figure II-2. Nationally:

- \$75 billion in 2003 estimated U.S. Obesity attributable medical expenditures half of which are financed by Medicare and Medicaid
- An estimated 64% of U.S. adults are either overweight or obese
- In 2000 there were an estimated 400,000 deaths attributable to obesity.

Source: www.obesityresearch.org

¹⁶ Finkelstein, Eric A., et al., "State Level Estimates of Annual Medical Expenditures Attributable to Obesity," Obesity Research, Vol. 12 No. 1, January 2004. www.obesityresearch.org

related disease among various groups within the state's population is essential for allocating resources to match the needs of the population. These trends also highlight the potential impact of obesity on state spending for Medicaid recipients.

Dispelling the Myth

Traditionally, obesity has been considered a discipline failure by an individual in choosing an appropriate diet and engaging in adequate activity. In other words, the individual is responsible for both the development of obesity and its treatment. These beliefs have fueled bias against the obese, because of the presumption that they have freely chosen to engage in the behaviors that lead to weight gain with full knowledge of the consequences. Under this model, most methods of treatment have focused on changing individual behavior through motivation, use of specific diet and exercise strategies, an emphasis on self-management and increasing the individual's sense of responsibility to self and will to change. Despite some ability to achieve success for individuals using these principles, the tide of increasing prevalence of obesity continues to rise across the population. Experts have refined their thinking about the problem of obesity in terms of a collection of overweight individuals to thinking of obesity as a health condition with a complex etiology for which everyone in the population is at risk.

Figure II-3. Overweight & Obesity, Prevalence 2002	CT %	% CT Population
White	50.8	81.6
Black	65.5	9.1
Hispanic	57.4	9.4
Asian/Pacific Islander	27.7	.3
Other	35.9	1.3
<i>Source: Kaiser Family Foundation, State Health facts online, CDC, 2002 (variations due to rounding)</i>		

Current efforts in Connecticut

Connecticut leaders recognize the obesity epidemic. As a result the state, schools, hospitals, communities, providers and other organizations are stepping up to make Connecticut residents healthier. Yet, without a coordinated effort, the programs remain disparate, unknown, and therefore unavailable to many residents of Connecticut. Efforts are underway to compile a comprehensive list of public and private programs in Connecticut aimed at nutrition and physical activity. DPH will provide leadership in the coordination among these partners to ensure collaboration critical in the fight against obesity in Connecticut. A representative sampling of current efforts includes the following:

State DPH Administered Programs

- **Obesity Prevention and Control Program.** Convened stakeholders to plan and develop the Statewide Obesity Plan, which is the major product of this program. Ongoing work will be dependent upon the level of resources made available. Current efforts include:
 - **ConnectiFIT.** This comprehensive worksite health and wellness program is a collaborative initiative between DPH and the University of Connecticut. The voluntary program, which is offered to all DPH employees, was designed to provide health awareness, lifestyle and environmental change programming targeted to improve the health of participants. Program components include exercise groups, educational sessions, healthy eating programs, worksite ergonomics, stress management, and smoking cessation. Program topics offered through ConnectiFIT are based on employee interest. A needs assessment of all DPH employees was conducted and results utilized to determine the types of health and wellness programs necessary to meet employee needs. DPH will serve as a ConnectiFIT pilot site with an overall goal to expand and offer ConnectiFIT to other state agencies.
 - **Pilot Programs in East Hartford and Ledyard:** Two programs, funded by DPH with CDC support through a cooperative agreement, test a community model that involves

conducting community assessment profiles, presenting findings to municipal leaders and the general public, identifying and implementing area-specific strategies and activities.

- **Community Assessment Tool:** DPH and the Yale-Griffin Prevention Research Center developed a community health and resource assessment tool, the Community Health Asset Profiler (CHAP), to assist the program pilot site communities of East Hartford and Ledyard in identifying assets, resources, and needs related to overweight and obesity. (See Resource Kit.)
- **Resource Kit:** A toolkit for community-based obesity prevention has been developed through a collaborative effort between Central AHEC and Connecticut Association of Directors of Health. Utilizing the experiences and strategies identified throughout the community planning process of the Pilot Program Sites, the toolkit includes “best practice and process” recommendations and resources for a community to promote the prevention and management of obesity within a variety of settings. As a guide for the community planning process, the resource toolkit includes the community assessment tool, information on engaging stakeholders, conducting a community assessment, holding a community forum, sample interventions by setting, developing and implementing an action plan, getting media involved, and conducting an evaluation. See page 30.
- **State Nutrition Action Plan (SNAP).** Developed by USDA funded programs in Connecticut, this initiative encourages programs to use interventions to work with their specific target populations to “Be Active, Stay Healthy, and Avoid Obesity.” These programs include: Connecticut Five A Day/Food Stamp Nutrition Education Program; DPH Women, Infants and Children Supplemental Food Program (WIC); UConn Family Nutrition Program; and the Connecticut State Department of Education (SDE) Team Nutrition Program.
- **The Special Supplemental Nutrition Program for Women, Infants and Children (WIC),** funded by USDA and administered by the Department of Public Health, provides specific foods, nutrition education and referrals for health and social services to low-income women, infants and children throughout the state. Emphasis is placed on nutrition education that targets both caregivers and children. Seventeen local agencies under contract with DPH provide services in nearly 80 permanent and portable sites throughout the state. WIC promotes physical activity and healthy eating habits with 52,000 participants each month.
- **The DPH Breastfeeding Program** is responsible for the coordination and oversight of the department’s breastfeeding activities. The Program Coordinator participates in the Connecticut Breastfeeding Coalition and chairs the statewide WIC Breastfeeding Committee that is composed of a designated Breastfeeding Coordinator from each local WIC Program. The WIC Breastfeeding Peer Counselor Program pilot project, and a number of other breastfeeding initiatives undertaken by the department, are coordinated by this program. A 40-hour Certified Lactation Counselor training program was provided to local agency nutritionists during 2005. All initiatives highlight the link between breastfeeding and obesity prevention.¹⁷
- **Five A Day Program:** Connecticut’s Five A Day program is funded through the federal food stamp program and provides direct nutrition education to low income audiences (food stamp eligible) in Connecticut through training workshops with parents, caregivers, and teachers of preschool children in Head Start and School Readiness. The program focuses on obesity prevention through increasing fruit and vegetable consumption and increasing physical activity among Head Start and School Readiness teachers, parents, and children. Training is provided to

¹⁷ The CDC Division of Nutrition and Physical Activity has identified 4 evidence-based components of obesity prevention: breastfeeding promotion and support, Five A Day (increased intake of fruits and vegetables), reduction of television viewing and increased physical activity.

teachers and parents on implementing a preschool nutrition curriculum that was developed by DPH and has been proven effective in increasing vegetable consumption in Head Start and School Readiness children. Training is also conducted with Food Share emergency food shelters, as well as health fairs and school assemblies. Information is provided on incorporating fruits and vegetables into meal plans, food budgeting and food preparation, among others. In addition, teachers from pre-kindergarten through 12th grade are trained on how to create healthy eating environments in the classroom and encouraging fruit and vegetable consumption through active modeling, encouragement, and incorporating 5 A Day in art, science, reading, among others. Connecticut 5 A Day incorporates a media effort, which includes TV, radio and bus boards in select cities where food stamp enrollment is highest.

- **The Cardiovascular Health Program (CVH)** funds four health departments (Eastern Highlands Health District, Northeast District Department of Health, Norwalk Health Department, and Stamford Health Department) to address nutrition and physical activity. Initiatives include formation of community health partnerships, implementation of community health assessments on attitudes, behaviors, and policy and environmental barriers to healthy eating and physical activity in the community and schools. The program also includes community walking and multi-purpose trail use/pedometer programs, expansion of farmers market/fresh produce initiatives, worksite wellness programs; and provision of direct nutrition education. DPH CVH Program is partnering with SDE to implement a Healthy Vending and Snack Sales Pilot Project that will serve as a state model for providing healthy food choices without negatively impacting profitability, and will be coupled with the development of a Healthy Vending and Snack Sales Action Guide to promote the Dietary Guidelines 2000 for foods and beverages sold in schools. The CVH Program has also partnered with the UCONN School of Allied Health to implement a worksite wellness program for Connecticut state employees. The program is being piloted at DPH with plans to expand it to other state agencies. A web-based worksite wellness toolkit has been developed to assist agencies in implementing the program.
- **Arthritis Program.** The Arthritis Program, through multiple collaborative efforts, is involved in expanding opportunities for people with arthritis to participate in arthritis self-help and physical activity programs. The Arthritis Program also utilizes partnerships to promote CDC's social marketing campaign, "Physical Activity: The Arthritis Pain Reliever." The message of the campaign, which targets people with arthritis, is that they can exert some control over their disease and reduce the pain.
- **Comprehensive Cancer Control Program.** This program recently published the *Connecticut Comprehensive Cancer Control Plan 2005-2008*. The plan is a collaborative effort of public and private partners that focuses on cancer prevention and early detection, quality of life issues, empowering survivors, and palliative care while addressing multiple cross-cutting issues. The plan identifies obesity as a modifiable risk and includes objectives that address poor nutrition and lack of physical activity.
- **Diabetes Program.** This program has worked with Hartford's Hill Health Center to pilot a program sponsored by the Bureau of Primary Health Care. The center was one of five national sites selected by the Disparities Health Collaborative. The program focused on the diagnoses and treatment of pre-diabetes through nutrition counseling and physical activity.
- **WISEWOMAN Program.** The Program provides screening services including height, weight, blood pressure, cholesterol, and blood glucose testing. Women identified through the program as being at risk for cardiovascular disease are provided the opportunity to participate in selected nutrition and physical interventions.

- **The Federal Preventive Health and Health Services Block Grant Program** funds obesity prevention and education programs. The two local health departments of Manchester and Norwalk are funded to conduct obesity programs in their communities.
- **The Maternal and Child Health Block Grant (MCHBG)** mandates that DPH conduct a needs assessment every five years. This assessment identifies the promotion of nutrition and exercise to reduce obesity as one of the State's nine priority needs. Several activities were outlined which address this need: 1) collaborate with the Department of Education to promote culturally appropriate physical activity and nutrition in schools; 2) create an internal infrastructure within Department of Health to address obesity across all programs; 3) collaborate with local health departments and other community based partners to address local interventions and to mobilize communities; 4) develop and implement a statewide public awareness campaign; 5) create/establish a comprehensive community plan to develop policies and practices in communities across the state; and 6) promote exercise and healthy eating through the Coordinated School Health Model. Performance measures have been established to evaluate progress toward meeting objectives.

State Legislative Effort

- **School Health Assessments:** Current law in Connecticut requires each child to undergo a health assessment prior to public school enrollment. The assessment includes a physical examination, an updating of immunizations, vision, hearing, postural and gross dental screenings, and other health information deemed appropriate by a physician. Legislation has been proposed that would require health care practitioners to include measurement of body mass index-for-age in the physical examinations. In addition, local or regional boards of education would be required to report annually to the local health department and the Department of Public Health the total number of pupils per school and per school district diagnosed with obesity based on the body mass index for age recorded on the school health assessments.
- **School Nutrition:** Effective July 1, 2004 Connecticut legislation specifies that each local and regional board of education must make available in the schools under its jurisdiction, for purchase by students enrolled in such schools, nutritious, low-fat foods and drinks that include low fat milk, 100% fruit juices, water, low fat dairy products, and fresh or dried fruits.

Other Programs

- **State Department of Education:** Connecticut Team Nutrition (a partnership of the Connecticut State Department of Education and the University of Connecticut) focuses on promoting healthy school nutrition environments and building local support among key decision makers for implementing healthy eating and physical activity practices. The partnership is conducting a healthy vending and snack sales pilot project in collaboration with the Yale Center for Eating and Weight Disorders and DPH for the purpose of developing a state model for healthy school snacks. Connecticut Team Nutrition has three activities related to the DPH initiatives:
 - **School Nutrition Policies Pilots:** Ten school districts are working to develop, adopt and implement school policies that promote healthy eating and physical activity, and foster a supportive healthy school nutrition program.
 - **Healthy Snack Pilot:** State model for providing healthy snack choices without negatively impacting school finances.
 - **Promoting Health Weight in Schools Guidelines and Position Statement:** State guidelines on obesity prevention in schools, practical strategies and policy recommendations to school districts for promoting healthy weight for all students.

- **Independent Programs:** Town of Greenwich, Obesity & Diabetes Education Program; New Haven Board of Education Healthy Kids First program involving removal of poor quality food from school vending machines and improvement of nutritional quality of school lunches prepared in a newly constructed central kitchen facility; Nathan Hale School, New Haven has a “junk-food free” school; Hartford Hospital; Connecticut’s WB20 television station features diet and weight loss programs online <http://wb20.healthology.com>. Hospitals have launched various initiatives, including Yale New Haven, Hartford Hospital, and Danbury Hospital. Bright Bodies, a program based in Yale New Haven Hospital for children to lose weight and change their activity levels. (See “Resource Tool Kit,” page 31, for community level projects.)
- **Environment and Human Health, Inc. (EHHI),** conducted a yearlong comprehensive research study that looks at nutrition and physical activity in schools, completed in 2004. EHHI is a nonprofit organization composed of doctors, public health professionals and experts.¹⁸
- **Connecticut Health Foundation:** A nonprofit charitable organization whose purpose it is to distribute funds for charitable, scientific and health initiatives that improve or bolster the state Department of Public Health. The Foundation concentrates on women’s health, childhood obesity and elder-health matters.
- **Governor’s Committee on Physical Fitness:** The Committee assists in the development of programs that promote healthier lifestyles and improve the well being of Connecticut residents of all ages.
- **Governor’s Greenways Council:** A statewide coalition of state and private agencies working to promote the development and maintenance of walking and multi-use trails to encourage healthy lifestyles.
- **Bike to Work Program:** A statewide coalition of representatives from health and transportation, and private citizens interested in promoting alternative transportation and healthy lifestyles.

The following plan is based on a summary of the best thinking of many stakeholders on obesity prevention and control issues, on the latest available literature, and on lessons learned from pilot obesity prevention projects.

¹⁸ EHHI Report, “The State of Nutrition and Physical Activity in our Schools,” <http://www.ehhi.org/reports/obesity>

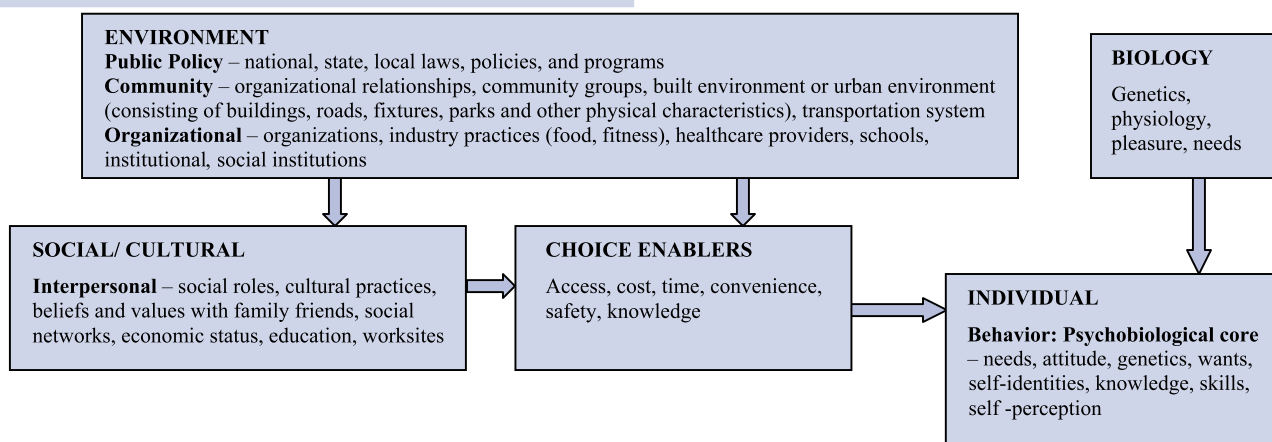
Section III: The Plan

Connecticut needs to act quickly to increase the demand for and support of nutrition and physical activity interventions to reverse the disturbing trends described in the preceding section, particularly through population-based strategies including: 1) policy-level change, 2) environmental change that supports healthier choices, and 3) social marketing. This plan outlines strategies in all three areas for action within communities, institutions, and policy making bodies, taking into account the social, economic, and cultural risk factors for poor nutrition and overweight. This plan recommends changes at the local and state levels both in Connecticut's practices related to physical activity and nutrition and in the environment within which residents make their choices. Interventions will be needed at multiple levels and in multiple sectors to control and prevent overweight and obesity.

An Intervention Model

A *socio - ecological model*, as depicted in Figure III-1 below, assumes a complex interaction of individual physiology, family, social environment in communities, cultural influences, and larger social influences on the development of obesity. For each individual in the population some risk for obesity exists, as a function of his or her own unique physiology, the home and family environment, the characteristics of the community and social environment, his or her cultural beliefs and practices, and shared societal beliefs, practices and conditions in the larger society.

Figure III-1. Impacting physical activity and eating behavior

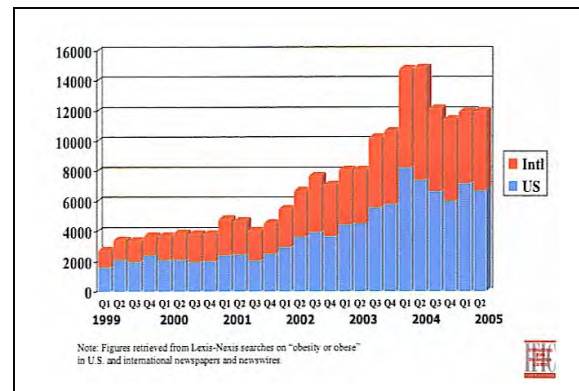


Interventions framed in the socio-ecological model do not focus on individual solutions, but rather on systematic change of factors that promote risk of obesity including the influence of family, community and social circumstances such as worksite, school and healthcare setting, cultural factors, and the larger social policy environment. The socio-ecological model brings with it several new challenges. First, whereas we have vast experience and models for studying an individual's health risk and health outcomes, we are less practiced at studying health problems on the community and larger societal level. Consequently there is little evidence to serve as a foundation for building and testing effective interventions aimed at families, communities, cultural groups, and policy environments. Also, any scientific study of complex systems, such as communities and policy-making groups, involves complex collaborations among entities with divergent interests and mandates. A multi-level intervention with several complex parts will more likely be required to show a significant impact on the current trend. This makes it difficult to measure the outcomes associated with specific components of obesity prevention. As

yet, no consensus exists regarding appropriate interim indicators of success for prevention or intervention initiatives.¹⁹

With the accelerating pace of media coverage of the obesity epidemic (Figure III-2), most professionals and opinion leaders and a high percentage of residents are getting the message about unhealthy eating and the dangers of a sedentary lifestyle.²⁰ Surveys and focus groups conducted during the planning process reinforced the increasing awareness. In fact, the Obesity Prevention and Control Plan (OPCP) Data Summary found that education, best practice guidelines, partnerships between industries, cultural sensitivity, and resources are the main facilitators to an effective strategy to counter obesity in Connecticut. To bring about behavioral change, the challenge is to bring this message to specific target groups and frame specific messages that will more likely result in behavior change at both the institutional and individual level. This will require detailed planning of a public awareness campaign with multiple target audiences, each with customized messages, media strategies, and messengers. For example, such a campaign would take into consideration that people's perceptions of obesity in Connecticut focus on one's health, appearance, comfort, mobility, and quality of life.²¹ This plan reflects the experiences, findings, and ideas of project participants in applying this socio-ecological framework to the problem of obesity with the goal of promoting change on the community and policy environment levels.

Figure III-2: Trends in Obesity-Related Media Coverage



The plan identifies three areas of work that are interrelated and work within the socio-ecological model:

I. Work at the **statewide** level to

- Create an infrastructure to support coordinated surveillance, planning and implementation across communities and sectors
- Increase general awareness of the severity of the issue and the need for action across multiple stakeholders
- Change policies and practices as well as the environment in which individual behavioral decisions are made

II. Work at the **community** level to galvanize local stakeholders to identify issues and address policy, practice, and environmental changes needed. For these purposes, community can be defined by geography—a town or city, a region, a neighborhood, or by other factors—ethnicity, race, age, worksite, social center, or interest. Wherever leadership exists to recognize the issue and move an agenda forward, there is an opportunity for progress through:

- Implementing community-based strategies
- Tracking progress and outcomes

¹⁹ The model represented is a composite of 3 socio-ecological models, e.g., Tufts, and based on the collective thinking of the work groups.

²⁰ Based on study by the International Food Information Council <http://www.ific.org/> Note: Figures represent IFIC tracking of U.S. and International (English-speaking) wire reports and print articles on the issue and do not necessarily reflect the true number of stories.

²¹ OPCP, Summary of Findings November 2003

III. Work within the **sectors** having the most impact on the issue (the healthcare system, education, the workplace, food and fitness industries, and institutions), enabling access to the socio-cultural, choice and individual behavior portions of the socio-ecological model by:

- Implementing sector-based strategies
- Tracking progress and outcomes

The plan presents recommended strategies recognizing that the state must set the environment as indicated in the socio-ecological model. Action in **all** three areas will be needed to achieve results. Each set of strategies is designed to support the others.

In each section below, the goals, recommendations and primary strategies are presented.

Overall Objectives

Connecticut's program objectives are designed to achieve national objectives included in the Healthy People 2010.²² The ultimate objective of the plan is the promotion of overall personal health and reduction of chronic diseases that are caused or aggravated by overweight and obesity and lack of physical activity. High-level Healthy People 2010 Objectives related to overweight and obesity include the following:

Intermediate Objectives

Physical Activity

- 22.1 Decrease 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.
- 22.11 Increase the proportion of children and adolescents who view television 2 or fewer hours per day.
- 22.12 Increase the proportion of schools that provide access to their physical activity spaces and facilities to all persons outside of normal school hours.

Long-term objectives

Weight Management

- 19.1 Increase the proportion of adults at healthy weight.
- 19.2 Decrease the proportion of adults who are obese.
- 19.3 Decrease the proportion of children and adolescents who are overweight or obese.

The Appendix lists the specific Healthy People 2010 objectives that are related to overweight and obesity. The objectives are grouped by those applicable to policy and regulation, information, environmental change, and individual behavioral change and health status.

²² As articulated by expert panels convened by the Centers for Disease Control and Prevention.

I. Statewide Infrastructure and Interventions

The infrastructure to support an obesity prevention and control initiative in Connecticut can be developed most efficiently at the statewide level. Many of the institutional partners, such as medical societies, trade and professional associations operate at the state level, and many of the required components will be more efficiently developed at that level. These include partnership structures, public awareness campaigns, surveillance systems, legislative initiatives, and state level public policy reviews.

Economies of scale can be achieved in a number of areas—surveillance to support continued assessment of the prevalence and impact of obesity, public awareness campaigns addressing audiences with similar characteristics across the state, development and promotion of practice guidelines for physicians and other professionals, and working with schools and employers.

The five goals developed by the work groups in this section and associated recommendations will support local and sectoral initiatives and strategies while promoting a model of local health departments' serving as the locus. It is the intent that they will also provide critical data for planning future interventions.

"While resources like funding will always be less than we would hope, the resource we have in abundance is the multitude of people and organizations who care about the health of our State's citizens. One of our highest priorities, therefore, should be the creation of a state-wide structure that effectively harnesses the energy and creativity of this resource so that lessons learned, tools created and opportunities identified can be efficiently communicated and shared among us all."

– Dr. Stephen Updegrave, Pediatrician, Hill Health Center, New Haven

Statewide Goal 1. Develop a strong statewide partnership to address the obesity issue.

Recommendations

Engage and maintain key stakeholders in a collaborative partnership to implement the statewide plan.

Sustain the statewide partnership structure pursuing specific action plans.

Experience across the nation demonstrates that solutions to complex public health issues require collaborative action across sectors. Building on the involvement of diverse stakeholders in the process to develop this plan, key partners must come together through a state-level collaborative process drawing on the diverse expertise of partners and based on effective mechanisms for resource development, staff and logistical support, communication across partners, priority setting, action planning, and implementation. Successful Connecticut and national models for broad public health interventions offer a guide in the design of this partnership process, such as efforts initiated by the East Hartford and Ledyard pilots. This partnership will ensure support for the community-level planning processes described in the next section.

Statewide Goal 2. Increase personal and general awareness of the need for prevention and intervention to reduce obesity through ongoing communication.

Recommendations

- 🌀 Conduct a statewide health survey to assess the general knowledge of the effects of obesity on health, and of prevention efforts.
- 🌀 Work with other state departments to promote awareness and provide information on health, chronic disease, and physical activity.
- 🌀 Increase general understanding of the gravity of obesity and the effects it has on quality of life through consistent messages across all audiences and sectors.
- 🌀 Launch and evaluate multiple interventions to reduce overweight and obesity across multiple venues.

A public awareness campaign should be designed to address identified barriers and to make healthy eating behavior and physical fitness attractive and desirable, for example linking physical activity and healthy eating with success. The barriers to healthy eating that consistently arose in our research include time, lack of education, television watching, bad habits, and cost. The barriers to physical activity included most of the same elements as well as lack of motivation. The campaign can provide concise and practical information on health, chronic diseases, and physical activity, and promote practical steps individuals and families can take that foster healthy behaviors like physical activity while watching TV and using stairs as an alternative to elevators.

This campaign must be closely coordinated with other interventions to support their success. It should provide both statewide media strategies and proven materials and techniques that communities can use as they mobilize local collaborative efforts. Efforts across partners and across state departments should be coordinated through the statewide partnership described in Goal 1 that can serve as a vehicle for information and experience exchange, coordination, and strategy development.

Although there is a growing body of evidence about what works to reduce overweight and obesity, there are many unknowns. Many ideas and efforts are being tried in different settings across the state. The challenge is to identify and support the most promising proposed interventions in the highest priority areas in terms of target populations and venues. The evaluation and documentation of these practices will build the foundation of evidence-based practices, which can then be expanded and replicated by others. Wherever possible, the goal is to institutionalize best practices within existing health care, education, and business processes. The Partnership will need to secure public and private financing for these pilots from philanthropic, health care, and government sources. This recommendation addresses Healthy People 2010 Objectives (23.4 in the Appendix).

Statewide Goal 3. Develop data and surveillance capabilities. Accurate data on the incidence, prevalence, patterns, and characteristics of overweight and obesity in Connecticut will be essential to effective planning and evaluation of our interventions.

Recommendations

- 🌀 With state efforts, develop an ongoing monitoring system through the proposed chronic disease surveillance system.
- 🌀 Establish an overweight-obesity surveillance system under guidance of an expert work group.
- 🌀 Assess health on a statewide level through a statewide health survey.
- 🌀 With stakeholders, collect, analyze and make available surveillance data.
- 🌀 Publish an annual surveillance report on overweight/obesity to inform state and local efforts and policy.

DPH has lead responsibility for developing surveillance systems across chronic and other diseases, and has made significant strides in recent years to develop and integrate surveillance capabilities.²³ Although challenged by resources constraints, DPH will work across its chronic disease programs and with its partners in the obesity prevention effort to develop over time a system for obesity-related surveillance in collaboration with state agencies, managed care organizations and healthcare providers.

Figure III-3: Obesity Surveillance System Components		Status
Existing Resources	Behavioral Risk Factor Surveillance System	Annual survey in partnership with CDC
	Youth Risk Factor Surveillance System	Periodic survey in partnership with CDC
	Medicaid Encounter Data	Analyzed as needed
Proposed Activities	School-based Reporting of Student Heights and Weights	Will require regulations
	Statewide Health Survey	Part of implementation

Components of the obesity surveillance system are listed in Figure III-3. A Surveillance Work Group will be convened to advise DPH's efforts. The data will be disseminated to inform statewide and community intervention planning efforts through periodic reports and the program's web site. Addresses HP 2010 23.2-23.4 (see Appendix).

Statewide Goal 4. Ensure that state and local policies and actions across all government departments support healthy nutrition and increased physical activity.

Recommendations

- ☞ Review state policy and evaluate practices and policies (including statutes, ordinances, and bylaws) regarding the extent to which they support healthy living.
- ☞ At the state level, charge an interagency work group with conducting this review and recommending specific changes that should be adopted across all departments, starting with those with the largest potential impact and easiest implementation.
- ☞ At the local level, an intermediary group such as the Connecticut Conference of Municipalities should be engaged to assess local policies through their membership and develop specific recommendations that will produce specific benefits for municipalities—healthier workforces, lower insurance costs, and healthier residents.

Many policies and practices within the public sector have the unintended consequence of impeding healthy eating or an active lifestyle. Creating a positive environment “begins at home”, and the state government should set an example by reviewing its facilities, purchasing, food services, health insurance policies and other related practices to ensure that it supports healthy eating and physical activity and does nothing to worsen the obesity problem for state employees or customers. In March 2005 the Connecticut Department of Public Health announced the kick off of ConnectiFIT, a voluntary worksite program to improve the health of DPH employees. “ConnectiFIT will provide our employees the opportunities to enhance their fitness, increase physical activity, improve diet and eating habits, and reduce stress, all without having to leave the DPH campus,” stated DPH Commissioner J. Robert Galvin, M.D., M.P.H.

²³ A surveillance system is a series of surveys conducted again and again, monitoring long-term trends in public health. A surveillance system is used to examine public health issues across several years; to compare information gathered, see the trends, track the ups and downs and determine whether something is improving or worsening for a specific group of people.

II. Community Level Intervention

All of the environmental and policy factors influencing individual behavior come together at the community level, and an increasing body of research and expert opinion suggests that well-conceived initiatives grounded in specific communities are the most effective way to bring about change.²⁴

Over the last year DPH has worked with local health departments serving two communities, East Hartford and Ledyard, to conduct detailed assessments of their communities to identify assets and needs related to overweight and obesity using the community assessment tool designed for this program.²⁵

DPH and PRC developed a community health and resource assessment tool, the Community Health Asset Profiler (CHAP) (See Resource Kit.) designed to provide a framework for identifying local environmental and policy-related resources likely to impact obesity prevention and control efforts. Focused on community assets, deficits, and needs in the areas of nutrition and physical activity, the CHAP served as a tool for the pilot program sites of East Hartford and Ledyard to inventory a variety of data including population demographics, crime and traffic patterns, parks and open space facilities, schools, worksites, food outlets, roadways and sidewalks.

To begin a community planning process, the community should identify its assets and needs. For example, the two towns initiated a comprehensive community assessment and compiled information through research, community forums and focus groups and surveys. This activity enabled them to identify key barriers and specific needs, while raising the awareness and interest of the community. Based on the experiences and best practices identified by the two pilot sites, the Resource Toolkit, developed by the Connecticut Association of Directors of Health, will guide communities through the assessment process to allow project planners and local stakeholders to understand a community's capacity to support healthy lifestyles and prioritize interventions for implementation. Enhancement of the assessment process will include utilization of the Healthy People 2010 Objectives to highlight national health promotion and disease prevention goals and objectives, and provide measures that can help serve as a model for communities to develop their own specific goals and priorities.

TOWN OF LEDYARD

- Through collaboration, designed a plan to target key problem areas by developing short-term solutions for immediate action and long-term solutions.
- By conducting a parks and recreation health survey Ledyard found that the town had hidden assets, such as prime walking paths, and enthusiastic residents who would volunteer heavy machinery and time to create more walking and hiking paths.
- A walking path was installed around the fields at Ledyard Middle School. On September 30, 2004, the town celebrated the official designation of the Middle School Walking Trail with a Ribbon Cutting Ceremony.

The Ledyard plan also raised the issue of poor lunch practices in their schools. School nurses and principals interested in improving the nutrition provided at the school assisted in preparing a full report with recommendations that is being forwarded to the Superintendent of Schools. The community hopes to advance policy changes through its Board of Education.

The town of East Hartford initiated a community-wide initiative, "H.E.A.L.T.H.Y. EAST HARTFORD, Healthy Eating and Active Living To Help You - work, play, learn, grow, and thrive in East Hartford." The initiative embarked on a series of community assessment activities involving community constituents to identify assets, resources, and public perceptions including local factors that influence eating behaviors and activity habits. The community assessment involved interviews with municipal leaders and service

²⁴ Report on the National Nutrition Summit, May 30, 2000: Results of the Obesity Discussion Groups

²⁵ The Community Assessment Tool is a component of the Resource Tool Kit (see Section IV, "Resources").

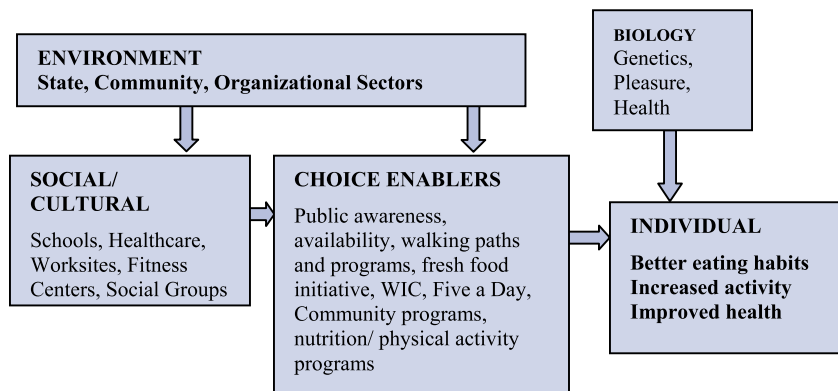
providers, surveys of residents and employees, focus group discussions with students, parents, seniors and healthcare providers, a resource inventory (using the CHAP) and a televised “Town Hall” meeting. Preliminary findings on town-specific obesity and health data from the assessment and focus groups were presented to solicit feedback and encourage potential responses or strategies for improving eating behaviors and activity patterns in East Hartford. The East Hartford Obesity Action Plan is a five-year design of community-level interventions selected based on the level of public support. Each intervention is linked directly to Healthy People 2010 objectives.

EAST HARTFORD INTERVENTIONS

- Multicultural Community Health Partnership: To help ensure that programs and materials offered by H.E.A.L.T.H.Y. East Hartford are linguistically accessible and relevant to East Hartford’s ethnically and culturally diverse population.
- Trailblazers: A year-round, self-paced community walking program that utilizes and promotes East Hartford’s ample public spaces to support regular physical activity and offers residents enrollment into the 90 day “Get Moving” framework.
- Fresh Produce Initiative: A network of services that collectively provide year-round access to affordable produce with special emphasis on outreach and marketing to vulnerable, low-income and minority populations.

As indicated in the socio-ecological intervention model, community environments affect individual behavior. Incorporating actual methods identified within the Plan, the revised model below portrays how the larger community, in conjunction with state efforts, provides an environment enabling individual change.

Figure III-4. Impacting physical activity, eating behavior, and health



The following goals and recommendations propose ways in which initiatives at the community level can incorporate active living and healthy lifestyles into their design or action plan. The obesity program findings suggest that community-level changes that would facilitate efforts to reduce obesity and overweight include: community based safety and wellness staff for education and health promotion, cultural sensitivity, partnerships between industries, efforts to raise awareness of available health and fitness programs, and funding.

Community Goal 1. Increase collaboration of nutrition and physical activity professionals between state and community to present consistent and effective messages within and across communities.

Recommendations

- 🌀 Create a community and state collaborative process for message development.
- 🌀 Create an ongoing community-level coalition or network for information dissemination and community discussion through regional approaches and collaboration.
- 🌀 Identify and inventory resources available for food, nutrition and activity programs.

Messages that are developed to encourage healthy lifestyles and increase awareness on the potential health risks of overweight need to be created with state and local input to ensure that the messages are clear, accurate and consistent. This can be accomplished through regional collaboration. Other approaches include the creation of ongoing community-level coalitions and/or networks that can disseminate information on available community resources for food, nutrition and physical activity programs, and facilitate ongoing discussion.

Community Goal 2. Identify and promote best practices to help communities statewide to change their environment to support healthy choices.

Recommendations

- 🌀 Conduct health assessments and determine health and environmental needs specific to the community using the Community Resource Tool Kit [see Section IV, "Resources"].
- 🌀 Work with state departments to identify, replicate and disseminate best practices.
- 🌀 Promote food policy councils and local actions by supporting political and municipal leaders who are advocating for healthier lifestyles.
- 🌀 Ensure that community-wide policies reflect behavior change regarding healthy eating and physical activity.
- 🌀 Increase the number of local health departments that have established culturally appropriate and linguistically competent community health promotion and disease prevention strategies.
- 🌀 Secure funding to support and evaluate a wide range of local interventions.

The state level partnership can play a pivotal role in facilitating the identification and replication of best practices across all the sectors. Each community will tailor its approach to the needs they feel most pressing in their area. Methods to achieve this goal might include the development or enhancement of available space and types of activity that would expand access to and availability of physical activities. This may include improved lighting for evening activity, opening schools after hours for community use, or clearing paths for hiking. To change attitudes related to healthy eating, communities could expand the availability of healthy food through better access and availability and programming to address gaps in knowledge and skills related to cooking and healthy eating. For example, communities could work with supermarkets or local stores to hold cooking sessions or they could encourage people to grow their own vegetables and fruits by promoting community gardening.

Community Goal 3. Support the development of comprehensive community plans that change policy in the community environment to support healthy choices in municipalities across the state.

Recommendations

- ☞ Develop a community assessment process to provide baseline data regarding assets, resources and need.
- ☞ Provide effective technical assistance in the form of (a) guidelines and toolkits for use in assessing community issues and attributes contributing to obesity and designing interventions, and (b) expert coaching and guidance from medical and community planning professionals and others in the statewide partnership as specific needs arise.
- ☞ Secure financial support from public and private sources for local community assessment, planning and implementation. This can take the form of seed funding to get the local process moving and generate local support as well as development of continuing funding streams to support innovative local interventions.
- ☞ Establish a communication network across communities to support effective intervention.
- ☞ Work with public health agencies to create a health improvement plan.
- ☞ Establish a minimum of 10 robust community-level collaboratives to address healthy eating and active living by 2008.

The community pilot programs in East Hartford and Ledyard funded by CDC through DPH have demonstrated the value of investments in building awareness and planning interventions across local institutions and sectors. Drawing on this experience and the quickly growing national literature, Connecticut can ensure the most rapid progress by supporting the burgeoning local concern across medical, public health, educational, and business interests with effective technical assistance and guidance and financial support for local community assessment, planning and implementation.

This work may include defining a quality plan template with accompanying guidelines. The template would begin with the Community Health Assessment Protocol that assists the local forces in defining community strengths and issues based on extensive data. The template will include benchmarks, incentives and leadership modeling on a local level. Financial assistance will be critical to support local planning and specific interventions.

In addition, resources and technical assistance would support the development of these local efforts and formulation of local best practice guides, community assessment tools and fund development. Addresses HP 2010 (23.12) See appendix.

III. Sectors: Interventions by Settings

In this section, the Plan considers key considerations and specifies goals for each major institution or environment influencing personal eating and exercise behavior—schools, healthcare, worksites and industry/institutions. Each area provides diverse opportunities for implementing interventions to reduce overweight and obesity.

A. Schools

Connecticut has a long history of high academic standards for its public schools. In the push to perform academically, the strong connection between school performance and factors such as good nutrition, healthy self-image, and an active lifestyle is sometimes diminished.

With the startling reports on the obesity epidemic now so pervasive in our nation, increased emphasis is being placed on the school environment. In Connecticut, local boards of education and parents are grappling with these issues across the state as evidence of a serious problem mounts.

Legislative mandates related to school policies are gaining ground across the country. In the 2002 Connecticut legislative session, the General Assembly debated but did not pass a bill that would have required the State Department of Education (SDE) and DPH to establish school nutrition pilot programs where fruit and vegetable sales were encouraged and carbonated beverage sales limited.

The eating behaviors and physical activity levels of Connecticut children reveal a mixed picture. 1999 CDC information shows that Connecticut youth in general are less overweight than the national average, but appear to be in worse physical shape. The State Education Department (SDE) data show elementary and middle school students average less than two physical education classes a week.²⁶ Findings from DPH support this. Common themes across multiple data sets indicate that schools are less than adequately addressing the physical activity and nutrition needs of Connecticut's children.²⁷ Compounding these problems are the increased use of vending machines or fast food contract lunches in public schools and the decreased time engaged in physical activities.

The School Work Group recognized the need to create bridges between schools and community to impact children's behavior, working within the **Comprehensive School Health Model** supported by SDE and DPH. Patterns of eating and exercise are largely set in the family, but are either reinforced or countered by school practices, policies, or environments. This indicates the importance of coordinated efforts to reach all school staff – administrators, principals, teachers, and support personnel –to raise awareness of the need for changed practices and to establish the links among nutrition, physical activity and school performance. The following goals and recommendations address needs identified by the work group and supported by the program findings.

Schools Goal 1. Provide healthy school nutrition environments – from cafeteria lines to concessions at sports games.

Recommendations

- ☞ Create a standard for healthy school environments.
- ☞ Change school environment by reducing the number of vending machines and/or stocking them with healthier choices.
- ☞ Generate school report cards on healthy school environment indicators, standards and publicity.
- ☞ Include healthy environment indicators in strategic school profiles.
- ☞ Improve data measures.
- ☞ Publicize model schools and districts.

School Administrators

“Athletic/fitness programs help students learn respect and cooperation. The energy expended during athletic activities can help students focus. The fun from fitness activities can be the draw that get students to school on time.”

2001 Administrator Survey Findings of School Superintendents, Board of Education chairpersons, chief elected officials:

Administrators believe efforts to improve their

- Emphasize enhancing the school's after school activities.
- Expand the type of activities offered.
- Increase activity capacities, particularly at the middle schools, and enrichment activities and homework help/tutoring at the elementary schools; and d) focus on both elementary and middle schools, with slightly more attention directed at middle schools.

²⁶ OLR Backgrounder, Childhood Obesity July 2002, Office of Legislative Research, Connecticut General Assembly, http://www.cga.state.ct.us/olr/2002Backgrounders/childhood_obesity

²⁷ CT DPH Obesity Prevention and Control Program Findings, Data Summary, 2003

Several promising school-based efforts suggest that change is possible. New Haven schools have made a concerted effort to change the types of foods that are being offered through vending machines and lunch programs, and a pilot program to teach students healthy eating habits is being conducted at Barnard school, endorsed by the Hospital of St. Raphael. Ledyard schools have instituted a fitness and nutrition program with school nurses for all Ledyard third graders, which led to a successful Connecticut at PLAY program and additional funding from General Mills.²⁸

To achieve these goals, standards for healthy school nutrition environments must be created, progress monitored, and reports disseminated (both stand-alone and through Strategic School Profiles) highlighting healthy environment indicators, for example, the Healthy Snack Pilot and a Healthy School Nutrition Environment Handout Series being developed by SDE. Model schools / districts achieving success and marked improvement could be publicized. Addresses HP 2010 19.2 (see Appendix).

Schools Goal 2. Develop state and local school district policies that increase physical activity opportunities and healthy eating habits.

Recommendations

- ☞ Create proactive collaboration with partners and allies.
- ☞ Encourage schools to adopt a coordinated student health model.
- ☞ Require school-wide policies to address health and physical activity in the schools.
- ☞ Limit unhealthy food products in schools and replace with healthy alternatives.
- ☞ Increase mandated credits for health and physical education.
- ☞ Hold schools accountable to regulations.

As a key component of the Comprehensive School Health Model the partnership will work closely with SDE and DPH to promote and in some cases mandate school policies and practices that promote healthy eating and physical activity to change the way students and school staff eat and exercise. Currently, the nutrition pilot programs of SDE are working to develop policies as a model for schools. Suggested guidelines include prohibiting the sale of unhealthy products in schools, expanding physical education and sports programs, and updating health curriculum and credit requirements. The Child Nutrition Improvement and Integrity Act (H.R. 3873) was passed in March 2004 requiring every local school district to have developed a local wellness policy by the first day of the 2006 school year. The policy must include goals for nutrition education and physical activity, include nutrition guidelines for foods sold in schools, and establish a plan to ensure implementation. The policy must be developed in consultation with parents, students, school food service professionals, school boards, school administrators, and the public.²⁹ Mechanisms need to be developed to hold schools accountable for observing the new directions. Addresses objectives HP 2010 22.8, 22.10 (see Appendix).

Schools Goal 3. Communicate the positive correlation between child health, physical activity, and academic performance.

Recommendations

- ☞ Launch studies on the correlation between nutrition, physical activity and school performance.
- ☞ Identify simple data points to establish correlations and links among nutrition, physical activity and school performance.
- ☞ Document changes in practice at schools based on standard assessment.
- ☞ Publicize statistics.

²⁸ Ibid

²⁹ <http://www.westonaprice.org/federalupdate/spring04.html>

According to a report from Action for Healthy Kids there is a direct link between nutritional intake and academic performance, as well as physical activity and academic achievement. One example, increased participation in breakfast programs, is associated with increased academic scores, improved daily attendance, and better class participation. Also found in studies on the effectiveness of exercise is that physical activity supports better learning.³⁰ To accomplish this goal, simple data points must be identified and publicized to emphasize the correlation and importance of overall health and school performance. Addresses HP 2010 22.8 (see Appendix).

Schools Goal 4. Provide tools to help educators make changes in their own classroom/education environments.

Recommendations

- ☞ Work with Connecticut's 5 A Day Preschool and Family nutrition education project to provide nutrition and physical activity training for teachers, staff and administrators of Healthy Start and School Readiness programs.
- ☞ Proactively collaborate with parents, partners, and allies to increase awareness among students, staff and parents to support policy changes and regulations.
- ☞ Train teachers and administrators on the importance of physical activity and nutrition and incorporate it within their programs.
- ☞ Encourage and help educators to integrate health, fitness & activity into academic curriculum (e.g., tools and training).
- ☞ Document changes in practice at schools based on standard assessment and indicators of school environment (e.g., number of vending machines, vending machine stock, type of fundraising sales held).
- ☞ Design and kick off a positive visual campaign (may be in conjunction with state efforts) through Report Card assessments for healthy school environments that reveal improved data measures (e.g., time in PE, BMI, fitness scores, academic testing, cafeteria serving statistics).

Assistance should be provided to educators to integrate health, fitness and activity into their academic curriculum through program tool kits and training sessions. An initial campaign that is both positive and visual could introduce educators to behavior change strategies such as information being developed by SDE on healthy fundraising in the Healthy School Nutrition Handout Series and the Alternatives to Food as Reward handout. Addresses HP 2010 4, 7.2-7.3, 19.2, 22.8-22.10 (see Appendix).

B. Health Care Systems

Through our formative research efforts, we have established that most people are well informed about health. But being well informed does not always translate into positive behavior change. Health care providers regularly perform the standard height-weight and BMI index during physical examinations, but is that enough? The Healthcare Work Group determined that consensus across HMOs and MCOs on the development and use of best practice guidelines for addressing overweight and obesity is an important starting point. This approach focuses on the whole person, physically, mentally and socially, and considers the individual's situation at home, worksite, school and community as indicated in the socio-ecological model.

Program findings revealed that few providers in Connecticut are aware of any guidelines and even fewer are using them.³¹ Recognizing adult obesity as a significant factor in the cost burden of health problems related to obesity, physicians are also looking for low cost practical methods that can help their patients get more exercise and eat healthier.

³⁰ <http://actionforhealthykids.org>

³¹ Ibid

It is recognized that factors influencing obesity include prenatal, genetic, familial and environmental. Exercise and eating behaviors are intimately connected with and shaped by genetic factors, environment, and family. Healthcare providers (and educators) can help parents understand the interaction of these influences to promote healthy behaviors in their children and integrate them in their lifestyles. Healthcare issues raised in each of the pilot programs (Ledyard and East Hartford) include the importance of cultural sensitivity in understanding the different viewpoints and habits among cultural groups, and perception of overweight and obesity across cultures particularly when provider recommendations conflict with parental opinions. Focus groups among healthcare providers in East Hartford named genetic predisposition as a factor contributing to obesity and noted that much of their patients' concern is cosmetic and not health-related while in Ledyard, providers noted that tight resources and understaffing limit more complete treatments, follow-up programs, and education for assessing obesity.

"It is important to recognize the role that behavior therapy referrals and consults can play in managing weight issues."

– Dr. Alex Geertzma, in reference to Medicaid Managed Care

Healthcare issues raised in each of the pilot programs (Ledyard and East Hartford) include the importance of cultural sensitivity in understanding the different viewpoints and habits among cultural groups, and perception of overweight and obesity across cultures particularly when provider recommendations conflict with parental opinions. Focus groups among healthcare providers in East Hartford named genetic predisposition as a factor contributing to obesity and noted that much of their patients' concern is cosmetic and not health-related while in Ledyard, providers noted that tight resources and understaffing limit more complete treatments, follow-up programs, and education for assessing obesity.

The following goals and strategies for the health care system related to coordination, quality improvement, and coverage were identified by the health care work group, which was comprised of physicians, dietitians, public health department directors, and nurse consultants.

Health Goal 1. Coordination: Develop common practices, standards, and referral mechanisms for addressing overweight and obesity across MCOs, health plans, public health systems and disease management programs.

Recommendations

- ☞ Develop common standards and best practice guidelines on obesity and overweight.
- ☞ Work with local health departments to promote standards on physical activity and health nutrition practices in all facets of their programming.
- ☞ Work with MCOs, other health systems and providers to disseminate and promote use and monitoring of best practice guidelines related to obesity and overweight.
- ☞ Encourage providers to agree upon and use best practice guidelines.
- ☞ Clarify and standardize referral processes across health plans.

Overwhelming evidence suggests that standards and guidelines must be identified and promoted. To achieve this goal, the healthcare work group recommends that collaborative partnerships be established with public health departments, MCOs, healthcare providers, other health systems, the Connecticut chapters of the American Academy of Pediatrics and the Primary Care Association, and others. The purpose of the partnerships would be to identify standards on physical activity and healthy nutrition practices, disseminate and promote the use and monitoring of best practice guidelines related to obesity and overweight, and to incorporate these practices into all aspects of their programming. Addresses HP 2010 7.7, 8.9 (see Appendix).

Health Goal 2. Quality improvement: Adopt, recognize, and use best practice guidelines related to a) prevention, screening, assessment, treatment and referral for overweight and obesity, b) nutrition services for related chronic diseases such as cardiovascular disease and diabetes, and c) promotion of physical activity.

Recommendations

- 🔗 Develop training sessions (that include coding and documentation) for providers and public health personnel based on NIH guidelines and include behavior patterns, cultural differences, perceptions and parenting skills that build upon existing efforts.
- 🔗 Promote standards and best practice guidelines that are accepted and adopted by health systems/providers.
- 🔗 Develop and disseminate a curriculum with established outcomes.
- 🔗 Educate health personnel, community leaders and the general public on overweight/obesity BMI assessment, treatment and interventions.
- 🔗 Develop and support a system to support quality improvements within health plans and practice groups to support compliance with guidelines.
- 🔗 Create mechanisms to measure incidence of obesity and related conditions.

Training sessions should be developed and conducted statewide for providers and public health personnel based on NIH guidelines (including coding and documentation) and include behavior patterns, cultural differences, perceptions, and parenting skills. Quality improvement programs within health plans and practice groups will support guideline compliance. Building upon existing efforts, initiate and continue education on overweight and obesity BMI assessment/treatment and interventions to health personnel, community leaders and the public. Addresses HP 2010 11.6, 19.2, 23.8-23.9, 23.11 (see Appendix).

Health Goal 3. Coverage: To address health plan coverage and reimbursement issues related to service provision, interventions, education and counseling programs, and referral processes.

Recommendations

- 🔗 Identify a compendium of desired services.
- 🔗 Clarify and standardize referral processes across plans including coverage of and reimbursement for recommended services.
- 🔗 Engage MCO / Health Plan and State support for reimbursement of early intervention, service provision, education and counseling programs, and referral processes.
- 🔗 Find funding / coverage for services currently not available through conventional or alternative sources.

Providers, agencies and individuals often cited the need for resources to initiate and enhance services. This goal would be accomplished through a collaborative effort of MCOs/Health Plans and State support for reimbursement of early intervention, service provision, education and counseling programs and referral processes. Efforts should be made to seek funding and coverage for services currently not available through conventional and alternative sources. Addresses objectives HP 2010 (1.3), (3.10h), (19.17). See Appendix.

C. Industry / Institutions

The obesity epidemic is impacting almost every sector of society, affecting the way institutions are approaching obesity-related issues. This section addresses the policy and environmental considerations related to overweight and obesity in the food and fitness industries as well as in the full range of institutions: residential facilities, hospitals, nursing homes, correctional facilities, airlines, transport.

Many interventions are in development to change industry and institutional practices. For example, some costs of a weight loss program may be tax-deductible if undertaken as treatment for the disease of obesity as diagnosed by a physician. Policy makers are pursuing legislative solutions to address the obesity epidemic, such as bills requiring fast food and chain restaurants to post nutrition information on menus.³² City planners are working with departments of public health, zoning and transportation, and fitness, education, government, legal and business groups to look at ways in which communities can foster physical activity.³³ Building on this momentum, we have begun to work with Connecticut-based institutions and industry representatives to identify ways to bring about policy and environmental changes that will promote increased physical activity and improved nutritional practices among Connecticut residents.

Interviews with key stakeholders indicate a strong desire on the part of both the food and activity sectors to become more involved in statewide and community efforts to educate individuals on the importance of making healthy food choices and engaging in healthy activities. Nationally, the food industry is responding by making health and nutrition part of their marketing strategy. Food companies are producing new lines of lower fat, more nutritious foods and smaller portions.³⁴ However, a Connecticut food industry representative when interviewed stated that a change first needs to occur in the demand for unhealthy food before a change will occur in the industry's supply.³⁵

The following recommendations build upon the idea of increasing the involvement of industries and institutions in combating obesity in Connecticut.

Industry / Institutions Goal 1. To promote and support healthier nutritional practices.

Recommendations

- ☞ Form partnerships with food and other industries.
- ☞ Work with food and other industry partners to improve food labeling, increase the number of restaurants and food outlets actively promoting healthy eating, and upgrade food offerings in worksites.
- ☞ Launch healthy eating campaign (incl. e.g. 5-A-Day, media, public relations and recognition programs).
- ☞ Promote local food supply and purchasing.
- ☞ Develop policies and regulations promoting healthy nutrition practices.
- ☞ Promote or require improved food labeling in stores and restaurants.

Responding to the identified problems by the work group and supported by the OPCP findings, the recommended strategies to achieve this goal include working with the institutional food industry to upgrade food offerings in worksites, launching healthy eating campaigns through the 5-A-Day programs, OPCP media campaign and general public relations and recognition programs. These efforts should also be supported by continued promotion of local food supplies and purchasing, and required improvements in food labeling in stores and restaurants as well as policies and regulations that promote healthy nutrition practices. Addresses HP 2010 19.1-19.2, 19.5-19.8, 19.10 (see Appendix).

³² Connolly, Ceci, Obesity in US Under Attack, Herald Net, August 10, 2003

³³ Creager, Ellen, Plan for America's new diet: Less sprawl, less fat, less frenzy, Detroit Free Press, August 11, 2003

³⁴ Uhlman, Marian, Food Companies Dealing with Obesity, Knight Ridder, August 11, 2003

³⁵ Fortier, Lionel. Interview, July 16, 2003.

Industry / Institutions Goal 2. To promote participation in physical activities.

Recommendations

- ☞ Create partnerships with the fitness and sports industry in a campaign to increase access to and promote physical activity, and to increase the availability of products supporting physical activity.
- ☞ Promote products that facilitate physical activity.

Partnerships should be established with the fitness and sports industry on the state and local level in a campaign to increase access and promote physical activity, in addition to the promotion of products that facilitate physical activity. Addresses HP 2010 (22.1 – 22.7). See appendix I.

Worksites

Employers are beginning to experience the high cost of obesity and its impact on their companies, which includes increased medical bills, reduced productivity, increased absenteeism, higher prescription drug costs to treat associated chronic illnesses, increased hospital stays and higher health and disability insurance premiums. In fact, obesity related healthcare costs trim an estimated annual \$12 million from employers' budgets nationally. For example, employers are spending 77 percent more on prescription drugs for the seriously overweight.³⁶ It is anticipated that the obesity epidemic, if left unchecked, will continue to cost employers even more in medical costs. Connecticut DPH obesity findings indicate that concerted action at the worksite is needed to support workers' efforts to reduce obesity and promote a healthier lifestyle.³⁷ A survey of employers conducted by the Connecticut Business and Industry Association (CBIA) revealed that businesses could do substantially more to provide messages and incentives to their workers in an effort to improve their employees' health and decrease the associated costs.³⁸ In addition, the survey revealed the greater proportion of unhealthy foods to healthy foods in cafeterias and vending machines. This kind of worksite environment can hinder an employee's efforts to lead a healthier lifestyle. The following recommendations suggest that by engaging the business sector and providing employees with information about the advantages of employee wellness programs, more worksites will be open to providing access to nutritional foods and opportunities for physical activity for their employees.

Worksites Goal 1. To promote wellness programs and policies within worksites that encourage improved nutritional practices, physical activity opportunities, and chronic disease management and prevention.

Recommendations

- ☞ Conduct outreach and information campaigns to engage employers based on the financial benefits of good health practices and education programs that provide a menu of health promotion options employers can implement.
- ☞ Engage corporations and employer groups headquartered in Connecticut to increase their awareness of the need for obesity prevention programming and their options for getting involved.
- ☞ Work with CT employers to foster health-promoting behavior on the job through on-site physical fitness programs or membership for employees to local fitness centers.
- ☞ Provide financial incentives for health plans to improve their coverage and policies related to obesity.
- ☞ Provide model programs centering on physical activity that include support for bicycle commuting, health promotion programs, nutrition or weight management classes or counseling.

³⁶Dixon, Kim, Employers Target Obesity-Linked Health Costs, Reuters, June 17, 2003

³⁷ Freudenheim, Milt, Major Employers Will Take on Obesity, The New York Times, June 19, 2003

³⁸ Connecticut Business Industry Association, Worksite Wellness Survey Preliminary Report, 2001

To achieve this goal the Obesity Prevention and Control and the Cardiovascular Health programs have joined forces with work group participants to recommend that outreach and information campaigns be conducted to engage employers based on the financial benefits of good health practices and education programs that provide a menu of health promotion options employers can implement, and that financial incentives are provided to health plans to improve coverage for suggested services, such as screenings and education counseling services. Worksites should also consider providing incentives for employees and encourage employee participation in fitness programs and workplace physical activity campaigns and events. Corporations should provide programs based on accepted models that center on health promotion that could be linked with community recreation departments and fitness industry. Addresses HP 2010 (7.5), (19.16), (22.13). See Appendix.

Worksites Goal 2. To promote worksite initiatives that support nursing mothers in the workplace.

Recommendations

- ☞ Engage worksites to change internal policies to allow flexible work hours and schedules for nursing mothers.
- ☞ Work with Connecticut corporations and larger employer groups to provide on-site physical fitness programs or provide membership for employees to local fitness centers.³⁹
- ☞ Encourage health plans and employers to cover these services with minimal or no co-payment.

Recommendations to support this goal include allowing flexible work hours and schedules for nursing mothers and encouraging health plans and employers to cover services with minimal or no co-payment.

³⁹ See also **Healthy People 2010 Objectives** related to Worksite Policies (increase in the number of worksites that offer a comprehensive employee health promotion program to their employees [7.5], nutrition or weight management classes or counseling [19.16] and employer-sponsored physical activity and fitness programs [HP 22.13] and that accommodate nursing mothers by providing flexible work hours and schedules and privacy.

Section IV. Resources

Connecticut benefits from a wealth of organizations, institutions, and individuals that commit substantial effort to improving the health and well being of its residents and communities. Representatives of many of these resources participated in the preparation of this Plan and as a result have a heightened awareness of the gravity of the obesity epidemic. Programs and activities are surfacing throughout Connecticut as communities begin to respond.

In this era of economic retrenchment across the public and private sectors, the human and financial resources to implement this Plan will have to come, for the most part, from existing resources.

Fortunately, much can be accomplished by leveraging change in existing organizations and institutions, using internal resources to conduct recommended adjustments in practices and investments. There are many areas where persuasive cases can be made for investment in prevention efforts that are tied directly to projected success in avoiding far higher later costs.

A toolkit for community-based obesity prevention has been developed through a collaborative effort between the Central Area Health Education Center and the Connecticut Association of Directors of Health, Inc. Designed as a community-driven process, the Healthy Eating and Active Living Resource Toolkit is intended to bring communities, stakeholders, policy makers, and health officials together to better understand obesity and implement strategies to promote healthy outcomes.

Guided by best practices, recommendations, the Healthy People 2010 Objectives, and evidence-based interventions, the resource toolkit serves as an important tool for illustrating current statewide and national programs, activities, and interventions and encouraging local-level initiatives and action plans. As a guide for the community planning process, the resource toolkit includes a community assessment tool, information on engaging stakeholders, conducting a community assessment, holding a community forum, sample interventions by setting, developing and implementing an action plan, getting media involved, and conducting an evaluation.

To access the Healthy Eating and Active Living Resource Toolkit go to the Connecticut Association of Directors of Health website (www.cadh.org) and follow the link to the toolkit via the “Resource” section, or access the Connecticut Department of Public Health website (www.dph.state.ct.us) and follow the link to the “Healthy Eating Active Living” Toolkit.

Section V. Implementation and Evaluation

The Department of Public Health will take the lead in convening statewide and regional partners to work on implementing the strategies articulated in this Plan. In an area of increasingly scarce public resources, the partners are committed to drawing on the expertise and resources of all stakeholders as well as seeking federal funds and private philanthropic support to develop and sustain the statewide infrastructure needed to make it a success.

Stakeholders met in December 2004 to confirm the recommendations outlined in the plan and identify tactics to begin implementation within each issue area by forming partnerships and building upon already-existing programs. A sampling of tactics include:

At the community level stakeholders suggested partnering with academic institutions, local doctors and health clinics, marketing consultants, town planners, policy development personnel, public television, social service agencies and local funding sources. These partners will conduct surveys and social marketing, create reference models and disseminate best practices. They will also change the environment to be more conducive to physical activity, educate the public on nutrition and improve meal offerings at academic institutions.

In the healthcare setting, DPH will take the lead on coordinating a meeting with the Connecticut Chapter of the American Academy of Pediatrics and other health care organizations to discuss coordination of efforts regarding recording and tracking of patient BMI.

Schools are already making significant changes through the efforts of the State Department of Education (SDE). Other activities include schools' recognizing, sharing and adopting best practice guidelines across districts, increasing data collection, engaging students and parents as part of the solution, and having schools conduct self-report cards on how they are doing in increasing physical activity and healthy eating among their students.

Suggested activities for Worksites, Industry and Institutions include DPH's assessing for physical activity and nutrition interventions those state agencies that manage residential facilities, such as SDE, the Department of Corrections, and the Department of Children and Families. These groups can engage in a collaborative effort to assess indoor and outdoor venues and the need for increased awareness and education on the positive effects of physical activity and healthy eating.

Various contractors were engaged to assist in achieving the recommendations of the OPCP. In a core strategy of the planning effort, the local public health agencies serving East Hartford and Ledyard were engaged to perform a local community assessment and action planning process both to collect local level data and test approaches to community mobilization around nutrition and physical activity issues. This not only provides a good model for implementation at the community level, but a way to compile data needed to measure the impact of interventions on priority populations and communities.

Plan implementation must include a strong commitment to effective evaluation, tapping the expertise and resources of the state's institutions of higher education. It is recognized that the evaluation must be grounded in the Healthy People 2010 objectives and conducted within each area through a variety of methods and with the use of instruments developed by the DPH in collaboration with stakeholders and targeted groups, i.e., communities, healthcare settings, schools, worksites, industry, and others.

In conjunction with the implementation of the recommendations within this Plan, the Connecticut Statewide Health survey would play a significant role in determining how well we are responding to the epidemic and ensuring that all Connecticut residents are eating healthfully and engaging in physical activity for better health.

Section VI. Conclusion

Connecticut's Plan for Health Promotion is a collaborative response based on the socio-ecological intervention model to engage the entire state through communities, worksites, healthcare settings, schools, and industry to change the health outcomes of Connecticut residents. The impact of obesity in Connecticut is just beginning to be realized. Successful implementation of the Plan through a coordinated statewide effort at all levels can not only have a significant impact on the health of Connecticut residents, but will reduce the cost burden of obesity-related illnesses.

Appendix: Healthy People 2010 Objectives

Healthy People 2010 Objectives Related to Overweight and Obesity

Policy and Regulation	
<i>School Policies – Increase the proportion of:</i>	
7.2	Middle, junior high, and senior high schools that provide school health education to prevent health problems in the following areas: unintentional injury; violence; suicide; tobacco use and addiction; alcohol and other drug use; unintended pregnancy; HIV/AIDS, and STD infection; unhealthy dietary patterns; inadequate physical activity; and environmental health.
7.3	College and university students receiving information on the six priority health risk behavior areas.
19.2	Children/ adolescents aged 6-19 years whose intake of meals /snacks at schools contributes to good overall dietary quality.
22.8	Public and private schools that require daily physical education for all students.
22.9	Adolescents who participate in daily school physical education.
22.10	Adolescents who spend at least 50% of school physical education class time being physically active.
<i>Worksite Policies- Increase the proportion of:</i>	
7.5	Worksites that offer a comprehensive employee health promotion program to their employees.
7.6	Employees who participate in employer-sponsored health promotion activities.
19.2	Worksites that offer nutrition or weight management classes or counseling
22.1	Worksites offering employer-sponsored physical activity and fitness programs.
<i>Public Health Infrastructure- Increase the proportion of:</i>	
7.10, 7.11	Local health departments with culturally and linguistically appropriate community health promotion and disease prevention strategies.
23.8, .9, .11	Health agencies that create a culturally and linguistically skilled workforce to competently provide essential public health services.
23.1	Public health agencies that have a health improvement plan.
23.2	State and local public health agencies that conduct or collaborate on population-based prevention research.
23.2	Evaluate the extent to which statutes, ordinances, and bylaws assure the delivery of essential public health services.
<i>Health Care System – Increase the proportion of:</i>	
7.7, .8, .9	Health care organizations, hospitals, and MCOs that provide chronic disease prevention and health promotion activities that address the community priority health needs, and of patients satisfied with the patient education received from their health care organizations.
3.10h	Primary care providers that counsel their at-risk patients about physical activity
19.2	Physician office visits made by patients with a diagnosis of cardiovascular disease, diabetes, or hyperlipidemia that include counseling or education related to diet and nutrition
1.3	Persons appropriately counseled about health behaviors.
11.6	Persons who report that their health care providers have satisfactory communication skills.
7.12	Older adults who have participated in at least one organized health promotion activity.

Information and Surveillance– Increase the proportion of public health agencies that:	
23.1	– Provide Internet access and apply electronic information systems to public health practice.
23.2	– Make information available to the public in the past year on leading health indicators, health status indicators, and priority data needs.
23.3	– All major health data systems that use geocoding to promote use of geographic information systems.
23.4	– Health status indicator data available on subgroups of the population.
23.2	– Public health agencies that gather accurate data on public health expenditures.
Environmental Change and Individual Behavioral Change and Health Status	
22.1	– Increase the proportion of schools providing access to their activity spaces and facilities to all persons outside of normal school hours.
Nutrition- Increase the proportion of persons aged 2 years and older who consume:	
19.5, .6, .7	– At least daily servings of fruit, three daily servings of vegetables, with at least one third being dark green or orange vegetables, six daily servings of grain products, with at least being whole grains.
19.8, .9, 10	– Less than 10 percent of calories from total fat, no more than 30 percent of calories from fat, 2,400 mg or less of sodium per day
19.1	– Meet dietary recommendations for calcium.
19.1	– Reduce iron deficiency among pregnant females, young children and females of childbearing age.
19.1	– Reduce anemia among low-income pregnant females in their third trimester
19.2	– Increase the proportion of children /adolescents aged 6-19 yrs. whose intake of meals and snacks contribute to good overall dietary quality.
Physical Activity- Increase the proportion of adults who:	
22.2	– Engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.
22.3	– Engage in vigorous physical activity that promotes the development and maintenance of cardio respiratory fitness 3 or more days per week for 20 or more minutes per occasion.
22.4, .5	– Perform physical activities that enhance and maintain muscle strength and endurance and flexibility.
22.6	– Engage in moderate physical activity for at least 30 minutes on 5 or more of the previous seven days.
22.7	– Engage in vigorous physical activity that promotes cardio respiratory fitness 3 or more days per week for 20 minutes per occasion.
22.1	– Decrease the proportion of adults who engage in no leisure time physical activity.
22.1	– Increase the proportion of children and adolescents who view television 2 or fewer hours per day.
22.1, 2	– Increase the proportion of trips made by walking and bicycling.
Weight Management	
19.1	– Increase the proportion of adults at healthy weight
19.2, .3	– Decrease the proportion of adults who are obese and proportion of children and adolescents who are overweight or obese
Disease Management	
12.1	– Increase the proportion of adults with high blood pressure who are taking action to control their blood pressure.
12.1	– Decrease the proportion of adults with high total blood cholesterol levels.