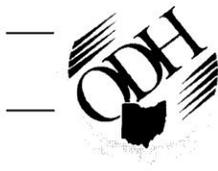


# The Ohio Obesity Prevention Plan

*Ohio Department of Health  
March 2009*

# HEALTHY OHIO

---



## OHIO DEPARTMENT OF HEALTH

---

246 North High Street  
Columbus, Ohio 43215

614/466-3543  
[www.odh.ohio.gov](http://www.odh.ohio.gov)

---

Ted Strickland/Governor

Alvin D. Jackson, M.D./Director of Health

March, 2009

Dear Ohioans:

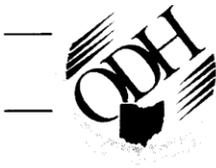
It is well understood that the obesity epidemic is one of today's most pressing public health issues. Recognizing this major health threat, Governor Ted Strickland issued a directive to the Ohio Department of Health's Office of Healthy Ohio to create a comprehensive obesity prevention plan for the state. The following Ohio Obesity Prevention Plan represents a collaborative effort to implement a collection of strategies designed to halt the alarming obesity trend.

A consistent theme throughout this plan is the role of the state's diverse agencies and programs in leading and collaborating with others to comprehensively address the issue of obesity. A great deal of work is already underway in communities, health care settings, schools and workplaces. Several organizations have developed, or are developing, proposals that also address the issue of obesity or the value of healthier living. The state's comprehensive plan recognizes and seeks to maximize those efforts by proposing objectives and strategies that contribute the state's role to promoting health and providing the tools necessary to achieve wellness.

The Ohio Obesity Prevention Plan was developed with guidance and contributions from numerous state agencies through the newly created Interagency Executive Committee on Health Investment Strategies. The plan was also informed by input from public survey responses, expert opinion and consideration of multiple state and national recommendations for obesity prevention strategies.

# HEALTHY OHIO

---



## OHIO DEPARTMENT OF HEALTH

---

246 North High Street  
Columbus, Ohio 43215

614/466-3543  
[www.odh.ohio.gov](http://www.odh.ohio.gov)

Ted Strickland/Governor

Alvin D. Jackson, M.D./Director of Health

The plan identifies the lead and partner state agencies for each objective, but recognizes and anticipates working with associations, local communities and agencies, private sector representatives and others to further develop the action plan and move each objective forward. By working together and following these proposed strategies, we can reach the goal of halting the growth rate in the prevalence of obesity among Ohioans by 2014.

Please go to <http://www.healthyohioprogram.org/> for electronic versions of the Ohio Obesity Prevention Plan, the plan's executive summary and the plan's objective summary sheet.

Thank you for your interest in the Ohio Obesity Prevention Plan. We look forward to working with you to create a healthier Ohio.

Sincerely,

Handwritten signature of Alvin D. Jackson, M.D.

Alvin D. Jackson, M.D.  
Director of the Department of  
Health

Sincerely,

Handwritten signature of Cynthia Burnell.

Cynthia Burnell  
Director of Healthy Ohio

# HEALTHY OHIO

---

## Table of Contents

<b>ENVISIONED STATE FOR A HEALTHY OHIO.....</b>	<b>7</b>
<b>BACKGROUND.....</b>	<b>7</b>
<b>THE GOVERNOR’S DIRECTIVE.....</b>	<b>9</b>
<b>THE OHIO OBESITY PREVENTION PLAN.....</b>	<b>10</b>
OVERVIEW .....	10
PLAN RATIONALE .....	11
VISION STATEMENT.....	12
FOCUS AREAS, SETTINGS AND GOALS .....	12
FOCUS AREAS.....	12
GOALS .....	13
SETTINGS .....	13
IMPLEMENTATION TIMELINE .....	14
PLAN SUMMARY .....	14
IMMEDIATE OBJECTIVES.....	14
SHORT-TERM OBJECTIVES.....	16
LONG-TERM OBJECTIVES .....	17
COORDINATION AND IMPLEMENTATION .....	19
EVALUATION.....	19
<b>IMPROVING SCHOOLS AND CHILD CARE ENVIRONMENTS .....</b>	<b>16</b>
OVERVIEW .....	16
TAKING ACTION .....	17
TARGET GRADES: PRE K-12.....	17
TARGET AGES: EARLY CHILDHOOD.....	18
OHIO ACTION TO DATE.....	19
OHIO ACTION MOVING FORWARD.....	21
PHYSICAL ACTIVITY OBJECTIVES .....	23
NUTRITION OBJECTIVES .....	24
COORDINATION, POLICY AND RESOURCE OBJECTIVES .....	26
<b>IMPROVING COMMUNITIES AND BUILT ENVIRONMENTS.....</b>	<b>29</b>
OVERVIEW .....	29

# HEALTHY OHIO

---

RURAL OHIO .....	31
TAKING ACTION .....	33
OHIO ACTION TO DATE.....	34
OHIO ACTION MOVING FORWARD.....	36
PHYSICAL ACTIVITY OBJECTIVES .....	37
NUTRITION OBJECTIVES .....	39
COORDINATION, POLICY AND RESOURCES OBJECTIVES .....	43
<u>SUPPORTING INDIVIDUALS AND FAMILIES .....</u>	<u>46</u>
OVERVIEW .....	46
INDIVIDUALS AND FAMILIES MOST AT RISK.....	48
TAKING ACTION .....	49
OHIO ACTION TO DATE.....	50
OHIO ACTION MOVING FORWARD.....	51
PHYSICAL ACTIVITY OBJECTIVES .....	51
NUTRITION OBJECTIVES .....	52
COORDINATION, POLICY AND RESOURCES OBJECTIVES .....	53
<u>IMPROVING HEALTH CARE.....</u>	<u>56</u>
OVERVIEW .....	56
TAKING ACTION .....	57
OHIO ACTION TO DATE.....	58
OHIO ACTION MOVING FORWARD.....	58
NUTRITION OBJECTIVES .....	59
IMPROVING COORDINATION, POLICY AND RESOURCES OBJECTIVES.....	61
<u>IMPROVING WORKSITE ENVIRONMENTS.....</u>	<u>66</u>
OVERVIEW .....	66
TAKING ACTION .....	66
OHIO ACTION TO DATE.....	68
OHIO ACTION MOVING FORWARD.....	69
PHYSICAL ACTIVITY OBJECTIVES .....	70
NUTRITION OBJECTIVES .....	70
COORDINATION, POLICY AND RESOURCES OBJECTIVES .....	72
<u>IMPROVING GOVERNMENT AGENCY RESPONSE AND COORDINATION .....</u>	<u>77</u>
OVERVIEW .....	77

# HEALTHY OHIO

---

TAKING ACTION .....	77
OHIO ACTION TO DATE.....	79
OHIO ACTION MOVING FORWARD.....	80
COORDINATION, POLICY AND RESOURCES OBJECTIVES .....	81
<u>CONCLUSION.....</u>	<u>87</u>
<u>DEFINITIONS.....</u>	<u>88</u>
<u>PLAN DEVELOPMENT PARTICIPANTS .....</u>	<u>94</u>
INTERAGENCY EXECUTIVE COMMITTEE ON HEALTH INVESTMENT STRATEGIES .....	94
OHIO DEPARTMENT OF HEALTH OBESITY VIRTUAL TEAM .....	95
PUBLIC HEARING PRESENTERS.....	95
PUBLIC HEARING ATTENDEES.....	96
E-MAIL AND WRITTEN RESPONDERS TO DRAFT OHIO OBESITY PREVENTION PLAN .....	97
SURVEY RESPONDERS TO DRAFT OHIO OBESITY PREVENTION PLAN .....	97
<u>REFERENCES.....</u>	<u>101</u>
<u>APPENDIX.....</u>	<u>103</u>
<u>GOVERNOR'S DIRECTIVE .....</u>	<u>104</u>
<u>SUMMARY OBJECTIVE LIST.....</u>	<u>107</u>
<u>OBJECTIVE CODING KEY .....</u>	<u>120</u>
<u>CITATIONS.....</u>	<u>121</u>

# HEALTHY OHIO

---

## Envisioned State for a Healthy Ohio

*“Ohioans are achieving and maintaining optimal health through personal wellness management and a health care delivery system that focuses on the promotion of health and the prevention of disease. At each stage of life, every Ohioan has access to timely, patient-centered and efficient physical and behavioral health care choices. All Ohioans have access to primary and preventive services as well as education and opportunities for healthy lifestyles and the incidence of preventable diseases are at the lowest levels in the nation across all population groups. Services and care are coordinated through widespread use of health information technology, thereby improving health outcomes and delivering effective, efficient and culturally competent health care.”*

Gov. Ted Strickland

## Background

Ohio and the nation are experiencing obesity epidemics that are threatening the health of our children, the productivity of our workers, the vitality of our communities, the affordability of our health care system and our overall quality of life. Overweight and obesity are no longer cosmetic issues but imminent public health and financial threats that require coordinated, immediate and long-term strategies to impact the health of our state. A magic wand will not eliminate this public health problem. Prevention is the only viable option. A sophisticated and aggressive local, state and federal approach to obesity is needed.

The staggering rise of obesity is a primary contributor to the increase in chronic conditions such as heart disease, type II diabetes, asthma, osteoarthritis and certain cancers. There are psychological consequences of obesity as well, including depression and self-esteem issues.

Ohio’s obesity rate is 17<sup>th</sup>-highest in the nation, according to the 2008 *F as in Fat* report, with 63.3 percent of adults are overweight and obese and 26.9 percent are obese, almost two-thirds of the adult population.<sup>1</sup> Overweight is also a serious health concern for children and adolescents. According to the Institute of Medicine’s 2006 report brief, *Progress in Preventing Childhood Obesity: How Do We Measure Up?*, one-third of children and youth in America are either obese or at risk of becoming obese. The obesity rate has nearly tripled for

## HEALTHY OHIO

---

children ages 2–5 years (from 5 percent to 14 percent) and more than tripled for youth ages 12–19 years (from 5 percent to 17 percent). The rate has more than quadrupled for children ages 6–11 years (from 4 percent to 19 percent).<sup>2</sup> In Ohio, 17 percent of Ohio third graders are classified as obese and an additional 18 percent are overweight.<sup>3</sup> Based on current overweight and obesity trends, one-third of children today will develop diabetes over their lifetime.<sup>4</sup> Statistics also show overweight adolescents have a 70 percent chance of becoming overweight or obese adults.<sup>5</sup> It appears that rates are still rising. In research now being led by the Center for Child Health & Policy at Rainbow Babies and Children’s Hospital (Cleveland) in collaboration with the Child Policy Research Center at Cincinnati Children’s Hospital, preliminary data from the 2008 Ohio Family Health Survey suggest 35.6 percent of Ohio children ages 10–17 years are overweight or obese and 18.5 percent are obese.<sup>6</sup> Overall, the rate of overweight and obesity in Ohio increases significantly with age until age 65 years. The Center for Child Health & Policy at Rainbow has also identified a trend of increasing obesity rates by age in other Ohio datasets with every Ohio county exceeding the target rate of obesity (<5 percent) even in children ages 2-5 years.<sup>7</sup>

Many experts now agree that the generation of children growing up today will live shorter lives than their parents if current trends are not halted. Data indicate certain segments of the population are more likely to be at risk for overweight/obesity. Low-income children in Ohio are more likely to be overweight or obese than children from other income groups. The Ohio Department of Health, Division of Family and Community Health Services’ *Report on Body Mass Index for Third-Graders* found that children living in Appalachian counties are more likely to be obese than children living in non-Appalachian counties.<sup>8</sup> Among low-income, preschool-age children, Hispanics have the greatest prevalence of overweight and obesity. The prevalence in 2007 was 33.9 percent for Hispanic children, 25.3 percent for black children and 27.2 percent for white children.<sup>9</sup> Further, the Ohio Obesity Prevention Plan recognizes targeted efforts are needed to best impact those most at risk, whose needs may be different because of life circumstance, age, education, culture, language, etc.

The economic consequences of obesity are becoming increasingly evident. Americans currently spend nearly \$100 billion, and Ohio spends an estimated \$3.3 billion, to address the consequences of limited physical activity and poor nutrition annually.<sup>10</sup> If the trend

## HEALTHY OHIO

---

continues, obesity will account for more than \$860 billion annually, or more than 16 percent, of health care expenditures in the United States by 2030.<sup>11</sup> According to a study in the *Journal of the American Medical Association*, medical expenditures for overweight-and-obesity related conditions accounted for 9.1 percent of total annual U.S. medical expenditures in 1998 and are estimated to be as high as \$78.5 billion (\$92.6 billion in 2002 dollars).<sup>12</sup> About half of these obesity-related costs were financed by Medicare and Medicaid.<sup>13</sup> Many obesity-related conditions could be prevented or better managed through targeting the major causes of obesity: poor nutrition and lack of physical activity.

Traditional public health approaches are not enough to reduce and prevent obesity. The causes of obesity are numerous and complex. Unfortunately, there are no quick fixes or purple pills that can reverse an obesity epidemic that has, since 1980, seen rates double for adults and at least triple for children.<sup>14</sup> Efforts to curb the obesity epidemic must be aggressive, timely, well-coordinated and responsive. A multi-setting, multi-goal, multi-approach strategy is required to impact policy, programs and individual behaviors.

### **The Governor's Directive**

State government can and should act as a leader in convening the necessary groups and supporting policy changes to halt and reverse obesity trends. In recognition of that role, on Sept. 19, 2008, Gov. Ted Strickland issued a directive to the Ohio Department of Health's Office of Healthy Ohio to develop a comprehensive, multi-faceted obesity prevention plan for the State of Ohio by March 31, 2009. The directive states the plan should, "develop goals and recommendations to support and enhance specific actionable obesity prevention measures for the residents of this State, with particular attention to children and adolescents. In addition to including goals to ensure that state agencies, boards and commissions are incorporating obesity prevention strategies into their programs, the plan should:

- Address specific areas including, but not limited to, creating school and employer strategies to improve student and employee health by reducing obesity, supporting communities that encourage more active lifestyles, improving the availability and consumption of healthy foods, increasing physical activity levels of Ohioans, and partnering with the medical community in the early identification and prevention of obesity;

## HEALTHY OHIO

---

- Formulate strategies and goals on policy and system changes that will encourage long-term sustainability and address high-risk populations;
- Develop policy or administrative recommendations that can be implemented by the State and local communities to prevent and reduce obesity;
- Create a five (5) year timeline for measuring specific and realistic goals and objectives regarding the State's progress in achieving the goals in reducing obesity among Ohioans and creating healthier lifestyle choices;
- Identify individual and organizational responsibility for implementing specific action steps that are included in the plan." <sup>15</sup>

To ensure effective development of the Ohio Obesity Prevention Plan, an interagency executive committee was created. The Interagency Executive Committee on Health Investment Strategies (the Interagency Executive Committee) represents a variety of Ohio state agencies and commissions that were charged with guiding the development of an action plan, including incorporating specific obesity prevention strategies into individual agency programs and initiatives.

The Office of Healthy Ohio and Interagency Executive Committee provided three opportunities for additional comments on the Ohio Obesity Prevention Plan. A public survey was completed in November 2008 to gather ideas for plan components and objectives. During February 2009, comments on the draft plan were widely solicited through a public comment period and a public hearing on Feb. 20, 2009. The November survey solicited more than 450 responses, the public comment period had over 130 comments and the public hearing had 51 attendees, with 11 individuals or groups providing formal comments. In addition, the Interagency Executive Committee reviewed local, state and national research and reviewed recommendations from other state obesity plans.

### **The Ohio Obesity Prevention Plan**

#### **Overview**

The proposed plan is a template to address Ohio's significant obesity epidemic across multiple settings. The plan outlines goals and objectives that have a particular emphasis on how state government may take a more active role in promoting obesity prevention through

# HEALTHY OHIO

---

supporting policy and environmental changes. The plan includes specific immediate, short-term and long-term action strategies to guide implementation efforts to ensure the document is an effective and measureable blueprint for action.

The plan that follows is the culmination of targeted planning work, and is based on agency experience and research of currently available data. It is anticipated that obesity prevention efforts will continue to evolve and that new research and best practices will emerge from the plan's implementation. Therefore, the proposed plan is a work in progress; open to revision and increased specificity. As local, regional and state efforts tackle the obesity epidemic, improvements will be made possible through monitoring, reviewing and revising the plan on an annual basis.

## **Plan Rationale**

The Ohio Obesity Prevention Plan recognizes the opportunities and challenges to improve the health of Ohioans. Given the growing recognition of the extent and consequences of the obesity epidemic, considerable attention to the problem is already being given and has informed the plan's development and priority recommendations. The preceding and ongoing work has enabled the plan to begin with several assumptions including:

- Inadequate nutrition and lack of physical activity are the leading causes of overweight and obesity. Improvements in physical activity and nutrition, beginning with breastfeeding of infants, will lead to improved health for all Ohioans.
- Various state agencies that do not directly deal with health or health care, have programs and policies that impact health and have potential to help prevent or reduce obesity.
- Information sharing across agencies regarding existing programs has the potential to benefit each agency's work, create greater efficiencies and support healthier Ohioans.
- Short and long-term goals and strategies must be identified and prioritized to be able to measure progress toward the plan's goals and use financial resources most wisely.
- Public and private partners' coordination is critical to avoid duplication, maximize resources and enhance results.

# HEALTHY OHIO

---

- The plan should be reviewed and updated annually to reflect experiences and current circumstances.
- A central repository is key to tracking the numerous obesity prevention initiatives and reporting on promising practices.
- High-risk populations in Ohio (for example, those in Appalachia and specific ethnic and cultural groups) may require specific strategies beyond those addressing the obesity problem in the general population.

## **Vision Statement**

The Ohio Obesity Prevention Plan seeks to fulfill Gov. Ted Strickland's envisioned state for a healthier Ohio by ensuring all Ohioans will learn, work and live in communities that support opportunities for physically active lifestyles and access to nutritious foods that lead to healthy weight and improved quality of life.

## **Focus Areas, Settings and Goals**

### **Focus Areas**

Given the pervasiveness of the obesity problem and the numerous possible tactics for intervention, four overarching focus areas were developed to meet the governor's directive and guide the plan. Those targets include:

1. **Focus on prevention.** Evidence of effective treatments for reversing obesity in individuals for the long-term is limited, so efforts should be focused on prevention of overweight and obesity.
2. **Focus on multi-faceted, population-based strategies.** Multi-faceted, population-based strategies are most likely to lead to successful results. While individual behavior change is necessary, those changes can and should be supported, encouraged and enabled through state and community strategies and policies.
3. **Focus on most at-risk populations.** In the Ohio Obesity Prevention Plan, special attention should be directed to groups most at risk for developing obesity and related chronic diseases.
4. **Focus on evaluation of efforts.** Because of the complexity of obesity, it is unlikely that major reductions in obesity rates will be achievable in the short term. Interim evaluation strategies

# HEALTHY OHIO

---

are critical to measure progress toward behavior, policy and environmental changes that support the prevention of obesity and ultimate reduction of obesity rates.

## Goals

To measure progress toward the vision of a healthy Ohio, a goal of improving the percentage of Ohioans engaging in physical activity and eating healthier foods as been established for 2014, along with stabilizing the increasing rate of obesity among both adults and children. In Ohio, 28.1 percent of adults<sup>16</sup> and almost 19 percent of Ohio's third grade public school children were classified as obese.<sup>17</sup> While a significant improvement is unlikely in less than five years, the vision is to prevent any further increase and begin to reverse the trend. The Ohio Obesity Prevention Plan outlines three specific goals for preventing obesity.

**Goal 1:** Improve physical activity options and opportunities.

**Goal 2:** Improve nutrition and access to healthy food choices and limit access to unhealthy food and beverage choices.

**Goal 3:** Improve the coordination of policy and resources directed to the prevention and reduction of obesity, especially among those populations most at risk.

## Settings

The plan is divided into settings where objectives related to each goal should be targeted and specific strategies developed. The following are those settings:

- Schools and Child Care (Setting A)
- Communities and the Built Environment (Setting B)
- Individuals and Families (Setting C)
- Health Care (Setting D)

# HEALTHY OHIO

---

- Employers (Setting E)
- Government (Setting F)

## **Implementation Timeline**

Launching a comprehensive effort to prevent obesity is of critical importance to both the physical and fiscal health of Ohioans. However, difficult economic times and resulting public and private budget challenges cannot be ignored. The following recommended objectives are categorized by immediate, short-term and long-term priority areas for action between 2009-2014. The time frames for action should not be seen as mutually exclusive, as planning to address long-term objectives may begin sooner to ensure adequate time to meet the objective. Also, the plan will be revised at least annually to reflect available opportunities or changed circumstances.

## **Plan Summary**

The Ohio Obesity Prevention Plan encompasses the next five years. Objectives outlined in the Ohio Obesity Prevention Plan provide specific actions that will be undertaken in the efforts to prevent obesity. The recommendations are categorized by immediate, short-term and long-term objective areas for action from 2009-2014. The plan will be revised annually to reflect available opportunities, additional partners or changed circumstances. The following provides the time line for immediate, short term and long term objectives, as well as **selected** objectives from each time frame and setting. Please refer to the objective summary document for the complete objective list.

## **Immediate Objectives**

Immediate objectives will be completed by Dec. 2009. These are objectives that are already underway, could be accomplished readily or are necessary to build infrastructure for the next steps in plan implementation.

### *Schools and Child Care*

- By Dec. 31, 2009, leadership of the Ohio Department of Education will identify and communicate with federal partners regarding increasing United States Department of Agriculture meal reimbursements to support the provision of high quality nutritious meals in schools.

### *Communities and the Built Environment*

- By summer 2009, create a plan to enhance physical activity opportunities as well as encourage healthier nutrition in the

# HEALTHY OHIO

---

school environment through school construction and reconstruction funded by state government.

- By Dec. 31, 2009, develop and promote a statewide trail plan, linking local and regional plans, including priorities for trail completion, anticipated time lines and identification of implementation funding.
- By Dec. 31, 2009, begin and expand marketing and promotional programs to encourage Ohioans to get physically active using Ohio's trails, parks and other natural resources.
- By Dec. 31, 2009, increase access to fresh and healthy food for all Ohioans through support of Ohio farmers' markets by creating a farmers' market management network.
- By Dec. 31, 2009, identify rural and urban food deserts in Ohio and by 2015, decrease these areas by 10 percent by providing access to healthy local foods. *Note: The Ohio Department of Agriculture has a six-year time frame for achieving this objective.*

## *Individuals and Families*

- By spring 2009, create and implement a statewide obesity prevention social marketing campaign that gives families information and tools to prevent obesity.
- By Dec. 31, 2009, launch a healthy living challenge to Ohioans that will incorporate the state's newly developed obesity prevention social marketing campaign.

## *Government*

- By July 31, 2009, form the Ohio Community Wellness Alliance as part of the Healthy Ohio Advisory Council. This public-private partnership will establish a framework to implement and evaluate progress toward the goals of the plan, including integrating efforts directed at obesity prevention.
- By Dec. 31, 2009, develop a plan for comprehensive, continuous and reliable surveillance and evaluation systems to facilitate data-driven decisions and monitor overweight, obesity, related risk factors and progress toward achieving the goals outlined in the Ohio Obesity Prevention Plan.
- By Dec. 31, 2009, identify additional inter-agency partnerships for opportunities to promote progress toward the plan.

# HEALTHY OHIO

---

- By Dec. 31, 2009, create a centralized database for the Healthy Ohio Web site of existing obesity prevention activities occurring across the state and of referral listings for obesity prevention services.

## **Short-term Objectives**

Short term objectives will be addressed by December 2011. These may require redistribution of resources, significant expansion of existing efforts or new initiatives to achieve results.

### *Schools and Child Care*

- By Dec. 31, 2011, develop a plan to involve students in an advisory role for implementing the Ohio Obesity Prevention Plan.
- By Dec. 31, 2011, develop a plan and evaluation measures to assess and make recommendations to improve nutrition and physical activity policies within all Ohio child care settings.

### *Communities and Built Environment*

- By Dec. 31, 2011, develop plans to make communities more accessible for active transportation such as walking and bicycling.
- By Dec. 31, 2011, increase the number of Ohio farmers' markets that can accept and process food stamps from 11 to 40.
- By Dec. 31, 2011, increase the number of local, broad-based coalitions with members representing a cross-section of community partners and agencies to support sustainable community-based and evidence-based activities to improve nutrition and physical activity. Coalitions should include representatives from sectors such as transportation, urban/rural planning, education, economic development and the employer community.

### *Health Care*

- By Dec. 31, 2010, emphasize obesity prevention and treatment for Ohioans with serious mental illness.
- By Dec. 31, 2011, increase trainings, education and resource opportunities for primary care providers and other health care professionals to promote obesity prevention.

# HEALTHY OHIO

---

- By Dec. 31, 2011, develop a plan to have more primary care providers and related health care professionals focus on early intervention by routinely measuring and tracking evidence-based obesity measures for children and adults and by providing counseling and/or referral to qualified providers for patients.

## *Worksites*

- By Dec. 31, 2011, identify best practices and develop resources for employers to improve physical activity at worksites, including worksite facilities (i.e. showers on site), work day flexibility and incentives for physical activity, policies and activities.
- By Dec. 31, 2011, identify best practices for improving food options in the workplace and develop resources for nutrition improvements at worksites.
- By Dec. 31, 2011, more employers will support breastfeeding-friendly policies.

## *Government*

- By Dec. 31, 2011, research policy issues, consider specific policy changes and incentives and make recommendations related to the availability of improved nutrition (including breastfeeding support).
- By Dec. 31, 2011, develop a health impact assessment tool for use by state agencies and other entities to objectively evaluate the potential health effects of a project or policy before it is implemented or built.

## **Long-Term Objectives**

Long-term objectives will be addressed by December 2014. These components of the plan will require significant policy or statutory changes involve new investment and are expected to have the most political challenges or require the most time to implement.

## *Schools and Child Care*

- By Dec. 31, 2014, increase the proportion of schools that increase physical activity throughout and after the school day.
- By Dec. 31, 2014, increase the number of facilities/environments that adopt policies, practices and incentives to promote healthy eating where children and adolescents learn and play.

## HEALTHY OHIO

---

- By Dec. 31, 2015, increase the number of schools using the national Farm-to-School program by a minimum of 50 schools. *Note: The Ohio Department of Agriculture has a six-year time frame for achieving this objective.*

### *Communities and Built Environment*

- By Dec. 31, 2012, increase the number of children walking or bike riding to school by 5 percent in communities funded for Safe Routes to School programs by supporting infrastructure improvements (such as sidewalks and bike paths) and programmatic components (such as walking school buses).
- By Dec. 31, 2014, at least 40 Ohio counties will have made an improvement in physical activity opportunities available in the county.
- By Dec. 31, 2014, develop and make recommendations to state government related to policy and funding for communities that limit sprawl and reward comprehensive planning efforts that support improved built environments and encourage pedestrian-friendly communities.

### *Individuals and Families*

- By Dec. 31, 2014, encourage and expand safe, accessible and affordable opportunities for increased physical activity for at-risk populations including persons with disabilities.
- By Dec. 31, 2014, increase the number of restaurants that offer healthier meals, appropriately sized portions and list caloric information on menus.

### *Improving Health Care*

- By Dec. 31, 2012, increase the number of research activities related to obesity prevention and control related to at-risk populations.
- By Dec. 31, 2014, develop strategies to work with birthing hospitals, prenatal care providers, pediatricians, other health care providers and breastfeeding coalitions to increase initiation and duration of breastfeeding among Ohio mothers.
- By Dec. 31, 2014, coordinate with insurers and payers to develop health plans that encourage patients to achieve a healthy weight and lifestyle.

# HEALTHY OHIO

---

## *Government*

- By Dec.31, 2014, explore, consider, and develop a plan for incentivizing policies and practices that encourage and support availability and purchase of healthy foods.

## **Coordination and Implementation**

The ongoing coordination of the plan's proposed strategies will be led by the Office of Healthy Ohio at the Ohio Department of Health. A Community Wellness Alliance comprised of the current members of the Interagency Executive Committee on Health Investment Strategies as well as other public and private partners will be formed as an adjunct to the Healthy Ohio Advisory Council. This group will provide ongoing direction, share information and lead evaluation activities related to the plan.

## **Evaluation**

Measurement and evaluation are critical components of determining progress toward stated goals. The development of the Ohio Obesity Prevention Plan has incorporated beginning plans for the surveillance and/or evaluation of each objective. Coordination of plan evaluation will rest with the Ohio Community Wellness Alliance. Further development of resources and expertise will be identified by the Alliance, along with a plan for reporting progress, identifying best practices and recommending revisions to the plan.

## Improving Schools and Child Care Environments

### Improving Schools and Child Care Environments

#### Overview

Preventing childhood overweight and obesity will lead to improved overall child health, avoidance of the health consequences of obesity, reduced risk of obesity in adulthood and improved academic achievement. The Ohio Department of Health's *Body Mass Index Survey of Third-Grade Students* indicates "over 18.9 percent of Ohio's third grade public school students were overweight, and an additional 16.7 percent of students were found at risk for overweight." The report also shows that Ohio counties varied from having about 10 percent of students overweight to 33 percent overweight.<sup>18</sup>

Unfortunately, preschool-aged children face similar obesity risks. According to the Institute of Medicine's 2006 report brief, *Progress in Preventing Childhood Obesity: How Do We Measure Up?*, one-third of children and youth in America are either obese or at risk of becoming obese. The obesity rate has nearly tripled for children ages 2–5 years (from 5 percent to 14 percent) and youth ages 12–19 years (from 5 percent to 17 percent). The rate has more than quadrupled for children ages 6–11 years (from 4 percent to 19 percent).<sup>19</sup> Children who are overweight as toddlers or preschoolers are more likely to be overweight or obese in early adolescence.<sup>20</sup>

Given the links between disease and childhood obesity, as well as the relationship between early-onset obesity and adult obesity, it is particularly important to target obesity prevention efforts in the settings in which the great majority of children spend their days: child care and schools.

Schools and child care settings are integral partners in the prevention of obesity and play an important role in the lives of children. Ohio provides formal education to 1,751,511 children in the pre-K to grade 12 school setting and an additional 31,962 children in child care settings (2007).<sup>21,22</sup> Students spend more time in school, after-school programs or child care and consume up to 50 percent of daily calories during school hours, thereby providing schools with a unique opportunity to influence students' health choices.<sup>23</sup> Additionally,

# HEALTHY OHIO

---

schools are often the centers of communities, and are well-positioned to assume a leadership role with supporting healthier lifestyles in children.

Schools and child care settings that place a high priority on health policies and programs create an environment where students are healthy and ready to learn every day. Integrating good nutrition and adequate physical activity each day sets the child up for social and academic success. Physical activity among adolescents is consistently related to higher levels of self-esteem and self-concept and lower levels of anxiety and stress.<sup>24</sup> Research has shown that well-designed, well-implemented school programs can effectively promote physical activity and healthy eating.

Conversely, the obese child can face academic and non-academic barriers to learning. In addition to the well-documented health issues affecting obese children, a child's social and emotional health are also impacted by obesity. Obese children tend to have higher rates of depression and lower self-confidence than children who are of normal weight.<sup>25</sup> Obese children also have higher rates of absenteeism than their normal-weight peers.<sup>26</sup>



## **Taking Action**

### **Target Grades: Pre K-12**

Schools and child care settings can provide numerous opportunities to improve students' eating habits and physical activity levels during the day. The Institute of Medicine reports that several studies found changes in the school food environment can improve students' dietary choices.<sup>27</sup> A North Carolina study found limiting access to unhealthy snacks during school will impact the amount of more nutritious offerings a student will eat throughout the day.<sup>28</sup>

Schools can also support increased opportunities for physical activity. A poll conducted by the Robert Wood Johnson Foundation and Sports4Kids shows Americans intuitively understand the importance of play and physical activity for children, and believe it should be an integral part of their school experience. The survey of national attitudes related to recess reveals that 82 percent of Midwesterners do not think children get adequate daily physical play time, compared to 76 percent of the rest of the country.<sup>29</sup>

## HEALTHY OHIO

---

There are specific actions that education systems are currently taking and/or could take to improve physical activity and nutrition in schools. The National Association of State Boards of Education in its December 2004 report, *The Role of Schools in Preventing Childhood Obesity*,<sup>30</sup> schools can:

- Address physical activity and nutrition through a Coordinated School Health Program approach.
- Designate a school health coordinator and maintain an active school health council.
- Assess the school's health policies and programs and develop a plan for improvement.
- Strengthen the school's nutrition and physical activity policies.
- Implement a high quality health promotion program for school staff.
- Implement a high quality course of study in health education.
- Implement a high quality course of study in physical education.
- Increase opportunities for students to engage in physical activity.
- Implement a quality school meals program.
- Ensure that students have appealing, healthy choices in foods and beverages offered outside of the school meals program.<sup>31</sup>

Schools can also design, support and promote active transportation infrastructure. The practice of combining schools (numerous grades on a single campus) and trends regarding school acreage requirements have resulted in the need for bigger tracts of land, rarely available in more densely populated communities, effectively forcing schools to build in less populated areas. The outcome is a community that is convenient for cars but not for students to walk to school. The prevalence of United States children who walk or bike to school has decreased dramatically over the last generation.<sup>32</sup> Increasing the number of students who can and do use active transportation to school is an important step in improving children's daily physical activity.

### **Target Ages: Early Childhood**

Child care providers also play a major role in influencing the health of young children in child care centers and family child care homes. Strategies that recognize and provide support and information to the family and caregiver are likely to be the most successful in promoting healthy habits. More than 31,000 children in Ohio spend time in

## HEALTHY OHIO

---

child care settings outside their homes. Given the broad impact of child care settings, these are ideal settings in which to target early childhood obesity interventions. Child care providers can impact health of young children in the following ways:

- Model healthy eating behaviors.
- Ensure children have at least 60 minutes per day of physical activity.
- Eliminate/limit screen time.
- Provide nutrient-rich foods and eliminate poor quality foods.
- Integrate nutrition and physical activity information into curricula.
- Disallow the provision of or withholding of food and activity as rewards or punishment.
- Ensure there is a plan for the provision of physical activity that includes adequate space, time and age-appropriate equipment.

### **Ohio Action to Date**

In Ohio, improving the nutrition and physical activity in child care settings and schools will involve the coordination of multiple partners. There are numerous federal, state and local agencies that play a role in the administration, certification, funding and implementation of education. The complexity of organizations involved, the role of local school district control and the requirements of all parties add challenges for making changes in schools. For example, standards for reimbursable school meals and nutritional requirements are set at the federal level by the United States Department of Agriculture (USDA). While the Dietary Guidelines for Americans were updated in 2005, the USDA is in the process of updating the guidelines for schools. Federal mandates have impacted Ohio schools including the USDA's requirement that schools participating in the school meal program have a wellness policy.

While there are challenges, progress is underway. The Ohio Department of Education has several efforts to specifically target the improvement of student health, including the prevention of obesity. These efforts include the following:

- The appointment of a wellness programs administrator.
- The recognition/adoption of the coordinated school health model, which employs a team approach for improved health.
- The adoption by the State Board of Education in 2007 of the National Association for Sport and Physical Education

## HEALTHY OHIO

---

standards for physical education. The Ohio Department of Education is currently developing benchmarks and indicators.

Other state agencies, such as the Ohio Department of Agriculture are working to improve the availability of fresh produce and other Ohio-produced foods in the schools. For example, the Ohio Department of Agriculture is seeking to build improved partnerships between schools and farmers to provide access to locally grown produce. Ohio Safe Routes to School, a program of the Ohio Department of Transportation, seeks to improve the infrastructure and programmatic components to increase the numbers of children who can walk or ride bikes to school. To date, Ohio Safe Routes to School has provided 140 grants to 338 schools to improve the use of active transportation to and from school.

The Ohio Department of Health has numerous programs that support improved health in child care settings and school

communities. The Child and Family Health Services program is designed as an organized community effort to eliminate health disparities, improve birth outcomes and improve the health status of women, infants and children in Ohio.<sup>33</sup> The Child and Family Health Services program targets low-income women and children in racial and ethnic groups that are disproportionately affected by poor health outcomes, including obesity. Ohio Department of Health also administers the



Cardiovascular Health and Healthy Ohio Community Obesity Prevention grant programs, which can involve projects to improve school health. Ohio Department of Health also targets early childhood care settings. For example, the Healthy Child Care Ohio program provides resources and education to child care providers regarding nutrition and physical activity. Ohio Department of Health also has a body mass index (BMI) surveillance program that measures the BMI of third graders in Ohio, a project that has been pivotal in defining the scope of the state's childhood obesity problem.

## HEALTHY OHIO

---

Finally, many local and nonprofit agencies in Ohio have programs that seek to improve the nutrition of children, including the local administration of USDA programs, summer food programs and student and family nutrition education. Additionally, local and nonprofit agencies play a significant role in the availability of physical activity programs, including the YMCA, Boys and Girls Clubs and neighborhood or community recreation centers.

Ohio also has several awards to recognize school districts' efforts to improve policies and practices related to wellness, including the Stellar award for Best Nutrition Practices and the Healthy Ohio Buckeye Best Healthy Schools awards program. In 2008, 28 school districts and 17 individual schools received the Stellar awards and more than 2,000 school buildings participated in the Buckeye Best program.

### **Ohio Action Moving Forward**

State agencies can collectively build support to plan, implement and evaluate fully functioning, coordinated school health programs in Ohio child care settings and schools. In addition, the state is well positioned to develop collaborations to implement best practices in response to the health and nutritional needs of local school communities. Promising practices for Ohio when planning and implementing school-based strategies can include:

- Working with schools to address physical activity and nutrition through a coordinated school health program.
- Providing guidance and technical assistance to schools on establishing a school health council as an effective way to achieve an enduring focus on promoting physical activity and healthy eating.
- Providing schools with resources and technical assistance to effectively assess the school's health policies and programs and develop a plan for improvement.
- Providing guidance and technical assistance to schools to implement the anticipated updated U.S. Department of Agriculture nutrition standards for school meals.
- Helping schools increase opportunities for students to engage in physical activity throughout the school day.

## HEALTHY OHIO

---

Given the numerous federal, state and local agencies that impact child care and school settings, a high level of coordination is required to achieve the goals outlined in the Ohio Obesity Prevention Plan. In the development of the plan, there is recognition of the role of federal policy and programs in impacting state level changes. Additionally, the Ohio Department of Education has limited control in *requiring* local districts to meet certain requirements. For example, the Ohio Department of Education has limited scope in determining meal requirements or nutrition standards.



Best practice research indicates the following components should be in place to improve nutrition and physical activity in the school setting:

- Have resources and support to offer healthier meals.
- Exceed current USDA nutrition requirements for meals.
- Provide at least 60 minutes of physical activity per day.
- Have a coordinated school wellness approach.
- Prohibit using or withholding of physical activity as punishment and/or reward.
- Prohibit using or withholding of food as a punishment and/or reward.
- Establish nutritional standards for food sales on school grounds.

# HEALTHY OHIO

---

**Goal 1:** Improve physical activity options and opportunities.

## **Physical Activity Objectives**

*Target area: Schools (Pre K - Grade 12)*

**Objective A-1-a.:** By Dec. 31, 2014, increase the proportion of schools that increase physical activity throughout and after the school day.

**Strategies:**

- A. Provide training and technical assistance to increase the proportion of schools that utilize the State Board of Education-adopted academic content standards for physical education.
- B. Develop school building plans to incorporate physical design that encourages physical activity and allows maximum use of space for physical activity.
- C. Encourage schools to provide and promote social, noncompetitive fitness and activity opportunities before, during and after school for all children.
- D. Increase the percentage of schools in which at least one physical education teacher or specialist received professional development on physical education during the past two years.
- E. Establish a system to increase the dissemination of information to schools related to the benefits of physical activity and academic achievement, resources and evidence-based policies, practices and physical education curricula.

**Lead Agencies:** Ohio Department of Education, Ohio Department of Health

# HEALTHY OHIO

---

**Goal 2:** Improve nutrition and access to healthy food choices and limit access to unhealthy food and beverage choices.

## **Nutrition Objectives**

*Target Area: Schools (Pre K - Grade 12)*

**Objective A-2-a:** By Dec. 31, 2009, leadership of the Ohio Department of Education will identify and communicate with federal partners regarding increasing United States Department of Agriculture (USDA) meal reimbursements to support the provision of high quality nutritious meals in schools.

**Strategies:**

- A. Identify barriers, obstacles and necessary changes in current meal reimbursement system, if required, including commodity products, reimbursement levels, local purchasing issues, etc.
- B. Identify appropriate federal legislative leaders to target related to school and child care meal issues.

**Lead Agency:** Ohio Department of Education, Ohio Department of Health

*Target area: Child care and Schools (Pre K - Grade 12)*

**Objective A-2-b:** By Dec.31, 2014, increase the number of facilities/environments that adopt policies, practices and incentives to promote healthy eating where children and adolescents learn and play.

**Strategies:**

- A. Strengthen statewide, regional and local infrastructure to promote coordination among partners across the state and within each region.
- B. Increase the number of schools that have 1) assessed, 2) developed wellness plans, 3) implemented and 4) evaluated changes to their nutrition and physical activity environments.
- C. Disseminate evidence-based practices that are effective at changing behaviors.
- D. Encourage schools to collaborate with public and private entities to promote student wellness.
- E. Encourage school and community leadership to demonstrate a commitment to comprehensive wellness.
- F. Develop an evaluation plan that includes monitoring statewide health-risk behaviors, policies and programs and

# HEALTHY OHIO

---

supports local-level assessments of school policies, programs and health-risk behaviors.

- G. Promote collaboration between the business, education and health communities to develop and measure the success of nutrition, physical education and fitness measurement programs in school and community settings.

**Lead Agencies:** Ohio Department of Education, Ohio Department of Health

**Target area:** *Child care and Schools (Pre K - Grade 12)*

**Objective A-2-c:** By Dec. 31, 2014, increase awareness and knowledge about healthy eating and the proportion of children and adolescents whose intake of meals and snacks in child care settings, schools and after-school programs that contribute to good overall dietary quality.

**Strategies:**

- A. Provide technical assistance to child care settings, schools, families and communities, including business partners, to implement a healthier nutritional environment.
- B. Develop and implement a communication plan to increase awareness and knowledge about healthy eating practices within child care agencies, schools and parent education programs.
- C. Develop and/or disseminate age-appropriate, culturally sensitive and sequential instruction in health education enhancing student knowledge, attitudes, skills and behavior development for adopting and maintain healthy eating habits and a physically active lifestyle.
- D. Educate schools regarding the United States Department of Agriculture's (USDA) dietary guidelines.
- E. Educate schools on USDA child nutrition programs available and provide technical assistance to schools to promote student participation in USDA child nutrition programs.
- F. Develop and disseminate materials encouraging schools to provide the opportunities for all certified and noncertified staff to participate in adult-focused staff wellness activities.
- G. Increase the percentage of schools in which the lead health education teacher received professional development on nutrition education and dietary behavior during the last two years.
- H. Encourage and support the provision of breast milk to infants in child care settings.

# HEALTHY OHIO

---

- I. Encourage family style serving of meals in child care settings, which have been shown to role model appropriate eating behavior and appropriate portion sizes.

**Lead Agencies:** Ohio Department of Education, Ohio Department of Health

*Target Area: Schools (Pre K - Grade 12)*

**Objective A-2-d:** By Dec. 31, 2015, increase the number of schools using the national Farm-to-School program by a minimum of 50 schools. *Note: The Ohio Department of Agriculture has a six-year time frame for achieving this objective.*

**Strategies:**

- A. Review Farm-to-School program options to develop mechanisms for farmers to sell their products to school districts.
- B. Develop resources for local food procurement in Ohio primary schools.
- C. Develop primer on school procurement process for farmers and food service companies.
- D. Review materials, conduct outreach to agencies and schools and an increase in schools participating in the program.

**Lead Agency:** Ohio Department of Agriculture

**Other Involved Agencies:** Ohio Department of Education, Ohio Food Policy Council

**Goal 3:** Improve the coordination of policy and resources directed to the prevention and reduction of obesity, especially among those populations most at risk.

## **Coordination, Policy and Resource Objectives**

*Target Area: Schools (Pre K - Grade 12)*

**Objective A-3-a:** By Dec. 31, 2010, increase participation in recognition programs to highlight school wellness-based initiatives such as the Buckeye Best Healthy Schools awards program.

**Strategies:**

- A. Enhance technical assistance provided to schools who participate in the Buckeye Best Healthy School awards program by collecting and reviewing their health and wellness policies.

# HEALTHY OHIO

---

- B. Notify and encourage all schools to participate in available wellness recognition programs.
- C. Increase awareness and participation in the Buckeye Best Healthy Schools awards program.
- D. Recognize schools that are exemplars in school wellness, nutrition and physical activity programs through:
  - The Buckeye Best Healthy Schools awards program,
  - Stellar awards,
  - Promising practices,
  - National programs.

**Lead Agencies:** Ohio Department of Health, Ohio Department of Health/Office of Healthy Ohio, Ohio Department of Education

**Other Involved Agencies:** American Cancer Society, Ohio Association of Health Physical Education Recreation and Dance

*Target Area: Schools (Pre K - Grade 12)*

**Objective A-3-b:** By Dec. 31, 2011, develop a plan to involve students in an advisory role for implementing the Ohio Obesity Prevention Plan.

**Strategies:**

- A. Consult with stakeholders to develop appropriate role for the group.
- B. Develop process for selection of participants.

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio

**Other Involved Agencies:** Ohio Department of Education

*Target area: Child Care Agencies*

**Objective A-3-c:** By Dec. 31, 2011, develop a plan and evaluation measures to assess and make recommendations to improve nutrition and physical activity policies within all Ohio child care settings.

**Strategies:**

- A. Convene major stakeholders such as the Ohio Child Care Resource and Referral Association, providers, Ohio Department of Health, Ohio Department of Job and Family Services and Ohio Department of Education to begin planning and identifying barriers.
- B. Consider specific strategies that have been shown to yield results such as: increasing the number of child care homes enrolled in the Child and Adult Care Food Program; ensuring food is not used as a reward, assuring that all food meets USDA dietary guidelines and serving sizes are age appropriate; prohibiting fundraising activities and marketing of foods and beverages that do not support a healthy diet; limiting screen time access; and requiring daily physical activity.

## HEALTHY OHIO

---

C. Develop promotional materials.

**Lead Agencies:** Ohio Department of Health, Ohio Department of Job and Family Services, Ohio Department of Education

*Target area: Child Care Agencies*

**Objective A-3-d:** By Dec. 31, 2011, expand the Buckeye Best Healthy Schools awards to include recognition for child care settings that implement model nutrition and physical activity policies.

**Strategies:**

- A. Review first year pilot being conducted in 2009.
- B. Develop award criteria and promotional materials.

**Lead Agency:** Ohio Department of Health

**Other Involved Agencies:** American Cancer Society, Ohio Association of Health Physical Education Recreation and Dance

## Improving Communities and Built Environments

### Improving Communities and Built Environments

#### Overview

There are a variety of factors that influence an individual's health, including the community in which one lives. Neighborhoods vary in opportunities available for daily physical activity and healthful eating. For example, neighborhoods without sidewalks, safe places for children to play or accessible markets with affordable healthy foods can create challenges to healthy living.

The rise of obesity across the nation has forced a comprehensive look at the contributing factors to our collective health issues including how transportation systems and community designs can influence health. Modern life has inadvertently developed numerous components that make maintaining a healthy lifestyle more complicated,<sup>34</sup> including:

- Communities that feature long or unwalkable distances between homes, shopping, jobs, schools and other destinations.
- Fear that walking or bicycling is unsafe due to crime.
- Communities built without sidewalks.
- Buildings and sites designed to accommodate cars more than pedestrian traffic.
- Schools built apart from community centers.
- Relocation of grocery stores to suburban areas.
- Proliferation of convenience stores that offer limited choices for healthy food.<sup>35</sup>

Multiple stakeholders, such as local governments (including public health agencies), private developers, community groups and schools must work collaboratively to ensure health impacts are considered when community and transportation design decisions are made. Research has found correlations between obesity and the ease of being physically active in one's environment. The design of a community contributes significantly to whether its members will be active.<sup>36</sup> The more opportunities for physical activity a neighborhood

## HEALTHY OHIO

---

has built into it, the more likely physical activity will occur. Incorporation of policy changes that add sidewalks and bicycle lanes in community designs has been shown to be an effective avenue for promoting more active lifestyles.<sup>37</sup> In a neighborhood with sidewalks, residents are 65 percent more likely to report walking.<sup>38</sup>

The physical structure of a community and the ease of active transportation modalities have an impact particularly with the commute to schools. Trends show schools are being built larger and further away from community centers. The trend of combining schools (numerous grades on a single campus) and requiring acreage, rarely available in dense communities, has forced schools to build in less populated areas. The outcome is communities that are convenient for cars and school buses but not for students to walk or bike to school. The prevalence of U.S. children who walk or bike to school has decreased dramatically over the last generation.<sup>39</sup> Improving the ability to use, and increasing the numbers of students who do use, active transportation to school is an important step in increasing children's daily physical activity and ultimately reducing the obesity epidemic.

The design of a community also contributes to the promotion of healthy eating habits.<sup>40</sup> Availability of fresh, nutritious produce in all types of neighborhoods and settings will improve consumption of healthy foods.<sup>41</sup> It is well documented that poor food choices are more prevalent in low-income neighborhoods. Recent literature has examined the role of "food deserts," areas in which there is no nutritious food easily available.<sup>42</sup> Food deserts occur when a significant portion of the local population spends its food budget in locations that do not have fresh produce or healthy food choices, resulting in a lack of fresh fruits and vegetables and other healthy foods in diets. Food deserts may be avoided by collaboration among policy makers, local planning officials, local farmers, industry and residents to ensure produce and other nutrient-rich foods are readily available to all. Because community design can support walking as a means of transportation and because food outlets are among the most

*"Food deserts" refer to specific geographic regions that lack access to fresh produce and adequate nutritional foods.*

## HEALTHY OHIO

---

common destinations for walkers, incentives for offering more healthful choices at food stores could affect both healthful eating and physical activity.<sup>43</sup>

Finally, a recent study in the *American Journal of Public Health* found a relationship between students' proximity to fast food restaurants and overweight and obesity. Specifically, the researchers found that students with fast-food restaurants within half mile of their school consumed fewer servings of fruits and vegetables, consumed more servings of soda and were more likely to be overweight or obese.<sup>44</sup> Thoughtful and intentional community design is a significant component of impacting obesity.

### **Rural Ohio**

In Ohio, 79 of the 88 state's counties are considered rural, and 32 of these counties are considered Appalachian.<sup>45</sup> Ohio's rural populations include many groups, including migrant workers, the Amish, Mennonites and Appalachians.

Data indicate populations in rural counties, especially in Appalachia, are vulnerable to the obesity epidemic. *A Report on Body Mass Index of Ohio's Third Graders: 2004 – 2005* conducted by The Ohio Department of Health found that children in Appalachian counties were more likely to be overweight than children living in other rural or suburban counties,<sup>46</sup> and some Appalachian counties had as many as fifty percent to fifty-five percent of third graders with BMIs that indicated the students were overweight or obese.

Rural communities may face greater obstacles when combating obesity related to broader demographics. Rural residents are older, less educated and poorer than urban residents. Each of these demographic characteristics increase obesity, and together forms a dangerous combination.<sup>47</sup>

Physical activity such as walking and farming, once a daily pattern in rural communities, has largely disappeared for portions of rural populations. Rural communities generally have significant geographic distances between homes, churches, schools, shopping and recreation centers (if they exist), and these distances require a car. The St. Louis University School of Public Health identified the role of environmental factors within rural communities in influencing activity. In their survey of 2,500 rural residents in Missouri, Tennessee and Arkansas, researchers found the distance from

# HEALTHY OHIO

---

recreational facilities, stores, churches and schools was linked to obesity. <sup>48</sup>

Ironically, rural communities can also suffer from a lack of high quality nutrition. The problem of food deserts, where high quality, nutritious foods are not readily available, applies to rural communities as well as lower income urban areas. While many rural communities may have a history of gardening and farming, many no longer produce and sell food locally. Rural families are facing the same pressures and demands of their urban counterparts, where the balance of work and family leave little time for food preparation in the home and there is a reliance on inexpensive, convenient, high-calorie fast foods. Finally, there may be social and cultural issues in rural communities related to foods that are ingrained, as such issues have been noted in the research of Appalachian communities, where the provision of food is tied to emotional relationships. Additionally, some healthy practices, such as gardening and breastfeeding, may be culturally associated with poverty, and therefore avoided by segments of the population. Conversely, the ability to purchase fast food may be seen as an indicator of wealth. Data has indicated a difference between some racial and cultural groups regarding what constitutes a normal body size, and this may also be true for some rural populations. Furthermore, because the prevalence of obesity is very high in Ohio rural populations, and in particular Ohio's Appalachian populations, a new norm may have emerged for what is considered a normal body weight.



While many of the strategies for impacting the obesity epidemic are similar for all populations, rural communities may require a varied approach and specific strategies to combat obesity. Rural communities can build upon the unique features of the setting to improve physical activity and nutrition. Rural communities will not have the population density for some of the built environment modifications suggested in the general community improvement literature, and may need to adapt strategies for a broader geographic population

# HEALTHY OHIO

---

spread. However, many of the strategies can be adapted for rural settings. For example, the opportunity to utilize active transportation modalities to and from school might still be possible for portions of rural Ohio, particularly if bike riding is considered. School sites, already often the center of communities, can become centers of recreational activity with the installation and wider utilization of tracks, walking trails and fitness rooms that schools may already have available. Walking and biking trail investments can be developed for local use and as possible tourist destinations. Rural communities can consider non-traditional settings for healthy activities such as libraries, senior centers and churches. Coordination of efforts is paramount to success in rural communities, and can be used to build infrastructure that supports physical activity and good nutrition opportunities.

In rural communities, more emphasis may be placed on education for students and families regarding nutrition and physical activity, with a goal of further impacting cultural, social and economic patterns that contribute to food and fitness choices. Educational activities such as gardening programs, that seek to provide information, challenge unhealthy cultural norms and practices and encourage a return to healthy lifestyle practices, can be encouraged.

**Walking school buses are programs that implement adult-supervised pedestrian routes to school. Organized like a bus route, there are scheduled pick ups and drop offs of children at designated locations.**

## **Taking Action**

Communities should ensure policies support the development of principles that encourage physical activity and healthy eating, especially in communities with a higher prevalence of overweight/obesity. Creating strong partnerships of multiple stakeholders can influence policy changes to do such things as prioritize capital investment projects that support park and recreation programs, sidewalks and bike paths and reward smart-growth practices that make communities more active and walkable.<sup>49</sup> Additionally, schools can adopt innovative, low-cost programs to support active transportation including programs such as walking school buses and biking to school.

With regard to nutrition, there is increasing attention around what can be done in the built environment to improve access to higher quality nutrition. Some municipalities have influenced nutritional choices through zoning; for example, limiting the number of fast-food restaurants in a given area, or ensuring there is land available for community gardening efforts. Much of the literature related to the built environment also points to a community's ideas about safety and how this promotes or discourages activity. For example, one researcher notes, "In socially cohesive neighborhoods, parents are more comfortable letting their children play outdoors and walk or cycle to nearby stores for minor food-shopping errands... whereas parents who are concerned about heavy or fast vehicular traffic are likely to restrict a child's movements."<sup>50</sup> Emerging research goes even further, with one study indicating that imposing limitations on drive-through restaurants should be considered because they appear to discourage pedestrian activity.<sup>51</sup> Continued research about the built environment and the link to health is sure to inform obesity prevention efforts moving forward.

## **Ohio Action to Date**

The built environment plays a critical role in the efficiency and ease of moving from one place to another. Our transportation system can facilitate infrastructure and programmatic components to improve safety and increase the number of trips people can take by transit, bicycle or foot. The State of Ohio has demonstrated leadership in reforming the current built environment, and can use these efforts to further develop infrastructure efforts that improve resident health. The Ohio Department of Transportation convened a 21<sup>st</sup> Century Transportation Priorities Task Force which has recently completed a year-long process that analyzed current and future transportation needs. This group recognized there is a need to look at transportation and roads for all users. Densely populated environments with specific, comprehensive transportation plans are seen as an emerging trend and priority in the development of transportation plans for multiple modalities of transportation.

***Transportation planning and development should be focused on "one system" – not on the interests of a single mode of transportation or the need for individual projects.***

Ohio's 21<sup>st</sup> Century  
Transportation Task  
Force Report  
January 2009

## HEALTHY OHIO

---

Other notable progress in improving the built environment to encourage walking/biking/public transportation includes the following:

- Since December 2007, through the Ohio Department of Transportation's Safe Routes to School program, 140 communities have or are currently working on plans for improving the walkability to 338 schools in Ohio. Plans include both infrastructure and non-infrastructure activities. To date, more than \$2 million has been awarded for these projects, and data are being collected on how many more children walk or ride bikes to school as a result of these projects.
- The Ohio Department of Natural Resources developed a Get Fit Naturally Website link that directly links consumers to fitness or nutrition resources.
- Local communities, with support from the Ohio Department of Natural Resources from 2002-2006, completed almost 220 miles of trails around the state with support from the Clean Ohio Fund.
- Ohio Department of Development funding has been used to establish grocery stores in areas of the state lacking them or turning brownfields into green places and parks.
- Ohio Department of Development's Living Cities Partnership focuses on expanding opportunities for urban neighborhoods by focusing attention on the spaces where families live, work and play.

The state has also made efforts to improve local access to healthy nutrition via changes in the built environment. These efforts include projects such as:

- The Governor's Food Policy Council was created to promote Ohio's agricultural system and provide greater access to fresh and nutritious Ohio-grown foods.
- Numerous programs are underway for community gardening, which gets people outside, provides exercise and allows participants to participate in the sharing of produce. Several local community garden projects are supported by ODH grant opportunities.
- Ohio Department of Agriculture is working to get local foods into vending machines.

# HEALTHY OHIO

---

## **Ohio Action Moving Forward**

The state is in a unique position to utilize its knowledge and resources to further improve the structures and conditions that impact Ohioans' health.

The built environment, and the ways in which society structures and influences such things as access to schools, food and other daily needs, greatly influences public health. Some groups such as The Prevention Institute, have begun demonstration projects to identify and improve the built environment of low-income neighborhoods.<sup>52</sup> Promising research and practices such as these efforts can lead to improved health outcomes in a community. Part of these efforts has been the identification of key aspects of the built environment that appear to be central to reducing health disparities and promoting healthier lifestyles. These components include supporting:

- Activity-promoting environments that foster incidental and recreational activity.
- Nutrition-promoting environments that provide and promote safe, affordable, healthy food.
- Availability of safe, affordable housing.
- Safe, reliable, accessible and affordable transportation.
- Safe, clean water, soil, air and building materials.
- Availability of safe, health-promoting products.
- Well-maintained, appealing, clean environments<sup>53</sup>

Including public health allies in community planning is also critical to impacting the ease of active transportation modalities in communities.

One specific built environment area in which progress is potentially great is in the development of school buildings. As schools are often the centers of a community, greater effort can be made to determine how to maximize this resource to encourage physical fitness and improve nutrition for students and the community at large. Physical activity opportunities can be increased by locating schools within walkable distances to a community's population, incorporating physical activity facilities in the school's planning stages, making facilities available to the public when not in use by the school and requiring sidewalks at the time of construction.

The Ohio Obesity Prevention Plan also encourages incorporation, in the development of new communities and in the renovation of current communities, active transportation modalities such as walking and biking paths and the availability of high quality nutritional resources into community design. For example, newly built communities might

# HEALTHY OHIO

---

be required to have sidewalks, and zoning might ensure the sidewalks connect to larger parts of the community, such as nearby parks or shopping. With regard to nutrition, built environment considerations might also involve the protection of certain lands for growing produce, ensuring its availability in known food deserts.

**Goal 1:** Improve physical activity options and opportunities.

## **Physical Activity Objectives**

**Objective B-1-a:** By Dec. 31, 2009, develop and promote a statewide trail plan, linking local and regional plans, including priorities for trail completion, anticipated time lines and identification of implementation funding.

**Strategies:**

- A. Hold regional meetings regarding planning for future trails in the state to shape priorities for future trail development and funding needs.
- B. Compile existing and planned trail information onto the Ohio Department of Natural Resources Web site with public access available by summer 2009.

**Lead Agency:** Ohio Department of Natural Resources

**Other Involved Agencies:** Ohio Department of Transportation

**Objective B-1-b:** By Dec. 31, 2009, begin and expand marketing and promotional programs to encourage Ohioans to get physically active using Ohio's trails, parks and other natural resources.

**Strategies:**

- A. Expand Explore the Outdoors campaign that encourages children and parents to get outside and be active at state and local parks, preserves and other areas. A focus this year will be on the beneficial health effects of getting outside and being active.
- B. Develop *Get Fit Naturally* feature on ODNR Web site that incorporates both physical and mental health benefits of getting fit naturally. Feature will continue throughout the year highlighting resources that can be utilized. A goal is to collaboratively work with the Ohio Department of Mental

# HEALTHY OHIO

---

Health to identify and demonstrate the mental health benefits of doing these activities.

**Lead Agency:** Ohio Department of Natural Resources

**Objective B-1-c:** By Dec. 31, 2011, develop plans to make communities more accessible for active transportation such as walking and bicycling.

**Strategies:**

- A. Consider promoting a link between funding and regulations for active living environments that promote walking and bicycling.<sup>54</sup>
- B. Increase problem identification and infrastructure planning for bicycle and pedestrian facilities and expand “share-the-road” education programs to educate motorists about the rights of bicyclists and pedestrians.
- C. Develop standards and goals for bicycle and pedestrian transportation systems that reflect the population densities of the areas served.
- D. Determine feasibility of adopting Ohio’s 21<sup>st</sup> Century Task Force recommendation to develop pilot projects to demonstrate the benefits of “Complete Streets” with the goal of evaluating the costs and benefits of “Complete Streets” design.
- E. Consider incentives for communities that develop comprehensive transportation plans that include active transportation modalities.

**Lead Agencies:** Ohio Department of Transportation, Ohio Department of Natural Resources, Ohio Department of Health

**Objective B-1-d:** By Dec. 31, 2012, increase the number of children walking or bike riding to school by 5 percent in communities funded for Safe Routes to School programs by supporting infrastructure improvements (such as sidewalks and bike paths) and programmatic components (such as walking school buses).

**Strategies:**

- A. Continue funding support from the Safe Routes to School Program for schools and communities to enable children to walk or ride their bikes to school.
- B. Examine the feasibility of developing curriculum for safety in walking or biking to school that could be incorporated into statewide education standards.
- C. Promote success stories of children walking to school and resources to help schools and families adopt active transportation to school.

# HEALTHY OHIO

---

- D. Examine the feasibility of deploying the Safe Routes to School travel tally on a statewide basis for identified grade levels.

**Lead agency:** Ohio Department of Transportation

**Objective B-1-e:** By Dec. 31, 2014, at least 40 Ohio counties will have made an improvement in physical activity opportunities available in the county.

**Strategy:**

- A. The Ohio Department of Health Cardiovascular Health Program will lead and support community efforts to improve physical activity opportunities in assigned communities. Targeted communities will receive education and resources to improve physical activity opportunities.

**Lead Agency:** Ohio Department of Health

**Goal 2:** Improve nutrition and access to healthy food choices and limit access to unhealthy food and beverage choices.

## Nutrition Objectives

**Objective B-2-a:** By Dec. 31, 2009, increase access to fresh and healthy food for all Ohioans through support of Ohio farmers' markets by creating a farmers' market management network.

**Strategies:**

- A. Work cooperatively to establish new and enhance existing Ohio farmers' markets both large and small to create unity, consistency and sustainability through collaboration, promotion and education.
- B. Partner with Ohio State University South Centers, local county health officials and ODA's Food Safety Division to provide consistent education about Ohio's safe food practices.
- C. Provide a directory of rules, regulations and best practices to aid Ohio farmers' markets in their efforts to improve and increase in number.

**Lead Agencies:** The Ohio Department of Agriculture and Ohio State University South Centers

**Objective B-2-b:** By Dec. 31, 2009, identify rural and urban food deserts in Ohio and by 2015, decrease these areas by 10 percent by

## HEALTHY OHIO

---

providing access to healthy local foods. *Note: The Ohio Department of Agriculture has a six-year time frame for achieving this objective.*

**Strategies:**

- A. Provide the support of the Ohio Food Policy Council to local governments and food policy groups to identify urban food deserts in the state.
- B. Establish a partnership between the Ohio Food Policy Council, Healthy Food Access Task Force and The Ohio State University to map rural food deserts in the state.
- C. Identify best practice policy and program options to ensure reasonable access to fresh, healthy and affordable foods.
- D. Develop a plan to address food desert areas to improve nutrition options.

**Lead Agencies:** Ohio Department of Agriculture, Ohio Food Policy Council, Healthy Food Access Task Force

**Objective B-2-c:** By Dec. 31, 2009, promote greater coordination and collaboration of nutrition education and promotion programs in Ohio to promote consistent and effective information on nutrition.

**Strategies:**

- A. Develop and administer a survey to nutrition education and promotion agencies in Ohio to identify what programs and services are provided and by which agency/organization.
- B. Analyze the programs and services being offered and identify opportunities for increased coordination in message and outreach, as well as any recommended changes.

**Lead Agency:** Ohio Department of Agriculture (Ohio Food Policy Council), Healthy Food Access Task Force.

**Objective B-2-d:** By Dec. 31, 2010, foster closer coordination among the various nutrition assistance programs to plan and implement nutrition education through the State Nutrition Action Plan (SNAP). Encourage partnerships and collaborative interventions targeting healthy eating and active lifestyles among nutrition assistance programs and other organizations working with low-income individuals and families.

**Strategies:**

- A. Create partnerships with other food assistance programs by collaborating on the design of nutrition projects and delivery of nutrition messages to low-income and high-risk population groups.
- B. Obtain cooperation of leaders from Ohio Department of Job and Family Services; Ohio Department of Education, Office for

# HEALTHY OHIO

---

Safety, Health and Nutrition; Women, Infants, Children program; Ohio Department of Aging and OSU Extension to further partnerships for the promotion of nutrition education and common messages to the target population in Ohio.

- C. Develop additional coordinated messages in collaboration with Office for Minority Health, Office of Healthy Ohio, Action for Healthier Kids, Food Bank Associations, Ohio Department of Natural Resources and faith-based organizations.
- D. Identify specific ways agencies/programs can partner to focus nutrition education efforts on overweight/obesity prevention and increasing physical activity for the low-income population.
- E. Develop and share training opportunities for agency personnel on teaching strategies to increase physical activity and assist in the prevention of overweight and obesity among the low-income population.
- F. Utilize the Education and Administrative Reporting System (EARS) for provision of uniform data and information about the nutrition education activities of all participating states across the country.

**Lead Agency:** Ohio Department of Job and Family Services (Ohio's Food Assistance Nutrition Education Plan).

**Other Involved Agencies:** Ohio Department of Education: including National School Breakfast/Lunch/After-school Snack programs, Summer Food Program, Child and Adult Care Food Program, Commodity Supplemental Food Program, and Team Nutrition; Ohio Department of Health: including Women, Infants, and Children (WIC), Office of Family Stability, Food Assistance Section (formerly food stamps), Ohio Department of Aging, Ohio State University Extension, Food Stamp Nutrition Education (Ohio Family Nutrition Program) and Expanded Food and Nutrition Education Program (EFNEP).

**Objective B-2-e:** By Dec. 31, 2010, identify opportunities for increased access to healthy, Ohio-produced foods in Ohio vending machines.

**Strategies:**

- A. Conduct consumer research pertaining to healthy, fresh and local food choices in vending machines as well as the design of a local food vending pilot project.
- B. Conduct a pilot project in select vending sites around the state identifying local items and conduct pre- and post-identification surveys to determine public/economic support of local vending choices.

## HEALTHY OHIO

---

- C. Disseminate findings to the Ohio food vending industry, universities, school systems and state procurement to expand the placement of Ohio products in vending machines around the state.

**Lead Agency:** Ohio Department of Agriculture

**Objective B-2-f:** By Dec. 31, 2011, increase the number of Ohio farmers' markets that can accept and process food stamps from 11 to 40.

**Strategies:**

- A. Through the Ohio Department of Agriculture, provide grants to farmers' markets to establish the infrastructure necessary to electronically process the Ohio Direction Card to enable recipients to purchase fruits and vegetables at additional farmers' markets.
- B. Provide Ohio Department of Agriculture assistance in promoting the new opportunity to the community.
- C. Create a partnership with Ohio Department of Agriculture and the Ohio Department of Job and Family Services to make sure the markets are appropriately certified to process this benefit.

**Lead Agencies:** Ohio Department of Agriculture and Ohio Department of Job and Family Services

**Objective B-2-g:** By Dec. 31, 2015, increase consumer awareness and participation in purchasing fresh local produce. *Note: The Ohio Department of Agriculture has a six-year time frame for achieving this objective.*

**Strategies:**

- A. Notify current nonprofit farmers' markets throughout the state of the Farmers' Market Cost Share Advertising Grant.
- B. Provide matching advertising funds, through a partnership with rural development, of up to \$1,500 to approve for farmers' market applicants.
- C. Expand the Choice Food Pantries program to provide more nutritious foods to the pantries and instructions on how to best prepare the food.

**Lead Agencies:** Ohio Department of Agriculture, Ohio Rural Development and Ohio Department of Health

# HEALTHY OHIO

---

**Goal 3:** Improve the coordination of policy and resources directed to the prevention and reduction of obesity, especially among those populations most at risk.

## **Coordination, Policy and Resources Objectives**

**Objective B-3-a:** By summer 2009, create a plan to enhance physical activity opportunities as well as encourage healthier nutrition in the school environment through school construction and reconstruction funded by state government.

**Strategies:**

- A. Examine and revise policy related to the renovation and construction of schools to encourage and support school sites that are reachable by walking, biking and public transportation.
- B. Through the Ohio School Facilities Commission: develop state requirements and enhance the design manual to encourage schools to be located in established community centers; promote physical education during the school day; improve healthy food options including elimination of fryers and enable residents to utilize their physical activity infrastructure when appropriate.
- C. Begin collaboration between the Safe Routes to School program and Ohio School Facilities Commission on school site design decisions to better coordinate state investments.

**Lead Agencies:** Ohio Schools Facilities Commission, Ohio Department of Transportation

**Other Involved Agencies:** Ohio Department of Education, Ohio Department of Health

**Objective B-3-b:** By Dec. 31, 2011, increase the number of local, broad-based coalitions with members representing a cross-section of community partners and agencies to support sustainable evidence-based activities to improve nutrition and physical activity. Coalitions should include representatives from sectors such as transportation, urban/rural planning, education, economic development and the employer community.

**Strategies:**

- A. Identify, with the Community Wellness Alliance, opportunities to encourage its local partners to participate in community-level nutrition and physical activity-related coalitions.

## HEALTHY OHIO

---

- B. Collect and post onto the Office of Healthy Ohio Web site information on coalitions to highlight existing efforts.
- C. Encourage linkage with existing chronic disease partnerships that share concerns about impact of obesity.

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance)

**Objective B-3-c:** By Dec. 31, 2011, increase the number of communities that apply for the Healthy Ohio Community award annually.

**Strategies:**

- A. Create improved promotional, marketing and media strategies to increase awareness of the award including identification of incentives for participation.
- B. Engage local partners such as health departments, community wellness coalitions, chambers of commerce and mayors to encourage and promote participation in the award.

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio

**Objective B-3-d:** By Dec. 31, 2014, develop and make recommendations to state government related to policy and funding for communities that limit sprawl, and reward comprehensive planning efforts that support improved built environments and encourage pedestrian-friendly communities.

**Strategies:**

- A. Adopt Ohio's 21<sup>st</sup> Century Task Force recommendation that includes development of a statewide transportation future plan to provide state grants to integrate transportation and land-use plans. Emphasis will be placed on increasing market share for transit, walking and bicycling and developing prioritization criteria for major transportation investments in existing communities favoring existing infrastructure.
- B. Determine how existing state agency programs can better coordinate and stem public investment in sprawl and give preference to communities that have adopted comprehensive land use plans.
- C. Develop incentives for developers to support and create smart growth projects.
- D. Develop state policy that will encourage/incentivize state and local transportation and development authorities to develop more physical activity-supportive communities. Ideas include engaging in regional planning, adopting zoning and subdivision ordinances, offering incentives for development of mixed-use neighborhoods and conserving open space,

## HEALTHY OHIO

---

promote regional cross-jurisdictional planning and public health impact mitigation requirements or fees during the project permitting processes.

- E. Provide guidance, particularly for unincorporated areas, to aid local implementation of smart growth policies such as proactive land use planning, development boundaries, transfer of development rights, conservation of agricultural land and open spaces and other practices to reduce sprawl and encourage more walkable, bicycle-friendly residential and commercial developments.

**Lead Agency:** Ohio Department of Transportation

**Other Involved Agencies:** Ohio Department of Development, Ohio Department of Health

## Supporting Individuals and Families

### Supporting Individuals and Families

#### Overview

In order to effectively impact obesity, individuals and families need tools and support to establish healthy habits and end unhealthy practices. Supporting healthy parents provides positive role models for children. Eating and exercise habits are often established early in life when parents have a strong role in influencing children's behaviors. While parents can serve as role models for healthy living, obesity prevention strategies need to take into account economic and time constraints that can be major stumbling blocks to individuals and families eating healthier and being more active.

Data on physical activity and nutrition provide a snapshot of the challenges to promoting healthy lifestyles. In Ohio, 25 percent of adults report no physical activity as part of leisure time.<sup>55</sup> The Ohio Department of Health Behavioral Risk Factor Surveillance System (2007) found as one's age increased, the percentage of individuals who reported engaging in physical activity decreased. Other trends related to education level, income, gender and race were also found including:

- Individuals with higher levels of education reported a higher percentage of time in exercise.
- Males reported exercising in the past month slightly more than females.
- A higher percentage of whites exercise (76.9 percent), compared to black (66.2 percent) and other races (74.2 percent).<sup>56</sup>

With regard to nutrition, only 20 percent of Ohioans reported eating the recommended number of servings of fruits and vegetables per day.<sup>57</sup> College-educated individuals were reported to consume at least five or more fruits and vegetables per day more than individuals with less than a college education, and females (25.8 percent) reported a higher percentage of eating at least five fruits and vegetables per day than males (15.3 percent).<sup>58</sup> The trend of eating away from home also plays a role in the current obesity trend. The

## HEALTHY OHIO

---

Association of State and Territorial Health Officials, in their report *Food Policy and Public Health*, note that in 1970, Americans spent just 26 percent of their food dollars on restaurant meals and other meals prepared outside their homes. Today, we spend almost half (46 percent) of our food dollars at restaurants.<sup>59</sup> Further, those who are poorer and often disproportionately affected by obesity and chronic disease spend more than 50 percent of their food dollars at restaurants.<sup>60</sup> Lower-income neighborhoods have limited healthy food choices and instead tend to have fast-food restaurants and other unhealthy, inexpensive food choices.<sup>61</sup> Literature related to eating out generally notes more calories are consumed in meals outside the home, portion sizes tend to be larger, and caloric and other nutritional information is generally not available, all of which contribute to greater caloric intake.

Maternal, individual and family behaviors as well as environmental factors influence a child's risk of becoming overweight or obese. A mother's pre-pregnancy weight status and whether she smokes during pregnancy influences her child's risk of obesity.<sup>62</sup> Unfortunately, both overweight and smoking are prevalent among new mothers in Ohio.<sup>63</sup> Among women who gave birth in Ohio in 2005, 19.8 percent were overweight and 21.0 percent were obese before becoming pregnant.<sup>64</sup> Twenty-two percent of these mothers smoked during the third trimester.<sup>65</sup> While it is widely believed that most female smokers abstain during pregnancy, only 10.6 percent of Ohio mothers who smoked prior to pregnancy quit while pregnant.<sup>66</sup>

While community support is essential for supporting healthy habits, there are a variety of practices for which individuals and families can assume responsibility. For example, the increasing amount of leisure time that is spent in front of a computer or television screen impacts the hours spent in more physically active pursuits. The issue of screen time is one that has received considerable attention related to obesity prevention literature and the relationship of one's time in front of the computer or television impacts one's physical activity. An average of three to four hours a day is spent watching television, as opposed to exercise among young adults.<sup>67</sup> Studies show individuals with greater television exposure were more likely to be less physically active and have a poorer dietary profile. An American Association of Pediatrics study found 30.8 percent of preschoolers studied

***Children age  
2 years and  
older should  
spend no  
more than  
two hours a  
day watching  
television and  
using the  
computer.***

***- American  
Academy of  
Pediatrics***

## HEALTHY OHIO

---

exceeded the AAP guidelines just by watching television, not including computer time.<sup>68</sup> Those children who surpassed the AAP recommendations on TV/video viewing were more likely to be overweight or at risk for being overweight. Reasons for obesity observed among the children exceeding AAP recommendations include substituting TV/video watching for physical activity; watching television ads that encourage consumption of unhealthy, fatty foods; and snacking while watching TV/videos.<sup>69</sup>

In the obesity prevention literature, there is also increased attention to marketing efforts and their impact on food and consumption. One study indicated that after exposure to 30-second commercials, a child will more likely select a food/beverage that was advertised when given the option.<sup>70</sup> The Center for Science in the Public Interest report titled *How Soft Drinks are Harming Americans' Health* found that public service campaigns that promote the consumption of fruits, vegetables, low-fat milk and other healthful foods are surpassed by the advertising expenditures of fast-food chains and soft-drink companies.

Research is also underway relating food insecurity to obesity. Food insecurity refers to “having access, at all times, to enough food for an active, healthy life without resorting to using emergency food supplies, begging, stealing or scavenging for food.”<sup>71</sup> Some researchers have investigated the link between food insecurity with Appalachian populations. *Holben et al.* found that participants from food-insecure households had higher BMIs, rates of obesity and self-reported rates of diabetes than those from food-secure households.<sup>72</sup> Furthermore, the authors found that “periods of overeating when food is available, including binge-like patterns of eating or fluctuations in eating habits that promote a metabolic-adaptive response, may also account for overweight and obesity among adults from food-insecure households.”<sup>73</sup>

### **Individuals and Families Most at Risk**

Data indicate certain population groups are at higher risk for obesity.

- Low-income children in Ohio are more likely to be overweight or obese than children from other income groups.<sup>74</sup>
- Children living in Appalachian counties are more likely to be obese than children living in non-Appalachian counties.<sup>75</sup>
- Among low-income, preschool-age children, Hispanics have the greatest prevalence of overweight and obesity. The prevalence in 2006 was 33.9 percent for Hispanic children,

## HEALTHY OHIO

---

25.3 percent for black children and 27.2 percent for white children.<sup>76</sup>

- Overweight persons are at greater risk of becoming obese. The prevalence of Ohio adults who were overweight increased from 28 percent in 1984<sup>77</sup> to nearly to 35.4 percent in 2007.<sup>78</sup>
- Obesity prevalence is highest in Southwest Ohio (23.0 percent) and lowest in Central Ohio (17.2 percent); however, overweight prevalence is highest in Central Ohio (38.7 percent) and lowest in Northeast Ohio (36.6 percent).<sup>79</sup>
- Prevalence of obesity was highest for African-American females (28 percent) and lowest for African-American males (18.8 percent).<sup>80</sup>
- About 68 percent of white men and more than 63 percent of African-American men were overweight or obese, compared to 50.5 percent of white women and 70.2 percent of African-American women.<sup>81</sup>

The unique language, experience, cultural styles and demographic characteristics of populations must be considered when evaluating approaches for obesity prevention. The Ohio Obesity Prevention Plan will ultimately develop components that address specific efforts and unique approaches to meet the needs of the state's most vulnerable populations.

### **Taking Action**

While living a healthy lifestyle may seem challenging, there are a variety of steps individuals and families can take and communities can support to encourage behavior change. One of the findings from the *Obesity Prevention Blueprint for Ohio: Request for Information* survey conducted by the Ohio Department of Health in November 2008, was that survey participants felt the primary focus of obesity prevention initiatives should be the home/parents (59.2 percent).<sup>82</sup>

Modifying one's lifestyle is difficult to do alone. Population-based strategies that focus on a broad range of policy and environmental strategies (at the local, state and federal levels) can help people adopt healthy behaviors, such as being physically active and adopting more nutritious diets.<sup>83</sup> Communities can help by making changes in the environment to support behavior change in families.

Development of social marketing campaigns can support these efforts by promoting awareness and providing healthy living tips.

# HEALTHY OHIO

---

Other cities and states, recognizing the impact eating outside the home has had on the obesity epidemic, have moved to limit certain ingredients in food, such as sodium and trans fat. Communities can also improve the availability of nutritional information so consumers might make informed choices.



Choosing breastfeeding for infants is another strategy that has correlations to the prevention of obesity as well as providing other health benefits. Not only is breastfeeding associated with reduced odds of pediatric overweight; it also appears the longer duration of breastfeeding the less chance of children being overweight.<sup>84</sup> In Ohio, only 59.6 percent of children born in 2004 were ever breastfed; 33.3 percent were still breastfed at 6 months; and 12.9 percent were breastfed at 1 year.<sup>85</sup> These rates for Ohio are below the national rates of 73.8 percent, 41.5 percent and 20.9 percent, respectively, and well below the Healthy People 2010 targets of 75 percent, 50 percent and 25 percent, respectively.<sup>86</sup>

## **Ohio Action to Date**

Ohio has numerous programs and efforts designed to target individuals, families and communities in the reduction of obesity. Many state agencies have formally recognized the role of good nutrition and improved physical activity in reducing obesity rates, and some have specific initiatives targeted to local improvements. Some examples of efforts include the following:

- Encouraging local farmers' market development, and supporting initiatives that allow low-income individuals to access the market.
- Promoting and providing resources in support of breastfeeding through the Ohio Women, Infant, and Children (WIC) program and the Ohio Department of Health.
- Developing an obesity prevention social marketing campaign to encourage healthier lifestyles by the Ohio Department of Health's Office of Healthy Ohio.
- Providing community training and nutrition education programs and opportunities in communities by a variety of agencies.
- Recognizing the role of vending machines improving access to healthier, Ohio-produced products.

# HEALTHY OHIO

---

- Beginning conversations regarding the role of retail food and consumer awareness regarding food choices.
- Working with restaurants to offer healthier menu options.
- Offering cooking demonstrations by local grocery stores.
- Developing a wellness center, open to the public, with monthly walks and runs organized by the Ohio Department of Natural Resources.

## **Ohio Action Moving Forward**

Ohio requires a multi-faceted approach to impact obesity on the individual and family level. With recognition of the current state fiscal situation, it is important to continue to prioritize projects and programs that specifically target efforts to improve nutrition and provide physical activity opportunities, especially for high-risk populations.

**Goal 1: Improve physical activity options and opportunities.**

## **Physical Activity Objectives**

**Objective C-1-a:** By Dec. 31, 2014, encourage and expand safe, accessible and affordable opportunities for increased physical activity for at-risk populations including persons with disabilities.

### **Strategies:**

- A. Determine barriers to physical activity for most at-risk populations and develop a plan to address those barriers.
- B. Develop incentives to make facilities with fees affordable for those with limited incomes.
- C. Encourage formation of family and/or neighborhood walk groups.
- D. Develop policies to support funding for and development of parks, playgrounds and community centers.
- E. Review opportunities available through programs and incentives at the Ohio Department of Development to promote healthy communities and families, including those that facilitate and encourage increased physical activity and access to healthy food choices.
- F. Review participation rates in urban/rural youth competitive sports, intramural activities and other related sporting

## HEALTHY OHIO

---

opportunities and make recommendations for improving opportunities.

- G. Encourage community needs assessments to include identification of safe, accessible and affordable opportunities for increased physical activity for at-risk populations.
- H. Identify or develop a specific evaluation tool to collect information on progress toward objective.

**Lead Agency:** Ohio Department of Health

**Other Involved Agencies:** Ohio Department of Public Safety, Ohio Department of Development, Ohio Department of Rehabilitation Services

**Goal 2:** Improve nutrition and access to healthy food choices and limit access to unhealthy food and beverage choices.

### **Nutrition Objectives**

**Objective C-2-a:** By Dec. 31, 2009, develop a plan to educate participants in Ohio's Food Assistance Nutrition Education program to make healthier choices within a limited budget and choose active lifestyles consistent with the current Dietary Guidelines for Americans and the Food Guide Pyramid.

**Strategies:**

- A. Educate and promote behavior change by increased knowledge of Food Guide Pyramid with an emphasis in fat-free/low-fat milk/equivalents, fruits and vegetables and whole grains.
- B. Increase knowledge of selection and preparation of low-cost and nutritious foods.
- C. Increase knowledge of overall food safety techniques.
- D. Increase awareness of how much time is spent in physical activity each day.

**Lead Agency:** Ohio Department of Job and Family Services/Ohio's Food Assistance Nutrition Education Plan

**Objective C-2-b:** By Dec. 31, 2014, continue current programs and increase community events that support local and healthy food such as celebrity chef contests or community cooking lessons for family participation.

# HEALTHY OHIO

---

**Strategies:**

- A. Continue “Ohio Proud” program, cooking demonstrations, mobile kitchen projects.
- B. Partner with restaurants, culinary schools and organizations to support events.
- C. Work with media to promote and/or sponsor events in schools and communities.

**Lead Agencies:** Ohio Department of Agriculture, Ohio Department of Health/Office of Healthy Ohio

**Objective C-2-c:** By Dec. 31, 2014, increase the number of restaurants that offer healthier meals, appropriately sized portions and list caloric information on menus.

**Strategies:**

- A. Develop incentives to encourage restaurants to list caloric information, serve appropriately portioned meals and encourage consumption of low-calorie beverages and water.
- B. Consider developing a recognition program for restaurants that offer healthier meals and use locally grown items.
- C. Educate the public through media strategy regarding eating healthier options at restaurants.
- D. Consider creation of celebrity/sports hero-endorsed healthy meal to be promoted to children.

**Lead Agency:** Ohio Department of Health

**Goal 3:** Improve the coordination of policy and resources directed to the prevention and reduction of obesity, especially among those populations most at risk.

## **Coordination, Policy and Resources Objectives**

**Objective C-3-a:** By spring 2009, create and implement a statewide obesity prevention social marketing campaign that gives families information and tools to prevent obesity.

**Strategies:**

- A. Continue existing Ohio Department of Health efforts to develop and implement a social marketing campaign including developing Web site and other tools to help Ohioans adopt healthier lifestyles.

## HEALTHY OHIO

---

- B. Develop plan to promote and make available the social marketing campaign for use with other state agencies and communities.
- C. Consider the creative use of agency buildings or other facilities to advertise positive health messages.
- D. Evaluate results and make necessary changes including recommendations for future campaigns.

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio

**Objective C-3-b:** By Dec. 31, 2009, launch a healthy living challenge to Ohioans that will incorporate the state's obesity prevention social marketing campaign.

**Strategies:**

- A. Develop plan targeted to families with themes related to increased physical activity and/or improved nutrition that incorporates state leaders.

**Lead Agencies:** Ohio Department of Health/Office of Healthy Ohio

**Objective C-3-c:** By Dec. 31, 2010, expand effective education and programming efforts to provide opportunities for parental education.

**Strategies:**

- A. Through the Ohio Department of Health Cardiovascular Health program, continue the Ounce of Prevention Program targeting parents of children ages 0-6.
- B. Develop, distribute and implement Ounce of Prevention program targeting parents of children ages 6-18.
- C. Increase number of providers and parents trained in Ounce of Prevention (for ages 0-6) from 179 to 215. Conduct at least 20 Ounce of Prevention trainings annually. Measure estimated numbers of parents impacted.
- D. Utilize the Family Health Survey, where possible, to identify the issues related to improving nutrition (including breastfeeding) and physical activity for families.

**Lead Agency:** Ohio Department of Health

**Objective C-3-d:** By Dec. 31, 2010, create a Healthy Ohio Star award to recognize individuals who promote consistent healthy messages within health care organizations, business and industry, schools, professional organizations and the community.

**Strategies:**

- A. Develop criteria for program, determine categories for awardees and incentives to encourage participation.
- B. Develop a promotional campaign to inform the public.
- C. Consider web-based tracking of individual activity.

## HEALTHY OHIO

---

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio

**Objective C-3-e:** By Dec. 31, 2014, increase the number of family programs offered at faith-based centers, park and recreation centers and other community-based centers that incorporate physical activity and healthy nutrition opportunities.

**Strategies:**

- A. Promote or create opportunities for community grant programs with evidence of promising practices that promote family programs.
- B. Promote curriculum or activities that include the whole family in family fun nights.
- C. Review vending machine and other food service options at facilities to encourage healthier options during programming.
- D. Ensure policies support non-food rewards.

**Lead Agency:** Ohio Department to Health

## Improving Health Care

### Improving Health Care

#### Overview

The health care system can offer significant leverage to encourage individuals to adopt healthier lifestyles. Traditionally, health care professionals and health care insurers provide access to services that has focused on treatment rather than prevention. Some insurance carriers do not cover obesity-related treatment or pay for prevention services. Often, insurance providers require a co-existing condition such as diabetes or hypertension in order to pay for obesity interventions. Evidence of effective treatments for reversing obesity in individuals for the long-term is limited, and many treatments, such as surgical interventions, involve significant cost or health risk, and are beyond the scope of Ohio Obesity Prevention Plan.

With the rising economic and health costs associated with obesity, incentives exist to more effectively prevent rather than treat the condition and its consequences. A recent study from the American Medical Association reports medical costs are higher for older adults who were overweight or obese in young and middle adulthood.<sup>87</sup> Another study shows that children treated for obesity are roughly three times more expensive for the health care system than the average insured child.<sup>88</sup> Prevention strategies targeted at children are critical; statistics show hospitalization rates for children with complications of obesity have tripled.<sup>89</sup> In addition, children treated for obesity are far more likely to be diagnosed with mental health disorders or bone and joint disorders than non-obese children.<sup>90</sup>

The impact of obesity to the state's Medicaid population is also important to note. At least one national study found annual health care costs are about \$6,700 for children treated for obesity covered by Medicaid and about \$3,700 for obese children with private insurance.<sup>91</sup> Children covered by Medicaid are nearly six times more likely to be treated for a diagnosis of obesity than children covered by private insurance.<sup>92</sup> The national

**“Ohio is committed to improving the health of its citizens. The staggering rise of obesity is contributing to chronic conditions such as heart disease and diabetes, as well as unsustainable health care costs.”**

Ohio Governor  
Ted Strickland.

Governor Ted Strickland. (2008, September 19). Directive to the Ohio Department of Health: Developing an Ohio Obesity Prevention Plan. Office of the Governor.

## HEALTHY OHIO

---

cost of childhood obesity is estimated at approximately \$11 billion for children with private insurance and \$3 billion for those with Medicaid.<sup>93</sup>

There is also emerging research on the impact of obesity on those with mental illness. Multiple studies have concluded that individuals with serious mental illness die decades earlier than the general population. Obesity, and complications such as diabetes, are prime factors contributing to the years of lost life. People with bipolar disorder or depression are twice as likely to be obese as the general population; those affected by schizophrenia are three times as likely to be obese.<sup>94</sup> Factors contributing to this problem include poverty, limited access to general health care services and certain medications.



Efforts to prevent obesity can and should be led by the health care community, including health care providers. Providers have a responsibility to encourage and support practices that have shown a demonstrated relationship to obesity prevention. Often, demonstrated best practices can also result in significant cost savings for health care systems. For example, breastfeeding has demonstrated both improved maternal and child health effects, including lowering the risk of obesity, as well providing cost

savings in the avoidance of other health problems, including obesity. A correlation found in a study by *Harder et al.*, is the greater the duration of breastfeeding, the lower the odds of overweight. For each month of breastfeeding up to age nine months, the odds of overweight decreased by 4 percent. This decline resulted in more than a 30 percent decrease in the odds of overweight for a child breastfed for 9 months when the comparison was with a child never breastfed.<sup>95</sup>

### **Taking Action**

There has been progress in obesity prevention through the health care system. Some insurance carriers provide comprehensive wellness coverage, including health club benefits, incentives for

## HEALTHY OHIO

---

healthy lifestyles, counseling, etc. In addition, some health care providers are beginning to talk with their patients more about the importance of healthier lifestyles.

Another strategy for impacting obesity is on the provider level with individuals and families. Health care providers must have the training and education specifically related to obesity and prevention in order to make effective impact. Encouraging and supporting providers to measure BMI, have conversations with patients and provide education and information related to physical activity and nutrition are critical. These conversations must begin early because of the correlation between breastfeeding and the overall improved health benefits, including lower rates of obesity.<sup>96</sup> Birth facility policies and practices that create a supportive environment for breastfeeding begin prenatally and continue through discharge.<sup>97</sup> Hospitals can be designated Baby-Friendly Hospitals through certification from the Baby-Friendly Hospital Initiative (BFHI), a global program sponsored by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) encourages and recognizes hospitals and birthing centers that offer an optimal level of care for lactation.

### **Ohio Action to Date**

The Ohio Department of Health, in cooperation with its partners, has developed the Ounce of Prevention Is Worth a Pound toolkit for physicians for use in primary care practices to prevent childhood obesity. The key messages are based on the 2007 Expert Committee Recommendations on Assessment, Prevention and Treatment of Obesity and include simple messages on nutrition (including breastfeeding) and physical activity, anticipatory guidance for the physician, BMI measurement tools, posters and parent handouts on portion sizes, snacking, calcium, sweetened beverages and physical activity.

### **Ohio Action Moving Forward**

Ohio's health care system can play a leadership role in improving the health of Ohioans, and in the prevention of obesity. Specific strategies can include:

- Offer more support to women and more targeted efforts to increase breastfeeding.
- Consider obesity risk or condition when treating for mental health issues.

## HEALTHY OHIO

---

- Improve and expand education and training opportunities of health care professionals related to obesity (identification, diagnosis and treatment).
- Target health care interventions by primary care providers to the prevention of obesity, particularly in children.
- Encourage health plans to implement steps that promote active lifestyles.
- Improve the nutritional options available in health care facilities, particularly those that serve children, in order to send consistent health messages.
- Determine best practices and approaches for obesity prevention in high-risk populations, such as Medicaid recipients.
- Increase participation in research related to obesity prevention and treatment.
- Further define and plan a role for community health centers in the prevention and treatment of patients.

**Goal 2:** Improve nutrition and access to healthy food choices and limit access to unhealthy food and beverage choices.

### **Nutrition Objectives**

**Objective D-2-a:** By Dec. 31, 2010, increase and expand effective education and programming efforts to provide professional and parental nutrition education.

**Strategies:**

- A. Through the Ohio Department of Health Cardiovascular Health Program, continue Ounce of Prevention program targeting pediatricians for children ages 0-6. Increase number of providers trained in Ounce of Prevention from 179 to 215. Measure estimated numbers of parents impacted through this approach.
- B. Develop, distribute and implement Ounce of Prevention program targeting pediatricians and parents caring for children ages 7-18. Increase number of providers trained in Ounce of Prevention from zero to 100. Measure estimated numbers of parents impacted through this approach.

## HEALTHY OHIO

---

- C. Expand utilization of the Ounce of Prevention toolkit to educate parents and caregivers of children. Increase number of caregivers (parents, teachers, nurses, etc) trained in Ounce of Prevention from zero to 50. Measure estimated numbers of parents impacted through this approach.
- D. Expand distribution and implementation of all Ohio Department of Health programs that serve the age 0-18 population.
- E. Provide at least four professional presentations annually for Ounce of Prevention targeting children age 0-6.
- F. Provide at least four professional presentations annually for Ounce of Prevention targeting children age 7-18.

**Lead Agency:** Ohio Department of Health

**Objective D-2-b:** By Dec. 31, 2011, more health care organizations, in particular those serving children, such as hospitals, will adopt policies to improve nutritional quality of food served through vending, restaurant and cafeteria choices.

**Strategies:**

- A. Conduct a survey to assess current conditions.
- B. Encourage providers to review policies regarding fast-food franchise outlets on site, vending machine contents, foods prepared with trans fat, staff health promotion and availability of fresh fruits and vegetables marketing and availability.

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio

**Objective D-2-c:** By Dec. 31, 2014, develop strategies to work with birthing hospitals, prenatal care providers, pediatricians, other health care providers and breastfeeding coalitions to increase initiation and duration of breastfeeding among Ohio mothers.

**Strategies:**

- A. Work with Ohio breastfeeding coalitions and hospital administrators to increase the number of Ohio Baby-Friendly Hospitals, the number of hospitals who have completed a certificate of intent, and the percent of hospitals using evidence-based maternity care practices known to influence breastfeeding.
- B. Develop incentives and technical assistance to hospitals to increase the number of hospitals using evidence-based maternity care practices known to influence breastfeeding or being certified as Baby-Friendly Hospitals.
- C. Train and encourage health care providers to promote and support breastfeeding to pregnant and postpartum women.

## HEALTHY OHIO

---

- D. Encourage Ohio Department of Health grantees to promote and support breastfeeding among the populations they serve.

**Lead Agency:** Ohio Department of Health

**Goal 3:** Improve the coordination of policy and resources directed to the prevention and reduction of obesity, especially among those populations most at risk.

### **Improving Coordination, Policy and Resources Objectives**

**Objective D-3-a:** By Dec. 31, 2010, emphasize obesity prevention and treatment for Ohioans with serious mental illness.

**Strategies:**

- A. Promote improved integration of mental health and other primary health care by the Ohio Department of Mental Health Office of Clinical Best Practices, Coordinating Centers and Foundation Partners to emphasize the strategic importance of efficient and effective obesity prevention and treatment as a core theme of ODMH initiatives.
- B. Collaborate with Ohio Department of Health, other state-level departments, commissions, the Multicultural Advocates for Cultural Competence and other stakeholders to identify and develop culturally competent policies and strategies to address obesity for Ohioans with serious mental illnesses.
- C. Explore feasibility of partnering at local, state and national levels to develop systematic capabilities of health indicators to measure the overall health status across the life cycle of individuals in Ohio with serious mental illness.
- D. Promote "lean health, including a healthy weight" as a core recovery goal among people affected by serious mental illnesses through the work of Ohio's coordinating centers promoting psychosocial approaches.
- E. Improve services by promoting training and technical assistance to mental health stakeholders focusing on obesity prevention and efficient treatment across the life cycle.
- F. Measure the impact of objectives.

**Lead Agency:** Ohio Department of Mental Health

**Other Involved Agencies:** Ohio Department of Mental Health Office of Clinical Best Practices, Ohio Coordinating Centers of Excellence,

## HEALTHY OHIO

---

federally qualified health centers, Ohio Department of Health, Ohio Department of Job and Family Services, Ohio Department of Agriculture, Ohio Department of Administrative Services, Interagency Executive Committee on Health Investment Strategies

**Objective D-3-b:** By Dec. 31, 2011, develop a plan to have more primary care providers and related health care professionals focus on early intervention for children by routinely measuring and tracking evidence-based obesity measures for children and adults and by providing counseling and/or referral to qualified providers for patients.

**Strategies:**

- A. Promote and further distribute the Ohio Department of Health Ounce of Prevention Tool Kit that includes resources for obesity screening, education on prevention, assessment, treatment and referral-based on best practice guidelines for children ages birth to age six. Provide at least four formal presentations to health professionals per year.
- B. Complete development of Ounce of Prevention Toolkit for children ages seven to eighteen. Provide at least four formal presentations to health professionals per year.
- C. Work with insurance providers to support physicians with information on screening, patient counseling and behavior change techniques.
- D. Encourage and disseminate promising practices in prevention, treatment, education and engagement.
- E. Develop a marketing campaign to provide information and resources on the importance of obesity prevention and referrals for health care professionals.
- F. Conduct research with health care providers on major obstacles to measuring BMI and obesity prevention treatment.

**Lead Agency:** Ohio Department of Health

**Other Involved Agency:** Ohio Department of Insurance

**Objective D-3-c:** By Dec. 31, 2011, increase trainings, education and resource opportunities for primary care providers and other health care professionals to promote obesity prevention.

**Strategies:**

- A. Add nutrition, physical activity and obesity prevention related coursework to medical school curriculum.
- B. Work with training programs and certifying entities such as medical and nursing licensing boards, to develop a plan for

## HEALTHY OHIO

---

continuing educational requirements for physicians and nurses in obesity prevention when renewing credentials.

- C. Provide education about importance of nutrition during pre-pregnancy year and post-partum/lactation period.
- D. Train physicians to use expert recommendations for prevention and treatment of obesity including the Ounce of Prevention Toolkit. Increase number of physicians and health providers trained in toolkit for children ages 0 to 6 from 179 to 215 by Dec. 31, 2010. Increase number of providers trained in Ounce of Prevention Toolkit for children ages 7-18 from 0 to 150 by Dec. 31, 2010.

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio

**Objective D-3-d:** By Dec. 31, 2011, develop/expand specific program approaches for the state Medicaid program including the Early Periodic Screening, Diagnosis and Treatment Program (EPSDT) and the State Children's Health Insurance Program (SCHIP) to prevent obesity in the Medicaid population and improve obesity-related pediatric practice in the state.

**Strategies:**

- A. Analyze results from ongoing Medicaid Technical Assistance and Policy Program (MEDTAPP) research projects designed to improve prevention and treatment of obesity in the Medicaid population by incorporating best practices for addressing obesity into the Medicaid program.
- B. Participate in the review of existing expert recommendations and develop guidelines for the prevention, assessment and management of overweight and obesity for children, adolescents and adults.
- C. Explore the potential for policy incentives, improvement initiatives and/or performance measures in managed care contracts to cover weight management and prevention services for children and adults and to evaluate progress.
- D. Review Medicaid provider regulations to determine options for coverage of obesity prevention services.

**Lead Agency:** Ohio Department of Job and Family Services

**Other Involved Agency:** Ohio Department of Health

**Objective D-3-e:** By Dec. 31, 2014, increase the number of insurance providers and health care providers who conduct or participate in research on obesity prevention, with a focus on at-risk populations, and disseminate promising practices for the prevention of obesity.

**Strategies:**

## HEALTHY OHIO

---

- A. Work with universities and associations to support and incentivize research efforts and encourage further development of evidence-based recommendations and guidelines to prevent obesity.
- B. Work with research partners to encourage promising practices in preventing obesity to be featured in professional journals.
- A. Encourage collaborations among academic institutions and groups implementing obesity prevention activities to further the understanding of effective obesity prevention programs and policies.
- B. Include additional obesity related analysis in existing surveillance or evaluation activities (e.g. the Ohio Family Health Survey).
- C. Conduct statewide survey of families to understand the largest barriers they face in supporting good nutrition and physical activity in their family.

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance), Ohio Department of Health

**Objective D-3-f:** By Dec. 31, 2014, coordinate with insurers and payers to offer health plans that encourage members to achieve a healthy weight and lifestyle.

**Strategies:**

- A. Determine the status of each insurance carrier in Ohio by June 2010, with regard to coverage of prevention of overweight/obesity benefits, treatments and procedures.
- B. Develop evidence-based guidelines for health plans so they can improve benefits available. Provide coverage, incentives and programs for nutrition counseling, physician visits and follow-up support to prevent obesity and address the unique needs of special populations such as the disabled and older adults.
- C. Encourage the adoption of prevention services that demonstrate the positive link between improved nutrition and physical activity and productivity for at-risk employees; provide incentives for employers who institute work site wellness initiatives and healthy lifestyle programs for employees.
- D. Consider use of a rating/incentive system (e.g. gold star) for those plans that include comprehensive benefits.

**Lead Agencies:** Ohio Department of Insurance and Ohio Department of Health

## HEALTHY OHIO

---

**Objective D-3-g:** By Dec. 31, 2014, develop strategies for community health centers to increase obesity prevention activities.

**Strategies:**

- A. Review existing services and community governance structure to identify existing opportunities and barriers in promoting obesity prevention.
- B. Develop strategies based on findings to offer services to improve nutrition and physical activity.

**Lead Agencies:** Ohio Department of Health, Ohio Department of Job and Family Services

## Improving Worksite Environments

### Improving Worksite Environments

#### Overview

The worksite is a prime area for providing supports to encourage healthier lifestyles for employees and their families. Healthy workers lead to a more productive workforce and reduce health care costs. Because the current health care system is largely dependent on employer-paid/subsidized health insurance, the incentives are well-aligned for health improvement led by the employer.

Obesity in the workplace increases medical expenditures and absenteeism.<sup>98</sup> Obesity is estimated to cost employers \$13 billion per year nationally.<sup>99</sup> Per capita, obesity costs Ohioans \$289 in health care costs on an annual basis, the 11<sup>th</sup>-highest rate in the country.<sup>100</sup> Employees who are obese also have a higher absenteeism rate than non-obese employees, and tend to be less productive.<sup>101,102</sup> Health, life and disability insurance premiums are also higher for individuals who are obese.<sup>103</sup> A Duke University Medical Center study discovered that, compared to non-obese employees, obese employees filed double the amount of workers' compensation claims, their medical costs were seven times higher and were absent 13 times more often from work due to illness or work injuries.<sup>104</sup> The state also has an interest in promoting healthier lifestyles within its own employee population. Employee health benefits are the second-largest state health expenditure behind Medicaid. As of 2008, Ohio has approximately 180,000 state employees; 19 percent of health plan participants generate 82 percent of the total state employee health care costs.<sup>105</sup>

#### Taking Action

Encouraging healthful habits presents an opportunity to improve employees' well-being, reduce the need for health care services and help control costs. Employers generally see a \$3 return on every \$1 invested in work site health care costs in addition to \$5 for every dollar resulting from lower absenteeism within 5 years of initiation of worksite wellness programs.<sup>106</sup> Programs and policies focusing on improving physical activity and nutrition are a critical way for employers to participate in

Evidence indicates that employers who provide breastfeeding support will see a return on investment in terms of improved child and maternal health, including lowering the risk of obesity, as well as significant cost savings.

## HEALTHY OHIO

---

wellness efforts. Workplaces can offer supportive environments by offering such things as exercise facilities, nutritional information on food items for purchase, discounts on healthy food purchases and walking groups. Innovative approaches such as supporting local farmers' markets, and providing secure bicycle storage, an on-site bicycle fleet for employee use, activity breaks, shower facilities and free consultations with paid registered dietitians may also facilitate promotion of physical activity and nutrition in the workplace.<sup>107,108</sup> Additionally, employers should consider policy changes that promote healthy living including consideration of work time utilization and flexible schedules that can promote improved nutrition or physical activity.

Policies that support breastfeeding are another example of ensuring employees and their families have improved health and contribute to preventing obesity. Among employed women with children under age three, approximately 70 percent work full time.<sup>109</sup> One-third of mothers return to work within three months after giving birth, and two-thirds return within six months.<sup>110,111</sup> Breastfeeding offers proven health benefits, including reduced rates of obesity, for babies and mothers, but women often find it difficult to continue breastfeeding once they return to the workplace. Challenges include lack of break time and inadequate facilities for pumping and storing human milk.<sup>112</sup> Worksites can offer support to nursing women through policy, culture and appropriate accommodations. Providing accommodations for breastfeeding offers tremendous rewards for the employer in cost savings for health care, reduced absenteeism, improved employee morale and employee retention.<sup>113</sup> The United States Breastfeeding committee reports that companies that have adopted breastfeeding support programs have noted the following benefits<sup>114</sup>:

- Cost savings of \$3 per \$1 invested in breastfeeding support.
- Less illness among the breastfed children of employees.
- Reduced absenteeism to care for ill children.
- Lower health care costs (an average of \$400 per baby over the first year).
- Improved employee productivity.
- Higher morale and greater loyalty.
- Improved ability to attract and retain valuable employees.
- Family-friendly image in the community.<sup>115</sup>

Data is not yet available regarding the cost savings employers achieve through breastfeeding support as an obesity prevention

## HEALTHY OHIO

---

measure. However, the Centers for Disease Control estimates that 15-20% of obesity could be prevented through breastfeeding.<sup>116</sup> It is clear that in addition to cost savings achieved through the overall health benefits of breastfeeding, additional savings would be realized through the prevention of obesity and its related illnesses.

### **Ohio Action to Date**

Ohio has made progress in the worksite in recent years to improve the health of employees. Examples of action to date include:

- All state agencies have an employee wellness committee that is responsible for plan creation and program implementation to improve staff health.
- The Healthy Ohio Business Council shares best practices for a healthy workforce and a healthy economy.
- The Healthy Ohio Worksite awards recognize Ohio employers that have implemented practices, policies and activities to improve employee health.
- The State of Ohio's employee benefits program is addressing rising health care costs and declining employee wellness levels through a new program called Take Charge! Live Well! The program employs a continuum of strategies involving preventive care, lifestyle behavior improvement and self-care.
- Various Ohio Department of Health programs including the Women, Infants and Children program, are increasing awareness of breastfeeding and its relationship to maternal and child health, and the need for worksite support to encourage breastfeeding.
- The Ohio Department of Mental Health has begun walking programs, biggest loser competitions and healthier snack options at their hospitals
- The Ohio Department of Natural Resources has a staff wellness plan and walking trails around its main office.
- The Ohio Department of Health has regular messages on the staff bulletin board, a fitness center funded completely through membership fees, a city walking route book, in addition to regular programming and activities directed to staff.
- The Ohio Department of Development is allowing employees to merge their two daily, 15- minute breaks with their lunch hour, giving them a one and a half hour lunch. This encourages employees to exercise by allowing them to eat, work out, get showered and back on the job within their allotted time.

## HEALTHY OHIO

---

- The Ohio Department of Transportation offers education and outreach efforts to improve physical activity, nutrition and overall health. Examples include sessions for employees to lose weight, exercise, stop smoking and make healthy food choices, an annual health fair and a walking path for employees, in addition to 10-week incremental walking clubs.

One innovative Ohio project involves 10 Ohio hospitals working to create model healthy workforces as grant recipients of *Hospitals as the Healthiest Workplaces in Ohio* from the Foundation for Healthy Communities.<sup>117</sup> Findings noted to date include:

- The most prevalent activities for hospitals to offer employees are a health risk assessment, classes for behavior change or wellness education and a regular information source such as a newsletter or Web site.<sup>118</sup>
- The most popular incentives to encourage participation in wellness programs include free health screenings and prizes including gift cards and T-shirts.<sup>119</sup>
- Health insurance discounts and medications, such as smoking cessation patches, are offered by about half of the 10 programs.<sup>120</sup>
- Early results show many employees engaged in their hospitals' wellness programs have lost weight, quit smoking and begun exercising regularly as a result of the programs.<sup>121</sup>

### **Ohio Action Moving Forward**

With more than 5.4 million Ohioans employed,<sup>122</sup> there is great potential for worksites to provide significant leadership in the prevention and reduction of obesity while investing in health and productivity of employees. Given that individuals spend a significant portion of their day at the worksite, employers can maximize their impact with targeted efforts.



Improving health at the worksite does not necessarily require significant resources. Simple changes in policy and practice can have considerable impact. Encouraging breastfeeding, using stairs and encouraging other efforts to improve nutrition and physical activity are low-cost, simple efforts that can be adopted easily. These types

# HEALTHY OHIO

---

of changes can promote healthier worksite cultures and reduce health care costs.

**Goal 1:** Improve physical activity options and opportunities.

## Physical Activity Objectives

**Objective E-1-a:** By Dec. 31, 2011, identify best practices and develop resources for employers to improve physical activity at worksites, including worksite facilities (i.e. showers on site), work day flexibility and incentives for physical activity, policies and activities.

### Strategies:

- A. By December 2009, complete research regarding best practices in the/sponsored by worksites to increase physical activity.
- B. By June 2010, identify worksites that have developed or included activities, programs and policies that encourage physical activity to/from and in the worksite.
- C. By December 2011, complete and distribute resource list to expand best practices to additional worksites, including state agencies.

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio, Ohio Department of Health/ Healthy Ohio Business Council

**Goal 2:** Improve nutrition and access to healthy food choices and limit access to unhealthy food and beverage choices.

## Nutrition Objectives

**Proposed Objective E -2-a:** By Dec. 31, 2011, identify best practices for improving food options in the workplace and develop resources for nutrition improvements at worksites.

### Strategies:

- A. By December 2009, complete research regarding best practices in the/sponsored by worksites.

## HEALTHY OHIO

---

- B. By June 2010, identify worksites that have developed or included activities, programs and policies that encourage improved nutrition in the worksite.
- C. By December 2011, complete a resource list to expand best practices to additional worksites, including state agencies.

**Lead Agency:** Ohio Department of Health/ Office of Healthy Ohio, Ohio Department of Health/Healthy Ohio Business Council, Ohio Department of Health

**Objective E-2-b:** By Dec. 31, 2011, more employers will support breastfeeding-friendly policies.

**Strategies:**

- A. Develop a plan to educate employers and employees on the health and financial benefits of breastfeeding, including approaches that reach small employers and low-wage workers.
- B. Collaborate with the Healthy Ohio Business Council to encourage businesses to adopt worksite lactation programs, using such tools as the Health Resource Services Administration, Maternal and Child Health Bureau's *Breastfeeding in the Workplace: A Federal Resource Kit* for guidance.
- C. Encourage grantees of Ohio Department of Health to work with local employers to adopt worksite lactation programs and/or breastfeeding-friendly employment practices.
- D. Recognize businesses with breastfeeding-friendly policies through the Healthy Ohio Worksite Award or separate mechanism.
- E. Encourage and support, through information sharing and communication strategies, lactation support at worksites, including state agencies.

**Lead Agencies:** Ohio Department of Health/Office of Healthy Ohio, and Ohio Department of Health/Healthy Ohio Business Council, Ohio Department of Administrative Services

**Goal 3:** Improve the coordination of policy and resources directed to the prevention and reduction of obesity, especially among those populations most at risk.

# HEALTHY OHIO

---

## **Coordination, Policy and Resources Objectives**

**Objective E-3-a:** By Dec. 31, 2009, increase participation in Take Charge! Live Well!, the program to improve the health of state employees and their dependents enrolled in a state health plan.

**Strategies:**

- A. Promote participation in health assessments, health coaching, online lifestyle change programs, chronic condition management and worksite biometric screenings.
- B. Enhance communication regarding Take Charge! Live Well! by launching an enhanced web site and developing videos to promote the program to state employees.
- C. Work with the wellness coordinators in each state agency to offer quarterly worksite events that will promote health, including increased physical activity and healthy weight.

**Lead Agencies:** Ohio Department of Administrative Services

**Objective E-3-b:** By Dec. 31, 2009, develop materials to encourage employee wellness programs to focus on the whole family.

**Strategies:**

- A. Create a plan to help employers promote wellness programs for the entire family and identify examples of the benefits for employees with healthy families or families that participate in employer programs.
- B. Develop information and recommendations for employers encouraging the selection of health plans that incorporate effective healthy weight and weight reduction programs for children and families.
- C. Enhance or add to the Healthy Ohio Healthy Worksite award a component that includes efforts to reduce childhood obesity by encouraging healthy behaviors in employees and families in worksite wellness programs.
- D. Establish or promote worksite environments that are breastfeeding friendly.

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio, Ohio Department of Health/Healthy Ohio Business Council

**Objective E-3-c:** By Dec. 31, 2009, continue and strengthen efforts to improve the health of state employees through agency wellness committees.

**Strategies:**

- A. Continue established staff wellness committee at each state agency site.

## HEALTHY OHIO

---

- B. Support participation in and efforts of staff wellness committee.
- C. Continue quarterly meetings of interagency staff wellness work group to share best practices, innovation and to further coordinate efforts where possible.
- D. Recognize the submission of wellness plans annually from all cabinet-level state agencies.

**Lead Agency:** Ohio Department of Administrative Services, Ohio Department of Health

**Other Involved Agencies:** All state agencies.

**Objective E-3-d:** By Dec. 31, 2010, an additional 10 percent of employers in the State of Ohio will apply for the Healthy Ohio Worksite award.

**Strategy:**

- A. The Healthy Ohio Business Council will expand solicitation of nominations for the Healthy Ohio Worksite Award to include more small businesses, employers of low-income workers and businesses utilizing emerging trend and best practice data for health program development and practices that support a healthy lifestyle.

**Lead Agency:** Ohio Department of Health/Healthy Ohio Business Council

**Objective E-3-e:** By Dec. 31, 2010, develop and implement a comprehensive obesity prevention program for state employees and their dependents.

**Strategies:**

- A. Select a population health management vendor whose responsibilities will include the development of a worksite obesity prevention health action program.
- B. Develop the program and coordinate with other state agencies to implement the program.
- C. Explore the feasibility of changes with vendor contracts to improve food choices available on worksite grounds of state agencies. Review existing smart choice employer-based vending and cafeteria programs and collaborate with National Governor's Association (NGA) on resource development and funding opportunities.

**Lead Agencies:** Department of Administrative Services, Ohio Department of Health/Office of Healthy Ohio

# HEALTHY OHIO

---

**Other Involved Agencies:** Rehabilitative Services Commission, Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance)

**Objective E-3-f:** By Dec. 31, 2010, the Healthy Ohio Business Council award criteria will be reviewed and expanded to include additional components related to improving physical activity and nutrition, including breastfeeding support.

**Strategy:**

- A. The Healthy Ohio Business Council will review the Ohio Obesity Prevention Plan and other research and determine additional components for inclusion in the Healthy Ohio Business Council Award application.

**Lead Agency:** Ohio Department of Health/Healthy Ohio Business Council

**Objective E-3-g:** By Dec. 31, 2011, increase the number of employers providing environments that support wellness, healthy food choices and physical activity.

**Strategies:**

- A. Further develop and promote the business case for supporting worksite programs that support healthier eating and increased physical activity in collaboration with representatives of the employer community and the Healthy Ohio Business Council.
- B. Encourage participation in regional Healthy Ohio Business Councils, which provide informational resources and networking to improve employer supported wellness programs.
- C. Develop a list of resources and/or toolkits for worksites to be promoted and posted on the Healthy Ohio Business Council Web site.
- D. Encourage employers to adopt policies such as: providing healthier food and beverage options with value pricing in both cafeterias and vending machines to make them more desirable; establish wellness committees; establish access to farmers' markets or farm stand programs at the workplace; encourage and provide time for physical activity breaks; implement stair promotion programs; support incentivized employee wellness programs; alternative work schedules to allow for exercise; provide healthy foods for staff meetings and conferences; and establish fitness centers or make equipment available.

## HEALTHY OHIO

---

- E. Identify and/or develop specific tools to collect baseline data to evaluate progress.

**Lead Agencies:** Ohio Department of Health, Ohio Department of Health/Healthy Ohio Business Council

## Improving Government Agency Response and Coordination

### Improving Government Agency Response and Coordination

#### Overview

Perhaps more than any other single entity, government has the potential to improve the health of its residents through policy and systems changes and through public awareness of obesity. The obesity epidemic's numerous consequences are seen not only in poor health outcomes but in a threat to the sustainability of the health care system, fiscal health and overall quality of life of Ohioans. Preventing obesity will require a broad-based approach with strong leadership and commitment from various partners for progress to occur.

Gov. Ted Strickland's Healthy Ohio initiative is an important step in linking the role health plays in the economy and quality of life. The initiative has increased coordination among Ohio's government agencies and created new partnerships to achieve the common goals of improving the health of Ohioans, reducing the prevalence of obesity and preventing chronic disease. Improving coordination and communication across state agencies will advance the prevention and reduction of obesity by establishing priorities, targeting efforts and sharing resources. Through collaboration and a common message, the impact of each agency and its programs can be maximized and enhanced at the state, regional and local levels creating a tipping point toward increased physical activity and improved nutrition leading to a culture of healthier living.

#### Taking Action

State and local governments can provide leadership through fostering and supporting initiatives that improve health. The Institute of Medicine's report, *What Government Can Do to Respond to Childhood Obesity* notes several specific components of an effective government response, including providing leadership and sustained commitment, evaluating policies and programs, monitoring progress and conducting research and disseminating promising practices.<sup>123</sup> Another Institute of Medicine report, *Focus on Childhood Obesity*,

## HEALTHY OHIO

---

noted that state government can expand and promote opportunities for physical activity through changes to ordinances, capital improvement and other planning processes; work with communities and support partnerships that expand availability of and access to healthful foods; and increase resources and strengthen policies that promote opportunities for physical activity and healthful eating in communities, neighborhoods and schools.<sup>124</sup>

When it comes to obesity prevention, state government can yield significant influence by improving state policy related to health. Specifically, policy actions and decisions should be viewed through the lens of improving the health of residents. Particular attention should be paid to policies that impact nutrition and physical activity opportunities. State government can also provide leadership to local governments as they consider policy and action. Examples of policy areas for potential impact include improvements in the quality of foods available at agencies and schools and enhancements to the infrastructure of the built environment to promote more active living. Other states' efforts to impact obesity have included the following policies:

- Restricting and limiting the types of food sold at certain locations (i.e. schools).
- Restricting specific ingredient types in foods, such as eliminating trans fat.
- Establishing requirements for school districts related to physical activity, physical education and nutrition.
- Requiring caloric information on restaurant menus.
- Focusing and supporting breastfeeding initiatives, as breastfeeding has been demonstrated to prevent obesity.
- Changing urban planning efforts to improve physical activity and quality nutrition opportunities.
- Concentrating efforts to improve worksite wellness.
- Developing social marketing and other messaging campaigns.
- Providing publically funded food programs offering access to high quality, nutrient-rich foods (e.g. WIC, senior meal programs).
- Creating food pricing strategies that encourage consumption and purchase of healthy foods.
- Ensuring coordination between transportation and opportunities for physical activity and quality nutrition (i.e. recreational facilities and farmers' markets).
- Encouraging design features of new construction that encourages physical activity.

# HEALTHY OHIO

---

- Supporting integration and connection of foot and bicycle pathways to roadways.
- Providing incentives for employers to encourage worksite wellness.

Successful efforts include strong partnerships linking natural allies in obesity prevention to improve the use of resources and maximize results.

## Ohio Action to Date

Ohio has taken some noteworthy steps to tackle the obesity epidemic. Numerous state agencies have addressed the need to improve nutrition and physical activity in their policies, procedures and programs. The development of the Ohio Obesity Prevention Plan is an essential next step in coordinating efforts to maximize resources and avoid duplication of effort. Other Ohio efforts to improve government response to obesity have included:



- Creation of Healthy Ohio Advisory Council to work collaboratively with public and private partners on health promotion, disease prevention and health equity.
- Development of policy requirements related to physical education in schools to ensure students meet minimum standards.
- Establishment of numerous local level efforts by health departments, employers, schools and communities to improve the health of local populations.
- Implementation of screening and counseling on obesity by the Women, Infants, and Children program (WIC) for parents/guardians on obesity in children ages 2-5 years. Targeted counseling is provided based on an individual's nutritional/medical risk condition which may include overweight or at risk of becoming overweight. Appropriate referrals are made.
- Distribution of new WIC food packages (effective Oct. 1, 2009,) will offer fruits and vegetables and whole grains in order to increase dietary fiber and decrease caloric intake.

## HEALTHY OHIO

---

Food packages for exclusively breastfeeding mothers have been also been enhanced.

- Participation of the Women, Infants and Children program, the Ohio Department of Health's Cardiovascular Health program (with CVH and Ounce of Prevention partner) on federal block grant performance measures addressing childhood obesity, including data collection efforts.
- Creation of the Healthy Heroes Activity Box pilot project, a box containing a physical activity book, a DVD with four short segments on healthy eating and being active, an activity toy and WIC coloring book. The intervention involves pre and post surveys, two face-to-face visits with a health professional that includes weight checks and BMI status and completion of some simple activities involving reading, viewing the DVD, being active and healthy eating. This pilot continues through the end of 2009. Results of pilot will be available in 2010.

### **Ohio Action Moving Forward**

The Ohio Obesity Prevention Plan represents a focused effort to coordinate and respond to the obesity epidemic in Ohio. One of the major tenants of the plan is that a greater public health impact can be made through coordinating efforts, improving the use of resources and including health consequences of decision-making at every level. The Ohio Obesity Prevention Plan encourages Ohio to consider more aggressive action in obesity and its consequences. Specific items for consideration will include:

- Consideration of policy related to foods available to children.
- Consideration of policy to ensure more physical activity opportunities for children.
- Improvement of the built environment to expand and/or improve physical activity opportunities.
- Development, expansion and distribution of Ohio's rich agricultural resources to all communities.
- Consideration of health consequences in policy and budget decision-making, including areas not traditionally considered as health expenditures.

A comprehensive statewide effort will lead to prevention and reduction of obesity. To the extent that this is achieved, the state will improve Ohioan's health and its fiscal health through improved productivity, improved academic outcomes and reduced medical expenditures. Further, at this time in our state's history, there is a high level of public interest in this issue at the individual and

# HEALTHY OHIO

---

organizational level. There is significant national attention and resources paid to the issue that can further inform and impact Ohio's effectiveness to reduce obesity.

**Goal 3:** Improve the coordination of policy and resources directed to the prevention and reduction of obesity, especially among those populations most at risk.

## **Coordination, Policy and Resources Objectives**

**Objective F-3-a:** By spring 2009, create a plan for launching and distributing the Ohio Obesity Prevention Plan in conjunction with the obesity prevention social marketing campaign.

### **Strategies:**

- A. Prepare plan for web site and electronic distribution.
- B. Determine appropriate public affairs role for governmental leadership in the release and implementation of the plan.
- C. Work with public information offices to ensure coordinated release of plan.
- D. Prepare and publish hard copy of report.
- E. Coordinate report release with other state wide events as appropriate (i.e. Obesity Prevention month).

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio

**Objective F-3-b:** By July 31, 2009, form the Ohio Community Wellness Alliance as part of the Healthy Ohio Advisory Council. This public-private partnership will establish a framework to implement and evaluate progress toward the goals of the plan, including integrating efforts directed at obesity prevention.

### **Strategies:**

- A. Develop strategic public/private partnerships at national, state and local levels to: implement and update the state plan; to convene and coordinate existing related obesity prevention efforts; to better leverage funding (public and private); and decrease duplication and increase efficiency among statewide efforts to prevent obesity.
- B. Create a process, including forming subcommittees, to monitor progress and ensure state plan strategies are being implemented.

## HEALTHY OHIO

---

- C. Develop recommendations based on the plan for priority areas for biennial funding decisions.
- D. Develop and promote common criteria for use by public and private organizations in identifying obesity prevention grant opportunities and in awarding obesity prevention grants to align programs, resources and evaluation.
- E. Coordinate regional meetings and campaigns to promote the state action plan with others engaged in obesity prevention.
- F. Develop and disseminate regular reports, at least annually, to stakeholders and to the governor regarding plan implementation.

**Lead Agency:** Healthy Ohio Advisory Council

**Other Involved Agency:** Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance)

**Objective F-3-c:** By Dec. 31, 2009, develop a plan for comprehensive, continuous and reliable surveillance and evaluation systems to facilitate data-driven decisions and monitor overweight, obesity, related risk factors and progress toward achieving the goals outlined in the Ohio Obesity Prevention Plan.

**Strategies:**

- A. Continue and expand (if funding is available) the monitoring of overweight, obesity and TV viewing habits among third grade and seventh grade students
- B. Utilize existing data sources to monitor and provide timely reports on overweight and obesity and their risk factors among various populations (e.g., Pediatric Nutrition Surveillance System, Pregnancy Risk Assessment Monitoring System, Youth Risk Behavior Survey and National Survey of Children's Health).
- C. Identify surveillance gaps and plan to remedy the gaps.
- D. Engage in continuous quality improvement of data systems including routine evaluation of systems.
- E. Seek sustainable funding for the continuation of surveillance of childhood overweight and obesity and related risk factors
- F. Provide local-level data to communities whenever possible.
- G. Identify measurable process indicators and performance outcomes.
- H. Ensure data sources for all indicators and outcomes.
- I. Analyze data, prepare reports and use findings to improve programs and identify promising practices.
- J. Communicate findings to stakeholders.

# HEALTHY OHIO

---

**Lead Agencies:** Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance) and Ohio Department of Health

**Objective F-3-d:** By Dec. 31, 2009, identify additional interagency partnerships for opportunities to promote progress toward the plan.

**Strategies:**

- A. Inventory existing state agency programs that currently fund nutrition or physical activity opportunities and assess current and potential effectiveness in reaching plan goals.
- B. Identify opportunities for collaboration to increase efficiency and ensure progress toward goals.
- C. Develop partnerships with other agencies and nonprofits, for example, Ohio State Cooperative Extension Program, to advance the vision of the Ohio Obesity Plan.

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance)

**Objective F-3-e:** By Dec. 31, 2009, create a centralized database for the Healthy Ohio Web site of existing obesity prevention activities occurring across the state and of referral listings for obesity prevention services.

**Strategies:**

- A. Continue and expand efforts to collect information on current obesity prevention programs, including developing a template and incentive process for collecting updates and identifying programs using evidence-based or promising practices.
- B. Develop and implement a plan for maintenance of the database.
- C. Collect and post contact information for referrals to obesity prevention services.

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio

**Objective F-3-f:** By Dec. 31, 2009, review opportunities available through programs and incentives at the Ohio Department of Development to promote healthy communities and families including, among others, those that tend to facilitate and encourage increased physical activity and access to healthy food choices.

**Strategy:**

- A. Review existing programs and identify strategies that could facilitate healthier lifestyles.

**Lead Agency:** Ohio Department of Development

## HEALTHY OHIO

---

**Objective F-3-g:** By Dec. 31, 2011, develop a plan to align social marketing and other public messaging used among state agencies as it relates to obesity.

**Strategies:**

- A. Determine areas of possible alignment related to obesity prevention.
- B. Determine possibility of consistent message for state agencies regarding obesity prevention.
- C. Ensure messages are appropriate for all population groups in Ohio.

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio

**Objective F-3-h:** By Dec. 31, 2011, encourage or require the use of evidence-based and/or promising practices in all Ohio Department of Health programs funding nutrition, physical activity or other obesity prevention related activities. Programs will review, and revise if necessary, existing relevant program and grant-making criteria to promote evidence-based and promising practices to prevent obesity.

**Strategies:**

- A. Make readily available and promote a listing of evidence-based and promising intervention practices to prevent obesity gathered by The Office of Healthy Ohio, in coordination with other department programs.
- B. Review and revise, if necessary, existing relevant program and grant-making criteria to promote evidence-based and promising practices to prevent obesity.
- C. Encourage and support local health departments in responding to local obesity trends through existing Ohio Department of Health programs and opportunities.

**Lead Agency:** Ohio Department of Health

**Objective F-3-i:** By Dec. 31, 2011, research policy issues, consider specific policy changes and incentives and make recommendations related to the availability of improved nutrition (including breastfeeding support).

**Strategies:**

- A. Develop resources or progress reports of issues related to plan implementation that could be useful for informing public policy.
- B. Develop an understanding of effective policies nationally, where implementation has been effective in changing the health of individuals and communities.

## HEALTHY OHIO

---

- C. Develop approaches to increase awareness of the Ohio Breastfeeding in Public law (Sec. 3781.55).

**Lead Agency:** Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance)

**Objective F-3-j:** By Dec. 31, 2011, develop a health impact assessment tool for use by state agencies and other entities to objectively evaluate the potential health effects of a project or policy before it is implemented or built.

**Strategies:**

- A. Review existing tools to determine a tool which could be adopted for various programs to use to encourage consideration of health impact during decision-making process.
- B. Make recommendations for incentives to promote the use of the health impact assessment tool by agencies outside the traditional public health arena.

**Lead agencies:** Ohio Department of Health/Office of Healthy Ohio

**Other Involved Agencies:** Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance), Ohio Department of Transportation

**Objective F-3-k:** By Dec. 31, 2011, align nutrition and physical activity programs with the goals and priorities of the state's obesity prevention plan.

**Strategies:**

- A. Evaluate success of existing grant programs to local communities for obesity prevention-related efforts and modify or continue local assistance projects to implement multi-sectoral system, policy and environmental changes for obesity prevention efforts.
- B. Review existing Ohio Department of Health programs and incorporate the Ohio Obesity Prevention Plan goals and priorities into relevant programs and initiatives.
- C. Partner with local health departments and community-based organizations to develop training materials and protocol to create and implement systems, policy and environmental changes at the local level.

**Lead Agency:** Ohio Department of Health

**Objective F-3-l:** By Dec. 2014, explore, consider, and develop a plan for incentivizing policies and practices that encourage and support availability and purchase of healthy foods.

## HEALTHY OHIO

---

**Strategies:**

- A. Become familiar with pending tax incentive proposals that support healthy foods in known food deserts.
- B. Consider differential fee structure for vendors to encourage healthy food choices.
- C. Encourage efforts for community garden development and maintenance.

**Lead Agencies:** Ohio Department of Health/Office of Healthy Ohio, Ohio Department of Development, Ohio Department of Agriculture.

## **Conclusion**

Ohio and the nation are experiencing obesity epidemics that are threatening the health of our children, the productivity of our workers, the vitality of our communities, the affordability of our health care system and our overall quality of life. Overweight and obesity are imminent public health and financial threats that require coordinated strategies to improve the health of our state. The Ohio Obesity Prevention Plan is evidence of a coordinated planning process and will require diligence and measurement efforts to ensure that state agencies and local communities are achieving the goals of improved physical activity opportunities; improved nutrition and access to healthy food choices and limited access to unhealthy food and beverage choices; and improved coordination of policy and resources directed to the prevention and reduction of obesity, especially among those populations most at risk.

## Definitions

### Definitions

**Active Community Environment (ACE):** As defined by the CDC, ACEs are places where people of all ages and abilities can easily enjoy walking, bicycling and other forms of recreation. ACEs support and promote physical activity; have sidewalks, on-street bicycle facilities, multi-use paths and trails, parks, open space and recreational facilities; promote mixed-use development and a connected grid of streets, allowing homes, work, schools and stores to be close together and accessible by walking and bicycling. The availability of these characteristics can play a significant role in promoting or discouraging physical activity.<sup>125</sup>

**Active Transportation:** Active transportation includes any method of travel that is human powered, but most commonly refers to walking and bicycling.<sup>126</sup>

**Appalachia:** The Appalachian Region, as defined in the legislation from which the Appalachian Regional Commission derives its authority, is a 200,000-square-mile region that follows the spine of the Appalachian Mountains from southern New York to northern Mississippi. It includes all of West Virginia and parts of 12 other states: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee and Virginia. In Ohio, the Appalachian region is located in the Southeastern area of the state and the communities within the region have high poverty rates and low economic opportunities.<sup>127</sup>

**Body Mass Index:** Body mass index (BMI) is a number calculated from a person's weight and height. BMI provides a reliable indicator of body fat ratio for most people and is used to screen for weight categories that may lead to health problems.<sup>128</sup>

**Breastfeeding Support:** Educational efforts provided to women prenatally as well as breastfeeding education, breast pumps and accessories, peer helpers and referrals that are provided postpartum in an effort to encourage and sustain breastfeeding infants as the primary mode of nutrition.

## HEALTHY OHIO

---

**Brownfields:** Abandoned, idled or under-used real property where expansion or redevelopment is complicated by the presence or potential presence of environmental contamination.<sup>129</sup>

**Built Environment:** References the man-made surroundings that provide the setting for human activity, from the largest-scale civic surroundings to the smallest personal place.

**Choice Food Pantry:** The client choice model allows clients to participate in choosing for themselves which foods they will take home. Well-operated choice pantries are conceptually similar to a grocery store: a full array of available goods is displayed and clients are permitted to browse and “shop” for what they want and need. In pantries with limited physical space, clients may be provided with a list of available food and they choose what items they want; pantry staff members or volunteers then assemble the clients’ food bags or boxes based on client selections.<sup>130</sup>

**Community Coalition:** Local groups that maintain a coalition that includes representation from all local health departments and from all settings; members from populations and communities identified as high need as well as appropriate agencies, organizations and providers.

**Complete Streets:** Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street. Instituting a complete streets policy ensures transportation agencies routinely design and operate the entire right of way to enable safe access for all users. Places with complete streets policies are making sure their streets and roads work for drivers, transit users, pedestrians and bicyclists, as well as for older people, children and people with disabilities. A multimodal development of streets is one that includes built-in bike paths, pedestrian access, good lighting and multi-use sidewalks that are wider and paved instead of concrete.<sup>131</sup>

**Comprehensive Plan:** A written plan compiled by a diverse group of participants that contains strategies to address obesity related health concerns for a community.

**Environmental Change:** Refers to changes in both the social, cultural and political environment, as well as the physical environment, at the

## HEALTHY OHIO

---

community level; a change in organizational practice or policy. For example, marked walking routes added in communities or at worksites.

**Evidence-based Practice:** Applying the best available research results (evidence) when making decisions about health care. Health care professionals who perform evidence-based practice use research evidence along with clinical expertise and patient preferences.<sup>132</sup>

**Federal Qualified Health Center (FQHC):** is a benefit under Medicare that went into effect Oct. 1, 1991, when Section 1861(aa) of the Social Security Act (the Act) was amended by Section 4161 of the Omnibus Budget Reconciliation Act of 1990. FQHCs are “safety net” providers such as community health centers, public housing centers, outpatient health programs funded by the Indian Health Service, and programs serving migrants and the homeless. The main purpose of the FQHC program is to enhance the provision of primary care services in underserved urban and rural communities.<sup>133</sup>

**Food Deserts:** A geographic region that lacks the financial means or has no close access to healthy foods; generally the area is large and isolated.

**Healthy Weight:** Body mass index for a child that is greater than or equal to the 5th percentile, but less than the 85th percentile, for children of the same age and sex, or a child with a greater or lesser BMI percentile who has been screened by a physician and found to be at low risk.<sup>134</sup> Adults who have a body mass index (BMI) between 18.5-24.9. A male who is 5’9” (average height) the approximate range for a healthy weight in pounds would be 121-163. A woman who is 5’4” (average height) and weighs around 108-144 pounds would be considered at a healthy weight.<sup>135</sup>

**Lead Agency:** State government agency that will coordinate efforts of the Ohio obesity prevention plan’s implementation. Accountability of accomplishing the goals and objectives will be directed by the lead agency to other involved agencies. Other involved agencies may be characterized as stakeholders and include Ohio-based businesses, industries, nonprofits, schools, hospitals, etc.

**Medical Nutrition Therapy:** “Nutritional diagnostic, therapy, and counseling services for the purpose of disease management which are furnished by a registered dietitian or nutrition specialist”.<sup>136</sup>

# HEALTHY OHIO

---

**Meta-analysis:** A way of combining data from many different research studies. A meta-analysis is a statistical process that combines the findings from individual studies.<sup>137</sup>

**Obese:** Body mass index for a child that is greater than or equal to the 95th percentile for children of the same age and sex.<sup>138</sup> Adults with a body mass index (BMI) of 30 and above. A male who is 5'9" (average height) and weighs above 196 pounds would be considered obese. A woman who is 5'4" (average height) and weighs above 174 pounds would be considered obese.<sup>139</sup>

**Objectives:** Specific, measurable, attainable and limited to a single result obtained through completion of planned activities. An objective must identify who or what will change, by what time line (date) the change will occur and how much it will change. The indicator in the objective must reflect a measurable outcome for which data are available. Measurable objectives have a completion date; i.e., a specific point in time when the objective is to be completed for evaluation.

**Other Involved Agencies:** Any interested stakeholders/organization(s) that have an interest in taking a role in conjunction with the lead agency to accomplish the goals and objectives set forth in the Ohio obesity prevention plan.

**Overweight:** Body mass index for a child that is greater than or equal to the 85th percentile, but less than the 95th percentile, for children of the same age and sex.<sup>140</sup> Adults that have a body mass index (BMI) range of 25.0-29.9. A male who is 5'9" (average height) the approximate range for overweight in pounds would be 164-195. A woman who is 5'4" (average height) and weighs around 145-173 pounds would be considered overweight.<sup>141</sup>

**Physical Activity:** "Any bodily movement produced by skeletal muscles that result in energy expenditure."<sup>142</sup>

**Policy Change:** A shift in the formal operations of organizations and/or governmental institutions that allows new or different activities to occur and thrive. These shifts may arise from information sharing, community participation, professional input, compromise and consensus-building and are usually the result of effective advocacy.

# HEALTHY OHIO

---

**Population-based:** Population-based practice reflects the priorities of the community. Community priorities are determined through an assessment of the population's health status and a prioritization process.<sup>143</sup>

**Risk:** A way of expressing the chance that something will happen. It is a measure of the association between exposure to something and what happens (the outcome). Risk is the same as probability, but it usually is used to describe the probability of an adverse event.<sup>144</sup>

**Rural:** According to official U.S. Census Bureau definitions, rural areas comprise open country and settlements with fewer than 2,500 residents.<sup>145</sup>

**Screening:** Using tests or other methods of diagnosis to find out whether a person has a specific disease or condition before it causes any symptoms. For many diseases (for example, cancers), starting treatment earlier leads to better results. The purpose of screening is to find the disease so treatment can be started as early as possible.<sup>146</sup>

**Smart Growth:** Zoning for new developments and revitalizing communities, including compact and mixed-use zoning, affordable housing, thriving retail, transit-oriented development, urban infill, walkable and bikable street design and green building practices.

**Stakeholder:** Person, group or organization that has direct or indirect stake in an organization because it can affect or be affected by the organization's actions, objectives, and policies.<sup>147</sup>

**Suburbs:** Closely settled residential areas on the outskirts of a city.<sup>148</sup>

**Sustainability:** Ensuring that an effort or change lasts.

**Systems Change:** A permanent change to the policies, practices and decisions of related organizations or institutions in the public and/or private sector.

**Systematic Review:** A summary of the clinical literature. A systematic review is a critical assessment and evaluation of all research studies that address a particular clinical issue. The researchers use an organized method of locating, assembling and evaluating a body of literature on a particular topic using a set of specific criteria. A systematic review typically includes a description of the findings of

## HEALTHY OHIO

---

the collection of research studies. The systematic review may also include a quantitative pooling of data, called a meta-analysis.<sup>149</sup>

**Urban:** The Census Bureau defines an urbanized area wherever it finds an urban nucleus of 50,000 or more people. They may or may not contain any individual cities of 50,000 or more. In general, they must have a core with a population density of 1,000 persons per square mile and may contain adjoining territory with at least 500 persons per square mile.<sup>150</sup>

**Walking School Bus:** A group of children walking to school with one or more adults.<sup>151</sup>

# HEALTHY OHIO

## Plan Development Participants

### Plan Development Participants

#### Interagency Executive Committee on Health Investment Strategies

Todd Barnhouse, Ohio Department of Education

Mary Anne Baum, M.A., Ohio Department of Administrative Services

Diane Beaty-Cargile, Ohio Department of Aging

Suparna Bhaskaran, Ph.D., Ohio Department of Insurance

Cheryl Boyce, M.S., Ohio Commission on Minority Health

Cynthia Burnell, M.L.H.R., Ohio Department of Health, Office of Healthy Ohio

John Corlett, Ohio Department of Job and Family Services

Dushka Crane-Ross, Ph.D., Ohio Department of Mental Health

Angela Cornelius Dawson, L.P.C., M.R.C., M.S., Ohio Department of Alcohol and Drug Addiction Services

Amy DeLong, Ohio Department of Development

Melanie Drerup, REFP, Ohio School Facilities Commission

Lisa Eible, M.S.W., LISW-S, Ohio Department of Health, Office of Healthy Ohio

Jason Fallon, Ohio Department of Natural Resources

Greg Gandy, Ohio Department of Transportation

Ciel Gavin, Ohio Department of Development

Elise Geig, Ohio Department of Job and Family Services

Amy Hager, Ohio Department of Youth Services

Lon Herman, M.A., Ohio Department of Mental Health

Brigette Hires, Ph.D., R.D., Ohio Department of Education

Daphne Kackloudis, Ohio Department of Job and Family Services

Amalie Lipstreu, L.S.M., Ohio Department of Agriculture

Mike Miller, Ohio Public Works Commission

Richard Nagel, Ohio Department of Public Safety

Alisa O'Brien, Ohio Department of Health, Office of Healthy Ohio

Ruth Satterfield, L.S.W., OCPS II, Ohio Department of Alcohol and Drug Addiction Services

Valerie Seagle, R.N., Ohio Department of Public Safety

Melissa Stanford, Ohio Department of Development

Kevin Tyler, Ohio Department of Insurance

# HEALTHY OHIO

---

Julie Walcoff, Ohio Department of Transportation, Safe Routes to Schools

Craig Wethington, M.P.H., Ohio Department of Education

## **Ohio Department of Health Obesity Virtual Team**

Jo M. Bouchard, M.P.H.

Elizabeth J. Conrey, R.D., Ph.D.

Lori Deacon

Rosemary Duffy, D.D.S., M.P.H.

Lisa Eible, M.S.W., LISW-S

Bobbie Erlwein, M.P.H.

Michele Frizzel, RD, M.B.A.

Celestine Harris, RD/LD

Lisa Heinbach, M.S.

Nan Migliozi, RN, M.S.N., COHN-S, FAAOHN

Angela Norton, M.A.

Alisa O'Brien

Lisa Pearce, M.P.H.

Heidi Scarpitti, RD/LD

Linda Scovern, M.P.H., RD/LD

Michele P-L Shipp, M.D., M.P.H., Dr.P.H.

Gwen Stacy, RD/LD

Ann Twiggs, RD/LD, IBCLC

Ann Weidenbenner, M.S., RD/LD

## **Public Hearing Presenters**

Tim Anderson, Near East Health Advisory Committee

Erica Daher-Twersky, Ohio State University Extension

Jody Dzurainin, HealthTech Blog

Alice Hohl, Leave No Child Inside Central Ohio Collaborative

Paulette M. Kline, Barberton Health District

Alex Kuhn, American Heart Association

Lisa Lyle-Henry, Ohio Association of Health, Physical Education, Recreation and Dance

Jenny Morgan, Leave No Child Inside Central Ohio Collaborative

Bradley Needleman, The Ohio Society for Bariatric Surgery

Barb Seckler, Institute for Active Living

Noreen Warnock, Local Matters

Valerie White, The Ohio State University

# HEALTHY OHIO

---

## Public Hearing Attendees

Mary Anne Baum, Ohio Department of Administrative Services  
Shelly Beiting, Children's Hunger Alliance  
Suparna Bhaskaran, Ohio Department of Insurance  
Cynthia Burnell, Ohio Department of Health, Office of Healthy Ohio  
David Ciccone, United Way of Central Ohio  
Ann Connelly, Ohio Department of Health  
Stacey Conrad, Ohio Hospital Association  
Donald Davis, Ohio Board of Dietetics  
Lisa Eible, Ohio Department of Health, Office of Healthy Ohio  
Mary Ellis, Ohio Department of Administrative Services  
Greg Gandy, Ohio Department of Transportation  
Ciel Gavin, Ohio Department of Development  
Sandy Gill, Columbus Public Health  
Amy Hager, Ohio Department of Youth Services  
Joseph Hau, Asian Festival Corp.  
Lisa Heinbach, Ohio Department of Health, Office of Healthy Ohio  
Lon Herman, Ohio Department of Mental Health  
Brigitte Hire, Ohio Department of Education  
Michael Jones, Local Matters  
Coleen Krubl, American Cancer Society  
Sarah Luchs, Ohio Department of Education  
Kimberly Munro, Johnson & Johnson Ethicon Endo Surgery  
Angie Norton, Ohio Department of Health  
Gary Panek, Ohio Department of Aging  
Lisa Pearce, Ohio Department of Health, Office of Healthy Ohio  
Sean Ragert, City of Marysville  
Heidi Scarpitti, Ohio Department of Health  
Dara Schuster, Ohio State University Health  
Stephanie Shafer, Ohio Department of Job and Family Services  
Reina Sims, Ohio Department of Education  
Debra Smith, Ohio Department of Health  
Charlie Solley, Ohio Hospital Association  
Lisa Stafford, Commission on Minority Health  
Autumn Trombetta, Columbus Public Health  
Julie Walcoff, Ohio Department of Transportation, Safe Routes to Schools  
Julie Wallis, The Ohio State University  
Tom Walsh, Anthem Blue Cross and Blue Shield

# HEALTHY OHIO

---

Ann Weidenbenner, Ohio Department of Health

Carol Whitmer, Ohio Association of Second Harvest Foodbanks

## **E-mail and Written Responders to Draft Ohio Obesity Prevention Plan**

Mary Ann Baum, Ohio Department of Administrative Services

Cecilia Burford, Ohio Association of Health, Physical Education, Recreation and Dance

Erica Daher-Twersky, Ohio State University Extension

Karen Dion, Ohio Department of Health

James W. Gross, Dayton and Montgomery County Department of Public Health

Shelley R.Hahn, Anthem Blue Cross and Blue Shield

Monica Harnish, Allen County Health Department

Pam Hunt, Ohio Department of Health, Primary Care and Rural Health

Pat McKnight, M.S.,R.D.,L.D., Ohio Dietetic Association and Mt. Carmel College of Nursing

Ann Nevar, The Center for Child Health and Policy at Rainbow, Rainbow Babies & Children's Hospital

Alison Patrick, Cuyahoga County Board of Health

Heather Reed, Ohio Department of Health, Primary Care and Rural Health

Debra E. Roy, General Public

Mari-jean Siehl, Ohio Department of Health

Reina Sims, MSA, CTTS, Ohio Department of Education

Tom Walsh, Anthem Blue Cross & Blue Shield of Ohio

## **Survey Responders to Draft Ohio Obesity Prevention Plan**

Christine Althouse, Columbus Public Schools

Michael Anderson, General Public

Tim Anderson, Near East Health Advisory Committee/Columbus Public Health

Wendy Anderson-Willis, M.D., Nationwide Children's Hospital

Melanie Arum, American Heart Association

Shelly Beiting, Children's Hunger Alliance

MaryAnn Blatz, R.N.C.-N.I.C., M.S.N., I.B.C.L.C., University Hospitals of Cleveland Case Medical Center

Dennis Bolen, Lake Schools

Eric Bostick, Mad River Schools

Dianne Brown, Springfield Local Schools

Jennifer Brown, Tippecanoe Middle School

Todd Brown, New Lexington City Schools

Steven Buerschen, Franklin City Schools

# HEALTHY OHIO

---

Theresa J. Butts, Westfall Local Schools  
David Ciccone, United Way of Central Ohio  
Traci Collins, Move It. Lose It. Live Healthy  
Stacey Conrad, Ohio Hospital Association  
Jeffrey Cooper, Dayton & Montgomery County Public Health  
Marcie M. Cornell, ProMedica Health System  
Miriam Crane, Cedarville University  
Erica Daher-Twersky, Ohio State University Extension  
Jennifer Demuth, Twin City Hospital  
Kathleen Doneyko, Crestwood Local Schools  
Selby Dorgan, Mansfield/Ontario/Richland County Health Department  
Cynthia D. Dye, Toledo Public Schools  
Alicia Dyer, Pickerington Local Schools  
Melissa Dyer, Pickerington Local Schools  
Jody Dzurainin, Health Tech Blog  
Noreen Edwards, St. Elizabeth Health Center  
Sylvia Ann Ellison, Boonshoft School of Medicine, Wright State University  
Maureen Faron, Hudson City Schools  
Gregory L. Frye, Urbana City Schools  
Shauna Gavorski, Lorain County Community Action Head Start  
Jennifer Gilliland, ProMedica Health Systems  
Christine Green, Columbus Public Health  
Connie Hahn, Northridge High School  
Erin Hamilton, Girls on the Run of Cincinnati, Inc.  
Pam Harb, Cargill, Inc.  
Monica Harnish, Allen County Health Department  
Joseph Hau, Asian Festival Corp  
Tiffany Hernandez, Benton-Carroll-Salem Schools  
Alice Hohl, Leave No Child Inside Central Ohio Collaborative  
Cheri Hollern, Division of Safety & Hygiene  
Christine T. Hughes, Green Plate Club  
Ellen Hughes, Indian Hill School District  
Scott Hughes, St. Bernard Elmwood Place  
Kathryn Isabell, Lorain County Community Action Agency  
Orelle Jackson, Children's Hunger Alliance  
Sharon L. Jaeger M.S., R.D./L.D., Medina County Health Department  
Deborah Janopoulos, Columbus City Schools  
Delene Junkans, Memorial Hospital of Union County  
Coleen Krubl, American Cancer Society

# HEALTHY OHIO

---

Leah Lambert-Dustin, Solon City Schools  
Shirley Leaser, Cleveland Clinic  
Deb Lemire, Association for Size Diversity and Health  
Joyce Leupp Davis, Lorain County General Health District  
Weidong Li, The Ohio State University  
Everett Logue, Ph.D., Summa Health System  
Kathy Luhn, Allen County Health Department  
D.J. McFadden, Holmes County General Health District  
Kevin McKee, Ottawa Hills Schools  
Cindy McQuown, Cornerstone Wellness  
Gisele L. Mack, Ed.D., Cincinnati Public School District  
Joe Mazzola, Ohio Department of Health  
Sue Meeks, R.N.,C., Ohio University College of Osteopathic Medicine-Community Health Programs  
Dr. Rich Menke, YourQuest  
Deborah Mickey, Clark State Community College  
Kim Miller, Bowling Green State University  
Steve Mitchell, Kent State University  
Anne Morse, Summit County Health District  
David Mortman, General Public  
Brenda Moton, BWC Garfield Heights  
Kimberly Munro, Johnson & Johnson Ethicon Endo Surgery  
Bradley Needleman, M.D., The Ohio Society for Bariatric Surgery  
Carolyn Nelson, Olentangy Local Schools  
Julianne Nesbit, Clermont County Health District  
Andrew Neuberger, Wellington Exempted Village Schools  
Deborah Newton, Zanesville Muskingum County Health Department  
Lauren Niemes, Nutrition Council  
Ginger L. Parsons, R.D.,L.D., LifeCare Alliance  
Alison Patrick, Cuyahoga County Board of Health  
David Pauer, Cleveland Clinic, Employee Wellness  
Kathy Pruchnicki, Olmsted Falls Middle School  
Catherine L. Ramstetter, University of Cincinnati  
Diana Reed, Amylin Pharmaceuticals, Inc.  
Rachel Riddiford, M.S., R.D., L.D., Dayton Children's Medical Center  
Kate Salmon, Lakewood Hospital  
Barb Seckler, Columbus Public Health  
Joanne Sherwood, Granville Exempted Village Schools  
Linda J. Smith, Bright Future Lactation Resource Centre

# HEALTHY OHIO

---

Aimee Soutar, Tippecanoe Exempted Village Schools  
Meg Spernoga, General Public  
Matthew Stefanak, Mahoning County District Board of Health  
Pam Stephens, Clinton County Board of Mental Retardation and Developmental Disabilities  
Alice Stratton, Cleveland Heights School District  
Leah Terhune, UC Physicians  
Desra Tomaino, General Public  
Karen Tuskey, Lakota School District  
Eric Vaiksnoras, General Public  
Wade Vantrease, Revere Local Schools  
Julie Wallis, The Ohio State University  
Noreen Warnock, Local Matters  
Pam Watson, Kettering City Schools  
Craig Wethington, Ohio Department of Education  
Vicki Ann Whitacre, M.D., Zanesville Muskingum County Health Department  
Valerie L. White, The Ohio State University  
Carol Whitmer, Ohio Association of Second Harvest Foodbanks  
John Wilcox, Corporate Voices for Working Families  
Patti Wilson, Otterbein College  
Jim Winkelman, Cuyahoga Falls High School  
Kathy Winters, St. John the Baptist School  
Susan Wooley, American School Health Association  
Molly Wray, Springboro High School  
Dr. Huiyun Xiang, Nationwide Children's Hospital  
Judith Young, Poland Local Schools

# HEALTHY OHIO

## References

### References

1. Association of State and Territorial Health Officials (ASTHO) (August 2006). State Options for Reducing Overweight and Obesity.
2. Bailey, D. (1998). Breastfeeding: The Best Investment. International Lactation Consultant Association. Raleigh, NC.
3. Blankenau, J. (January 2009). Nutrition, Physical Activity, and Obesity in Rural America: A Series of Health Care Issues in Rural America. Center for Rural Affairs. No.1.
4. Center for Vital and Health Statistics. (2004). Minority Health Profile: Health Risk Factors by Race and Ethnicity. Ohio Department of Health, Behavioral Risk Factor Surveillance System.  
<http://www.odh.ohio.gov/ASSETS/6698DFDF5DA644EC9075BCC521180424/minhealpro.pdf>
5. Colorado Connections for Healthy Schools. (2005). Making the Connection Between Health and Learning: A 2010 State Plan for Coordinated School Health. Interagency School Health Team.  
(<http://www.cde.state.co.us/cdeprevention/download/pdf/CCHSplan2.pdf>)
6. Draper, DA. Tynan, A. and Christianson, JB. (2008). Health and Wellness: The shift from managing illness to promoting health. Center for Studying Health System Change. Issue Brief No. 121.
7. For Your Health Ohio (2009). Ohio's Nutrition Plan [Draft].
8. For Your Health Ohio (February 2008). Ohio's Physical Activity Plan.  
(<http://www.opraonline.org/pdf/FYHO/ohiophysicalactivityplanexecutivesummary1.pdf>)
9. Heinig, MJ. Ishii, KD. Bañuelos, J. (March 2006). Breastfeeding: The First Defense Against Obesity. California WIC Association and the UC Davis Human Lactation Center.
10. Institute of Medicine (U.S.) & Koplan, J. (2007). Progress in preventing childhood obesity How do we measure up? Washington, D.C.: National Academies Press.
11. Koplan, J.P., Liverman, C.T. and Kraak, V.A. (editors), Institute of Medicine of the National Academies (2004). Preventing Childhood Obesity: Health in the Balance. (<http://www.iom.edu/?id=22596&redirect=0>)
12. Minnesota Department of Health. (2008). Minnesota Obesity Plan: Minnesota Plan to Reduce Obesity and Obesity-Related Chronic Diseases 2008-2013.  
(<http://www.health.state.mn.us/divs/hpcd/chp/obesity/pdf/obesityplanfinal.pdf>)
13. Moschonis, G. Grammatikaki, E. and Manios, Y. (2008). Perinatal Predictors of Overweight at Infancy and Preschool Childhood: The Genesis Study. International Journal of Obesity, 32: 39–47.

# HEALTHY OHIO

---

14. New York State Department of Health. (2005). New York State Strategic Plan for Overweight and Obesity Prevention. ([http://www.health.state.ny.us/prevention/obesity/strategic\\_plan/docs/strategic\\_plan.pdf](http://www.health.state.ny.us/prevention/obesity/strategic_plan/docs/strategic_plan.pdf))
15. Nutrition Council of Oregon and the Oregon Coalition for Promoting Physical Activity. (2007). A Healthy, Active Oregon: Statewide Physical Activity and Nutrition Plan 2007-2012. (<http://www.oregon.gov/DHS/ph/copi/pan-plan2007-12.pdf>)
16. Ohio Department of Health Childhood Obesity Leadership Team (COLT). (2007). A Healthy Weight for All Ohio's Children.
17. Ohio Department of Health, Cardiovascular Health Program. (2003). Cardiovascular Quarterly Pulse. Ohio Department of Health. (<http://www.odh.ohio.gov/ASSETS/71E4AADD5BD84696999D2918C3FCE610/cardwi03.pdf>)
18. Ohio Department of Health Center for Public Health Statistics and Informatics. (2008). Ohio PRAMS Annual Data Summary 2004-2007. Ohio Department of Health. Columbus, OH. (<http://www.odh.ohio.gov/ASSETS/1788CE8FAF5B4C10BEA188AC40116E2C/PRAMSDataSummary2004-2007.pdf>)
19. Ohio Department of Transportation. (January 2009). 21<sup>st</sup> Century Transportation Priorities Task Force: Moving Ohio into a Prosperous New World. (<http://www.dot.state.oh.us/groups/tft/Documents/21stCenturyTransportationPrioritiesTaskForceReport-Web.pdf>)
20. Saelens, BE. Sallis, JF. and Frank, LD. (2003). Environmental Correlates of Walking and Cycling: Findings from the Transportation, Urban Design, and Planning Literatures. *Annals of Behavioral Medicine*, 25(2), 80–91.
21. Simpson, L. Alendy, C. Cooper, J. and Gunther-Murphy, C. (2008). National Initiative for Children's Healthcare Quality and Child Policy Research Center. Childhood Obesity: The Role of Health Policy Report to the Second National Childhood Obesity Congress. Miami, Florida. (<http://www.cincinnatichildrens.org/assets/0/78/1067/1395/1833/1835/1849/1853/25d0bc47-60da-49e4-b626-89cb87de49b9.pdf>)
22. Von Kries, R. Toschke, AM. Koletzko, B. and Slikker, W. (2002). Maternal Smoking during Pregnancy and Childhood Obesity. *Am J Epidemiol*, 156(10):954-961.
23. U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. (2008). The Business Case for Breastfeeding: Steps for Creating a Breastfeeding Friendly Worksites. U.S. Department of Health and Human Services.
24. Vermont Department of Health. (April 2006). Preventing Obesity in Vermont: A Statewide Plan Engaging Individuals, Organizations, Communities, Government & Industry. ([http://healthvermont.gov/family/fit/documents/Obesity\\_Plan.pdf](http://healthvermont.gov/family/fit/documents/Obesity_Plan.pdf))
25. Washington State Department of Health. (June 2003). Washington State Nutrition and Physical Activity Plan. (<http://www.doh.wa.gov/cfh/NutritionPA/publications/08-plan.pdf>)

## Appendix

### **Appendix Documents**

Governor's Directive

Summary Objective List

Objective Coding Key

## Governor's Directive

### Governor's Directive



**TED STRICKLAND**  
GOVERNOR  
STATE OF OHIO

Directive to the Ohio Department of Health  
September 19, 2008

#### Developing an Ohio Obesity Prevention Plan

1. **Ohio is Committed to Improving the Health of Its Citizens.** The staggering rise of obesity is contributing to chronic conditions such as heart disease and diabetes, as well as an unsustainable growth in health care costs. Ohio recognizes that educating Ohioans about the effects of obesity will create a better quality of life, assure a more productive workforce, and contribute to a more efficient and cost-effective use of medical services.
2. **Collaborative Efforts Across State Government Will Help Address the Complex Barriers Contributing to Obesity.** Poor nutrition and lack of physical activity are the major causes of obesity and resulting chronic conditions. These preventable chronic conditions, caused by obesity and other contributing factors, account for at least 75% of health care expenditures and are a leading cause of death for Ohioans. The State is committed to developing policies that address obesity through encouraging and enabling increased physical activity and promoting healthier food choices in local communities, places of employment and schools.
3. **Development of an Ohio Obesity Prevention Plan.** In order to ensure that state agencies, boards and commissions ("state agencies") are incorporating obesity prevention strategies into their programs and initiatives, I hereby direct the Ohio Department of Health's Office of Healthy Ohio (the "Office") to develop a comprehensive, multi-faceted obesity prevention plan ("the plan") and to present it to me by March 31, 2009. In developing the plan, the Office shall review and evaluate existing information and plans on obesity prevention. The plan should:

(Page 1 of 3)

# HEALTHY OHIO

---

- a. Develop goals and recommendations to support and enhance specific actionable obesity prevention measures for the residents of this State, with particular attention to children and adolescents;
  - b. Address specific areas including, but not limited to, creating school and employer strategies to improve student and employee health by reducing obesity, supporting communities that encourage more active lifestyles, improving the availability and consumption of healthy foods, increasing physical activity levels of Ohioans, and partnering with the medical community in the early identification and prevention of obesity;
  - c. Formulate strategies and goals on policy and system changes that will encourage long-term sustainability and address high-risk populations;
  - d. Develop policy or administrative recommendations that can be implemented by the State and local communities to prevent and reduce obesity;
  - e. Create a five (5) year timeline for measuring specific and realistic goals and objectives regarding the State's progress in achieving the goals of the Council in reducing obesity among Ohioans and creating healthier lifestyle choices;
  - f. Identify individual and organizational responsibility for implementing specific action steps that are included in the plan.
4. **Stakeholder Participation in Obesity-Prevention Plan Development.** In developing the plan, the Office shall consult with and obtain assistance from:
- a. The Directors, or their designees, at the following state agencies: Administrative Services, Development, Drug and Alcohol Addiction Services, Education, Health, Insurance, Job and Family Services, Mental Health, Natural Resources, Public Safety, Public Works, Transportation and any other appropriate state agency;
  - b. Representatives of public or private sector entities that:
    - i. focus on nutrition, physical activity and physical education;
    - ii. promote the health and well-being of ethnically diverse and economically disadvantaged Ohioans;

(Page 2 of 3)

# HEALTHY OHIO

---

- iii. conduct research regarding the causes and effects of obesity;
- c. Representatives of local government agencies including, but not limited to city planners and those who work in health-related fields;
- d. Any other individual or entity deemed appropriate by ODH.



*Ted Strickland*  
Ted Strickland

# HEALTHY OHIO

---

## Summary Objective List

### Summary Objective List

# HEALTHY OHIO

## Ohio Obesity Prevention Plan

### Summary Objective List, Sorted by Goal and Timeline

#### Goal 1: Improve physical activity options and opportunities.

Timeline	Setting	Objective	Lead Agency	Reference Number in Plan
Immediate (to be completed by Dec. 31, 2009)	Communities and the Built Environment	By Dec. 31, 2009, develop and promote a statewide trail plan, linking local and regional plans, including priorities for trail completion, anticipated time lines and identification of implementation funding.	Ohio Department of Natural Resources	B-1-a
Immediate (to be completed by Dec. 31, 2009)	Communities and the Built Environment	By Dec. 31, 2009, begin and expand marketing and promotional programs to encourage Ohioans to get physically active using Ohio's trails, parks and other natural resources.	Ohio Department of Natural Resources	B-1-b
Short term (to be completed by Dec. 31, 2011)	Communities and the Built Environment	By Dec. 31, 2011, develop plans to make communities more accessible for active transportation such as walking and bicycling.	Ohio Departments of Transportation, Natural Resources and Health	B-1-c
Short term (to be completed by Dec. 31, 2011)	Worksite	By Dec. 31, 2011, identify best practices and develop resources for employers to improve physical activity at worksites, including worksite facilities (i.e. showers on site), work day flexibility and incentives for physical activity, policies and activities.	Ohio Department of Health/Office of Healthy Ohio, Ohio Department of Health/Healthy Ohio Business Council	E-1-a
Long term (to be completed by Dec. 31, 2014)	Communities and the Built Environment	By Dec. 31, 2012, increase the number of children walking or bike riding to school by 5 percent in communities funded for Safe Routes to School programs by supporting infrastructure improvements (such as sidewalks and bike paths) and programmatic components (such as walking school buses).	Ohio Department of Transportation	B-1-d

## HEALTHY OHIO

---

Long term (to be completed by Dec. 31, 2014)	Communities and the Built Environment	By Dec. 31, 2014, at least 40 Ohio counties will have made an improvement in physical activity opportunities available in the county.	Ohio Department of Health	B-1-e:
Long term (to be completed by Dec. 31, 2014)	Individuals and Families	By Dec. 31, 2014, encourage and expand safe, accessible and affordable opportunities for increased physical activity for at-risk populations including persons with disabilities.	Ohio Department of Health	C-1-a
Long term (to be completed by Dec. 31, 2014)	Schools and Child Care	By Dec. 31, 2014, increase the proportion of schools that increase physical activity throughout and after the school day.	Ohio Departments of Education and Health	A-1-a

## HEALTHY OHIO

<b>Goal 2: Improve nutrition and access to healthy food choices and limit access to unhealthy food and beverage choices.</b>				
Timeline	Setting	Objective	Lead Agency	Reference Number in Plan
Immediate (to be completed by Dec. 31, 2009)	Schools and Child Care	By Dec. 31, 2009, leadership of the Ohio Department of Education will identify and communicate with federal partners regarding increasing United States Department of Agriculture (USDA) meal reimbursements to support the provision of high quality nutritious meals in schools.	Ohio Departments of Education and Health	A-2-a
Immediate (to be completed by Dec. 31, 2009)	Communities and the Built Environment	By Dec. 31, 2009, increase access to fresh and healthy food for all Ohioans through support of Ohio farmers' markets by creating a farmers' market management network.	Ohio Department of Agriculture and Ohio State University South Centers	B-2-a
Immediate (to be completed by Dec. 31, 2009)	Communities and the Built Environment	By Dec. 31, 2009, identify rural and urban food deserts in Ohio and by 2015, decrease these areas by 10 percent by providing access to healthy local foods. <i>Note: The Ohio Department of Agriculture has a six-year time frame for achieving this objective.</i>	Ohio Department of Agriculture, Ohio Food Policy Council, Healthy Food Access Task Force	B-2-b
Immediate (to be completed by Dec. 31, 2009)	Communities and the Built Environment	By Dec. 31, 2009, promote greater coordination and collaboration of nutrition education and promotion programs in Ohio to promote consistent and effective information on nutrition.	Ohio Department of Agriculture (Ohio Food Policy Council), Healthy Food Access Task Force	B-2-c
Immediate (to be completed by Dec. 31, 2009)	Individuals and Families	By Dec. 31, 2009, develop a plan to educate participants in Ohio's Food Assistance Nutrition Education program to make healthier choices within a limited budget and choose active lifestyles consistent with the current Dietary Guidelines for Americans and the Food Guide Pyramid.	Ohio Department of Job and Family Services/Ohio's Food Assistance Nutrition Education Plan	C-2-a

# HEALTHY OHIO

Short term (to be completed by Dec. 31, 2011)	Communities and the Built Environment	By Dec. 31, 2010, foster closer coordination among the various nutrition assistance programs to plan and implement nutrition education through the State Nutrition Action Plan (SNAP). Encourage partnerships and collaborative interventions targeting healthy eating and active lifestyles among nutrition assistance programs and other organizations working with low-income individuals and families.	Ohio Department of Job and Family Services (Ohio's Food Assistance Nutrition Education Plan)	B-2-d
Short term (to be completed by Dec. 31, 2011)	Communities and the Built Environment	By Dec. 31, 2010, identify opportunities for increased access to healthy, Ohio-produced foods in Ohio vending machines.	Ohio Department of Agriculture	B-2-e
Short term (to be completed by Dec. 31, 2011)	Health Care	By Dec. 31, 2010, increase and expand effective education and programming efforts to provide professional and parental nutrition education.	Ohio Department of Health	D-2-a
Short term (to be completed by Dec. 31, 2011)	Communities and the Built Environment	By Dec. 31, 2011, increase the number of Ohio farmers' markets that can accept and process food stamps from 11 to 40.	Ohio Departments of Agriculture and Job and Family Services	B-2-f
Short term (to be completed by Dec. 31, 2011)	Health Care	By Dec. 31, 2011, more health care organizations, in particular those serving children, such as hospitals, will adopt policies to improve nutritional quality of food served through vending, restaurant and cafeteria choices.	Ohio Department of Health/Office of Healthy Ohio	D-2 b
Short term (to be completed by Dec. 31, 2011)	Worksite	By Dec. 31, 2011, identify best practices for improving food options in the workplace and develop resources for nutrition improvements at worksites.	Ohio Department of Health/ Office of Healthy Ohio, Ohio Department of Health/Healthy Ohio Business Council, Ohio Department of Health	E -2-a
Short term (to be completed by Dec. 31, 2011)	Worksite	By Dec. 31, 2011, more employers will support breastfeeding-friendly policies.	Ohio Department of Health/Office of Healthy Ohio, and Ohio Department of Health/Healthy Ohio Business Council, Ohio Department of Administrative Services	E-2-b

# HEALTHY OHIO

Long term (to be completed by Dec. 31, 2014)	Schools and Child Care	By Dec. 31, 2014, increase the number of facilities/environments that adopt policies, practices and incentives to promote healthy eating where children and adolescents learn and play.	Ohio Departments of Education and Health	A-2-b
Long term (to be completed by Dec. 31, 2014)	Schools and Child Care	By Dec. 31, 2014, increase awareness and knowledge about healthy eating and the proportion of children and adolescents whose intake of meals and snacks in child care centers, schools and after-school programs that contribute to good overall dietary quality.	Ohio Departments of Education and Health	A-2-c
Long term (to be completed by Dec. 31, 2014)	Individuals and Families	By Dec. 31, 2014, continue current programs and increase community events that support local and healthy food such as celebrity chef contests or community cooking lessons for family participation.	Ohio Department of Agriculture, Ohio Department of Health/Office of Healthy Ohio	C-2-b
Long term (to be completed by Dec. 31, 2014)	Individuals and Families	By Dec. 31, 2014, increase the number of restaurants that offer healthier meals, appropriately sized portions and list caloric information on menus.	Ohio Department of Health	C-2-c
Long term (to be completed by Dec. 31, 2014)	Health Care	By Dec. 31, 2014, develop strategies to work with birthing hospitals, prenatal care providers, pediatricians, other health care providers and breastfeeding coalitions to increase initiation and duration of breastfeeding among Ohio mothers.	Ohio Department of Health	D-2-c
Long term (to be completed by Dec. 31, 2014)	Schools and Child Care	By Dec. 31, 2015, increase the number of schools using the national Farm-to-School program by a minimum of 50 schools. <i>Note: The Ohio Department of Agriculture has a six-year time frame for achieving this objective.</i>	Ohio Department of Agriculture	A-2-d
Long term (to be completed by Dec. 31, 2014)	Communities and the Built Environment	By Dec. 31, 2015, increase consumer awareness and participation in purchasing fresh local produce. <i>Note: The Ohio Department of Agriculture has a six-year time frame for achieving this objective.</i>	Ohio Departments of Agriculture and Health, Ohio Rural Development	B-2-g

**Goal 3: Improve the coordination of policy and resources directed to the prevention and reduction of obesity, especially among those populations most at risk.**

Timeline	Setting	Objective	Lead Agency	Reference Number in Plan
Immediate (to be completed by Dec. 31, 2009)	Government	By spring 2009, create a plan for launching and distributing the Ohio Obesity Prevention Plan in conjunction with the obesity prevention social marketing campaign.	Ohio Department of Health/Office of Healthy Ohio	F-3-a
Immediate (to be completed by Dec. 31, 2009)	Individuals and Families	By spring 2009, create and implement a statewide social marketing campaign that gives families information and tools to prevent obesity.	Ohio Department of Health/Office of Healthy Ohio	C-3-a
Immediate (to be completed by Dec. 31, 2009)	Communities and the Built Environment	By summer 2009, create a plan to enhance physical activity opportunities as well as encourage healthier nutrition in the school environment through school construction and reconstruction funded by state government.	Ohio Schools Facilities Commission, Ohio Department of Transportation	B-3-a
Immediate (to be completed by Dec. 31, 2009)	Government	By July 31, 2009, form the Ohio Community Wellness Alliance as part of the Healthy Ohio Advisory Council. This public-private partnership will establish a framework to implement and evaluate progress toward the goals of the plan, including integrating efforts directed at obesity prevention.	Ohio Department of Health/ Office of Healthy Ohio (Healthy Ohio Advisory Council)	F-3-b
Immediate (to be completed by Dec. 31, 2009)	Individuals and Families	By Dec. 31, 2009, launch a healthy living challenge to Ohioans that will incorporate the state's newly developed obesity prevention social marketing campaign.	Ohio Department of Health/Office of Healthy Ohio	C-3-b
Immediate (to be completed by Dec. 31, 2009)	Worksite	By Dec. 31, 2009, increase participation in Take Charge! Live Well!, the program to improve the health of state employees and their dependents enrolled in a state health plan.	Ohio Department of Administrative Services	E-3-a
Immediate (to be completed by Dec. 31, 2009)	Worksite	By Dec. 31, 2009, develop materials to encourage employee wellness programs to focus on the whole family.	Ohio Department of Health/Office of Healthy Ohio, Ohio Department of Health/Healthy Ohio Business Council	E-3-b

## HEALTHY OHIO

---

Immediate (to be completed by Dec. 31, 2009)	Government	By Dec. 31, 2009, develop a plan for comprehensive, continuous and reliable surveillance and evaluation systems to facilitate data-driven decisions and monitor overweight, obesity, related risk factors and progress toward achieving the goals outlined in the Ohio Obesity Prevention Plan.	Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance) and Ohio Department of Health	F-3-c
Immediate (to be completed by Dec. 31, 2009)	Worksite	By Dec. 31, 2009, continue and strengthen efforts to improve the health of state employees through agency wellness committees.	Ohio Departments of Administrative Services and Health	E-3-c
Immediate (to be completed by Dec. 31, 2009)	Government	By Dec. 31, 2009, identify additional interagency partnerships for opportunities to promote progress toward the plan.	Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance)	F-3-d
Immediate (to be completed by Dec. 31, 2009)	Government	By Dec. 31, 2009, create a centralized database for the Healthy Ohio Web site of existing obesity prevention activities occurring across the state and of referral listings for obesity prevention services.	Ohio Department of Health/Office of Healthy Ohio	F-3-e
Immediate (to be completed by Dec. 31, 2009)	Government	By Dec. 31, 2009, review opportunities available through programs and incentives at the Ohio Department of Development to promote healthy communities and families including, among others, those that tend to facilitate and encourage increased physical activity and access to healthy food choices.	Ohio Department of Development	F-3-f
Short term (to be completed by Dec. 31, 2011)	Schools and Child Care	By Dec. 31, 2010, increase participation in recognition programs to highlight school wellness-based initiatives such as the Buckeye Best Healthy Schools awards program.	Ohio Departments of Education and Health, Ohio Department of Health/Office of Healthy Ohio	A-3-a
Short term (to be completed by Dec. 31, 2011)	Worksite	By Dec. 31, 2010, an additional 10 percent of employers in the State of Ohio will apply for the Healthy Ohio Worksite award.	Ohio Department of Health/Healthy Ohio Business Council	E-3-d

## HEALTHY OHIO

---

Short term (to be completed by Dec. 31, 2011)	Individuals and Families	By Dec. 31, 2010, expand effective education and programming efforts to provide opportunities for parental education.	Ohio Department of Health	C-3-c
Short term (to be completed by Dec. 31, 2011)	Individuals and Families	By Dec. 31, 2010, create a Healthy Ohio Star award to recognize individuals who promote consistent healthy messages within health care organizations, business and industry, schools, professional organizations and the community.	Ohio Department of Health/Office of Healthy Ohio	C-3-d
Short term (to be completed by Dec. 31, 2011)	Health Care	By Dec. 31, 2010, emphasize obesity prevention and treatment for Ohioans with serious mental illness.	Ohio Department of Mental Health	D-3-a
Short term (to be completed by Dec. 31, 2011)	Worksite	By Dec. 31, 2010, the Healthy Ohio Business Council award criteria will be reviewed and expanded to include additional components related to improving physical activity and nutrition, including breastfeeding support.	Ohio Department of Health/Healthy Ohio Business Council	E-3-f
Short term (to be completed by Dec. 31, 2011)	Worksite	By Dec. 31, 2010, develop and implement a comprehensive obesity prevention program for state employees and their dependents.	Ohio Department of Administrative Services	E-3-e
Short term (to be completed by Dec. 31, 2011)	Schools and Child Care	By Dec. 31, 2011, expand the Buckeye Best Healthy Schools awards to include recognition for child care settings that implement model nutrition and physical activity policies.	Ohio Department of Health	A-3-d
Short term (to be completed by Dec. 31, 2011)	Health Care	By Dec. 31, 2011, increase trainings, education and resource opportunities for primary care providers and other health care professionals to promote obesity prevention.	Ohio Department of Health/Office of Healthy Ohio	D-3-c
Short term (to be completed by Dec. 31, 2011)	Communities and the Built Environment	By Dec. 31, 2011, increase the number of local, broad-based coalitions with members representing a cross-section of community partners and agencies to support sustainable evidence-based activities to improve nutrition and physical activity. Coalitions should include representatives from sectors such as transportation, urban/rural planning, education, economic development and the employer community.	Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance)	B-3-b

# HEALTHY OHIO

---

Short term (to be completed by Dec. 31, 2011)	Schools and Child Care	By Dec. 31, 2011, develop a plan to involve students in an advisory role for implementing the Ohio Obesity Prevention Plan.	Ohio Department of Health/Office of Healthy Ohio	A-3-b
Short term (to be completed by Dec. 31, 2011)	Schools and Child Care	By Dec. 31, 2011, develop a plan and evaluation measures to assess and make recommendations to improve nutrition and physical activity policies within all Ohio child care settings.	Ohio Departments of Health, Job and Family Services, and Education	A-3-c
Short term (to be completed by Dec. 31, 2011)	Health Care	By Dec. 31, 2011, develop/expand specific program approaches for the state Medicaid program including the Early Periodic Screening, Diagnosis and Treatment Program (EPSDT) and the State Children's Health Insurance Program (SCHIP) to prevent obesity in the Medicaid population and improve obesity-related pediatric practice in the state.	Ohio Department of Job and Family Services	D-3-d
Short term (to be completed by Dec. 31, 2011)	Communities and the Built Environment	By Dec. 31, 2011, increase the number of communities that apply for the Healthy Ohio Community award annually.	Ohio Department of Health/Office of Healthy Ohio	B-3-c
Short term (to be completed by Dec. 31, 2011)	Health Care	By Dec. 31, 2011, develop a plan to have more primary care providers and related health care professionals focus on early intervention by routinely measuring and tracking evidence-based obesity measures for children and adults and by providing counseling and/or referral to qualified providers for patients.	Ohio Department of Health	D-3-b
Short term (to be completed by Dec. 31, 2011)	Worksite	By Dec. 31, 2011, increase the number of employers providing environments that support wellness, healthy food choices and physical activity.	Ohio Department of Health and Ohio Department of Health/Healthy Ohio Business Council	E-3-g
Short term (to be completed by Dec. 31, 2011)	Government	By Dec. 31, 2011, develop a plan to align social marketing and other public messaging used among state agencies as it relates to obesity.	Ohio Department of Health/Office of Healthy Ohio	F-3-g

## HEALTHY OHIO

---

Short term (to be completed by Dec. 31, 2011)	Government	By Dec. 31, 2011, encourage or require the use of evidence-based and/or promising practices in all Ohio Department of Health programs funding nutrition, physical activity or other obesity prevention-related activities. Programs will review, and revise if necessary, existing relevant program and grant-making criteria to promote evidence-based and promising practices to prevent obesity.	Ohio Department of Health	F-3-h
Short term (to be completed by Dec. 31, 2011)	Government	By Dec. 31, 2011, research policy issues, consider specific policy changes and incentives and make recommendations related to the availability of improved nutrition (including breastfeeding support).	Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance)	F-3-i
Short term (to be completed by Dec. 31, 2011)	Government	By Dec. 31, 2011, develop a health impact assessment tool for use by state agencies and other entities to objectively evaluate the potential health effects of a project or policy before it is implemented or built.	Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance)	F-3-j
Short term (to be completed by Dec. 31, 2011)	Government	By Dec. 31, 2011, align nutrition and physical activity programs with the goals and priorities of the state's obesity prevention plan.	Ohio Department of Health	F-3-k
Long term (to be completed by Dec. 31, 2014)	Health Care	By Dec. 31, 2014, increase the number of insurance providers and health care providers who conduct or participate in research on obesity prevention, with a focus on at-risk populations, and disseminate promising practices for the prevention of obesity.	Ohio Department of Health/Office of Healthy Ohio (Community Wellness Alliance), Ohio Department of Health	D-3-e
Long term (to be completed by Dec. 31, 2014)	Communities and the Built Environment	By Dec. 31, 2014, develop and make recommendations to state government related to policy and funding for communities that limit sprawl and reward comprehensive planning efforts that support improved built environments and encourage pedestrian-friendly communities.	Ohio Department of Transportation	B-3-d
Long term (to be completed by Dec. 31, 2014)	Individuals and Families	By Dec. 31, 2014, increase the number of family programs offered at faith-based centers, park and recreation centers and other community-based centers that incorporate physical activity and healthy nutrition opportunities.	Ohio Department to Health	C-3-e

## HEALTHY OHIO

---

Long term (to be completed by Dec. 31, 2014)	Health Care	By Dec. 31, 2014, coordinate with insurers and payers to offer health plans that encourage patients to achieve a healthy weight and lifestyle.	Ohio Departments of Insurance and Health	D-3-f
Long term (to be completed by Dec. 31, 2014)	Health Care	By Dec. 31, 2014, develop strategies for community health centers to increase obesity prevention activities.	Ohio Departments of Health and Job and Family Services	D-3-g
Long term (to be completed by Dec. 31, 2014)	Government	By Dec.31, 2014, explore, consider, and develop a plan for incentivizing policies and practices that encourage and support availability and purchase of healthy foods.	Ohio Department of Health/Office of Healthy Ohio, Ohio Departments of Development and Agriculture	F-3-l

# HEALTHY OHIO

---

## Objective Coding Key

### Objective Coding Key

Letter	Setting
A	Schools and Child Care
B	Communities and the Built Environment
C	Individuals and Families
D	Health Care
E	Worksite
F	Government
Number	Goals
1	Improve physical activity options and opportunities.
2	Improve nutrition and access to healthy food choices and limit access to unhealthy food and beverage choices.
3	Improve the coordination of policy and resources directed to the prevention and reduction of obesity, especially among those populations most at risk.

## Citations

### Citations

<sup>1</sup> Vinter, S. Levi, J. St. Laurent, R. and Segal, LM. (2008). F as in Fat: Obesity Policies Are Failing in America. Trust for America's Health Fifth Annual Report.

<sup>2</sup> Institute of Medicine (U.S.) and Koplan, J. (2007). Progress in preventing childhood obesity: How do we measure up? National Academies Press. Washington, DC.

<sup>3</sup> Ohio Department of Health Division of Family and Community Health Services School and Adolescent Health Section. (2006). A report on body mass index of Ohio's third graders: 2004-2005. [Report] Ohio Department of Health. Columbus, OH. Obtained on 2/5/09 from:  
<http://assets.columbus.gov/Health/FINAL%20Healthy%20Ohioan%20BMI%20report.pdf>

<sup>4</sup> Narayan, KM. Boyle, JP. Thompson, TJ. Sorensen, SW. and Williamson, DF. (2003). Lifetime Risk for Diabetes Mellitus in the United States. JAMA, 290(14):1884-1890.

<sup>5</sup> Office of the Surgeon General. (2007). The Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity. U.S. Department of Health and Human Services Web site. Obtained 1/20/09 from:  
[http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact\\_adolescents.htm](http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_adolescents.htm)

<sup>6</sup> State of Ohio: Department of Insurance, Department of Job and Family Services, Department of Health, and Department of Mental Health. (2009). Ohio Family Health Survey, 2008-09 [Computer File]. Ohio State University, Ohio Colleges of Medicine Government Resource Center [distributor]. Columbus, OH.

<sup>7</sup> *Ibid.*

<sup>8</sup> Ohio Department of Health Division of Family and Community Health Services School and Adolescent Health Section. (2006). A report on body mass index of Ohio's third graders: 2004-2005. [Report] Ohio Department of Health. Columbus, OH. Obtained on 2/5/09 from:  
<http://assets.columbus.gov/Health/FINAL%20Healthy%20Ohioan%20BMI%20report.pdf>

<sup>9</sup> Ohio Department of Health. (2007). 2007 Pediatric Surveillance System (PedNSS). [Report]. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2007. Atlanta, GA. Obtained on 2/5/09 from:  
<http://www.odh.ohio.gov/ASSETS/BF5C3A4EFE70499595BEE6B9C09BCEA5/pedppt.pdf>

<sup>10</sup> Goldberg, J. (2005). Obesity: The Health Debate and Policy Challenges. The Health Policy Institute of Ohio.

<sup>11</sup> Huang, TK. Glass, TA. (2008). Transforming Research Strategies for Understanding and Preventing Obesity. JAMA, 300(15):1811-1813.

<sup>12</sup> Finkelstein, EA. Fiebelkorn, IC. Wang, G. (2003). National Medical Spending Attributable to Overweight and Obesity: How much, and Who's Paying? Health Affairs, W3;219-226.

<sup>13</sup> *Ibid.*

# HEALTHY OHIO

---

- <sup>14</sup> Goldberg, J. (2005). Obesity: The Health Debate and Policy Challenges. The Health Policy Institute of Ohio.
- <sup>15</sup> Governor Ted Strickland. (2008, September 19). Directive to the Ohio Department of Health: Developing an Ohio Obesity Prevention Plan. Office of the Governor. Columbus, OH.
- <sup>16</sup> Behavioral Risk Factor Surveillance System Survey Data. Centers for Disease Control and Prevention. Atlanta, GA. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2007.
- <sup>17</sup> Ohio Department of Health Division of Family and Community Health Services School and Adolescent Health Section. (2006). A report on body mass index of Ohio's third graders: 2004-2005. [Report] Ohio Department of Health. Columbus, OH. Obtained on 2/5/09 from: <http://assets.columbus.gov/Health/FINAL%20Healthy%20Ohioan%20BMI%20report.pdf>
- <sup>18</sup> *Ibid.*
- <sup>19</sup> Institute of Medicine (U.S.) and Koplan, J. (2007). Progress in preventing childhood obesity: How do we measure up? National Academies Press. Washington, DC.
- <sup>20</sup> National Institutes of Health (2006, September 5). Overweight in Early Childhood Increases Chances for Obesity at Age 12. [Press Release]. National Institutes of Health.
- <sup>21</sup> Ohio Department of Education. 2007 Fall Enrollment Data by building by grade. Ohio Department of Education. Columbus, OH. Obtained on 1/26/09 from: <http://www.ode.state.oh.us/GD/Templates/Pages/ODE/ODEDetail.aspx?page=3&TopicRelationID=3&ContentID=12261&Content=52960>
- <sup>22</sup> Ohio Department of Education. Ohio Enrollment State Average Data Warehouse Reports (2007-2008 School Year). Ohio Department of Education.
- <sup>23</sup> Vinter, S. Levi, J. St. Laurent, R. and Segal, LM. (2008). F as in Fat: How Obesity Policies Are Failing in America. Trust for America's Health Fifth Annual Report.
- <sup>24</sup> Calfas, K. and Taylor, W. (1994). Effects of physical activity on psychological variables in adolescents. *Pediatric Exercise Science*, 6:406-423.
- <sup>25</sup> Geier, AB. Foster, GD. Womble, LG. McLaughlin, J. Borradaile, KE. Nachmani, J. Sherman, S. Kumanyika, S. and Shults, J. (2007). The Relationship Between Relative Weight and School Attendance Among Elementary Schoolchildren. *Obesity*, 15: 2157-2161.
- <sup>26</sup> *Ibid.*
- <sup>27</sup> Koplan, JP. Liverman, CT . and Kraak, VA. (editors). Institute of Medicine of the National Academies (2004). Preventing Childhood Obesity: Health in the Balance. <http://www.iom.edu/?id=22596&redirect=0>
- <sup>28</sup> Gonzalez, W. Jones, SJ. and Frongilio, EA. (2009). Restricting Snacks in U.S. Elementary Schools Is Associated with Higher Frequency of Fruit and Vegetable Consumption. *Journal of Nutrition*, 139: 142-144.
- <sup>29</sup> Robert Wood Johnson Foundation and Sports4Kids. (2008, December 10). Americans Want Schools to Take Recess Seriously: New poll reveals that parents see school playground as key to helping kids stay physically active, focused in the classroom. [Press Release]. Robert Wood Johnson Foundation.
- <sup>30</sup> Wechsler, H. McKenna, ML. Lee, SM. and Dietz, WH. (2004). The Role of Schools in Preventing Childhood Obesity. National Association of State Boards of Education. *The State Education Standard*, 5(2):4-12.
- <sup>31</sup> *Ibid.*

# HEALTHY OHIO

---

<sup>32</sup> Centers for Disease Control and Prevention. Kids Walk-to-School: Then and Now—Barrier and Solutions. Centers for Disease Control and Prevention. Retrieved on 1/16/09 from: [http://www.cdc.gov/nccdphp/dnpa/kidswalk/then\\_and\\_now.htm](http://www.cdc.gov/nccdphp/dnpa/kidswalk/then_and_now.htm)

<sup>33</sup> Ohio Department of Health. (2009). Child and Family Health Services. Ohio Department of Health. Retrieved on 2/11/09 from: [http://www.odh.ohio.gov/odhprograms/cfhs/cf\\_hlth/cfhs1.aspx](http://www.odh.ohio.gov/odhprograms/cfhs/cf_hlth/cfhs1.aspx)

<sup>34</sup> Morris, M. (2002, July 18). Physical Activity and the Built Environment. Presented at 121 Cannon House Office Building. American Planning Association. [Power Point Presentation]. Chicago, IL.

<sup>35</sup> *Ibid.*

<sup>36</sup> Giles-Corti, B. and Donovan, R.J. (2002). The Relative Influence of Individual, Social and Physical Environment Determinants of Physical Activity. *Social Science & Medicine*, 54: 1793-1812.

<sup>37</sup> Robbins, L.T. Morandi, L. (2002). Promoting Walking and Biking: The Legislative Role. [Report]. National Conference of State Legislatures.

<sup>38</sup> The National Complete Streets Coalition. Complete the Streets: Frequently Asked Questions. National Complete the Streets Coalition. Washington, DC. Obtained 1/16/09 from: <http://www.completethestreets.org/faq.html#Basic>

<sup>39</sup> Centers for Disease Control and Prevention. Kids Walk-to-School: Then and Now—Barrier and Solutions. Centers for Disease Control and Prevention. Retrieved on 1/16/09 from: [http://www.cdc.gov/nccdphp/dnpa/kidswalk/then\\_and\\_now.htm](http://www.cdc.gov/nccdphp/dnpa/kidswalk/then_and_now.htm)

<sup>40</sup> Aboelata, M J. (2004). The Built Environment and Health: 11 Profiles of Neighborhood Transformation. Prevention Institute. Obtained on 2/4/09 from: <http://www.preventioninstitute.org/builtenv.html>

<sup>41</sup> Sallis, JF. and Glanz, K. (2006). The Role of Built Environments in Physical Activity, Eating, and Obesity in Childhood. *The Future of Children*, 16(1): 89-108.

<sup>42</sup> *Ibid.*

<sup>43</sup> Frank, LD. Engelke, PO. and Schmid, TL. (2003). Health and Community Design: The Impact of the Built Environment on Physical Activity. Island Press. Washington, DC.

<sup>44</sup> Davis, B. and Carpenter, C. (2009, March). Proximity of Fast-Food Restaurants to Schools and Adolescent Obesity. *American Journal of Public Health*, 99(3): 505-510.

<sup>45</sup> Appalachian Regional Commission. (2008). Appalachian Region: Counties in Appalachia. Appalachian Regional Commission. Retrieved on 3/9/09 from: <http://www.arc.gov/index.do?nodeId=27>

<sup>46</sup> Ohio Department of Health Division of Family and Community Health Services School and Adolescent Health Section. (2006). A report on body mass index of Ohio's third graders: 2004-2005. [Report] Ohio Department of Health. Columbus, OH. Obtained on 2/5/09 from: <http://assets.columbus.gov/Health/FINAL%20Healthy%20Ohioan%20BMI%20report.pdf>

<sup>47</sup> Tai-Seale, T. and Chandler, C. (2003). Nutrition and Overweight Concerns in Rural Areas. Rural Healthy People 2010: A companion document to Healthy People 2010. Volume 1. The Texas A&M University System Health Science Center, School of Rural Public Health, Southwest Rural Health Research Center. College Station, TX. Retrieved on 2/25/2009 from: <http://srph.tamhsc.edu/centers/rhp2010/09Volume1nutrition%20.htm>.

# HEALTHY OHIO

---

- <sup>48</sup> Medical News Today. (2006). What Leads to Obesity in Rural Areas? [Press Release]. Medical News Today. Retrieved on 2/25/2009 from: <http://www.medicalnewstoday.com/articles/46439.php>
- <sup>49</sup> Vinter, S. Levi, J. St. Laurent, R. and Segal, LM. (2008). F as in Fat: How Obesity Policies Are Failing in America. Trust for America's Health Fifth Annual Report.
- <sup>50</sup> Sallis, JF. and Glanz, K. (2006). The Role of Built Environments in Physical Activity, Eating, and Obesity in Childhood. *The Future of Children*, 16(1): 89-108.
- <sup>51</sup> *Ibid.*
- <sup>52</sup> Aboelata, M J. (2004). The Built Environment and Health: 11 Profiles of Neighborhood Transformation. Prevention Institute. Obtained on 2/4/09 from: <http://www.preventioninstitute.org/builtenv.html>
- <sup>53</sup> *Ibid.*
- <sup>54</sup> Lee, V. Mikkelsen, L. Srikantharajah, J. Cohen, L. (2008). Healthy Eating Active Living Convergence Partnership: Promising Strategies for Creating Healthy Eating and Active Living Environments. Prevention Institute. Obtained on 2/4/09 from: [http://www.convergencepartnership.org/atf/cf/%7B245A9B44-6DED-4ABD-A392-AE583809E350%7D/CP\\_Promising%20Strategies\\_printed.pdf](http://www.convergencepartnership.org/atf/cf/%7B245A9B44-6DED-4ABD-A392-AE583809E350%7D/CP_Promising%20Strategies_printed.pdf)
- <sup>55</sup> Goldberg, J. (2005). Obesity: The Health Debate and Policy Challenges. The Health Policy Institute of Ohio.
- <sup>56</sup> Behavioral Risk Factor Surveillance System Survey Data. Centers for Disease Control and Prevention. Atlanta, GA. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2007.
- <sup>57</sup> *Ibid.*
- <sup>58</sup> *Ibid.*
- <sup>59</sup> Wootan, M. Osborn, M. (2006). Availability of Nutrition Information from Chain Restaurants in the United States. *American Journal of Preventive Medicine*, 30(3): 266-268.
- <sup>60</sup> *Ibid.*
- <sup>61</sup> *Ibid.*
- <sup>62</sup> Li, C. Kaur, H. Choi, WS. Huang, TT. Lee, RE. and Ahluwalia, JS. (2005). Additive Interactions of Maternal Pre-Pregnancy BMI and Breast-Feeding on Childhood Overweight. *Obesity Research*, 13(2): 362-371.
- <sup>63</sup> Conrey, E. Kopfman, K. Myer, J. Norton, A. Scarpitti, H. Scovern, L. Siehl, MJ. Stacy, G. and Weidenbenner, A. (2008). A Healthy Weight for All Ohio Children: A Proposed Ohio Department of Health Plan of Action to Address Childhood Obesity. [Report]. Columbus, OH.
- <sup>64</sup> *Ibid.*
- <sup>65</sup> *Ibid.*
- <sup>66</sup> *Ibid.*
- <sup>67</sup> Goldberg, J. (2005). Obesity: The Health Debate and Policy Challenges. The Health Policy Institute of Ohio.
- <sup>68</sup> Agriculture Research Service and Flores, A. (2008, April 21). New Study Correlates Preschoolers' Screen Time with Obesity. [Press Release]. U.S. Department of Agriculture. Obtained on 1/16/09 from: <http://www.ars.usda.gov/is/pr/2008/080421.htm>

# HEALTHY OHIO

---

<sup>69</sup> *Ibid.*

<sup>70</sup> Borzekowski, DL. and Robinson, TN. (2001). The 30-Second Effect: An Experiment Revealing the Impact of Television Commercials on Food Preferences of Preschoolers. *Journal of the American Dietetic Association*, 101(1):42-46.

<sup>71</sup> Holben, DH. and Pheley, AM. (2006, July). Diabetes risk and obesity in food-insecure households in rural Appalachian Ohio. *Prev Chronic Dis* [serial online]. Retrieved on 2/18/2009 from:  
[http://www.cdc.gov/pcd/issues/2006/jul/05\\_0127.htm](http://www.cdc.gov/pcd/issues/2006/jul/05_0127.htm)

<sup>72</sup> *Ibid.*

<sup>73</sup> *Ibid.*

<sup>74</sup> Ohio Department of Health Division of Family and Community Health Services School and Adolescent Health Section. (2006) A report on body mass index of Ohio's third graders: 2004-2005. [Report] Ohio Department of Health. Columbus, OH. Obtained on 2/5/09 from:  
<http://assets.columbus.gov/Health/FINAL%20Healthy%20Ohioan%20BMI%20report.pdf>

<sup>75</sup> *Ibid.*

<sup>76</sup> Ohio Department of Health. (2007). 2007 Pediatric Surveillance System (PedNSS). [Report]. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2007. Atlanta, Georgia. Obtained on 2/5/09 from:  
<http://www.odh.ohio.gov/ASSETS/BF5C3A4EFE70499595BEE6B9C09BCEA5/pedppt.pdf>

<sup>77</sup> Ohio Behavioral Risk Factor Surveillance System. (2002). Community Health Assessments; BHSIOS - Prevention, Ohio Department of Health. Retrieved on 3/5/09 from:  
<http://www.odh.ohio.gov/ASSETS/71E4AADD5BD84696999D2918C3FCE610/cardwi03.pdf>

<sup>78</sup> Behavioral Risk Factor Surveillance System Survey Data. Centers for Disease Control and Prevention. Atlanta, GA. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2007.

<sup>79</sup> *Ibid.*

<sup>80</sup> *Ibid.*

<sup>81</sup> *Ibid.*

<sup>82</sup> Ohio Department of Health. (2008, November). Obesity Prevention Blueprint for Ohio: Request for Information. [Survey]. Ohio Department of Health. Columbus, OH.

<sup>83</sup> American Heart Association. (2008, July 2). Population-based Approach Needed To Reduce Obesity In United States. *Science Daily*.

<sup>84</sup> National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition and Physical Activity. (2007, July). Does breastfeeding reduce the risk of pediatric overweight? Centers for Disease Control and Prevention, Research to Practice Series No. 4. Atlanta, Georgia. Retrieved on 3/3/09 from:  
[http://www.cdc.gov/NCCDPHP/DNPA/nutrition/pdf/breastfeeding\\_r2p.pdf](http://www.cdc.gov/NCCDPHP/DNPA/nutrition/pdf/breastfeeding_r2p.pdf)

<sup>85</sup> Conrey, E. Kopfman, K. Myer, J. Norton, A. Scarpitti, H. Scovern, L. Siehl, MJ. Stacy, G. and Weidenbenner, A. (2008). A Healthy Weight for All Ohio Children: A Proposed Ohio Department of Health Plan of Action to Address Childhood Obesity. Ohio Department of Health. [Report]. Columbus, OH.

<sup>86</sup> *Ibid.*

# HEALTHY OHIO

---

- <sup>87</sup>Daviglus, ML. Kiang, L. *et al.* (2004). Relation of Body Mass Index in Young Adulthood and Middle Age to Medicare Expenditures in Older Age. *JAMA*, 292: 2743-2749.
- <sup>88</sup>Marder, WD. and Chang, S. (2006). Childhood Obesity: Costs, Treatment Patterns Disparities in Care, and Prevalent Medical Conditions. Thomson Medstat [Research Brief]. Obtained on 2/4/2009 from: [http://www.medstat.com/pdfs/childhood\\_obesity.pdf](http://www.medstat.com/pdfs/childhood_obesity.pdf)
- <sup>89</sup>Dietz, WH. (2002, May 21). CDC's Role in Combating the Obesity Epidemic. Testimony before the Senate Committee on Health, Education, Labor and Pensions. DHHS, Office of Assistant Secretary for Legislation. Washington, DC.
- <sup>90</sup>Marder, WD. and Chang, S. (2006). Childhood Obesity: Costs, Treatment Patterns Disparities in Care, and Prevalent Medical Conditions. Thomson Medstat [Research Brief]. Accessed at: [http://www.medstat.com/pdfs/childhood\\_obesity.pdf](http://www.medstat.com/pdfs/childhood_obesity.pdf)
- <sup>91</sup>*Ibid.*
- <sup>92</sup>*Ibid.*
- <sup>93</sup>*Ibid.*
- <sup>94</sup>National Association of State Mental Health Program Directors. (2006). Morbidity and Mortality in People with Serious Mental Illness. [Technical Report]. National Association of State Mental Health Program Directors.
- <sup>95</sup>Harder, T. Bergmann, R. Kallischnigg, G. and Plagemann, A. (2005). Duration of breastfeeding and risk of overweight: a meta-analysis. *Am J Epidemiol*, 162:397-403.
- <sup>96</sup>National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition and Physical Activity. (2008, June 10). 2007 CDC National Survey of Maternity Practices in Infant Nutrition and Care (mPINC). Centers for Disease Control and Prevention. Atlanta, Georgia. Retrieved on 3/3/09 from: <http://www.cdc.gov/breastfeeding/data/mpinc/index.htm>
- <sup>97</sup>*Ibid.*
- <sup>98</sup>Finkelstein, E. Fiebelkorn, C. and Wang, G. (2005). The Costs of Obesity among Full-Time Employees. *American Journal of Health Promotion*, 20(1): 45-51.
- <sup>99</sup>Thompson, D. *et al.* (1998). Estimated Economic Costs of Obesity to U.S. Business. *American Journal of Health Promotion*, 12(2):120-127.
- <sup>100</sup>Vinter, S. Levi, J. St. Laurent, R. and Segal, LM. (2008). F as in Fat: How Obesity Policies Are Failing in America. Trust for America's Health Fifth Annual Report.
- <sup>101</sup>Finkelstein, E. Fiebelkorn, C. and Wang, G. (2005). The Costs of Obesity among Full-Time Employees. *American Journal of Health Promotion*, 20(1): 45-51.
- <sup>102</sup>Levin-Epstein, J. (2005, February 28). Presenteeism and Paid Sick Days. Center for Law and Social Policy.
- <sup>103</sup>Blackburn, D. (2008). Making Obesity Everybody's Business: What is the Employer's Role? *Obesity Management*, 4(4): 169-175.
- <sup>104</sup>Ostbye, T. Dement, JM. and Krause, KM. (2007). Obesity and Workers' Compensation: Results from the Duke Health and Safety Surveillance System. *Arch Intern Med.*, 167:766-773.
- <sup>105</sup>Ohio Department of Administrative Services. (2009, March 20). [email from Baum, MA.]. Thomson Reuters Data Warehouse.
- <sup>106</sup>Rees, C. (2004, November). Health Improvement: A Comprehensive Guide to Designing, Implementing and Evaluating Worksite Programs. [Issue Brief]. National Business Group on Health, 1(1):1-16.

# HEALTHY OHIO

---

<sup>107</sup> Thaman, MB. Park, M. *et al.* (2008). Ohio's Physical Activity Plan: A statewide plan of action to improve the nutrition and physical activity habits of all Ohioans. For Your Health Ohio.

<sup>108</sup> For Your Health Ohio. (2009). Ohio's Nutrition and Physical Activity Plan: A statewide plan of action to improve the nutrition and physical activity habits of all Ohioans. [Draft]. For Your Health Ohio.

<sup>109</sup> Fein, SB. and Roe, B. (1998). The Effect of Work Status on Initiation and Duration of Breast-Feeding. *Am J Public Health*, 88(7): 1042-1046.

<sup>110</sup> *Ibid.*

<sup>111</sup> Roe, B. Whittington, LA. Fein, SB. and Teisl, M. (1999). Is There Competition Between Breastfeeding and Maternal Employment? *Demography*, 36(2): 157-171.

<sup>112</sup> United States Breastfeeding Committee. (2002). Workplace Breastfeeding Support [issue paper]. Raleigh, NC: United States Breastfeeding Committee.

<sup>113</sup> *Ibid.*

<sup>114</sup> *Ibid.*

<sup>115</sup> *Ibid.*

<sup>116</sup> Dietz, WH. (2001). Breastfeeding May Help Prevent Childhood Overweight. *JAMA*, 285:2506-2507.

<sup>117</sup> The Foundation for Healthy Communities. (2006). Healthy Communities: Fall 2006. Ohio Hospitals Association. [Newsletter]. Obtained on 1/16/09 from: <http://www.healthycommunitiesohio.org/newsletter/2006/Fall2006.htm>

<sup>118</sup> *Ibid.*

<sup>119</sup> *Ibid.*

<sup>120</sup> *Ibid.*

<sup>121</sup> *Ibid.*

<sup>122</sup> Ohio Department of Job and Family Services, Office of Workforce Development Bureau of Labor Market Information. (2008, November 28). Quarterly Report on the State of Ohio's Workforce Reference Period: Third Quarter 2008. [Report]. Ohio Department of Job and Family Services. Obtained on 2/4/09 from: [http://ohiolmi.com/wf\\_quarterly/archive/OhioWorkforceQuarterly\\_2008Q3.pdf](http://ohiolmi.com/wf_quarterly/archive/OhioWorkforceQuarterly_2008Q3.pdf)

<sup>123</sup> Institute of Medicine (U.S.) and Koplan, J. (2007). Progress in preventing childhood obesity How do we measure up? National Academies Press. Washington, DC.

<sup>124</sup> *Ibid.*

<sup>125</sup> Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity and Obesity, National Center for Chronic Disease Prevention and Health Promotion. (2008). Active Community Environments. Centers for Disease Control and Prevention. Obtained 1/16/09 from: [http://www.cdc.gov/nccdphp/dnpa/physical/health\\_professionals/active\\_environments/aces.htm](http://www.cdc.gov/nccdphp/dnpa/physical/health_professionals/active_environments/aces.htm)

<sup>126</sup> Active Transportation Web site and Campaign. Obtained 1/16/09 from: <http://www.activetransportation.org/what.htm>

<sup>127</sup> Appalachian Regional Commission. (2004, October 1). Moving Appalachia Forward: Appalachian Regional Commission Strategic Plan, 2005-2010. [PDF]. Appalachian Regional Commission. Washington, DC. Retrieved 3/10/09 from: <http://www.arc.gov/images/newsandevents/publications/sp/sp2005-2010.pdf>

# HEALTHY OHIO

---

<sup>128</sup> Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity and Obesity, National Center for Chronic Disease Prevention and Health Promotion. (2009). Healthy Weight Assessment: Body Mass Index. Centers for Disease Control and Prevention. Obtained on 1/16/09 from:

<http://www.cdc.gov/nccdphp/dnpa/healthyweight/assessing/bmi/index.htm>

<sup>129</sup> Office of Community Planning and Development. (2009). Brownfields Definition. U.S. Department of Housing and Urban Development. Washington, DC. Retrieved on 3/9/2009 from:

<http://www.hud.gov/offices/cpd/economicdevelopment/programs/bedi/bfieldsdefinition.cfm>

<sup>130</sup> Ohio Association of Second Harvest Foodbanks. (2006). Making the Switch: A Guide for Converting to a Client Choice Food Pantry.

<http://www.oashf.org/choice%20pantry%20guide.pdf>

<sup>131</sup> The National Complete Streets Coalition. Complete the Streets: Frequently Asked Questions. The National Complete Streets Coalition Obtained on 1/16/09 from:

<http://www.completethestreets.org/faq.html#Basic>

<sup>132</sup> The National Guideline Clearinghouse™ (NGC), sponsored by the Agency for Healthcare Research and Quality (AHRQ), U.S. Department of Health and Human Services web-based glossary. Obtained on 1/26/09 from:

<http://effectivehealthcare.ahrq.gov/tools.cfm?tooltype=glossary&report=full>

<sup>133</sup> Centers for Medicare and Medicaid Services. (2008, April). Federally Qualified Health Centers Factsheet. U.S. Department of Health and Human Services. Washington, DC.

<sup>134</sup> Conrey, E. Kopfman, K. Myer, J. Norton, A. Scarpitti, H. Scovern, L. Siehl, MJ. Stacy, G. and Weidenbenner, A. (2007). A Healthy Weight for All Ohio Children: A Proposed Ohio Department of Health Plan of Action to Address Childhood Obesity. [Report]. Ohio Department of Health. Columbus, OH.

<sup>135</sup> National Health and Nutrition Examination Survey. (2003, July). Healthy Weight, Overweight and Obesity Among U.S. Adults. Centers for Disease Control and Prevention, National Center for Health Statistics. Atlanta, GA.

<sup>136</sup> American Dietetic Association. (2006). Medical Nutrition Therapy vs. Nutrition Education. [PDF]. American Dietetic Association. Retrieved on 2/25/2009 from:

[http://www.eatright.org/ada/files/chart\\_of\\_mnt\\_vs\\_nut\\_ed\\_revised\\_short\\_version\\_8\\_06.pdf](http://www.eatright.org/ada/files/chart_of_mnt_vs_nut_ed_revised_short_version_8_06.pdf)

<sup>137</sup> The National Guideline Clearinghouse™ (NGC), sponsored by the Agency for Healthcare Research and Quality (AHRQ), U.S. Department of Health and Human Services web-based glossary. Obtained on 1/26/09 from:

<http://effectivehealthcare.ahrq.gov/tools.cfm?tooltype=glossary&report=full>

<sup>138</sup> Conrey, E. Kopfman, K. Myer, J. Norton, A. Scarpitti, H. Scovern, L. Siehl, MJ. Stacy, G. and Weidenbenner, A. (2007). A Healthy Weight for All Ohio Children: A Proposed Ohio Department of Health Plan of Action to Address Childhood Obesity. [Report]. Ohio Department of Health. Columbus, OH

<sup>139</sup> National Health and Nutrition Examination Survey. (2003, July). Healthy Weight, Overweight and Obesity Among U.S. Adults. Centers for Disease Control and Prevention, National Center for Health Statistics. Atlanta, Georgia.

<sup>140</sup> *Ibid.*

<sup>141</sup> National Health and Nutrition Examination Survey. (2003, July). Healthy Weight, Overweight and Obesity Among U.S. Adults. Centers for Disease Control and Prevention, National Center for Health Statistics. Atlanta, GA.

# HEALTHY OHIO

---

<sup>142</sup> Caspersen, CJ. Powell, KE. Christenson, GM. (1985). Physical Activity, Exercise, and Physical Fitness: Definitions and Distinctions for Health-Related Research. *Public Health Report*, 100 (2):126-31.

<sup>143</sup> Minnesota Department of Health. (2003). Definition of Population-Based Practice. Center for Public Health Nursing.

<sup>144</sup> Agency for Healthcare Research and Quality (AHRQ). Web-based glossary. U.S. Department of Health and Human Services. Obtained on 1/26/09 from: <http://effectivehealthcare.ahrq.gov/tools.cfm?tooltype=glossary&report=full>

<sup>145</sup> Office of Management and Budget. (2003, June). Measuring Rurality: New Definitions in 2003. Office of Management and Budget (OMB).

<sup>146</sup> Agency for Healthcare Research and Quality (AHRQ). Web-based glossary. U.S. Department of Health and Human Services. Obtained on 1/26/09 from: <http://effectivehealthcare.ahrq.gov/tools.cfm?tooltype=glossary&report=full>

<sup>147</sup> BusinessDirectory.com. (2007-2009). [Web site] BusinessDirectory.com. Retrieved on 3/9/09 from: <http://www.businessdictionary.com/definition/stakeholder.html>

<sup>148</sup> Federal Highway Administration. Appendix B: Glossary, Suburban Definition. [Web site ]. U.S. Department of Transportation, Obtained on 2/5/09 from at: <http://www.fhwa.dot.gov/environment/sidewalks/appb.htm>

<sup>149</sup> Agency for Healthcare Research and Quality (AHRQ). Web-based glossary. U.S. Department of Health and Human Services. Obtained on 1/26/09 from: <http://effectivehealthcare.ahrq.gov/tools.cfm?tooltype=glossary&report=full>

<sup>150</sup> Office of Management and Budget. (2003, June) Measuring Rurality: New Definitions in 2003. Office of Management and Budget (OMB).

<sup>151</sup> National Center for Safe Routes to School and the Pedestrian and Bicycle Information Center. (2006, August 17). The Walking School Bus: Combining Safety, Fun and the Walk to School. University of North Carolina Highway Safety Research Center.