



THE **Ohio** Collaborative

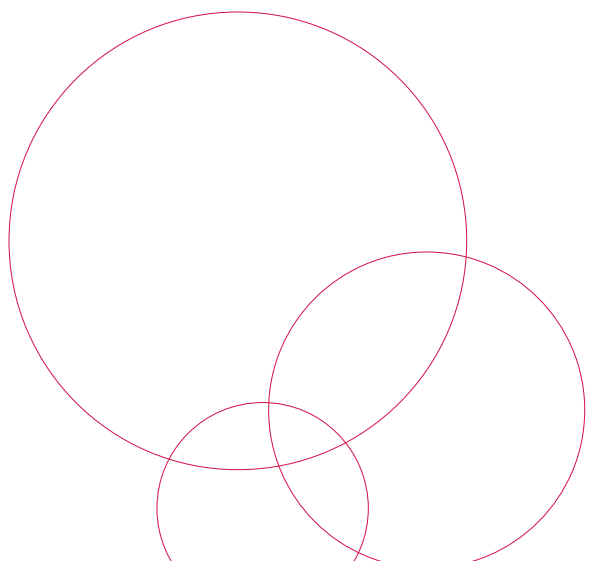
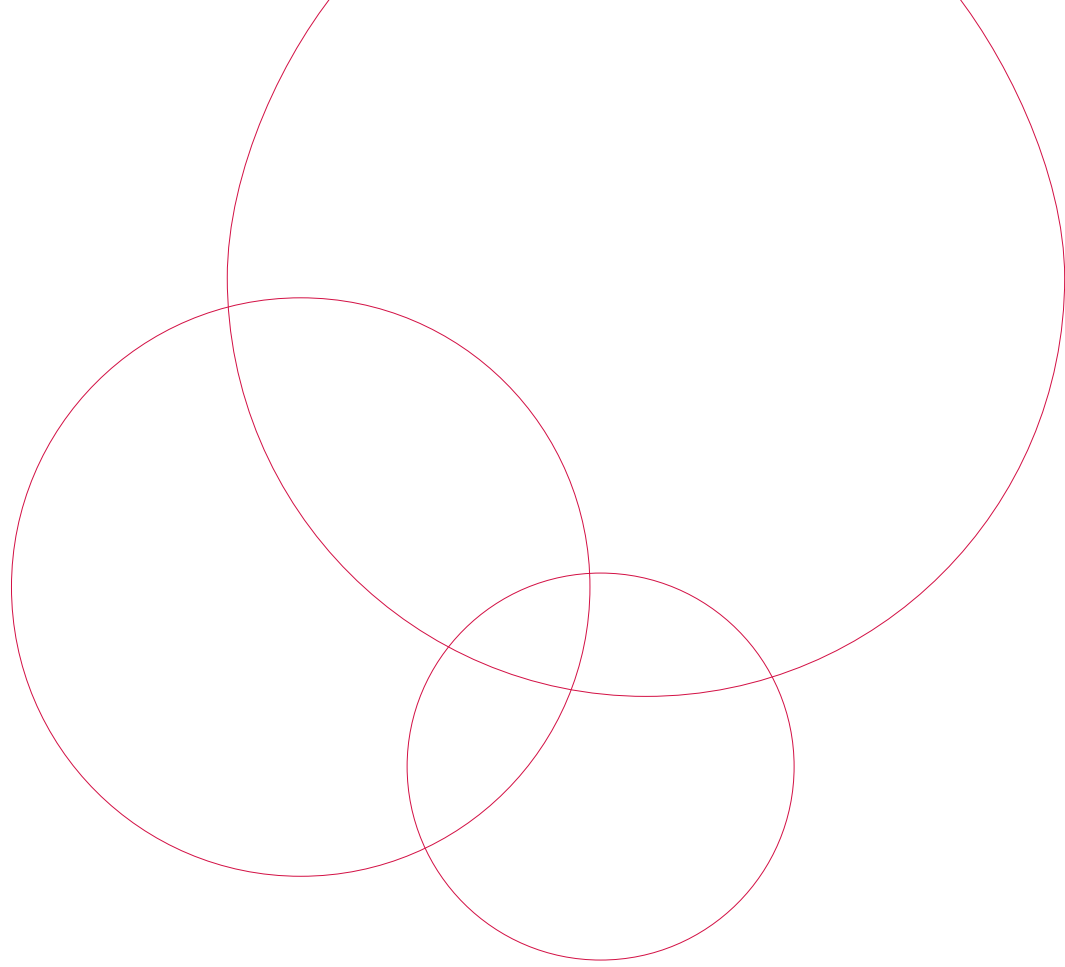
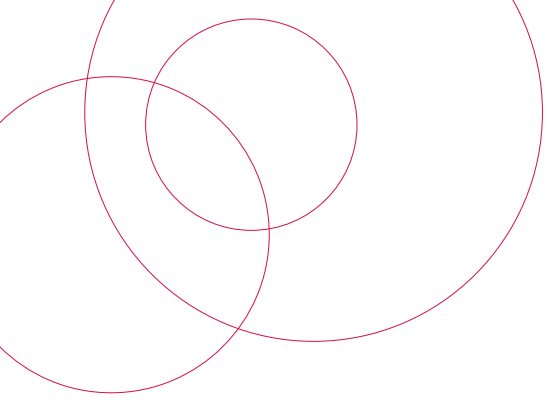
RESEARCH AND POLICY FOR SCHOOLS, CHILDREN, AND FAMILIES

The Ohio Project

□ *Progress in Preventing Childhood/Youth Obesity
How Do We Measure Up?*

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The Ohio Collaborative

The Ohio Collaborative is a research and policy analysis center committed to conducting and disseminating research that can improve schools and the lives of children and families.

Funded initially by the Ohio Board of Regents, the primary goals of the Ohio Collaborative are guided by the policy and research questions that face major state entities such as the Ohio Legislature and the Governor's Office, the Ohio Department of Education, the Ohio Department of Job and Family Services, and the Ohio Board of Regents. Additionally, the Collaborative provides information and assistance to Ohio's school districts, especially those that serve lower socioeconomic areas.

The work of the Ohio Collaborative is carried out in partnership with faculty and graduate associates throughout the Ohio college and university system and under the administration of The Ohio State University.

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The Ohio Project

Progress in Preventing Childhood/ Youth Obesity

How Do We Measure Up?

Introduction

Over the past quarter-century, the prevalence of overweight and obesity among children and youth in the United States has reached epidemic proportions, more than doubling in the 6-11 years age group and tripling in the 12-19 years age group. At present, 16.7% of children and adolescents are overweight and 17.1% are obese (Koplan, et al., 2006). Obesity rates alone for adults have increased from 15% in 1980 to 32% in 2004 (Levi, et al., 2006). These data suggest that future overweight/obesity rates for adults will increase markedly unless substantial efforts are made to reduce incidence of overweight and obesity among children and youth.

Overweight and obesity are not distributed normally across the population. Low-income children and African American children have higher obesity rates (Anderson & Butcher, 2006). From 1999-2004, 23% of teens aged 15-17 from families living in poverty were overweight compared to 14% of those not living in poverty (Meich, et al., 2006). Children and youth with disabilities are at greater risk for becoming overweight than non-disabled peers.

In the 2004-05 school year, the Ohio Department of Health (2006) investigated the prevalence of overweight/obesity for Ohio 3rd graders. This was done because “local data collection does not uniformly apply appropriate equipment, techniques, and body mass index (BMI) calculation” (p.1). Three hundred randomly chosen schools participated and data were collected for 14,543 students. The analysis showed that 17% of 3rd graders were overweight (using current CDC guidelines) while 20.6% were obese. Notable differences were that children eligible for free and reduced school meals were more likely to be overweight or obese, and children in rural counties were more likely to be overweight or obese.

Our national goals for health improvement include reducing the proportion of children and adolescents who are overweight or obese (Healthy People 2010, goal 19-3). The 2010 target for children in the 6-11 age group is 5% and the target for adolescents aged 12-19 is also 5%. It appears, therefore, that we are not likely to achieve the 2010 goal; rather, we are moving further from achieving that goal.

CDC Definitions of Overweight and Obesity for Children/ Youth

Overweight and obesity estimates are made using body mass index (BMI) data, a measure that compares weight to height. BMI data for individual children and youth are compared to other children/youth of the same age and gender and calculated in percentiles. Normal weight for age is from the 5th to 84th percentile. Overweight for age is from the 85th to 94th percentile. Obese for age is equal to or above the 95th percentile.

Health and Economic Costs

The American Academy of Pediatrics (American Academy of Pediatrics, 2003) reported that overweight and obesity are associated with a range of significant health problems during childhood and adolescence as well as being important early risk factors for adult morbidity and mortality. Among the medical problems related to overweight/obesity among children/youth are high blood pressure, hypertension, type 2 diabetes, orthopedic problems, and psychological/behavioral problems. Nearly 60% of overweight children 5-10 years of age have elevated blood pressure and increased insulin levels, both risk factors for heart disease (Wilkinson, et al., 2002). Among adults, overweight and obesity are known risk factors for diabetes, heart disease, stroke, hypertension, gallbladder disease, osteoarthritis, sleep apnea, and some forms of cancer (U.S. Department of Health and Human Services, 2006). Some overweight/obesity conditions have an immediate adverse effect on the health of children and adolescents, while other conditions lead to chronic long-term effects. Daniels (2006) has argued that the overweight/obesity epidemic means that young people may, on average, live less healthy and ultimately shorter lives than their parents.

A major concern underlying the current national effort to combat the overweight/obesity crisis is the current and future health costs to the nation. The United States spends more than \$1.5 trillion on health care each year, a figure that has doubled over the past five years and is expected to double again within six years. The CDC has determined that obesity is now the second leading cause of death in the USA, and the Surgeon General estimates that the direct and indirect costs (costs due to lost work days and the like) of obesity come close to \$1.2 trillion annually (Senate Report 108-345, 2006).

Precipitating Factors

Overweight and obesity stem from the imbalance created when energy intake exceeds energy expenditure. This imbalance develops over time when caloric intake through eating/drinking patterns exceeds energy expenditure through physical activity; thus current efforts tend to focus on improving nutritional choices and increasing physical activity for the 6-19 age group. Currently, children and youth in the United States consume more energy-dense foods and are less physically active than they were a quarter-century ago (Levi, et al., 2006). In food consumption, the primary factors are higher caloric intake, more dietary fat, higher caloric density of foods and larger portions (Trust for America's Health, 2006). These factors are related to less in-home cooking, greater reliance on take-out food, more fast-food meals, and eating in restaurants. Spending in fast-food restaurants has increased from \$6 billion to \$18 billion in the past three decades. Foods served at school breakfasts and lunches and in-school vending machines have often included too many non-nutritious ingredients. The 2000 CDC School Health Policies and Programs Study (SHPPS) data showed that 76.3% of schools sold soft drinks, sports drinks, and fruit drinks, more than 60% sold salty snacks not low in fat and baked goods not low in fat, while only 17.6% sold fruits and

vegetables, and only 14.9% sold low-fat or nonfat yogurt. Schools have increased revenues through contracts with vendors who sell non-nutritious snacks and drinks in vending machines and advertise those products on school property. Schools participate in fund-raising projects in which non-nutritious foods and drinks are featured (Molnar, et al., 2006).

Reductions in physical activity are caused by a number of factors primarily related to what is now commonly referred to as the *built environment*. Factors such as commuting time, communities designed to foster driving rather than walking/biking, and lack of public transit reduce physical activity. Forty years ago, more than half of all U.S. children walked or cycled to school, while today only 10% do (ncdot.org). The average American adult takes 42% fewer walking trips than a generation ago (Wilkinson, et al., 2002). Currently, physical activity among children and youth has decreased while time spent with video games, watching TV, and using the computer for games and for connecting to the Internet has increased. Historically, schools have been embedded within communities and have served as centers for community activity, accessible to most children, youth, and adults by walking or cycling. More recently, especially in metropolitan areas, very large schools are built in more remote, less accessible locations. This is particularly prevalent with middle and high schools (Beaumont & Pianca, 2002).

Since the federal No Child Left Behind (NCLB) legislation, schools have substantially increased their focus on language arts, English, and math. This has led to a reduction in instructional time for other subjects. Most notably for this analysis is a reported 14% reduction in time for physical education since NCLB (Jennings, 2006). Financial strains on schools have also contributed to the reduced amount of physical education, recess, and recreation time students are afforded during the school day. The fact that the vast majority of students are bussed to and from school reduces participation in after-school programs that include physical activity opportunities.

Suburban sprawl and urban decay both contribute to decreased physical activity among persons of all ages. Parents cite five primary barriers to their children's participation in physical activity (PA): transportation problems, lack of opportunities for PA in the immediate area, expense, parents' lack of time, and concerns about neighborhood safety (MMWR Weekly, 2003).

Focus for the Policy/Program Analysis

The primary focus of this analysis will be on state and local efforts to strengthen school programs to combat the overweight/obesity epidemic among children and youth. Although analysts agree that a multifaceted program involving families, community programs, schools, and community infrastructure is necessary to achieve significant reductions in incidence of overweight/obesity, the health problems associated with the increased incidence, and the costs of those problems, the Institute of Medicine (2004) of the National Academies emphasizes the role that schools should play because "schools are one of the primary locations for reaching the nation's children and youth," an assertion that is supported by the American Heart Association (2006) and the President's Council

on Physical Fitness and Sports (*Research Digest*, 2006). As this analysis will show, the most pervasive national effort has focused on leadership from local school wellness councils. These school wellness councils *might* also attempt to engage community programs and to change community infrastructure to support behavioral changes in eating and exercising—for example, to increase the availability of after-school and weekend programs, to alter the community infrastructure to support walking/biking to school, and the development of safe, attractive community spaces for physical activity. Their major focus, however, will be on nutrition and physical activity during the school day. The nation's Chronic Disease Directors ranked school-based approaches such as increasing physical education classes, more recess/free-play time, and improving the nutritional content of foods served and sold in schools as a top priority in combating childhood obesity (Levi, et al., 2006).

The primary legislative impetus for the current efforts to combat the overweight/obesity epidemic among children/youth came from the federal government. In June 2004, Congress passed Section 204 of Public Law 108-265, the Child Nutrition and WIC Reauthorization Act of 2004. Section 204 required that, “each local educational agency participating in a program authorized by the Richard B. Russell National School Lunch Act (42 U.S.C. 1751 et seq.) or the Child Nutrition Act of 1966 (42 U.S.C. 1771 et seq.) shall establish a local school wellness policy” by School Year 2006–07. This important federal initiative also defined the minimum requirements that the local wellness policy should address:

- “1. Includes goals for nutrition education, physical activity, and other school-based activities that are designed to promote student wellness in a manner that the local educational agency determines is appropriate;
2. Includes nutrition guidelines selected by the local educational agency for all foods available on each school campus under the local educational agency during the school day with the objectives of promoting student health and reducing childhood obesity;
3. Provides an assurance that guidelines for reimbursable school meals shall not be less restrictive than regulations and guidance issued by” the U.S. Department of Agriculture Secretary;
- “4. Establishes a plan for measuring implementation of the local wellness policy, including designation of 1 or more persons within the local educational agency or at each school, as appropriate, charged with operational responsibility for ensuring that the school meets the local wellness policy; and
5. Involves parents, students, and representatives of the school food authority, the school board, school administrators, and the public in the development of local school wellness policy.”

As this analysis will show, most states have passed legislation to define minimum requirements for their school wellness councils to establish policies for nutrition, nutrition education, and physical education/physical activity. A review of Ohio's legislative initiatives that define and guide school wellness councils will be the focus of this analysis and will allow for an assessment of Ohio's efforts compared to efforts in other states.

Relevant National and Ohio Data

The following data are meant to provide a beginning picture of where Ohio stands relative to the nation on a range of data related to issues important to the child/youth overweight/obesity epidemic.

The Health Policy Institute of Ohio (Goldberg, 2005) reported that overweight among adult Ohioans was 35% and obesity among adult Ohioans was 24%, the 13th highest level in the nation. They also reported that 13.9% of Ohio's high school students were overweight, the 4th highest in the nation. Thirty-two percent of Ohio's high school students spent three or more hours per day watching television on an average school day and only 41.2% of Ohio's students attended physical education class one or more days during an average school week, compared to 55.7% nationally. They also reported that Ohio ranked 33rd in an evaluation of *Best States for Raising Healthy Kids*, ratings based on 12 fitness and nutrition criteria.

The Trust for America's Health (2006) reported that Ohio ranked 15th (rankings were from worst to best) in adult overweight (24.9%) and 14th in overweight/obesity (61.4%). The "worst" state was Mississippi (ranked 1st) with a combined 65.9%, and the best was Colorado (ranked 50th) with a combined 53.0%. These data were derived from the CDC's Behavioral Risk Factor Surveillance System (BRFSS), a state-by-state telephone survey, which has been shown to underestimate the incidence of these factors, compared, for example, to data from the CDC's NHANES, a national data collection model that includes a physician examination.

The University of Baltimore Schaefer Center for Public Policy (Cotton, et al., 2005) reviews state legislation to control obesity and assigns each state a "grade." This review monitors state legislation related to (1) affecting the prevalence of obesity in general and (2) state efforts to affect childhood obesity. For this report, rankings from the second category are most useful. Legislation in eight areas related to childhood overweight and obesity are monitored for this survey. In 2004, no state received an A grade. Ohio was grouped with 22 other states in receiving a C grade. In 2005, California received the first A, and Ohio was grouped with 20 other states receiving a C, with West Virginia and Pennsylvania moving from the C group to the B group. In 2006 (Cotton, et al., 2007) Illinois, Oklahoma, Pennsylvania, South Carolina, and Tennessee joined California in the A group. Twenty-one states ranked B, while Ohio was among 14 states in the C group.

The Center for Science in the Public Interest (Wootan, et al., 2006) evaluated school nutrition policies of the 50 states "regarding foods and beverages sold outside of the school meal programs through vending machines, school stores, and fundraisers" (Wootan, et al., 2006. p.3). The report, titled *School Foods Report Card*, graded states on food nutrition standards, grade levels to which policies applied, time during the school day to which policies applied, and location on the school campus to which the policies applied. Kentucky, with an A-, rated highest among the states. Twelve states graded B+, B, or B-. Six states graded C+, C, or C-. Seven states graded D+, D, or D-. Ohio was among the 23 states that graded E.

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The United Health Foundation (2006) ranked each state on a large number of health-related components including personal behaviors, community environment, public and health policy, health services, and outcomes. The rankings showed the percentage that each state has above or below the national average for the composite score and the specific score for each of the component area subcomponents. Overall, Minnesota ranked 1st, 21.1% above the national average, while Louisiana ranked 50th with a 20.4% below the national average. Ohio ranked 25th, 3.7% above the national average. The subcomponent of most interest to this analysis was that of “prevalence of obesity,” defined as having an adult BMI rate of 30.0% or higher. In this subcomponent ranking, Colorado was 1st with an adult obesity rate of 17.8% that was 25% lower than the national average, while Mississippi, Louisiana, and West Virginia tied for last with an adult obesity rate of 30.8% that was 25% higher than the national average. Ohio ranked 24th with an adult obesity rate of 24.3%, right at the national average.

The CDC’s Division of Adolescent and School Health (DASH) supports states to build and strengthen their capacities to improve child and adolescent health. DASH funds states in eight program areas: abstinence, asthma, coordinated school health programs, food safety, HIV prevention, professional development, skin cancer prevention, and the youth risk behavior survey (YRBS). Ohio and Utah are the only two states that have not received DASH funding in any of these program areas¹. Overall, 2005 CDC per capita funding was \$11.85 for Ohio and \$20.99 nationally (*The State of Your Health Ohio*, 2006). Estimated per capita state funding for health in Ohio was \$10.85, ranking 41st nationally.

Physical activity and physical education in schools are thought to be important components in combating the overweight/obesity epidemic. A review of state requirements in physical education shows substantial variation (National Association of Sport and Physical Education, 2006). Thirty-five states, including Ohio, mandate elementary physical education; 33 states, including Ohio, mandate middle school PE; and 42 states, including Ohio, mandate high school PE. High school requirements range from seven semesters in Illinois to no specific credit requirement in Oklahoma. The median high school requirement is two semesters. Ohio requires one semester credit. Sixteen states allow for exemptions for PE, but Ohio does not. Twenty-seven states, including Ohio, allow districts to substitute other activities for PE. Ohio is one of three states that does not have state standards for PE and one of 13 states that does not have a PE coordinator in the state department of education. Twenty-two states require PE grades to be reported to parents, but Ohio has no such requirement. Fifteen states require assessment in PE, but Ohio does not.

¹ In the autumn of 1998, Ohio legislators expressed concern over explicit information intended to be included in HIV-prevention education programs for which Ohio had been granted one million dollars by the CDC (10% of the funding was to be used for HIV-prevention education, with the remainder used for other health prevention strategies). Legislators passed an amendment that froze the CDC funds, prohibiting the Ohio Department of Education from using or dispensing the funds. In January 2000, the legislature held two days of hearings on these issues and reached a tentative compromise that would allow the funds to be used in programs that focused primarily on abstinence, but a majority could not be developed and a motion to hold a vote on the compromise failed. As a result, the CDC funding expired without Ohio using it (National Coalition to Support Sexuality Education, 2007). CDC funding for HIV prevention was a prerequisite for applying for funding for other CDC programs.

The Ohio Effort

In June of 2005, the Ohio General Assembly passed legislation (House Bill 66) to form a School Physical Fitness and Wellness Advisory Council. The council was directed to develop guidelines for best practices regarding nutrition education, physical activity for students, school-based activities, and school-business partnerships that promote student wellness. These guidelines were to assist school districts in establishing school wellness policies that would enable them to meet the requirements for nutrition and physical activity specified in the federal Child Nutrition Act of 1966 as amended, including strategies districts could use to evaluate the implementation of their local wellness policies to determine whether or not the goals and objectives specified in the local policies were being met.

The members appointed to the council represented specific Ohio government agencies, professional organizations, and business organizations. Dr. Deborah Owens Fink, a member of the Ohio Board of Education, was appointed as the chair of the School Physical Fitness and Wellness Advisory Council. The council met five times between September and December 2005, with additional communications accomplished between meetings. The outcome of these deliberations was the publication of *Healthier Schools: A Brighter Tomorrow, Evidenced-Based Practices to Jump Start Ohio School Wellness Plans*. The document was organized with 11 “guidelines,” each accompanied by descriptions of “best practices” related to that guideline. The best practices were selected from within the state of Ohio and nationally. The guidelines were as follows:

1. Schools provide an environment that offers and promotes healthy and appealing food and drink choices.
2. Parents, families, and students are educated about healthy lifestyle choices.
3. Schools collaborate with public and private entities to promote student wellness.
4. Schools maximize their participation in federal nutrition programs.
5. Schools maximize their participation in student fitness and physical activity programs.
6. Schools integrate nutrition education and physical activity into their everyday curriculum.
7. Schools provide professional development, support, and resources for staff about wellness.
8. School community leadership demonstrates a commitment to wellness through policies, plans, and action.
9. Schools provide a positive dining environment that encourages a pleasant eating experience.
10. Schools provide and promote social, noncompetitive fitness and activity opportunities.
11. Schools use data to develop, structure, and support their wellness plans.

The Ohio Department of Education sent a memorandum to all district superintendents and food service directors to clarify the federal legislation, address the school wellness policy minimum requirements, and to offer technical assistance and wellness trainers who could visit a region and provide technical support.

The Ohio Project

Beginning in 2000, Governor Taft met with Ohio Department of Health (ODH) director J. Nick Baird, M.D., to begin efforts to combat the overweight/obesity epidemic among Ohioans of all ages. The result was the *Healthy Ohioans* initiative, financed primarily from funds related to the tobacco settlement. The *Healthy Ohioans* initiative is focused on four fronts. The Governor's Buckeye Best Healthy Schools² initiative was launched in 2001 to recognize schools that have adopted policies and practices that place a high priority on healthy outcomes for children. In the first year of the awards program, 603 schools applied and 53 received gold awards, 227 silver awards, and 230 bronze awards. In 2006, 1,929 schools applied and 324 were awarded gold status, 628 silver status, and 645 bronze status. Schools wishing to improve their efforts in school wellness can receive a best practices kit or on-site consultation from an ODH health educator consultant.

The ODH emphasis on community efforts began with cardiovascular health grants to selected Ohio counties and continued in 2005 with the beginning of the Healthy Ohioans – Healthy Communities Parks and Recreation award, recognizing communities in which community groups, schools, parks and recreation programs, and businesses work collaboratively to build healthier communities.

The Centers for Disease Control, building on recommendations in the 2000 *Report to the President*, created a Kids Walk-to-School Program, the goals of which are to increase physical activity by encouraging children to walk or bike to school in groups accompanied by adults. Many states have begun walk-to-school initiatives, encouraging communities to build coalitions to create local and neighborhood environments that support safe walking and cycling to school. In 2005, federal legislation created a national Safe Routes to School Program with an initial appropriation of \$54 million. The legislation required that 10-30% of the funds be used for non-infrastructure-related activities (e.g., public awareness, bicycle safety, funding for trainers and managers of safe routes to school programs, etc.), while the bulk of the funds were to be used to support infrastructural changes. In 2006, the Ohio Department of Transportation announced the Ohio Safe Routes to School Program, with plans to allocate \$19 million over four years to support infrastructure projects such as sidewalks, pedestrian and bike paths, crosswalks, and traffic control, as well as educational and encouragement projects (ODOT, 2006). The initial requests for applications went out in January 2007. ODOT received more than 200 applications totaling over \$23 million for the initial year fund of \$3 million. Awards will be announced at the end of August 2007. Several states have already created state walk-to-school offices that add state funds to the federal initiative and begin to support the development of “walkable environments” at the local level. It appears that ODOT will not use state funds to supplement the federal support nor increase the scope of the program.

² Buckeye Best Healthy Schools applications are sent to all Ohio schools. The current application contains 47 questions designed to assess a school's implementation of healthy policies and practices. Schools return applications to ODH where they are scored.

The Ohio School Wellness Legislative Effort

The Ohio Action for Healthy Kids (OAFHK) organization has provided the leadership in developing proposed legislation related to the school wellness initiative. OAFHK is a partnership of more than 30 Ohio education, fitness, nutrition, and health organizations (Ohioactionforhealthykids.org). OAFHK is divided into 10 regional zones to support a representative infrastructure and to work more effectively at the local level. OAFHK's zone model was borrowed from already existing structure of the Buckeye Association of School Administrators (BASA). This choice to utilize already existing BASA zones allowed for the formation of local groups that were already accustomed to working together. The mentor of each regional zone team is a member of the OAFHK steering committee.

In the summer of 2004, Representative Jon Peterson convened a committee to advise him on the state of child obesity and health in Ohio. In the autumn of 2005, Representative Peterson asked the OAFHK policy committee to meet with him and begin conversations to create model language to create healthier school environments for Ohio's children and youth. Following these meetings, the OAFHK policy committee held four briefings for members of the Ohio House and Senate. In August 2006, Representative Peterson asked the OAFHK leadership to bring together a group to create model legislation that would move Ohio forward in the quest for school programs to enhance the health and well-being of Ohio's children and youth. The OAFHK Advocacy Group, chaired by Shelly Roth, vice president of the Children's Hunger Alliance, was formed with representation from education, physical education, nutrition, and health organizations, as well as representatives from ODE and ODH. The Advocacy Group was divided into three sub-groups (School Wellness Policy, Physical Activity/Education, and School Nutrition). Subgroups met to begin to craft potential legislation related to their focus, then key representatives from the subgroups met to merge the proposals into a single piece of legislation.

The state team goals were to:

1. Ensure that meals offered through all school feeding programs meet federal nutrition standards and expanding participation in the School Breakfast Program.
2. Ensure that healthy snacks and foods are provided in vending machines, school stores, and other venues within the school's control.
3. Provide adequate co-curricular physical activity programs, including fully inclusive intramural programs and physical activity clubs.

At a Health Policy Institute meeting, Representative Peterson had interactions with several persons from Arkansas. Arkansas was an early national leader in passing legislation to guide local school wellness policies. From the outset, the Ohio Advocacy Group was influenced by the Arkansas legislation. During the remainder of 2006 and into early 2007, the Advocacy Group teams held many sub-group meetings and several steering committee meetings. On January 17, 2007, the steering committee presented its draft legislation ideas to Representative Peterson and Representative Strayhorn, who had agreed to become a co-sponsor.

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In February 2007 Senator Gardner approached the leadership of the Ohio Association for Health, Physical Education, Recreation, and Dance (OAHPERD) and asked them to provide ideas and language for a bill to strengthen physical education in Ohio schools. In early spring 2007 Senator Gardner introduced a package of changes for physical education into SB 118. Shortly after SB 118 was introduced, Senator Fedor introduced SB 131 with essentially the same physical education requirements as SB 118. As the OAFHK's team was finishing its draft legislation proposals, the members dropped the physical education section/physical activity proposals assuming that SB 118 and SB 131 would eventually be merged with the nutrition and nutrition education proposals to be introduced in the Ohio House of Representatives.

The Proposed Ohio Legislation

The school wellness provisions inserted into HB 254 are as follows.

Sec. 3301.20. The Department of Education shall employ a physical education coordinator on a full-time basis to provide guidance and technical assistance to school districts, community schools established under Chapter 3314 of the Revised Code, and chartered nonpublic schools regarding physical education and physical activity for students.

Sec. 3301.80. (A) The Ohio Child Wellness Advisory Council is hereby established in the Office of the Governor. The council shall consist of the following members:

- (1) The superintendent of public instruction, or the superintendent's designee;
- (2) The director of health, or the director's designee;
- (3) A member of the State Board of Education, appointed by the state board;
- (4) A representative of the Ohio Dietetic Association, appointed by the association;
- (5) A representative of the American Heart Association, appointed by the association;
- (6) A representative of the School Nutrition Association of Ohio, appointed by the association;
- (7) A representative of the State Planning Committee for Health Education in Ohio, appointed by the committee;
- (8) An elementary school administrator, appointed by the Ohio Association of Elementary School Administrators;
- (9) A middle school administrator, appointed jointly by the Ohio Association of Elementary School Administrators and the Ohio Association of Secondary School Administrators;
- (10) A high school administrator, appointed by the Ohio Association of Secondary School Administrators;

- (11) A representative of the Buckeye Association of School Administrators, appointed by the association;
- (12) A representative of the Ohio Parent Teacher Association, appointed by the association;
- (13) A representative of the American Cancer Society, appointed by the society;
- (14) A representative of the food and beverage industry, appointed by the Ohio chamber of commerce;
- (15) A representative of the Ohio Parks and Recreation Association, appointed by the association;
- (16) A representative of Ohio Action for Healthy Kids, appointed by Ohio Action for Healthy Kids;
- (17) A representative of the Ohio Association of School Nurses, appointed by the association;
- (18) A representative of the Association of Ohio Health Commissioners, appointed by the association;
- (19) A representative of the Ohio chapter of the American Academy of Pediatrics, appointed by the chapter;
- (20) An elementary school teacher, a middle school teacher, and a high school teacher, appointed jointly by the Ohio Education Association and the Ohio Federation of Teachers (two of the teachers shall teach physical education);
- (21) A representative of the Ohio School Boards Association, appointed by the association;
- (22) A representative of the Ohio Association of School Business Officials, appointed by the association;
- (23) A representative of The Ohio State University Extension, appointed by the director of the extension;
- (24) A representative of the Children's Hunger Alliance, appointed by the alliance;
- (25) A representative of the Ohio Association for Health, Physical Education, Recreation, and Dance, appointed by the association;
- (26) A representative of the Ohio Society for Public Health Education, appointed by the society;
- (27) A representative of the Governor, appointed by the Governor;
- (28) A member of the Senate and a member of the House of Representatives, appointed jointly by the president of the Senate and the speaker of the House of Representatives (the members shall be from different political parties).

(B) Appointments to the council shall be made within 30 days after the effective date of this section. All members of the council shall serve at the pleasure of their appointing authority. If any appointing authority disbands, the Governor may choose a suitable organization as a replacement and that organization shall appoint members to the council in the same manner as the disbanded appointing authority.

The council, by a majority vote, shall select a member of the council to serve as chair. For one year after its initial meeting, the council shall meet at least monthly. Subsequent meetings shall be held at least quarterly. Members shall not be compensated.

(C) The council shall make policy recommendations to the state board of education and the Department of Health to promote, coordinate, and implement statewide efforts to improve children's nutrition, physical education, and physical activity through school-based activities and to promote, coordinate, and implement other school-based strategies to improve child wellness. The recommendations shall be based on the guidelines for best practices developed by the School Physical Fitness and Wellness Advisory Council established by Section 206.10.12 of Am. Sub. H.B. 66 of the 126th General Assembly and the school climate guidelines adopted by the state board. The recommendations shall address at least the following:

- (1) Strategies for improving the nutritional value of food and beverages available for sale to students through the following sources:
 - (a) School food service programs operated under section 3313.81 or 3313.813 of the Revised Code;
 - (b) Vending machines located on school property;
 - (c) Stores operated by schools, student associations, or other school-sponsored organizations.
- (2) Strategies for promoting student wellness, including participation in physical education and activity.
- (3) Procedures for monitoring implementation of the nutrition standards established in sections 3313.816 and 3313.817 of the Revised Code by school districts, community schools established under Chapter 3314 of the Revised Code, and chartered nonpublic schools and consequences for noncompliance with those sections. If any statewide standards for physical education or physical activity are enacted by the General Assembly or adopted by the state board, the recommendations also shall address procedures for monitoring implementation of those standards by districts and schools and consequences for noncompliance.
- (4) Methods to ensure that each school district, community school, and chartered nonpublic school has and is implementing a local wellness policy as required by section 3313.82 of the Revised Code and consequences for noncompliance with that section.
- (5) An assessment tool for evaluating the effects of district and school efforts to improve child wellness.

(D) The Department of Education and the Department of Health shall provide technical assistance to school districts, community schools, and chartered nonpublic schools in implementing the recommendations of the council. The departments jointly shall report to the council each year on the status of implementation of district and school efforts to improve child wellness.

The changes for physical education in Ohio schools introduced into Senate Bill 118 included the following provisions.

- Not later than July 31, 2007, the State Board of Education will adopt the National Association of Sport and Physical Education standards K-12 or its own standards K-12. The Ohio Department of Education shall provide standards to districts, and districts may utilize these standards. All standards are voluntary.
- Remove oversight and control of adoption of physical education standards from the General Assembly.
- The Ohio Department of Education shall employ a full-time physical education coordinator in the Office of Curriculum and Instruction who is qualified by a combination of education, license, and experience.
- As schools provide the study of physical education, they shall now include daily, high-quality instruction involving a combination of physical activity and content instruction in each grade K-6.
- School boards and governing authorities should adopt a policy to provide daily, high-quality physical education no later than December 31, 2007.
- Remove changes to high school physical education requirements from the Ohio core.
- Beginning July 2010, increase physical education requirements from one-half Carnegie unit to one full Carnegie unit to graduate from high school.

Senate Bill 131 includes the same provisions as SB 118 with a single difference.

SB 118 requires that, "Any district or community school may utilize the standards." SB 131 requires that, "Not later than July 1, 2009, the board of education of each school district shall adopt the physical education standards. Each school district and community school shall comply with the standards beginning in the 2009-2010 school year."

How the nutrition, nutrition education, and physical education provisions of the three bills will eventually be merged is not known at the date of the publication of this report.

Comparisons With Legislation in Other States

Arkansas – The Model for Ohio’s Plan

Since the Ohio legislation was modeled primarily after the Arkansas legislation, it will be instructive to examine how the two pieces of legislation differ. Act 1220 of 2003 as articulated in House Bill 1583 created a statewide Child Health Advisory Committee charged with coordinating efforts "to combat childhood obesity and related illnesses; to improve the health of the next generation of Arkansans; and for other purposes."

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The composition of the state committee, its meeting requirements, and its responsibilities are similar to the proposed Ohio model. The primary charge to the committee was to develop nutrition and physical activity standards and policy recommendations for:

- Foods sold individually in school cafeterias but outside the regulated National School Lunch Program
- Competitive foods as defined by the USDA and offered at schools through vending machines, student stores, school fund raisers, food carts, or food concessions
- Continuing professional development of food service staff
- The expenditure of funds derived from competitive food and beverage contracts
- Physical education and activity
- Systems to ensure the implementation of nutrition and physical activity standards
- The monitoring and evaluating of results and reporting of outcomes

The act also requires the hiring of a community health professional, a statewide health promotion consultant, and a health promotion specialist. The act prohibits in-school access to vending machines offering food and beverages in elementary schools.

Arkansas was the first state to require an annual body mass index (BMI) percentile by age for each student and the reporting to parents of the possible health effects of BMI, nutrition, and physical activity. In January 2007, the Arkansas House of Representatives Education Committee voted 15-5 to repeal the BMI reporting requirement of the act. Although state data indicated that the increase in obesity among children had leveled off after the wellness act was passed in 2003, concerns about the cost of the project and complaints from parents precipitated the repeal movement. In February 2007, the House passed the bill by a 71-26 vote and sent it to the Senate.

Both the Ohio and Arkansas bills include a general statement about nutrition education, but offer little specificity about the requirements to implement nutrition education in the school curriculum (see the Kansas model on page 20 for an example of a specific requirement for nutrition education). The Arkansas legislation, like the OAFHK proposed legislation, also lacks specificity in terms of school physical education, requiring that local wellness councils seek to “improve the quality of physical education curricula and increase the training of physical education teachers” and to “enforce existing physical education requirements.” The Arkansas Department of Education, however, had previously required that schools must establish strategies to achieve 30 minutes/day of physical activity in grades K-12 and must have begun implementation of those strategies in the 2005-06 school year. The same rules require that PE classes in grades K-6 must have a maximum student-to-adult ratio of 30-1, and, beginning in the 2008-09 school year, K-6 schools must have a ratio of one qualified, full-time PE teacher for every 500 students. Also beginning in 2007-08, K-6 students have to receive a total of 150 minutes/week of physical activity including 60 minutes of PE. Students in grades 7-8 must receive 150 minutes of PA weekly met through a combination of PE, intramurals, activity periods during the school day, and the integration of PA into the academic curriculum.

Students in high school must complete one semester of PE and, in addition, receive a minimum of 150 minutes/week of PA through activities such as walking programs, intramurals, lifestyle wellness education, and organized PA courses.

The other major difference between Ohio and Arkansas is the requirement by the Arkansas Department of Education that each local School Nutrition and Physical Activity Advisory Committee annually assess each school campus wellness initiative by using five modules from the CDC's School Health Index. The results from the annual assessment must be compared to the standards defined by the Arkansas DOE's Physical Education and Health Education Curriculum Framework. The proposed Ohio legislation in HB 254 requires the School Fitness and Wellness Advisory Council to recommend "an assessment tool for evaluating the effects of district and school efforts to improve child wellness." If this provision remains in the bill when it is passed, it would seem to guarantee not only a common assessment tool but would also lead to the development of a state database, just as has been accomplished in the Arkansas legislation.

Kansas – high degree of specificity with modest oversight

In 2005 the Kansas legislature passed SB154 that required local school districts to develop policies and guidelines to provide healthful foods and beverages, physical activities, and wellness education "with the goals of preventing and reducing childhood obesity" (Kansas State Department of Education, 2005). The Kansas Department of Education then developed what are perhaps the most thorough and specific set of guidelines developed in the United States. The model guidelines are divided into three main parts: nutrition, nutrition education, and physical activity, and each part has specific categories. The nutrition section includes categories for school meals, a la carte foods, vending machines, special food events during the school day, and food events after school. The nutrition education section includes categories for the classroom, cafeteria, events during the school day, after-school programs, family and community, and staff wellness. The physical activity section includes categories for physical education classes, PA throughout the day, PA as punishment, recess, before and after school, and family and community. Within each of these categories, guidelines are proposed for three levels: *basic level* guidelines meet all requirements of current federal and state laws and regulations; the *advanced level* incorporates all basic guidelines plus more healthful guidelines; and the *exemplary level* incorporates all guidelines from the basic and advanced levels plus more healthful guidelines. Examples follow in the gray boxes on pages 15-17.

KANSAS GUIDELINES **Category: Nutrition -**

Subsection – A La Carte – all other food and beverage items sold by the school food service program in the school cafeteria or other locations where school meals are served or eaten.

Basic: A la carte items comply with USDA regulations prohibiting the sale of "foods of minimal nutritional value" where school meals are served or eaten during the meal period.

Advanced: A la carte beverages items are limited to:

- Water, non-caloric
- Milk equal to or less than 360 calories
- Soy or rice beverages with not more than 35% of weight from total sugar
- 50-100% juice

Exemplary: A la carte food items are limited to:

- Water, non-caloric
- Only low-fat (1% or 1/2%) and/or skim (non-fat) milk
- Soy or rice beverages with not more than 35% of weight from total sugar
- 100% juice

KANSAS GUIDELINES

Category: Nutrition Education –

Subsection - Cafeteria

Basic: Attractive, current nutrition education materials are prominently displayed in dining areas and are changed at least every nine weeks. Students are encouraged to start each day with a healthful breakfast and to choose nutritious foods throughout the day.

Advanced: Teachers discuss with students the nutrition education materials displayed in the dining areas. Students participate in taste tests and/or surveys to obtain their input on foods offered in the cafeteria.

Exemplary: Teachers collaborate with the school nutrition staff to use the cafeteria as a learning laboratory that allows students to apply critical thinking skills. Students learn about the nutrition requirements for school meals and some students are involved in helping plan menus.

The Kansas law supporting its School Wellness Policy initiative also requires that, “When establishing the wellness policy of the school district, the board of education of each district shall take into consideration the guidelines developed by state board...” (Kansas State Department of Education, 2005a, p. 3). While this seems like a modest level of accountability, the Kansas State Department of Education (KSDE) has developed an innovative model to document the degree to which each district “considered” the state guidelines when developing their local wellness policies and programs.

KSDE created a web-based “Wellness Policy Builder” (WPB) that each school district is required to complete annually (Mackey, 2007). The WPB has a screen for each content area in the guidelines. For each guideline at each school level, the user selects the appropriate status code (not applicable, new goal, in progress, or achieved). After completing and submitting the screen for each content area, the system gives the user a numeric score and an achievement level (e.g., basic, advanced, or exemplary). The WPB then produces reports showing the status of guidelines utilization throughout the state. Schools that do not use the WPB to develop their local policy are required to submit their locally developed policy, including when it was adopted, and a copy of the school board minutes documenting the adoption. To date, 75% of Kansas schools have reported through the WPB, thus achieving a reasonable amount of oversight for compliance with state policy.

Washington – ahead of the curve with help from the Department of Health

In 2004, the Washington State Legislature (Senate Bill 5436) required local school boards to adopt school wellness policies by August 2005, nearly a full year ahead of the federal mandates. The legislation required the Washington State School Directors Association to convene an advisory committee to develop a model school wellness policy. The nutrition section of the model policy provided general guidance on nutrition standards, the food services program, free and reduced-priced food services, and surplus commodities charging the district superintendent to encourage the eating of nutritious meals and snacks by establishing rules for sale of food during the school day. The physical education section of the policy was more specific, requiring the establishment of a comprehensive health and fitness curriculum with a minimum time commitment of 100 minutes per week from grades 1-8. The act required physical educators to use classroom-based assessment strategies and was to be in place by the 2008-2009 school year. It should be noted that states increasing the required minimum time commitment for physical education often allow for a phase-in period, as the change often requires hiring more licensed physical education teachers.

The school wellness effort in Washington was substantially aided by the publication of the Washington State Department of Health’s (2003) *Washington State Nutrition and Physical Activity Plan*. This plan focused on nutrition and physical activity issues in the community and throughout the state. Nutrition objectives included increasing access to health-promoting foods, reducing hunger and food insecurity, and increasing the proportion of mothers who breastfeed their infants and toddlers. Physical activity objectives were to increase access to free or low-cost recreational opportunities for physical activity, increasing physical activity opportunities available to children, and making community environments more accessible for physical activity. The active

community environment was defined as “places where people of all ages and abilities can easily enjoy walking, bicycling, and other forms of recreation” (p. 58). The plan also called for adopting curricula and policies that provided quality, daily physical education for all children. Part of the plan included a strong public awareness agenda that set the stage for better understanding and acceptance of the school wellness initiative that followed. The comprehensive nature of the WDH plan created a broader program initiative and a broader awareness among Washington citizens that one might expect will enhance the planning and implementation of local school wellness initiatives.

The Department of Health plan also included an extensive evaluation and monitoring data plan. As will be discussed later, one of the key issues in the establishment of school wellness councils in all the states is how outcomes will be evaluated at the local level (required by the federal regulations) and at the state level. The Washington DOH plan includes statewide assessment using the Center for Disease Control’s Behavioral Risk Factor Surveillance System (BRFSS), the Population Survey Food Security Supplement, the Pregnancy Risk Assessment Monitoring System, data from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and the School Health Education Profile. Environmental and policy efforts will be evaluated with the Nutrition and Physical Activity Scorecard. Body mass index, nutritional issues, and physical activity levels will be monitored and assessed using the BRFSS, Youth Health Survey, and the Pediatric Nutrition Surveillance System. The success of local community efforts will be measured by an evaluation plan developed at the local level with the assistance of the Department of Health.

Texas – building through a coordinated school health infrastructure

In 2001, the Texas legislature passed SB 19 recognizing the growing problems of children’s health. The legislation defined three primary components: (1) minutes of physical activity (30 minutes daily or 135 minutes weekly in grades 1-6), (2) the establishment of School Health Advisory Councils (SHAC), and (3) the use in all districts of the Coordinated School Health model, coordinating health education, physical education and activity, nutrition services, and parental involvement. The legislation also required that the Texas Education Association provide training in the Coordinated School Health model and that this training be completed by September 1, 2007. In 2005, SB 19 was amended to require the same number of minutes/week in physical education for middle schools. In March 2004, following the passage of the new federal guidelines for school nutrition, the Texas Department of Agriculture released a new Texas School Nutrition Policy that brought nutrition policies of the already active SHACs in line with the new federal requirements. Elementary schools in Texas are required to adopt one of four models to implement their local Coordinated School Health model. The four models are the Coordinated Approach to Child Health (CATCH), which is being piloted in Ohio schools through a partnership of ODE and ODH; Bienester, a model for schools with high Latino populations; Health Wise; and The Great Body Shop.

KANSAS GUIDELINES

Category: Physical Activity-

Subsection - Physical Education Classes

Basic: Students receive 100-150 minutes of PE per week. During PE classes, students engage in moderate to vigorous physical activity at least 15 minutes per day and/or 75 minutes per week.

Advanced: Students receive 151-200 minutes of PE per week. During PE classes, students engage in moderate to vigorous physical activity at least 20 minutes per day and/or 100 minutes per week.

Exemplary: Students receive more than 200 minutes of PE per week. During PE classes, students engage in moderate to vigorous physical activity at least 30 minutes per day and/or 150 minutes per week.

South Carolina – moving up quickly

In the initial state childhood obesity rankings of the University of Baltimore Obesity Report Card, South Carolina earned a C (as did Ohio). In the 2006 rankings, South Carolina had moved into the elite A group with five other states. The initiative began with a comprehensive review of the state's efforts in school nutrition and physical activity conducted by the State Department of Education Task Force on Student Nutrition and Physical Activity. In a series of legislative actions in 2005-2006, the South Carolina General Assembly used these guidelines to dramatically change the nutrition and physical education standards in the state and adopted the Coordinated School Health model for local districts to implement the federal requirements related to school wellness councils. Each school is to have a Coordinated School Health Advisory Council (CSHAC) to assess, plan, implement, and monitor district and school health policies and programs, including the district wellness policy. Districts are also required to include the wellness plan goals and progress towards meeting those goals in the district's strategic plan.

Legislation requires the board of education to establish nutritional requirements for school food service meals and competitive foods recommended by the State Department of Education Task Force on Student Nutrition and Physical Activity, the National School Lunch Act, and the most recent applicable Dietary Guidelines for Americans. Districts are required to make a proactive effort to encourage students to make nutritious food choices by ensuring a variety of healthful food choices whenever food is sold or served on district property or district-sponsored events, regulate the sale or serving of foods that are high in fat, sodium, or added sugars, and to ensure that meals served by the school food services comply with state and federal laws.

South Carolina had already established itself as a national leader in physical education by adopting state standards for physical education and putting into practice the nation's first state assessment system for outcomes in physical education (Rink & Mitchell, 2003). The recent school wellness legislation requires that students in grades K-5 complete an average of 150 minutes/week physical education and physical activity (60 minutes in PE and 90 minutes in PA) with a student-to-teacher ratio of no more than 28:1. Additionally, each elementary school must appoint a physical education teacher to serve as its physical education activity director to plan and coordinate opportunities for student physical activity that exceed the designated weekly instructional time. All high school students are required to complete two credits of health and fitness. The legislation also requires a phase-in of student-to-certified physical education teacher ratios. By 2006-2007, the ratio for elementary schools is to be no more than 700:1, then 600:1 by 2007-2008, then 500:1 by 2008-2009.

Schools are required to report yearly the number of minutes in physical education and the minutes of additional physical activity students receive daily with a weekly total. All schools must administer the South Carolina Physical Education Assessment in the 2nd, 5th, and 8th grades, as well as in high school. Individual student fitness status must be reported to parents/guardians during a student's 5th- and 8th-grade and high school physical education courses. The South Carolina legislature pledged \$23 million over three years for districts to hire an additional 250 physical education teachers in order for elementary schools to boost physical activity time.

North Carolina – embedding school wellness efforts within a comprehensive state effort

The North Carolina State Board of Education policy requiring local school health advisory councils was created in 2003 and amended in 2005. The local councils are required to be organized with representatives from the school and community in the eight areas of a coordinated school health program that had previously been adopted in North Carolina. The legislation does not include specific requirements related to school nutrition and school meals, but one can assume that they, like Texas, are required to meet new federal standards defined in the Child Nutrition and WIC Reauthorization Act of 2004. The legislation requires elementary schools to “consider the benefits of and move toward having 150 minutes per week with a certified physical education teacher throughout the 180-day school year.” Middle schools are advised to consider and move towards having 225 minutes per week in PE. Additionally, the policy requires that all K-8 students be provided a minimum of 30 minutes daily of moderate to vigorous physical activity (in PE, PA activity periods, recess, etc.). The act requires all districts to report annually, including the minutes of PE and PA for each school within the district.

While the board of education policy is a step forward for the state, its importance needs to be contextualized within the larger state initiative titled EatSmartMoveMoreNC (Caldwell, et al., 2006), a comprehensive five-year plan (2007-2012) to prevent overweight, obesity, and related chronic diseases in North Carolina. This state plan was built on connecting a number of earlier plans to combat overweight and obesity that had been developed by various governmental agencies and state organizations such as:

- FitTogetherNC – a statewide campaign to equip individuals, families, and communities with tools they need to address overweight and obesity.
- N.C. Health and Wellness Trust Fund’s *Childhood Obesity in North Carolina*, a report describing the causes of the epidemic and developing realistic recommendations for addressing it.
- North Carolina Blueprint for Changing Policies and Environments in Support of Healthy Eating – a community guide for improving nutrition.
- North Carolina Blueprint for Changing Policies and Environments in Support of Increased Physical Activity – a community guide for increasing physical activity.
- Moving Our Children Toward a Healthy Weight – A leadership plan to raise awareness about childhood overweight and recommendations to address changes at community and individual levels.

EatSmartMoveMoreNC has four primary goals with measurable objectives that are to be reached by 2012: (1) increase healthful eating and physical activity opportunities for all North Carolinians by fostering supportive policies and environments; (2) increase the percentage of North Carolinians who are at a healthy weight; (3) increase the percentage of North Carolinians who consume a healthful diet; and (4) increase the percentage of North Carolina adults, youth, and children ages 2 and up who participate in recommended amounts of physical activity. The objectives are specific,

measurable, attainable, relevant, and time-oriented. Baseline data for each of the objectives under each goal were established through various national and state databases. Data from 2001-2005 were used to establish the baseline measures for each objective.

EatSmartMoveMoreNC includes an extensive list of strategies to address the objectives and encourage their attainment. The strategies are defined under three categories: individual and family strategies, community and school strategies, and policy and environmental strategies. The community and school strategies are the most extensive of the three categories. It is clear that for the 2007-2012 period, North Carolinians will be seeing and listening to efforts that bring their attention to the issues defined under the objectives. Additionally, it is clear that EatSmartMoveMoreNC understands that the primary action must take place at the local level. It will be interesting to see the degree to which local school health advisory councils are assisted in their efforts because they can embed their efforts and gain support from the comprehensive state effort.

California – first to the “A” level and for good reason

California was the first state to earn an A on the University of Baltimore’s yearly review of state legislation to stem the childhood obesity epidemic. Governor Schwarzenegger developed a *10-Step Vision for a Healthy California* and convened a 2005 summit that resulted in the publication of the *California Obesity Prevention Plan: A Vision for Tomorrow, Strategic Actions for Today*, (California Department of Health Services, 2006). This plan identified strategic actions to be taken under four goals:

1. Ensure state-level leadership and coordination that reaches into communities across the state.
2. Create a statewide public education campaign that frames healthful eating and active living as California living.
3. Support local assistance grants and implement multi-sectoral policy strategies to create healthful eating and active living community environments.
4. Create and implement a statewide tracking and evaluation system.

California Senate Bills 12 and 965 defining the state’s strategies for local school wellness councils were introduced as part of this state initiative. The California Department of Education provided guidance with its *Healthy Children Ready to Learn* white paper. The state budget for 2006 supported this agenda with the following investments.

- \$40 million to hire more credentialed physical education teachers
- \$500 million for the purchase of PE, art, and/or music supplies and equipment to improve and expand the infrastructure of school programs
- \$3 million to meet increased demand for the School Breakfast Program and the California Fresh Start Pilot Program to increase the number of students receiving nutritious breakfasts
- \$15 million to revitalize the School Garden Program so that students can experience the important educational benefits of growing fruits, vegetables, and plants

Of particular interest in all of these state documents is the linking of better nutrition and more physical activity to school attendance and student achievement: “Adoption of school wellness policies supports a school environment in which active and well-nourished students are more likely to attend school and are better prepared to learn” (California Department of Education, 2005).

The California school wellness model, like several others cited here, utilizes an already existing 2003 commitment to the eight-component Coordinated School Health model. The legislation divided the recommendations into two categories: (1) recommended policies and programs and (2) requirements. Examples of the requirements for nutrition are:

- The only beverages that shall be sold are: water with no added sweeteners, two-percent, one-percent, or non-fat milk or rice or soy milk, preferably 100% but at least 50% fruit juice with no added sweeteners, vegetable juice with at least 50% vegetable and no added sweeteners.
- All school meals must meet or exceed nutrition requirements established by local, state, and federal requirements.
- School food service departments should use either the USDA or SHAPE California nutrient-based menu planning options as the basis for meal menu planning.
- The healthiest lunch choices, such as salads and fresh fruit, should be prominently displayed in cafeterias to encourage students to make healthful choices.
- The school district should eliminate the marketing and advertising of unhealthful food and beverages.

Examples of the requirements for physical education and physical activity are:

- A minimum of 200 minutes of PE for every 10 school days in grades 1-6.
- A minimum of 400 minutes of PE for every 10 school days in grades 7-12.
- High school students who are exempt from two years of PE in grades 10-12 must be provided with the opportunity to participate in a variety of PE elective courses.
- PE is delivered by a teacher credentialed for PE.
- School districts will administer a physical fitness test annually to all students in grades 5, 7, and 9 during the months of February-May.
- Student involvement in other activities involving physical activity (e.g., interscholastic or intramural sports, band, ROTC, drill team, etc.) should not be substituted for meeting the PE requirement.

The nutritional and physical education recommendations and requirements are comprehensive and among the most rigorous of the states reviewed for this analysis.

The assessment of local school wellness program implementation and outcomes is left primarily to the local district. State law requires that the local school board be involved in establishing goals for the wellness policy as well as success indicators, a reporting methodology, and frequency of school wellness council reporting to the board. The district superintendent is charged with recommending

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specific quality indicators to the board. The state Obesity Prevention Plan, however, includes requirements for creation of an evaluation and accountability agenda to improve California's data systems. The plan includes the following:

- Consensus or standardized measures of active living and healthful eating
- Studies that identify barriers to active living and healthful eating
- Studies that compare obesity rates for communities with access to healthful eating and active living environments and those without access to these environments
- Longitudinal studies that follow people with obesity and without obesity over time to track health impacts, obesity-related conditions, and health care costs.

The plan also recommends that standardized health indicators such as physical activity, healthful eating, social norm change, and healthy community environment measures be incorporated into all relevant statewide surveys.

Complicating Factors for Ohio

Several factors potentially complicate the passage of robust state legislation supporting school wellness initiatives and the capacity of local school districts to meet or exceed new state requirements. It is clear that whatever the benefits of No Child Left Behind, it has created substantial tensions at both the state and local levels that impinge upon the development of other initiatives (Jennings, 2006). Reading and mathematics get extra attention in school timetables at the expense of other approved curricular subjects such as social studies, science, art, music, and physical education. Time allocated for recess or physical activity breaks is also affected. Strong state accountability measures are particularly focused on student performance in state exams at the elementary school level. School administrators and teachers respond to the accountability system with stronger efforts in the subjects featured in the state tests. Although the school wellness councils will certainly focus on K-12 issues in their districts, there is little doubt that a major focus will be on nutrition, nutrition education, and physical education/physical activity in elementary schools.

The factor even more likely to impinge on Ohio's effort to enable and fund school wellness policies and programs at the district level is the continuing impact of the 1997 Ohio Supreme Court ruling that the school funding system was unconstitutional, ordering a complete and systematic overhaul of the system to be enacted within 12 months (Brickler & Eckler 2006)—what has become widely known as the *DeRolph* case. The main issue was the over reliance on local property taxes for school funding, thus violating the Ohio Constitution, which requires that the state is responsible for a “thorough and efficient system of common schools throughout the state” (Section 2, Article VI). In 1997, State defendants filed a motion for reconsideration and clarification, particularly in relation to the role of property taxes in the new funding formula. The Court responded by finding that property taxes could be used as part of the funding solution, but they may no longer be used as the primary source of funding.

Over the next two years, the Supreme Court entertained reconsideration in what are known as *DeRolph II* and *DeRolph III*. In November 2001, the Court referred the matter to a settlement conference to be presided over by a master commissioner. In March 2002, the master commissioner reported that no agreement had been reached. In November 2001, the Court granted the State's motion for reconsideration of *DeRolph III*. In December 2002, in a 4-2 decision, the Court vacated *DeRolph III* and made *DeRolph I* and *II* the law of the case. The Court has not taken up the issue again.

Ohio schools are funded primarily through a local property tax. Property taxes are voted upon as a specified millage. Each mil generates \$1 for each \$1000 of property value. Ohio HB920 limited the dollar amount a district may collect to the amount the millage brought during the original vote (e.g., the amount cannot be indexed to reflect inflation). As costs increase yearly, the voted millage would be decreased to keep the dollars constant. Local property taxes are supplemented by state and federal dollars, either targeted for particular educational programs or distributed to districts according to formula.

What this has meant for school districts, especially those with lower property wealth, has been the difficulty in sustaining budgets supporting their schools when the budgets are essentially reduced by inflation each year and the districts are required to go back to voters regularly to seek support for additional funding to keep up with increased costs and inflationary pressures³. This tends to make school administrators wary of new programs that, while useful and even necessary, come essentially as unfunded mandates in already difficult budgetary situations. In 2007, a movement began to bring forward a Constitutional Amendment (known as "Getting it Right for Ohio's Future") on the November 6, 2007, ballot that would reduce reliance on property taxes to support schools and require a higher state share for school funding.

It would appear that the school nutrition portion of local school wellness councils may be put in place and operated without serious budget implications, especially since food and beverage vendors, understanding the federal requirements, have begun to respond so that contracts with districts, from which districts have received valuable additional funding, can be sustained with more nutritious foods and beverages.

The same cannot be said for physical education and physical activity programs in schools. The national standard recommended for physical education is 150 minutes/week. For Ohio schools to meet this standard, a substantial hiring program would be required, bringing additional expense to districts (see the South Carolina and California descriptions for states that have recognized this with state funds to hire new PE teachers). As shown in this analysis, several states are mandating a teacher-to-student ratio in elementary and middle school PE. This is another requirement that would mean additional PE staff in schools.

3 From 1998-2007, 1,708 levies to support local schools were put forward in Ohio with 52.6% of the levies passing (Candisky, 2007).

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How Does Ohio Measure Up?

Ohio responded to the 2004 federal mandate to form local school wellness councils when the General Assembly created the School Physical Fitness and Wellness Advisory Council, whose deliberations culminated in ODE's publication of *Healthier Schools: A Brighter Tomorrow, Evidenced-Based Practices to Jump Start Ohio School Wellness Plans*. This initiative provided guidance to local school districts but did not provide a list of specific requirements mandated by the state.

The OAFHK Advocacy Group formed in 2005 to begin to draft recommendations for legislation that would more clearly specify requirements for local school districts as they proceeded in developing their local wellness council plans (see pages 9-10). The plan was for the legislation to be introduced in summer 2007. The result of their efforts was the introduction of HB 254, Senate Bill 118, and Senate Bill 131.

If the Senate Physical Education bills are merged successfully with the more nutrition-focused bill introduced in the House and a combined bill is passed, it would provide a major step forward for Ohio. The legislation is particularly specific and complete on the issues of school nutrition. In that area it compares favorably to the exemplary states cited in this analysis. Nutrition education, on the other hand, is cited only in the general requirements for the Local Wellness Committees, where they are instructed to adopt goals for nutrition education. The Kansas legislation (see page 16) shows more specific requirements for nutrition education.

On June 30, 2007, the Ohio budget bill signed by Governor Strickland included the following provisions for physical education:

- Adopt PE standards by the State Board of Education by December 31, 2007.
- Create a staff position for physical education within the Department of Education by December 31, 2007.
- Remove PE Standards from concurrent approval of the General Assembly.
- Require that each school district, by October 31, 2007, report how many minutes per week students spend in PE and how frequently instruction is provided per week for each grade level.

These changes, while improvements over the current situation in Ohio, are weak compared to the states reviewed in this report; indeed, none of the provisions would require school districts to do anything different than they are now doing.

The other unknown at this point is what the Advisory Council might do to fulfill the requirement that it creates "an assessment tool for evaluating the effects of district and school efforts to improve child wellness." If the requirement in the proposed House legislation that each Local Wellness Committee must report "progress in meeting its goals based on the assessment tool identified by the Ohio Child Wellness Advisory Council," this would seem to ensure a common evaluation process across the state. The state regulation, defined in *Healthier Schools: A Brighter Tomorrow*, guideline 11, is that "schools use data to develop, structure, and support their wellness plans." Furthermore, the advice is for local councils to use the ODE "logic model" and *choose* from the 12 evaluation tools described in that document. How this is reconciled will determine whether Ohio will have a common

evaluation process or whether each local district will be free to develop its own evaluation model. If the latter prevails, then the development of a state database that informs Ohioans of progress towards improving the health and well-being of its children and youth would likely fall to the Ohio Department of Health (see section on Washington on pages 16-17 for an example of that strategy).

The Evaluation Component

In 2006, the Institute of Medicine (IOM) of the National Academies published “Progress in Preventing Childhood Obesity: How Do We Measure Up?” (Koplan, et al., 2006) as a follow-up to its 2004 report “Preventing Childhood Obesity: Health in the Balance.” The primary thrust of the 2006 report is to provide the rationale for comprehensive evaluation of nutrition and physical activity policies, programs, and interventions: “Given the numerous changes being implemented throughout the nation to improve the dietary quality and extent of physical activity for children and youth, an overarching assessment of progress in preventing childhood obesity necessitates both the tracking of trends across the nation and a more detailed examination of lessons learned through the evaluations of relevant interventions, policies, and programs” (p.20). Evaluation is defined as “the systematic assessment of the quality and effectiveness of a policy, initiative, or other action to prevent childhood obesity” (p. 38).

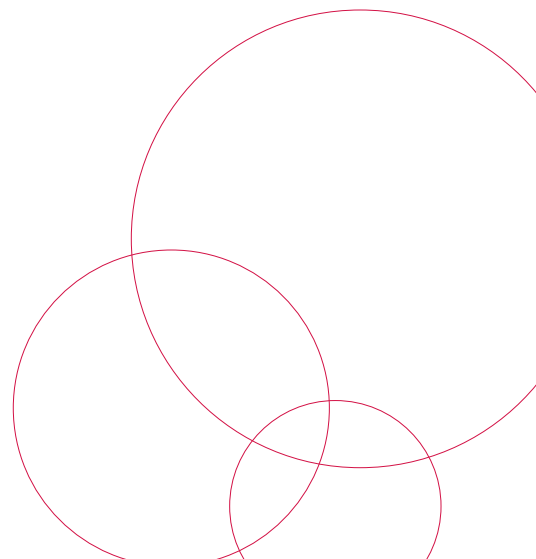
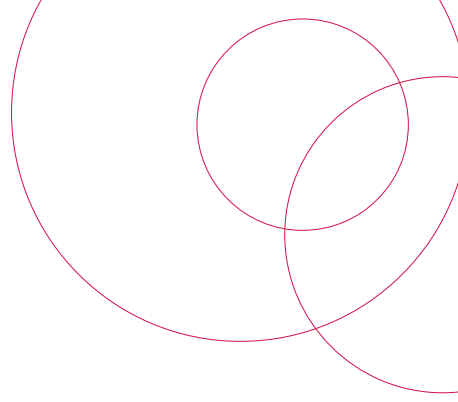
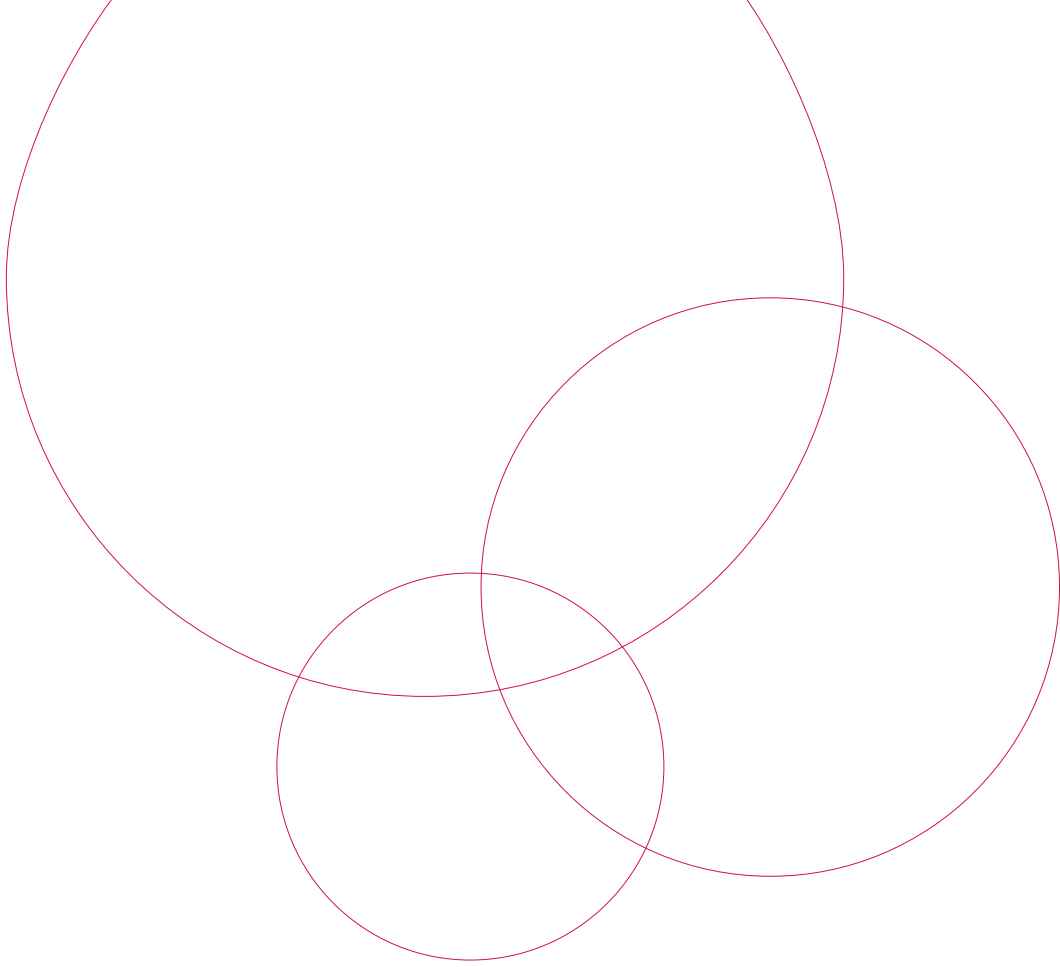
A complete evaluation program involves three different types of assessment. Formative evaluation focuses on what is needed and the feasibility of implementing an intervention in a particular setting. Process evaluation assesses whether the policy or program is being implemented as intended. Outcome evaluation assesses the degree to which the policy or program achieved its intended objectives (see gray box at right). The utilization of evaluation and research findings to identify best practices is the surest way to ensure that state and local efforts to combat the child and youth obesity epidemic are actually working. Part of this effort should include data from surveillance systems that are integrated to offer usable data at the state and national levels. It would appear that state departments of health are the most likely source for the expertise to sustain a statewide surveillance system.

Local wellness councils should be encouraged to examine a range of outcomes, some proximal and some distal. For example, there is some beginning evidence that nutrition and physical activity, of the right kinds and provided at the appropriate times, can increase student attendance and academic performance—two important outcomes that are not typically considered as part of the overweight/obesity prevention agenda. Short-term outcomes (such as increased time spent in physical activity or reduced time spent in sedentary activities such as watching television or playing video games) will show changes more quickly than reductions in BMI or improved physical fitness test scores. When changes in proximal outcomes are linked to changes in more distal outcomes, the evidence base grows stronger. When decisions are made at the state level to ensure uniformity in at least part of the local wellness council measurement program, such as the Arkansas legislation that requires local councils to use the CDC’s School Health Index as a primary measurement tool, the chances of creating a useful state database are greatly increased.

The IOM suggests that six overriding principles should guide policy and program evaluation (p. 44).

- Evaluations of all types—no matter the scale or level of complexity—can contribute to a better understanding of effective actions and strategies.
- Defensible and useful evaluations require adequate and sustained resources and should be a required component of budget allocations.
- Evaluation is valuable for all sectors of obesity prevention.
- Evaluation is valuable at all phases of childhood obesity prevention actions, including program development, program implementation, and assessment of outcomes.
- Useful evaluations are contextually relevant and culturally responsive, making full use of a repertoire of methodologies.
- Evaluation should be a fundamental component of meaningful and effective social change by stakeholders engaged in a range of dissemination activities to promote the use and scaling up of effective policies.

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