

**Mississippi Kids Count:
Healthy Schools in Mississippi**

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Table of Contents:

INTRODUCTION	2
THE CURRENT STATE OF HEALTHY SCHOOLS IN MISSISSIPPI.....	4
OTHER STATES' EFFORTS TO CREATE HEALTHY SCHOOLS	9

I. INTRODUCTION

Schools play an incredibly influential role in children's lives. In addition to being the primary places where children are educated, schools influence children's health and wellbeing by providing opportunities for physical activity, meals, and health services. Children spend more than one-third of their waking hours at school – often between 6 and 7 hours per weekday.¹ They get much of their physical activity through physical education, recess, and athletics programs. Many students eat up to two meals and snacks each day at school, and when they become ill or injured, school nurses and counselors are the ones who treat them.

These non-classroom aspects of school have very real implications for children's well-being. Children benefit from physical activity by building and maintaining healthy bones and muscles, reducing the risk of obesity and chronic diseases such as diabetes and cardiovascular disease, reducing feelings of depression and anxiety, and promoting psychological well being.² Additionally, physical activity programs help children develop social skills, reduce risk-taking behaviors, and provide short-term cognitive benefits.³ The food served at school also influences children's health. Consumption of sugar-sweetened beverages⁴ and snack foods,⁵ sometimes served in school cafeterias and vending machines, may predict weight gain in children. Many health consequences are associated with childhood obesity: obese children are more likely to become obese adults⁶ and they are at higher risk of developing cardiovascular disease,⁷ certain cancers,⁸ diabetes,⁹ and asthma.¹⁰

When children are ill, having more nurses at school means students are more likely to receive services and follow-up for chronic diseases, depression, unintended pregnancy, vision problems, and school-related injuries.¹¹ School health education programs also play an essential role in

¹ Table 1.8: Average Length of School Year and Day, By Affiliation: 1993-94, U.S. DEPT. OF EDUC., NAT'L CTR. FOR EDUC. STATISTICS, <http://nces.ed.gov/pubs/ps/459t1080.asp>.

² Physical Activity Guidelines Advisory Comm. Report, U.S. Dept. of Health and Human Services (2008).

³ Howard Taras, *Physical Activity and Student Performance at School*, 75(6) J Sch Health.214, 214-218 (2005).

⁴ Margaret Carroll, Katherine Flegal, Cynthia Ogden, & Clifford Johnson, *Prevalence and Trends in Overweight Among US Children and Adolescents, 1999-2000*, 288 JAMA 1728-1732.

⁵ Cara B. Ebbeling et al., *Effects of Decreasing Sugar-Sweetened Beverage Consumption on Body Weight in Adolescents: A Randomized, Controlled Pilot Study*, 117 PEDIATRICS 673, 680 (2006).

⁶ Shumei S. Guo, Wei Wu, William C. Chumlea, & Alex F. Roche, *Predicting Overweight and Obesity in Adulthood From Body Mass Index Values in Childhood and Adolescence*, 76 AM J CLIN NUTRITION 653, 658 (2002).

⁷ Aviva Must et al., *Long-Term Morbidity and Mortality of Overweight Adolescent: A Follow-Up of the Harvard Growth Study of 1922 to 1935*, 327 N ENG. J MED. 1350, 1355 (1992).

⁸ Susan Schoff & Polly Newcomb, *Diabetes, Body Size, and Risk of Endometrial Cancer*, 148 AM J EPIDEMIOL. 234, 240 (1998).

⁹ Richard Mahler & Michael Adler, *Clinical Review 102: Type 2 Diabetes Mellitus: Update on Diagnosis, Pathophysiology, and Treatment*, 84 J CLIN ENDOCRINOL METAB 1165, 1171 (1999).

¹⁰ Helen L. Kwon et al., *Harlem Children's Zone Asthma Initiative. Childhood Asthma and Extreme Values of Body Mass Index: The Harlem Children's Zone Asthma Initiative*, 83 J URBAN HEALTH 421, 433 (2006).

¹¹ Martha Guttu, Martha Engelke, & Melvin Swanson, *Does the School Nurse-to-Student Ratio Make a Difference?*, 74(1) J SCH HEALTH 6, 9 (Jan. 2004).

building healthy children. These programs can reduce risky behaviors such as tobacco use, poor nutrition, lack of physical activity, drug and alcohol use, and violence.¹²

The nation as a whole has tuned in to the growing problem of poor childhood health. Much has been made recently of the role schools can play in mitigating the childhood obesity epidemic. First Lady Michelle Obama's "Let's Move!" campaign to end childhood obesity aims to improve the Child Nutrition Act in part by encouraging healthier food in schools and increasing kids' physical activity.¹³ Many states have used legislative approaches to address these issues by increasing public schools' focus on students' health. As a recent example, the District of Columbia passed a Healthy Schools Act in May 2010 to combat childhood obesity in the District. In addition to several other features, the Act increases funding for school lunches, requires schools to serve free breakfast, sets a goal of 60 minutes of physical activity for students each day, and triples the amount of health and physical education currently offered.¹⁴

Among Mississippi's children, an extremely high 44.4 percent are overweight or obese the state is among those making an effort to confront this issue through recent legislation.¹⁵ The Healthy Students Act of 2007 requires schools to take specific actions to make them healthier environments for students. The state has seen real improvement since the Act's passage, including significant increases in the proportion of students receiving a physical education curriculum.¹⁶

However, there remain problems that Mississippi's legislative efforts have not sufficiently addressed. Mississippi does not have a state policy on recess¹⁷ and twelve of the state's school nutrition standards have met with low compliance.¹⁸ Twelve school districts in the state have no school nurses, and the state student to nurse ratio of one nurse for 1092 students falls well short of the optimal ratio of one nurse for every 750 students.¹⁹ Finally, based on the rates of

¹² *Health Educ. Fact Sheet*, THE AMERICAN CANCER SOCIETY, THE AMERICAN DIABETES ASSOCIATION, AND THE AMERICAN HEART ASSOCIATION (2008), <http://www.everydaychoices.org/082008> (click "Health Ed Fact Sheet").

¹³ *USDA Highlights Efforts to Improve School Meals and Health of Nation's Children*, USDA FOOD AND NUTRITION SERVICE (JULY 21, 2010), <http://www.fns.usda.gov/cga/pressreleases/2010/0190.htm>.

¹⁴ *Healthy Schools Act of 2010*, MARY CHEH: WARD 3 DC COUNCIL (2010), http://www.marycheh.com/index.php?option=com_content&view=article&id=98&Itemid=79.

¹⁵ *Parents', Youth and Policymakers' Perspectives on the Miss. Healthy Students Act of 2007: Baseline Findings*, CTR. FOR MISS. HEALTH POLICY (Oct. 29, 2009),

http://www.mshealthpolicy.com/documents/MSUYear1_FinalReport.pdf.

¹⁶ *Id.*

¹⁷ *State School Healthy Policy Database*, NAT'L DATABASE ASS'N OF STATE BOARDS OF EDUC. (Sept. 16, 2010), http://www.nasbe.org/healthy_schools/hs/state.php?state=Mississippi#Physicalpercent20Education.

¹⁸ *Perspectives*, CTR. FOR MISS. HEALTH POLICY, *supra* note **ERROR! BOOKMARK NOT DEFINED.**

¹⁹ *School Nurses in Mississippi*, CTR. FOR MS HEALTH POLICY (Feb. 2009), <http://www.mshealthpolicy.com/documents/SchoolNurseBrief2009-2-17.pdf>.

childhood depression and suicide in Mississippi, the state's school counseling services may be inadequate.²⁰

It is our responsibility to make sure that our schools provide an environment in which children can thrive both intellectually and physically. Mississippi should invest in its children and young adults by ensuring that they have a school environment that will help them grow into healthy and productive adults. This paper will discuss the efforts made in Mississippi and throughout the country to provide such environments to our children, with special attention on what has worked and how Mississippi can improve the health of its schools across a range of indicators.

II. THE CURRENT STATE OF HEALTHY SCHOOLS IN MISSISSIPPI

The Healthy Students Act

According to the Center for Disease Control and Prevention (CDC), 42.4 percent of Mississippi school children today are heavier than their recommended weight, and 23.9 percent are considered obese.²¹ This gives Mississippi one of the highest rates of childhood obesity in the country.²² To combat this problem, the CDC recommends better health education, more physical education and physical activity programs, and healthier school environments.²³ Mississippi legislators responded to the obesity problem with the Healthy Students Act of 2007, which promotes all three of these CDC recommendations. The Act requires public schools to provide increased amounts of physical activity and health education instruction for K-12 students. It mandates 45 minutes per week of health education instruction and 150 minutes per week of activity based instruction in Grades K-8.²⁴ In grades 9-12, there is a ½ Carnegie Unit, meaning 60 hours of study per year, in health education required for graduation and ½ Carnegie Unit in physical education required for graduation.²⁵

In 2010, Mississippi passed legislation to assist and incentivize school districts to comply with the Healthy Students Act. Section 37-11-8 of the Mississippi Code requires the Office of Healthy Schools within the Department of Education to develop and implement the USDA's HealthierUS School Initiative to facilitate healthier choices and practices by local school districts through the promotion of healthier school environments.²⁶ The Office of Healthy Schools provides technical assistance to schools that participate in the challenge and financial incentives to schools

²⁰ *Miss. Youth Mental Health Fact Sheet*, NAT'L CTR. FOR MENTAL HEALTH CHECKUPS AT COLUMBIA U. (2008), <http://www.teenscreen.org/mississippi-youth-mental-health-fact-sheet>.

²¹ *Perspectives*, CTR. FOR MISS. HEALTH POLICY, *supra* note **ERROR! BOOKMARK NOT DEFINED.**

²² *Id.*

²³ *The Obesity Epidemic and Mississippi Students*, CTR. FOR DISEASE CONTROL AND PREVENTION (2009), http://www.cdc.gov/HealthyYouth/yrbs/pdf/obesity/ms_obesity_combo.pdf.

²⁴ S.B. 2369, Reg. Sess. (Miss. 2007) (enacted).

²⁵ *Id.*

²⁶ H.B. 1078 (Miss. 2010) (enacted).

receiving recognition in the challenge.²⁷

In 2008, the Center for Mississippi Health Policy collaborated with the University of Southern Mississippi (USM), Mississippi State University (MSU), and the University of Mississippi (UM) to evaluate the impact of the Mississippi Healthy Students Act on childhood obesity.²⁸ The evaluators conducted surveys of local and state policy-makers, surveys of parents and adolescents, and on-site assessments of school nutrition environments. The Center lists in its One Year Report the following key findings:

- Most schools reported having implemented local school wellness committees and established school health councils; however, more emphasis must be placed on the work of the councils, particularly in ensuring that councils report to school boards as required.
- Middle schools have demonstrated the most progress toward full implementation of local school wellness policies, followed by high schools, then elementary schools.
- While parents express strong support in general for school policies that require physical education and healthy eating, they are not widely aware of specific policies being implemented in their children's schools.²⁹

The study also revealed significant changes in Mississippi students' physical activity. A majority of school board members and superintendents stated that their school boards had adopted policies within the last year to increase physical activity.³⁰ More students are also involved in physical education: in 2008, 84.2 percent of schools reported that 75 percent to 100 percent of their students received a physical education curriculum (compared to 57.1 percent of schools in 2006).³¹ Additionally, 73.8 percent of schools reported in 2008 that students were physically active at least 75 percent of the time in a physical education class (compared to 64.1 percent in 2006).³² Changes in the physical education policy for Mississippi schools are paying off: an analysis of the Child and Youth Prevalence of Obesity Surveys (CAYPOS), a collection of heights and weights of Mississippi public school students from 2005, 2007, and 2009, showed that trends in childhood obesity rates that indicate the rates may be leveling off in Mississippi after decades of steady increases.³³ On the other hand, disparities in obesity rates between white and nonwhite students have increased.³⁴

²⁷ *Id.*

²⁸ *Perspectives*, CTR. FOR MISS. HEALTH POLICY, *supra* note **ERROR! BOOKMARK NOT DEFINED.**

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

³³ Elaine Fontenot Molaison et al., *Prevalence and Trends in Obesity among Mississippi Public School Students, 2005-2009*, March 2010 Journal MSMA 67, <http://www.mshealthpolicy.com/documents/JMSMACAYPOSArticleMar10.pdf>.

³⁴ *Id.*

Recess and Physical Activity Outside of Physical Education

While the Healthy Students Act created a state policy for physical education, Mississippi currently does not have state policies on recess or physical activity breaks, walking/biking to school, interscholastic athletics, or recess before lunch.³⁵ Mississippi should first require that all schools have recess. Furthermore, Mississippi should consider a policy of statewide recess before lunch. Across the country since 2001, schools have been scheduling recess before lunch, which appears to have a positive impact not only because it provides an opportunity for physical activity but also because it affects students' food choices.³⁶ In 2003, the National Food Service Management Institute at the University of Mississippi researched national recess programs and found that "when students go to recess before lunch they do not rush through lunch and tend to eat a more well-balanced meal including more foods containing vitamins, such as milk, vegetables, and fruits."³⁷ Mississippi should join the trend of states implementing recess before lunch as part of the program to create healthful schools.

School Nutrition and Food Choices

In addition to regulating physical education, the Healthy Students Act requires the State Board of Education to adopt regulations that address food choices, preparation, and marketing. Specifically, the Board must "adopt regulations that address healthy food and beverage choices, marketing of healthy food choices to students and staff, healthy food preparation, food preparation ingredients and products, minimum and maximum time allotments for lunch and breakfast periods, the availability of food items during lunch and breakfast periods, and methods to increase participation in the child nutrition School breakfast and lunch Programs."³⁸

The Center for Mississippi Health Policy conducted nutritionist visits to over 100 Mississippi schools to examine the nutrition environments and see how those environments may have changed since the enactment of the Healthy Students Act. Ninety to 100 percent of Mississippi schools have complied with numerous nutritional standards set by the Act.³⁹ Nevertheless, the Center reports that there are still twelve nutrition standards with less than 50 percent compliance with stated goals.⁴⁰ The standards with low compliance include serving fresh vegetables at all observed lunches, having at least one product labeled "0" grams trans fat in both lunch and breakfast menus, eliminating fryers from kitchen operations, and serving recommended dark green and/or orange vegetables or fruits three times per week.⁴¹

³⁵ *Healthy Policy Database*, NAT'L DATABASE ASS'N OF STATE BOARDS OF EDUC., *supra* note 17.

³⁶ *Benefits of Recess Before Lunch: Fact Sheet*, HAMILTON COUNTY COORDINATED SCHOOL HEALTH COMMITTEE (2009), <http://www.peacefulplaygrounds.com/pdf/benefits-recess-before-lunch-facts.pdf>.

³⁷ *Id.*

³⁸ S.B. 2369, *supra* note 24.

³⁹ *Perspectives*, CTR. FOR MISS. HEALTH POLICY, *supra* note 15.

⁴⁰ *Id.*

⁴¹ *Id.*

The Healthy Students Act also includes regulations for vending machines, snack bars and student stores that were phased in over two years beginning with the 2007-2008 school year. Under the regulations, only bottled water, low-fat or non-fat milk, and 100 percent fruit juices can be sold to Mississippi students during the school day.⁴² Zero calorie or low calorie beverages and light juices/sports drinks can be sold only in high schools.⁴³ Full-calorie, sugared carbonated soft drinks cannot be sold to students in Mississippi schools during the school day.⁴⁴ Standards for snack items vary by the type of snack product, and the Department of Education maintains a list of products meeting state standards.⁴⁵

The Center for Mississippi Health Policy's Year One Report (discussed *supra* at p. 5) results show that school administrators rely on the vending industry to ensure compliance with the Healthy Students Act, and this relationship has kept vending products in Mississippi schools in compliance.⁴⁶ However, the report found a few instances where vending machine contents were found to be out of compliance.⁴⁷ School administrators reported that noncompliance was, in most cases, due to misinterpretation of specifications in relation to beverage flavorings and variable portion sizes of acceptable items.⁴⁸

Health Education

Mississippi Board of Education policy requires 45 minutes per week of health education for grades K-8 and ½ Carnegie Unit (60 hours of study) per year for grades 9-12.⁴⁹ The Mississippi Comprehensive Health Framework serves as a guideline for Health teachers. The framework provides minimum content standards to ensure that all students gain the information and skills necessary to make quality age appropriate health decisions.⁵⁰

The Healthy Students Act mandated that minimum requirements for health education be defined.⁵¹ As a result, much higher percentages of students now receive comprehensive health education, and more students receive health education from classroom teachers, nurses, PE teachers, and certified staff than before the Act's passage.⁵² The Year One Report listed two significant improvements in 2008: 1) percentage of schools with 75 to 100 percent of students receiving health education (75.9 percent in 2008 vs. 38.4 percent in 2006) and 2) percentage of

⁴² S.B. 2369, *supra* note 24.

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ *Perspectives*, CTR. FOR MISS. HEALTH POLICY, *supra* note **Error! Bookmark not defined.**, at 20

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ Miss. Dept. of Educ. Physical Education/Comprehensive Health Education Rules and Regulations (2008), http://www.mde.k12.ms.us/SBE_policymanual/4012.htm.

⁵⁰ *2006 Miss. Comprehensive Health Framework*, MISS. OFFICE OF ACADEMIC EDUCATION, <http://www.mde.k12.ms.us/ACAD/ID/Curriculum/health/health.html>.

⁵¹ S.B. 2369, *supra* note 24.

⁵² *Perspectives*, CTR. FOR MISS. HEALTH POLICY, *supra* note **Error! Bookmark not defined.**

schools with 75 to 100 percent of health education taught by classroom teachers (61.1 percent in 2008 vs. 38.2 percent in 2006).⁵³

School Medical Services

Another measure of a school's healthiness is the types of services it offers its students. The CDC and the National Association of School Nurses (NASN) agree that a school nurse should be responsible for no more than 750 students' medical needs.⁵⁴ A NASN study showed a 1:750 or better student-to-nurse ratio was related to decreased absenteeism and increased graduation rates.⁵⁵ The Department of Education reports that Mississippi had 457 school nurses in the 2008-09 school year for a statewide ratio of one school nurse for every 1,092 students.⁵⁶ This figure has improved from previous years but it is still short of the optimal ratio of 1:750. Furthermore, twelve school districts in Mississippi do not have any school nurses. The good news is that State Department of Education data shows that, where Mississippi schools have nurses, they are effective in enabling children to stay in school.⁵⁷ According to a study by the State Department of Education, 85 percent of children and 86 percent of school staff seeking care from a school nurse are able to return to the classroom the same day.⁵⁸

Counseling and mental health

Mississippi Public School Accountability Standards require each high school to provide student support services by a licensed guidance counselor working at a minimum of half-time.⁵⁹ The Accountability Standards require each elementary school to provide services by qualified school personnel such as a guidance counselor, social workers, nurse, psychologist, psychometrist, etc.⁶⁰ Section 37-9-79 of the Mississippi Code lists the counseling services guidance counselors are required to provide.⁶¹ They include academic and personal/social counseling, career and educational counseling, crisis intervention and preventive counseling, and conflict resolution.⁶²

Data suggests the school counseling currently being provided may not be adequate, given the range of mental health issues in the state. In 2005, the CDC reported suicide as the third leading cause of death for children in Mississippi ages 11 to 18, a rate almost as great as the rate of death

⁵³ *Id.*

⁵⁴ *School Nurses in Mississippi*, CTR. FOR MS HEALTH POLICY (Feb. 2009), <http://www.mshealthpolicy.com/documents/SchoolNurseBrief2009-2-17.pdf>.

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Miss. Public School Accountability Standards*, MISS. DEP'T OF EDUC. (2006), <http://www.mde.k12.ms.us/accred/Public.doc>.

⁶⁰ *Id.* Note that the Accountability Standards do not mention requirements for middle school student support and counseling services.

⁶¹ MISS. CODE ANN. § 37-9-79 (2010).

⁶² S.B. 2441, Reg. Sess. (Miss. 2002) (enacted).

from all natural causes combined.⁶³ In 2007, the National Survey on Drug Use and Health Promotion revealed that eight percent of Mississippi children ages 12 to 17 had experienced a period of major depression within the past year.⁶⁴ This rate is comparable to other states in the South: the Georgia rate was also eight percent; Tennessee and Alabama both had rates of nine percent; and the Louisiana rate was slightly lower at seven percent.⁶⁵ These rates reflect the necessity for the entire region to address depression among teens. Finally, for secondary school students in Mississippi, 28.2 percent felt depressed enough over a two-week period to stop engaging in their normal course of activities, and 13.4 percent sincerely contemplated suicide.⁶⁶

III. OTHER STATES' EFFORTS TO CREATE HEALTHY SCHOOLS

The Healthy Students Act has done much to improve school wellness in Mississippi. In continuing our efforts to promote health in schools, Mississippi can learn from successful strategies employed in states across the country. Below are exemplary school wellness programs and policies that can serve as useful models for Mississippi as we take further action to create healthy school environments.

Physical Activity Outside of Physical Education

States can ensure that students participate in physical activity in a number of ways: through physical education and physical activity periods, recess, programs that encourage walking and biking to school and organized after-school sports. The Healthy Students Act created a statewide policy for Mississippi schools' physical education programs, but the state lacks any comprehensive policies on these less formal types of physical activity.⁶⁷

Physical Activity Periods

The United States Department of Health and Human Services provides basic guidelines concerning the amount and type of physical activity that best promote child and adolescent health. According to the HHS guidelines,⁶⁸ children and adolescents should:

- Participate in one hour or more of physical activity per day, most of which should be moderate or vigorous aerobic physical activity
- Participate in vigorous physical activity at least three days a week

⁶³ *Miss. Youth Mental Health Fact Sheet*, NAT'L CTR. FOR MENTAL HEALTH CHECKUPS AT COLUMBIA U. (2008), http://www.teenscreen.org/index.php/learn/index.php?option=com_content&view=article&Itemid=7&id=184percent3Amississippi.

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Healthy Policy Database*, NAT'L DATABASE ASS'N OF STATE BOARDS OF EDUC., *supra* note 17.

⁶⁸ *HHS Fact Sheet*, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, OCT 7, 2008.

- Participate in muscle-strengthening activities three days a week (Examples include push-ups, sit-ups, and tug-of-war)
- Participate in bone-strengthening activities at least three days a week (Examples include jumping rope, hopping, and running)

States often ensure that students are receiving adequate physical activity by mandating physical activity periods in addition to physical education. In Louisiana, schools are statutorily required to provide each student in Kindergarten through eighth grade with a minimum of thirty minutes per day of moderate to rigorous physical activity in addition to 150 minutes per week of mandatory physical education.⁶⁹ Similarly, Oklahoma requires public elementary schools to provide sixty minutes each week of physical activity above and beyond an average of sixty minutes per week of physical education.⁷⁰ Schools can meet this requirement through extra physical education, exercise programs, fitness breaks, or recess, among other options.⁷¹

One low-cost way to provide extra physical activity for students during school hours is to have teachers incorporate physical activity into classroom lessons. Several resources are available for teachers and administrators interested in trying this strategy:

- The Michigan Department of Education’s physical activity idea book for elementary school teachers, **Brain Breaks**, is available for free online and includes activities that advance learning in math, science, social studies, and language arts.⁷²
- An organization called **Active Academics** also provides a website for teachers with activity-based classroom lessons and ideas for short “classroom energizers” for use in between longer lessons.⁷³
- **Take10!**, a program created by the International Life Sciences Institute, is another classroom-based, physical activity program for elementary schools. With minimal preparation, teachers can use the resources included in a grade-specific Take10! kit (\$82) to lead students in physical activities that advance learning in the subjects of math, social studies, science, reading, and oral communication.⁷⁴
- Action for Healthy Kids created the **ReCharge! Energizing After-School** in collaboration with the National Football League as an after-school program, but teachers can also implement the free-of-charge program during the school day. Geared toward

⁶⁹ Bulletin 741: La. Handbook for School Administrators, LA. DEPT. OF EDUC. (2008), <http://www.doe.state.la.us/Lde/bese/1041.html> (click “Bulletin 741-Louisiana Handbook for School Administrators”).

⁷⁰ S.B. 1186 (Okla. 2008) (enacted), *available at* http://webserver1.lsb.state.ok.us/2007-08bills/SB/SB1186_ENR.RTF.

⁷¹ *Id.*

⁷² *Brain Breaks Table of Contents*, MICH. DEPT. OF EDUC. (2008), <http://www.emc.cmich.edu/brainbreaks/2005/TOC.htm>.

⁷³ ACTIVE ACADEMICS, <http://www.activeacademics.org> (last visited Nov. 15, 2010).

⁷⁴ TAKE10!, <http://www.take10.net/> (last visited Nov. 15, 2010).

elementary school students, The ReCharge! Kit includes teamwork-based lesson plans that focus on nutrition, physical activity, and goal setting, as well as equipment for those lessons and educational information for families.⁷⁵

Recess

Recess provides a period in which students can engage in physical activity outside of the structured exercise of physical education and activity breaks. The Mississippi Healthy Students Act does not include language about recess, but many states have adopted policies requiring or encouraging regular recess periods. For example, Virginia requires daily recess for elementary school students.⁷⁶ Arkansas has adopted a resolution urging school districts to provide two ten-minute recess periods daily for students from Kindergarten through sixth grade.⁷⁷ The Hawaii Department of Education requires public schools in all grades to provide 20 minutes of supervised recess daily.⁷⁸ Hawaii schools must encourage students to engage in moderate to vigorous activity during this recess period, and must provide middle and high schools with opportunities to be physically active during recess—for example, through intramural opportunities and exercise equipment.⁷⁹ Six states have adopted policies that prohibit withholding recess as a means of punishment or discipline.⁸⁰

Mississippi schools have resources beyond legislative intervention. The **Peaceful Playground** program helps schools ensure that students are physically active during recess by providing blueprints for productive playgrounds and activity guides that “introduce children and school staff to the many choices of activities available on playgrounds and field areas.”⁸¹ Their website offers guidance on grant funding,⁸² free “webinars,”⁸³ and advocacy information in its “Right to Recess Campaign.”⁸⁴

⁷⁵ *Recharge! Energizing After-School*, ACTION FOR HEALTHY KIDS (2009), <http://www.actionforhealthykids.org/recharge>.

⁷⁶ 8 VA. ADMIN. CODE § 20-131-200 (2006), available at <http://leg1.state.va.us/cgi-bin/legp504.exe?000+reg+8VAC20-131-200>.

⁷⁷ H. R. 1023, Reg. Sess. (Ark. 2007), available at <http://www.arkleg.state.ar.us/assembly/2007/R/Bills/HR1023.pdf>.

⁷⁸ *State of Haw. Wellness Guidelines*, HAW. DEPT. OF EDUC., http://kahoomiki.org/docs/HI_Wellness_Guidelines.pdf.

⁷⁹ *Id.*

⁸⁰ *Policy Regarding Physical Educ. in the Public Schools*, N.C. STATE BD. OF EDUC. (Apr. 7, 2005), available at <http://sbepolicy.dpi.state.nc.us/policies/GCS-S-000.asp?pri=01&cat=S&pol=000&acr=GCS>; see also *State School Healthy Policy Database: Physical Activity Other Than Physical Educ.*, NAT'L ASS'N OF STATE BDS. OF EDUC. (2010), http://www.nasbe.org/healthy_schools/hs/bytopics.php?topicid=3120&catExpand=acdntm_catC.

⁸¹ PEACEFUL PLAYGROUNDS, <http://www.peacefulplaygrounds.com> (last visited Nov. 15, 2010).

⁸² *School Playground Grants*, PEACEFUL PLAYGROUNDS (2010), <http://www.peacefulplaygrounds.com/grants.htm>.

⁸³ *Peaceful Playground Webinars*, PEACEFUL PLAYGROUNDS (2010), <http://www.peacefulplaygrounds.com/webinars.htm>.

⁸⁴ *Right to Recess Campaign*, PEACEFUL PLAYGROUNDS (2010), <http://www.peacefulplaygrounds.com/right-to-recess.htm>.

Walking and Biking to School

Mississippi is one of many states that receive Federal funding for a **Safe Routes to School** program to encourage students to walk or bike to school, turning their daily commute into an opportunity for exercise. In addition to challenging students to walk or bike, school districts that receive SRTS funding generally audit the safety of streets around schools, improve the condition of sidewalks near schools, and use devices to calm traffic and prioritize pedestrians.⁸⁵ Mississippi's Department of Transportation administers the funds for this program.⁸⁶

School Nutrition and Food Choices

Schools can implement various policies and programs to improve their food environments and promote healthy food choices among students. By requiring food sold and served at school to meet nutritional standards, or by implementing a farm-to-school program, schools help students learn about healthy food options and guide them toward making healthy decisions.

School Food Sales

Many states create healthy food environments by ensuring that the food sold on campus, including in vending machines, is nutritious. These policies include specifying what, when, and where food can be sold. The National Association of State Boards of Education considers Mississippi's current policy on school food sales exemplary.⁸⁷ However, Mississippi might consider the following additional restrictions found in other state policies:

- In New Mexico's elementary schools, students may not purchase beverages from vending machines until after the last lunch period.⁸⁸
- New Mexico additionally limits the snack items offered in middle school vending machines before lunch to nuts, seeds, cheese, yogurt, and fruit.⁸⁹
- In contrast to Mississippi's restriction of the calories of snack packages to 200 for all schools, Oregon restricts snack calories to 150 in elementary schools, 180 in middle schools, and 200 for high schools.⁹⁰

⁸⁵ *Program Overview: Miss. Safe Routes to School Program*, MISS. DEPT. OF HIGHWAYS, <http://www.gomdot.com/Divisions/Highways/Resources/Programs/SRTS/pdf/ProgramOverview.pdf>.

⁸⁶ For more information about the Mississippi Safe Routes to School Program, contact Cookie Leffler, Safe Routes to School Coordinator, Mississippi Dept. of Transportation, at cleffler@mdot.state.ms.us or 601-359-1454.

⁸⁷ *State School Healthy Policy Database: Health Education*, NAT'L ASS'N OF STATE BDS. OF EDUC. (2010), http://www.nasbe.org/healthy_schools/hs/picks.php.

⁸⁸ N.M. CODE R. § 6.12.5 (2006), available at <http://www.nmcpr.state.nm.us/nmac/parts/title06/06.012.0005.htm>.

⁸⁹ *Id.*

⁹⁰ H.B. 2650, Reg. Sess. (Or. 2007) (enacted), available at <http://www.leg.state.or.us/07reg/measpdf/hb2600.dir/hb2650.en.pdf>.

- While Mississippi requires that snack options contain no more 35 percent of calories from fat, Oregon sets the bar at 10 percent and additionally requires that each serving contain no more than 0.5 grams of trans fat.⁹¹
- West Virginia has a state policy that “encourages county boards of education to minimize marketing of [unhealthy] foods and beverages in the high school setting by locating their distribution in low student traffic areas and by ensuring that the exterior of vending machines does not depict commercial logos of products or suggest that the consumption of vended items conveys a health or social benefit.”⁹²
- West Virginia also prohibits schools from offering food or beverages as an award during the school day.⁹³
- School cafeterias in Arkansas may not serve French fries more than once per week and portion sizes are limited.⁹⁴

Farm to School Programs

Farm-to-School programs, a partnership between schools and local farms, provide students with fresh produce while creating a unique educational opportunity for students to learn about the source of their food. Research shows that children choose more servings of fruits and vegetables when offered farm fresh options.⁹⁵ They are also more likely to eat fruits and vegetables, “especially unfamiliar items, if they participate in fun educational activities featuring these foods.”⁹⁶ Farm-to-School programs have the added benefit of supporting the local agricultural economy, and do not necessarily add to a school’s food budget. Schools can purchase local produce with federal reimbursement money when the produce is served in a federally-funded school meals program.⁹⁷ Schools can additionally apply for a number of private grants to help fund the program.⁹⁸ Farm-to-school programs may also include activities that provide students with hands-on learning opportunities, such as farm visits, cooking demonstrations, and school gardening and composting programs.⁹⁹

⁹¹ *Id.*

⁹² 126 W. Va. Bd. of Educ. Legis. Rule 86 (describing State Board Policy 4321.1) (2008), *available at* <http://wvde.state.wv.us/policies/p4321.1.pdf>.

⁹³ *Id.*

⁹⁴ *Rules Governing Nutrition and Physical Activity Standards in Arkansas Public Schools*, ARK. DEPT. OF EDUC. (Aug. 2005), http://www.arkansased.org/health/pdf/ade_215_nutrition_and_physical_activity_standards.pdf.

⁹⁵ Lyra Halprin, *UC Researchers Find Farm-to-School Programs Shift Students’ Diets*, UNIV. OF CAL. DAVIS, http://www.ucdavis.edu/spotlight/0505/school_lunches.html.

⁹⁶ *Frequently Asked Questions About the Farm-to-School Program*, IOWA DEPT. OF AGRIC. & LAND STEWARDSHIP, <http://www.iowaagriculture.gov/AgDiversification/pdf/FarmToSchoolQA.pdf>.

⁹⁷ *Id.*

⁹⁸ *Funding Opportunities*, FARM TO SCHOOL (2010), <http://www.farmentoschool.org/fundingopps.php>.

⁹⁹ *State School Healthy Policy Database: School Food Env’t*, NAT’L ASS’N OF STATE BDS. OF EDUC. (2010), http://www.nasbe.org/healthy_schools/hs/bytopics.php?topicid=3115&catExpand=acdnbtm_catC.

Although Mississippi has a farm-to-school program,¹⁰⁰ it is not one of the thirty-three states that have passed legislation regarding the programs.¹⁰¹ Farm-to-school legislation comes in a variety of forms: it can detail project implementation, create a task force or council, create an official state fund or detail budget appropriations, allocate grant money, or simply encourage farm to school programs, among other options.¹⁰²

Beyond legislation, Mississippi schools have access to several helpful resources with information on succeeding with farm-to-school programs. The **National Farm to School Program**, a collaborative project of the Center for Food and Justice, Occidental College, and the Community Food Security Coalition, provides support for farm-to-school programs through fundraising and providing technical assistance in creating and sustaining a farm to school program.¹⁰³ The **Growing Minds** website, created by the Appalachian Sustainable Agriculture Project, offers resources for planning and implementing school gardening programs, farm field trips, and nutrition education as well as tips for a successful farm-to-school program.¹⁰⁴

Other Nutrition-Based Programs

In addition to programs mentioned above that promote healthy food options in schools, there are also many programs that help educators and school administrators promote healthy activities and increase knowledge about health and nutrition among students.

The USDA Food and Nutrition Service's **Team Nutrition** supports Child Nutrition Programs through "training and technical assistance for food service, nutrition education for children and their caregivers, and school and community support for healthy eating and physical activity."¹⁰⁵

Game On! The Ultimate Wellness Challenge is a free elementary school program created by Action for Healthy Kids that aims to make health "a part of the day-to-day culture" of the school, home, and community environments.¹⁰⁶ The program involves a series of fun challenges, chosen by and tailored to each individual school, designed to encourage students and their families to "eat better" and "move more," hopefully culminating in lasting, positive behavior changes.¹⁰⁷

¹⁰⁰ *Mississippi Profile*, FARM TO SCHOOL (2010), <http://www.farmtoschool.org/state-home.php?id=57>.

¹⁰¹ *State Farm to School Legislation*, FARM TO SCHOOL (Nov. 2, 2010), http://www.farmtoschool.org/files/publications_177.pdf (listing all Farm to School legislation).

¹⁰² *See id.*

¹⁰³ FARM TO SCHOOL, <http://www.farmtoschool.org> (last visited Nov. 15, 2010). *See also* Anupama Joshi, Marian Klab, & Moira Beery, *Going Local: Paths to Success for Farm to School Programs*, NAT'L FARM TO SCHOOL PROGRAM (Dec. 2006), <http://departments.oxy.edu/uepi/cfj/publications/goinglocal.pdf>.

¹⁰⁴ GROWING MINDS FARM TO SCHOOL PROGRAM, <http://growing-minds.org> (last visited Nov. 15, 2010).

¹⁰⁵ *Team Nutrition*, USDA FOOD AND NUTRITION SERVICE (2010), <http://teammnutrition.usda.gov/Default.htm>.

¹⁰⁶ *Why Take the Game On! Challenge*, ACTION FOR HEALTHY KIDS (2010), <http://www.actionforhealthykids.org/game-on/access/about/why-take-the-challenge.html>.

¹⁰⁷ *Id.*

Students Taking Charge is an online program designed for high school students by Action for Healthy Kids. Students who participate in this program learn about wellness and form groups to advocate for healthy changes on their campus, receiving guidance and inspiration from the resources on the Students Taking Charge website.¹⁰⁸

Health Education

Forty-seven states require that students receive health education through legislation that varies in specificity.¹⁰⁹ Mississippi is one of forty-four states that mandate health education for primary school students.¹¹⁰ Mississippi is also among the thirty-one states that require high school students to complete some health education in order to graduate.¹¹¹ The most successful health education policies are those that specify the amount of instruction time required. Mississippi currently requires 45 minutes per week of health education instruction in elementary and middle schools. South Carolina's Comprehensive Health Education Act, in contrast, mandates 75 minutes per week of health education for elementary school students.¹¹² Delaware increases the required amount of health education instruction as students grow older. Students in grades K-4 must receive a minimum of 30 hours of health education per school year, but the requirement increases to 35 hours per year for fifth and sixth graders, and to 60 hours per year for seventh and eighth graders.¹¹³

School Medical Services

The National Association of School Nurses recommends a maximum nurse-to-student ratio of 1:750, and the organization has shown that such a ratio benefits students' general well-being significantly.¹¹⁴ While Mississippi does not have a policy specifying a mandatory nurse to student ratio in its schools, 20 other states have adopted legislation regarding school nurse to student ratios.¹¹⁵ Seven of those state policies encourage or require districts to work towards a ratio of one nurse per 750 students.¹¹⁶

Counseling and Mental Health

Many states mandate that schools, including Mississippi, provide counseling and mental health services. Such programs may include the identification of students with mental or emotional

¹⁰⁸ STUDENTS TAKING CHARGE, <http://studentstakingcharge.org> (last visited Nov. 15, 2010).

¹⁰⁹ *State School Healthy Policy Database: Health Education*, *supra* note 17.

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² S. C. CODE § 59-32-30 (2009), *available at* <http://www.scstatehouse.gov/CODE/t59c032.htm>.

¹¹³ 14 DEL. ADMIN. CODE § 851 (2010), *available at* <http://regulations.delaware.gov/AdminCode/title14/800/851.shtml#TopOfPage>.

¹¹⁴ *School Nurses*, CTR. FOR MS HEALTH POLICY, *supra* note 19.

¹¹⁵ *State School Healthy Policy Database: Requirements for School Nurses*, NAT'L ASS'N OF STATE BDS. OF EDUC. (2010), http://www.nasbe.org/healthy_schools/hs/bytopics.php?topicid=2130&catExpand=acdntm_catB.

¹¹⁶ *Id.*

disorders, substance abuse counseling, and suicide prevention.¹¹⁷ Personnel at schools with such programs are often granted immunity from any civil liability that could result from providing mental health services. Mississippi has a policy regarding the provision of mental health counseling, but, as noted above, rates of suicide and depression are high in the state so there may be more services or public awareness campaigns that the school counselors can provide.

Schools in Arkansas, for example, are required to provide consultation and counseling to parents, students and school personnel, and “school counselors must spend 75 percent of their work time each week providing direct counseling related to students.”¹¹⁸ Schools also must provide social work services for students with attendance, behavior, and learning issues, including identification and evaluation of those issues.¹¹⁹ The Code also requires that schools implement suicide prevention public awareness programs, and grants school personnel immunity from any civil liability that might arise from providing good faith assistance to suicidal students.¹²⁰

In Louisiana, schools are statutorily required to screen each child for “the existence of impediments to a successful school experience at least once in grades K-3” unless his or her parent objects.¹²¹ Furthermore, if a public or private primary or secondary school identifies any student as having a substance abuse issue, that student must enter a drug counseling program.¹²² Schools also offer suicide prevention services which may include individual, family, and group counseling, referral, crisis intervention, and training for school personnel.¹²³

CONCLUSION

Mississippi’s legislative efforts to create healthy schools are among the best in the country in the areas of physical education, health education, and school food sales restrictions. Mississippi can continue to improve school wellness by increasing compliance with statutory requirements, expanding some programs we already have, such as Farm-to-School and Safe Routes to School, and adopting new policies and programs regarding school nutrition and physical activity other than physical education. Mississippi students would also benefit from a higher level of counseling and mental health services and an enforced nurse to student ratio at the recommended 750:1.

¹¹⁷ *State School Healthy Policy Database: Counseling & Mental Health Services*, NAT’L ASSOC. OF STATE BDS. OF EDUC., (2009), http://www.nasbe.org/healthy_schools/hs/bytopics.php?topicid=4120&catExpand=acdnbtm_catD.

¹¹⁸ Ark. CODE § 6-18-1005 (2005), *available at* <http://www.arkleg.state.ar.us/assembly/ArkansasCode/6/6-18-1005.htm>.

¹¹⁹ *Id.*

¹²⁰ Ark. CODE § 6-17-107(b) (1991), *available at* <http://www.arkleg.state.ar.us/assembly/ArkansasCode/6/6-17-107.htm>.

¹²¹ LA. REV. STAT. § 17:392.1 (1999), *available at* <http://www.legis.state.la.us/lss/lss.asp?doc=80944>.

¹²² LA. REV. STAT. § 17:404 (1994), *available at* <http://www.legis.state.la.us/lss/lss.asp?doc=80995>.

¹²³ LA. REV. STAT. § 17:282.4 (2001), *available at* http://www.legis.state.la.us/lss_doc/lss_house/RS/17/Docpercent2080438.html.