bridging the gap

Research Informing Policies & Practices for Healthy Youth

School Policies and Practices to Improve Health and Prevent Obesity: National Elementary School Survey Results



Summer 2010

About Bridging the Gap

Bridging the Gap is a nationally recognized research program of the Robert Wood Johnson Foundation dedicated to improving the understanding of how policies and environmental factors affect diet, physical activity and obesity among youth, as well as youth tobacco use. The program identifies and tracks information at the state, community and school levels; measures change over time; and shares findings that will help advance effective solutions for reversing the childhood obesity epidemic and preventing young people from smoking. Bridging the Gap is a joint project of the University of Illinois at Chicago's Institute for Health Research and Policy and the University of Michigan's Institute for Social Research. For more information, visit www.bridgingthegapresearch.org.

bridging the gap

Research Informing Policies & Practices for Healthy Youth

University of Illinois at Chicago Institute for Health Research and Policy 1747 West Roosevelt Road, 5th floor (M/C 275) Chicago, IL 60608 (866) 757-4507 www.bridgingthegapresearch.org

This report was written by the Bridging the Gap program at the University of Illinois at Chicago with support from the Robert Wood Johnson Foundation. The opinions expressed in this report are those of the authors and do not necessarily reflect the views of the Foundation.

About the Authors

Lindsey Turner, Ph.D., Jamie Chriqui, Ph.D., M.H.S., and Anna Sandoval, M.P.H., are with the Bridging the Gap program located within the Health Policy Center in the Institute for Health Research and Policy at the University of Illinois at Chicago.

Frank J. Chaloupka, Ph.D., co-directs the Bridging the Gap program and is a distinguished professor of Economics and director of the Health Policy Center in the Institute for Health Research and Policy at the University of Illinois at Chicago.

This report, or part of, may be reproduced without prior permission provided the following citation is listed:

Suggested Citation:

Turner L, Chaloupka FJ, Chriqui JF and Sandoval A. School Policies and Practices to Improve Health and Prevent Obesity: National Elementary School Survey Results: School Years 2006–07 and 2007–08. Chicago, IL: Bridging the Gap Program, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2010. www.bridgingthegapresearch.org

Copyright 2010 Bridging the Gap

For questions contact:

Lindsey Turner, Ph.D.
Health Policy Center
Institute for Health Research and Policy
University of Illinois at Chicago
E-mail: lindseyt@uic.edu
www.bridgingthegapresearch.org

Support for this publication was provided by the Robert Wood Johnson Foundation.

The Robert Wood Johnson Foundation focuses on the pressing health and health care issues facing our country. As the nation's largest philanthropy devoted exclusively to improving the health and health care of all Americans, the Foundation works with a diverse group of organizations and individuals to identify solutions and achieve comprehensive, meaningful and timely change. For more information, visit www.rwjf.org.





The prevalence of obesity among children ages 6 to 11—those typically in elementary school—rose from 4 percent in the late 1970s¹ to nearly 20 percent in 2007–08.².³ The dramatic increase in obesity prevalence is clearly associated with unhealthy eating habits and lack of physical activity.⁴.5.6 Because children spend a significant portion of their time in school, many researchers, health advocates and policy-makers at all levels of government are pushing for changes that will make the school environment healthier for students.

The Child Nutrition and WIC Reauthorization Act of 2004 (P.L. 108-265, Section 204) included language that required school districts participating in the National School Lunch Program, School Breakfast Program and other federal child nutrition programs to develop and implement a wellness policy by the first day of the 2006-07 school year. The Act required wellness policies to include:

- goals for nutrition education and physical activity;
- assurance that reimbursable school meals meet the minimum federal school meal standards;
- guidelines for foods and beverages sold or served outside of school meal programs (i.e., "competitive foods"); and
- implementation plans.

Recent studies indicate that the majority of U.S. school districts have developed a wellness policy, but overall the policies were weak, fragmented and did not necessarily require schools to take action. ^{7,8}

Report Overview

This report summarizes findings from one of the most comprehensive studies to date of health-related policies and practices in U.S. elementary schools. Our survey examined topics addressed in the federal wellness policy mandate and many other issues relevant to childhood obesity, such as specific foods and beverages offered during school lunches; products sold through competitive venues (e.g., vending machines, à la carte lines); physical education programming; and walking and bicycling to school.

Our data were collected during the first two years following the wellness policy mandate. As such, these findings help to document school-level implementation of the new district wellness policies. Understanding how school practices and district policies facilitate healthy changes in school environments is particularly important as Congress considers reauthorization of child nutrition and WIC programs, K–12 education policies and transportation programs. These data also are critical for informing school- and district-level efforts to provide a healthier environment for students.

Our findings are based on data obtained from administrators at nationally representative samples of public and private elementary schools. Results describe policies and practices in schools during the 2006–07 and 2007–08 school years that ultimately impacted approximately 21 million K–5 students each year. Data are weighted to reflect the percentages of students nationwide who attended an elementary school that engaged in the practices referenced in our survey.

a Because elementary schools vary in grade composition (e.g., pre-K-3, grades 2-5, K-6), and all schools we surveyed had at least one third-grade class, we selected grade 3 as a proxy for weighting our data. We used each school's third-grade student population to develop weights that reflect the percentage of elementary school students nationwide who were impacted by the practices referenced in our survey.

Key findings presented in this summary focus on public elementary schools. The report also describes opportunities to improve practices in public elementary schools through policy changes at the district, state and federal levels. Although private schools often do not have districts that set policies, it is important to examine health-related practices that impact private students, who account for 13 percent⁹ of the U.S. elementary school student population. Results for private elementary school students are detailed separately in the final section of this executive summary.

This summary concludes with Table 1.2, which presents data for the 2007–08 school year that is featured in our full report. More information, including complete data for private school students and results for the 2006–07 school year, is available at www.bridgingthegapresearch.org.

Major Findings

Overall, U.S. public and private elementary schools simply are not making the grade when it comes to providing students a healthy environment. Our results indicate that major changes are needed to better support healthy eating and physical activity among all elementary school students.

As shown in Table 1.1, public elementary schools have made progress in some areas, but many practices were not consistent with national recommendations for diet and physical activity. For example, most public elementary school students had easy access to unhealthy foods and beverages on campus throughout the school day, and very few had the opportunity to get enough physical activity to satisfy the minimum recommendations set by the U.S. Department of Health and Human Services (USDHHS) or the National Association for Sport and Physical Education (NASPE).

TABLE 1.1 Percentage of Public Elementary School Students Exposed to Selected Policies and Practices, School Years 2006–07 and 2007–08

	2006-07	2007-08
SCHOOL MEALS		
Salad bar available most days or every day in National School Lunch Program meals	17%	21%
Whole grains available most days or every day in National School Lunch Program meals	15%	20%
High-fat milk (2% or whole milk) available most days or every day in National School Lunch Program meals	75%	77%
COMPETITIVE FOODS AND BEVERAGES Competitive items available in vending machines, à la carte, stores and/or snack bars	59%	62%
Unhealthy foods (e.g., fries, candy, cookies) available in competitive venue	47%	44%
Sugary beverages (e.g., sodas) available in competitive venue	17%	17%
PHYSICAL ACTIVITY AND PHYSICAL EDUCATION		
Daily physical education class offered to third-grade students	20%	20%
At least 150 minutes of physical education offered per week for third-grade students	19%	18%
At least 20 minutes of recess offered daily for third-grade students	66%	68%
Physical fitness measured annually for all elementary school students	42%	34%

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2010

Nutrition-Related Findings

School Meals

Key Findings

- Most public elementary school students had access to the School Breakfast Program and the National School Lunch Program, particularly at schools serving many lower-income students.
- Meals offered through the National School Lunch Program often included higher-fat products such as pizza, french fries and 2% or whole milk. In 2007–08, these products were available on some or most days for, respectively, 99 percent, 39 percent and 81 percent of public elementary school students. Only one-fifth of public elementary school students had salad bars and whole grains available most or all days of the week during the 2007–08 school year.
- In 2007–08, only 14 percent of public elementary school students attended a school with a fruit and/or vegetable garden and only 7 percent attended a school that participated in a farm-to-school program.

Policy Opportunities

Improve the Nutritional Quality of School Meals

School meals should provide more healthy foods and fewer low-nutrient, high-calorie options. The U.S. Department of Agriculture (USDA) regulations for school meals should be regularly updated to reflect the current dietary guidelines. The regulations also should meet the Institute of Medicine's 2009 recommendations¹⁰ for increasing the availability of fruits, vegetables and whole grains; decreasing saturated fat, trans fat, added sugars and salt; and limiting milk to 1% or nonfat options.

Increase Federal Reimbursement Rates for School Meals

Offering students more access to healthier foods, such as fruits, vegetables and whole grains and relying less on ready-to-serve entrees that are high in fat and sodium are two important strategies for improving the nutritional quality of school meals. Yet both of these strategies will increase food service costs. At a time of strained budgets, increasing the reimbursement rates for school meals will be crucial for enabling school food service programs to offer healthier meals that comply with current nutrition guidelines.

Support School Gardens and

Farm-to-School Programs

Participating in farm-to-school programs and using school gardens both in curriculum and food service are two emerging interventions that support nutrition education and may increase student consumption of healthy foods. However, such programs are not widespread and more research is needed to evaluate their impact on dietary behaviors. This presents an opportunity for the USDA to work with state and local governments, community groups, and school authorities to encourage partnerships between local farms and schools and to support schools in establishing gardens.

Competitive Foods and Beverages

Key Findings

- Competitive foods and beverages—those available through vending machines, à la carte lines, school stores and/or snack bars—were widely available for purchase by public elementary school students. In 2007–08, 62 percent of public elementary school students had access to at least one competitive food or beverage venue on campus, up from 59 percent in 2006–07.
- Less-healthy competitive products were commonly available. In 2007–08, 44 percent of public elementary school students could purchase foods such as potatochips, candy, cookies or french fries, 17 percent could purchase sugar-sweetened beverages, and 38 percent could purchase high-fat milks through vending machines, à la carte lines or other competitive venues on campus.

- As of 2007–08, awareness of the nutritional guidelines for competitive foods and the school beverage guidelines brokered by the Alliance for a Healthier Generation had increased, but implementation of the guidelines remained relatively low in public elementary schools.
- In 2007-08, 37 percent of public elementary school students attended a school that restricted sugary foods during class parties, and 39 percent attended a school that restricted the use of food as a reward for good academic performance.

Policy Opportunities Update Standards for Competitive Foods and Beverages

The current federal regulations on the nutritional quality of foods sold or served outside of the school meal programs (i.e., competitive foods) are weak and outdated. Although some districts and states have enacted policies and legislation that restrict the availability of unhealthy competitive foods and beverages—or aim to improve the nutritional quality of products sold in competitive venues—these sales are unregulated in many schools.

Congress should give USDA the authority to update national nutrition standards for foods and beverages served outside of the school meal programs and apply them to the entire campus for the full school day. In tandem, states and school districts should update their policies to ensure that all competitive foods and beverages available on campus contribute to a healthy diet.

Limit the Availability of Unhealthy Products in the Classroom

Establishing and strengthening district policies regarding the use of non-food options for student rewards and classroom parties would remove a significant source of high-calorie, low-nutrient products in elementary schools.

Physical Activity and Physical Education

Key Findings

Opportunities for elementary school students to be physically active at school were generally lacking and were not aligned with national recommendations for daily physical activity.

- Although most third-grade public school students were required to take physical education class, in 2007–08, only one in five were offered daily physical education. Also, about one in five were offered 150+ minutes of physical education per week, which is recommended by NASPE.¹³
- Thirty-four percent of public elementary school students attended a school that annually tested all students' physical fitness during the 2007–08 school year, down from 42 percent the year prior.
- Although more than 80 percent of third-grade public school students had daily recess time in 2007–08, only two-thirds received 20+ minutes of recess per day as recommended by NASPE and other organizations. Public elementary school students at predominantly Black and Latino schools were even less likely to receive recommended amounts of recess than were students at predominantly White schools (43% and 55% compared with 77%, respectively).
- In 2007-08, approximately 20 percent of public elementary school students walked or bicycled to school, but close to one-third attended a school that did not allow students to bicycle to school. Participation in Safe Routes to School programs was low, and issues such as traffic danger, distance and lack of bike racks and crossing guards were commonly reported barriers to active commuting.

Policy Opportunities

Support High-Quality Physical Education in Schools

Ensuring that students have access to high-quality physical education programming, such as daily classes that allow students at least 150 minutes of physical

b Data from the National Center for Education Statistics (NCES) were obtained regarding school-level demographic characteristics. Using information on the racial and ethnic representation of students at the school, we classified schools as: majority White (>66% White), majority Black (>50% Black), or majority Latino (>50% Latino). A fourth group includes the remaining schools that did not fall into one of the aforementioned groups and which have a diverse student population.

education per week and engage students in moderateto-vigorous physical activity, will help students meet national recommendations for daily activity and learn lifelong skills that contribute to healthy behavior. Increasing the use of fitness testing for goal-setting and monitoring student progress can help ensure that physical education programming is effective.

Increase Opportunities for Physical Activity During the School Day

Ensuring that all students—particularly those at predominantly Black and Latino schools—have adequate daily recess and other opportunities to be active during the school day will help more children meet the USDHHS recommendation for at least 60 minutes of moderate-to-vigorous physical activity each day.

Support Walking and Bicycling to School

Increasing participation in programs such as Safe Routes to School and providing crossing guards and bike racks at school could increase active commuting. As new schools are built, planners should consider school location and sidewalk connections to residential areas. ¹⁶

Implementation of Wellness Policies

Key Findings

- By the 2007-08 school year, 89 percent of public elementary school students attended a school that had a wellness policy in place at the district and/or school level.
- When a wellness policy was in place, public elementary school students were more likely to be covered by goals for nutrition and physical activity, as well as guidelines for reimbursable meals and competitive foods.
- In many cases, schools and/or districts had not established plans for evaluating the implementation of wellness policies, nor did they have an ongoing health or wellness advisory council to assist with implementation of the policies.

Policy Opportunities

Support Wellness Policy Implementation

Lack of support from district administrators, as well as lack of money and staff time, have been noted as key barriers for implementation of district wellness policies.¹⁷ Developing mechanisms to financially support school-level implementation of wellness policies will be an important consideration during the federal reauthorization process.

Monitor and Evaluate Policy Implementation

Monitoring school-level implementation of districtlevel wellness policies will enable decision-makers at all levels to track progress and evaluate the impact of both the federal mandate and specific wellness policy provisions.

Private Schools— A Special Challenge

Key Findings

As previously discussed, our findings indicate a strong need to strengthen and improve health-related policies and practices in public elementary schools. Further, for the one of every eight elementary school students in the United States who attends a private school, ¹⁸ the environment is significantly less healthy than it is for public elementary school students. Compared with public elementary school students, private elementary school students:

- paid more for School Breakfast Program and National School Lunch Program meals, where available;
- more often were served meals sourced from commercial vendors, including fast-food outlets;
- were more likely to have competitive foods and beverages available on campus. In fact, approximately one-half of private elementary school students had access to nutrient-poor foods and sugary beverages through competitive venues; and
- spent less time in physical education and were offered physical education classes less frequently.

Opportunities for Improvement

Encourage Grassroots Change in Private Schools

Private schools vary tremendously in organization, size, philosophy and other important characteristics. Federal legislation, such as the Elementary and Secondary Education Act, generally does not apply to private schools. Further, because so few private schools participate in the USDA meal programs, most are not required to comply with the federal wellness policy mandate. Policy-making at private schools is typically done by the school board at each school, making it difficult to develop and implement federal and state policies that could have a wide-reaching impact on private school students.

These findings appear to be the first to specifically examine health-related policies and practices in private elementary schools, and to show that private elementary school students are faring even worse than those in public schools when it comes to having a healthy environment. Sharing these findings and maintaining a national media focus on school practices will help to inform school boards, administrators, teachers and parents of the need to garner community-based support for changes in private school policies and practices.

Next Steps

The Bridging the Gap team has been collecting nationally representative data on district policies and school practices in elementary, middle and high schools annually since the 2006–07 school year, which was the first year of the federal wellness policy mandate. Our annual school-level surveys will track changes in school policies and practices as districts, localities and states continue to develop and strengthen policies relevant to student health. We also will monitor the impact of these changes and identify areas where progress is being made, as well as areas that need additional policy focus. This research is vital for assessing the nation's progress in creating healthier school environments to help reverse the childhood obesity epidemic.

Summary of Health-Related Policies and Practices in Elementary Schools

Table 1.2 summarizes data included in our full report for the 2007–08 school year. All data are weighted to reflect the percentages of public and private elementary school students nationwide who were impacted by these practices. Data for the 2006–07 school year, additional survey topics and demographic sub-sample comparisons are available in the full report and at www.bridgingthegapresearch.org.

TABLE 1.2 Summary of Elementary School Policies and Practices by School Type, School Year 2007–08

School Meals	Responses	Public	Private	Total
School Breakfast Program available at school	Yes	86%	6%	80%
Students who were offered full-priced School Breakfast Program meal in each price range	\$0.50 or less \$0.51 to \$1.00 \$1.01 to \$1.50 \$1.51 or more	18% 51% 28% 4%	15% 37% 29% 19%	18% 51% 28% 4%
National School Lunch Program available at school	Yes	97%	31%	92%
Students who were offered full-priced National School Lunch Program meal in each price range	\$0.50 or less \$0.51 to \$1.00 \$1.01 to \$1.50 \$1.51 to \$2.00 \$2.01 to \$2.50 \$2.51 or more	3% 5% 28% 45% 15% 3%	1% 1% 9% 42% 38% 9%	3% 5% 28% 45% 16% 3%
French fries available in National School Lunch Program meals	Never Some days Most or every day	61% 38% 1%	51% 48% 2%	60% 39% 1%
Pizza available in National School Lunch Program meals	Never Some days Most or every day	0% 94% 5%	0% 97% 3%	0% 95% 5%
Salad bar available in National School Lunch Program meals	Never Some days Most or every day	66% 14% 21%	53% 27% 20%	65% 14% 21%
Whole grains available in National School Lunch Program meals	Never Some days Most or every day	17% 63% 20%	16% 62% 21%	17% 63% 20%
Nonfat or 1% milk available in National School Lunch Program meals	Never Some days Most or every day	8% 2% 90%	8% 1% 91%	8% 2% 90%
2% or whole milk available in National School Lunch Program meals	Never Some days Most or every day	20% 4% 77%	18% 4% 78%	20% 4% 77%
Duration of lunch period	less than 20 minutes 20 to <30 minutes 30 minutes or more	2% 33% 65%	3% 44% 53%	2% 34% 64%

TABLE 1.2, CONTINUED

School Meals (CONTINUED)	Responses	Public	Private	Total
Timing of lunch and mid-day recess for third-grade students	Lunch before recess Lunch after recess No mid-day recess Varies by class	57% 15% 14% 14%	70% 12% 12% 6%	58% 15% 14% 13%
Supplier of school meals	School system food service Food service company Other	80% 17% 3%	34% 18% 46%	77% 17% 6%
Were any commercial foods offered in school (e.g., pizza, sub sandwiches, fast food)?	Yes	10%	48%	13%
Kitchen facilities at school	Full-service kitchen Partial kitchen No kitchen	76% 21% 3%	76% 18% 7%	76% 21% 3%
School garden	Yes	14%	14%	14%
Farm-to-school program	Yes	7%	5%	7%
Participated in Team Nutrition (among schools that participated in the School Breakfast Program or National School Lunch Program)	Yes	44%	34%	43%
School provided nutritional information to parents and/or students	Yes	69%	32%	66%
School or district set food and beverage prices to encourage consumption of healthier items	Some/a lot	28%	25%	29%

Competitive Foods and Beverages	Responses	Public	Private	Total
Awareness and implementation of the Alliance for a Healthier Generation's Nutritional Guidelines for Competitive Foods	Unaware of guidelines Not implementing Not implementing but planning to do so In process of implementing Have already implemented	62% 10% 1% 6% 20%	72% 19% 1% 3% 5%	63% 11% 1% 6% 19%
Awareness and implementation of the Alliance for a Healthier Generation's School Beverage Guidelines	Unaware of guidelines Not implementing Not implementing but planning to do so In process of implementing Have already implemented	54% 12% 1% 6% 27%	65% 20% 1% 4% 11%	55% 13% 1% 5% 25%
Had vending machines available on campus	Beverages	15%	35%	16%
	Foods	3%	16%	4%
	Foods and/or beverages	16%	36%	17%
Had à la carte lines available	Foods and/or beverages	47%	49%	47%
Had school stores or snack bars available on campus	Beverages	17%	23%	17%
	Foods	21%	30%	22%
	Foods and/or beverages	23%	33%	24%
Had competitive foods or beverages in any venue (e.g., vending, à la carte, stores and/or snack bars) on campus	Beverages	57%	71%	58%
	Foods	46%	57%	47%
	Foods and/or beverages	62%	74%	63%
Number of competitive venues (food or beverage) available on campus	None	38%	26%	37%
	One	41%	39%	41%
	Two	18%	26%	19%
	Three	3%	9%	4%

TABLE 1.2, CONTINUED

Competitive Foods and Beverages (CONTINUED)	Responses	Public	Private	Tota
Healthy foods (e.g., fresh fruit, vegetables or salad)	Vending	1%	5%	29
vailable in each competitive venue	Stores or snack bars	11%	19%	11'
	À la carte	30%	29%	30'
	Any competitive food venue	34%	38%	34'
ess-healthy foods (e.g., high-sugar, high-fat and/or	Vending	3%	15%	4
igh-sodium foods) available in each competitive venue	Stores or snack bars	21%	28%	22'
	À la carte	33%	32%	33'
	Any competitive food venue	44%	54%	45
Healthy beverages (e.g., bottled water, 100% fruit juice, ow-fat milk) available in any competitive venue	Yes	55%	69%	56
ugar-sweetened beverages (e.g., soda, sport drinks) vailable in any competitive venue	Yes	17%	41%	19
ow-calorie or no-calorie beverages (e.g., diet soda, "light" uices) available in any competitive venue	Yes	18%	40%	20'
% or whole milk available in any competitive venue	Yes	38%	47%	39
Bottled water available in each competitive venue	Vending	13%	32%	14
Grandon modernostrifo forido	Stores or snack bars	14%	17%	14
	À la carte	27%	28%	28
	Any competitive food venue	40%	54%	41
oid school have an exclusive pouring contract with	Yes	6%	17%	7
peverage distributor?	No	4%	12%	4
	Don't know/no answer	6%	6%	6
	N/A, no beverage vending	85%	66%	84
oid school receive incentives for beverage sales through	Yes	2%	7%	3
ending machines?	No	4%	18%	6
craing machines.	Don't know	9%	9%	9
	N/A, no beverage vending	85%	66%	84
ypes of advertising present in any locations on school campus	Soft drinks/fast food/candy	1%	5%	1
	Milk	80%	49%	78
	Fruits/vegetables	78%	46%	76
Vere there restrictions on sugary foods during class parties?	Yes, schoolwide policy	37%	21%	36
	Yes, in some classes	15%	23%	16
	No	48%	56%	49
Vere there restrictions on sugary foods during snack time?	Yes, schoolwide policy	42%	36%	41
	Yes, in some classes	15%	25%	16
	No	19%	31%	20
	N/A, no snack time	24%	8%	23
Vere teachers allowed to use food as a reward for good	No	39%	47%	40
cademic performance?	Yes, it is up to the teacher	32%	31%	32
	Yes, but it is discouraged	29%	22%	28
Vere teachers allowed to use food as a reward for good	No	39%	50%	40
tudent behavior?	Yes, it is up to the teacher	30%	29%	30
	Yes, but it is discouraged	31%	21%	30
Vere students allowed to keep water bottles at their desks?	No.	5%	17%	6
vere students allowed to keep water buttles at their desks:		93%	82%	929
	Yes, it is up to the teacher	449	0.70%	

TABLE 1.2, CONTINUED

Competitive Foods and Beverages (continued)	Responses	Public	Private	Total
Were beverages other than water regularly allowed in class?	No	92%	96%	92%
	Yes, it is up to the teacher	6%	3%	5%
	Yes, but it is discouraged	2%	1%	2%
Nere foods regularly allowed in class?	No	80%	86%	80%
	Yes, it is up to the teacher	17%	12%	17%
	Yes, but it is discouraged	3%	2%	3%

Physical Activity and Physical Education	Responses	Public	Private	Tota
Were elementary school students required to take physical education (PE)?	Yes	98%	98%	98%
Number of days per week third-grade students had PE	None	1%	1%	19
	One	23%	31%	249
	Two	34% 18%	44%	359 179
	Three Four	4%	11% 3%	39
	Five	20%	10%	199
Did third-grade students receive 60+ minutes of PE per week?	Yes	75%	71%	759
Did third-grade students receive 90+ minutes of PE per week?	Yes	50%	36%	499
Did third-grade students receive 150+ minutes of PE per week?	Yes	18%	10%	189
Number of days per week third-grade students had recess	None	6%	3%	69
	One to four days per week	9%	6%	89
	Five days per week	86%	92%	869
Number of times per day third-grade students had recess	None	7%	4%	79
	Once per day	57%	46%	569
	Twice per day Three or more	27% 9%	42% 8%	289
Did third-grade students receive 20+ minutes of recess daily?	Yes	68%	79%	689
Were intramural team sports available at school?	Yes	25%	45%	269
Were extramural team sports available at school?	Yes	19%	60%	229
Were school-sponsored after-school physical activities available at school?	Yes	38%	56%	399
Were externally-sponsored after-school programs available at school?	Yes	43%	24%	429
Were nontraditional PE activities (e.g., yoga, kick-boxing) available at school?	Yes	20%	18%	20%
Were opportunities for organized physical activities (outside of PE class) available during the school day?	Yes	42%	33%	429
How adequate is the gymnasium?	N/A, don't have	17%	13%	179
	Not very adequate	15%	7%	149
	Adequate Very adequate	29% 39%	27% 53%	299 409
law adamata aya tha mlaying field-2				
How adequate are the playing fields?	N/A, don't have Not very adequate	4% 17%	11% 20%	49 179
	Adequate	44%	38%	449
	Very adequate	35%	32%	359

TABLE 1.2, CONTINUED

Physical Activity and Physical Education (CONTINUED)	Responses	Public	Private	Total
How adequate is the playground equipment?	N/A, don't have	2%	7%	2%
	Not very adequate	18%	13%	18%
	Adequate	48%	43%	48%
	Very adequate	32%	37%	33%
Barriers to implementing high-quality PE programming	Lack of staff	18%	8%	18%
	Inadequate indoor facilities	18%	13%	17%
	Inadequate outdoor facilities	7%	9%	7%
	PE is not a priority for district	4%	0%	4%
	Financial constraints	14%	12%	14%
	Competing demands for other subjects No state or district policies requiring PE	22% 2%	12%	21% 2%
Were teachers allowed to withhold recess from students?	Yes, but it is discouraged Yes, up to the teacher	24% 43% 33%	17% 32% 51%	24% 42% 34%
Were teachers allowed to use physical activity (e.g., running aps) as a punishment for poor student behavior?	Yes, but it is discouraged	2%	3%	2%
	Yes, up to the teacher	3%	9%	4%
	No	95%	88%	94%
Were students allowed to bicycle to school?	No	28%	31%	28%
	Yes, in certain grades	23%	26%	23%
	Yes, all students	49%	43%	48%
About what percentage of students walked or bicycled to school?	Average (SD)	21% (22)	6% (24)	20% (25
Barriers to walking/bicycling (as perceived by principals)	School is too far away Traffic danger Bad weather Crime Lack of sidewalks No bike racks No crossing guards	40% 55% 25% 14% 30% 20%	72% 76% 25% 13% 30% 20% 32%	43% 57% 25% 14% 30% 20%
Was Safe Routes to School (or similar program) available at school?	Yes	15%	4%	14%
Was a walking school bus available at school?	Yes	4%	2%	4%
Were advertisements for sports and/or physical activity oresent in any locations on school campus?	Cafeteria	46%	23%	44%
	Elsewhere in school	48%	37%	47%
	Anywhere in school	72%	51%	70%
How often was student body mass index (BMI) measured/calculated?	Never	53%	80%	55%
	Selected grades only	26%	9%	25%
	Annually for all students	21%	11%	20%
Were results of student body mass index (BMI) measurements sent to parents?	Yes No Measured but don't know whether reported N/A, not measured	28% 12% 7% 53%	13% 3% 3% 80%	27% 12% 7% 55%
How often was student physical fitness measured?	Never	31%	49%	32%
	Selected grades only	35%	20%	34%
	Annually for all students	34%	31%	34%
Were results of student physical fitness testing sent to parents?	Yes	38%	24%	37%
	No	18%	18%	18%

TABLE 1.2, CONTINUED

Wellness Policies	Responses	Public	Private	Total
Did school or school district have a wellness policy in place?	Yes, school and district	13%	7%	12%
	Yes, district only	72%	14%	68%
	Yes, school only	4%	26%	6%
	No	4%	43%	7%
	Don't know	6%	9%	7%

The following data show student exposure to each of the wellness policy provisions required as part of the Child Nutrition and WIC Reauthorization Act of 2004. Results are presented separately for schools with a wellness policy (WP) and those without (No WP).

	Responses	Pt WP	ıblic No WP	Pr WP	ivate No WP
Did school or district have goals for nutrition education?	Yes, developed Currently developing No, not yet Don't know	54% 25% 15% 7%	9% 9% 73% 10%	49% 32% 17% 2%	9% 12% 79% 0%
Did school offer formal classroom instruction on nutrition education?	Yes	72%	48%	83%	74%
Did school or district have goals for physical activity?	Yes, developed Currently developing No, not yet Don't know	65% 19% 12% 5%	38% 16% 42% 4%	63% 24% 13% 0%	36% 17% 47% 0%
Did school offer formal classroom instruction on physical activity, exercise and health related fitness?	Yes	90%	87%	88%	84%
Did school or district have guidelines for reimbursable school meals?	Yes, developed Currently developing No, not yet Don't know	61% 6% 10% 22%	52% 9% 28% 12%	40% 4% 41% 14%	5% 0% 87% 8%
Did school or district have nutrition guidelines for competitive foods and beverages?	Yes, developed Currently developing No, not yet Don't know	49% 10% 16% 26%	20% 11% 49% 20%	39% 12% 37% 12%	5% 5% 80% 10%
Did school or district have plans for evaluation and implementation of wellness policy?	Yes, developed Currently developing No, not yet Don't know	40% 23% 17% 20%	N/A	38% 28% 29% 5%	N/A
Did school or district designate one or more persons with operational responsibility for ensuring that the wellness policy was implemented?	Yes, school and district Yes, district only Yes, school only No Don't know	14% 51% 13% 12% 10%	N/A	8% 9% 52% 29% 2%	N/A
Did school or district have an ongoing health advisory council or an advisory group in place to make recommendations regarding nutrition and/or exercise for students?	Yes, school and district Yes, district only Yes, school only No Don't know	16% 40% 5% 21% 18%	3% 18% 2% 57% 20%	7% 8% 23% 56% 6%	0% 0% 4% 95% 1%

Due to rounding, some percentages may not sum to exactly 100. Exact numbers are available at www.bridgingthegapreserach.org. Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2010.

Overview of Study Methods

This study is based on mail-back survey data gathered from principals, food service managers, and other staff at nationally representative samples of public and private elementary schools during the 2006–07 and the 2007–08 school years. For the 2006–07 school year, we received responses from 837 schools (57.7% response rate), and for the 2007–08 school year, we received responses from 1,084 schools (74.4% response rate). Because elementary schools vary in grade composition (e.g., pre-K-3, grades 2–5, K-6), we selected grade 3 as a proxy for sampling and weighting our data. All schools included at least one grade 3 class, and the third-grade student population at each school was used to develop weights that reflect the percentage of elementary students nationwide who were impacted by the practices referenced in our survey.

Data are presented on the weighed percentage of students nationwide who were enrolled in a school with each policy or practice discussed. Because some schools included higher grades (particularly at smaller schools and private schools), most of our survey items asked respondents to provide information on practices relevant only to K–5 students, although for some topics such as recess and physical education, we asked about grade 3 specifically. Findings in this report are based on analyses of school-level practices that ultimately impacted approximately 21 million K–5 students each year.

References

- Ogden CL, Carroll MD, Curtin LR, et al. "Prevalence of Overweight and Obesity in the United States, 1999–2004." *Journal of the American Medical Association*, 295(13): 1549–1555, 2006.
- Ogden CL, Carroll MD and Flegal KM. "High Body Mass Index for Age Among U.S. Children and Adolescents, 2003–2006." *Journal of* the American Medical Association, 299(20): 2401–2405, 2008.
- Ogden CL, Carroll MD, Curtin LR, et al. "Prevalence of High Body Mass Index in U.S. Children and Adolescents, 2007–2008." *Journal* of the American Medical Association, 303(3): 242–249, 2010.
- Institute of Medicine Committee on Prevention of Obesity in Children and Youth. *Childhood Obesity: Health in the Balance*. Koplan, JP, Liverman, CT and Kraak, VI (eds). Washington, DC: National Academy of Sciences. 2005.
- Barlow SE. "Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity: Summary Report." *Pediatrics*, 120(Suppl 4): S164–S192, 2007.
- Davis MM, Gance-Cleveland B, Hassink S, et al. "Recommendations for the Prevention of Childhood Obesity." *Pediatrics*, 120(Suppl 4): \$229–\$253. December 2007.
- Belansky E, Chriqui JF and Schwartz MB. "Local School Wellness Policies: How Are Schools Implementing the Federal Mandate?" Robert Wood Johnson Foundation Research Brief, 2009, www.rwjf. org/files/research/20090708loalwellness.pdf (accessed April 2010).
- Chriqui JF, Schneider L, Chaloupka FJ, et al. Local Wellness Policies:
 Assessing School District Strategies for Improving Children's Health.

 School Years 2006–07 and 2007–08. Chicago, IL: Bridging the Gap,
 Health Policy Center, Institute for Health Policy and Research, University of Illinois at Chicago, 2009, www.bridgingthegapresearch.org.
- National Center for Education Statistics. "Projection of Education Statistics to 2018." 2009. http://nces.ed.gov/programs/projections/ projections2018/tables/table_02.asp?referrer=list (accessed April 2010).

- Institute of Medicine. School Meals: Building Blocks for Healthy Children. Washington, DC: National Academies Press, 2009.
- Robinson-O'Brien R, Story M and Heim S. "Impact of Garden-Based Youth Nutrition Intervention Programs: A Review." *Journal of the American Dietetic Association*, 109(2): 273–280, 2009.
- Joshi A, Kalb M and Beery M. Going Local: Paths to Success for Farm to School Programs. 2009, http://departments.oxy.edu/uepi/cfj/ publications/goinglocal.pdf (accessed April 2010).
- National Association for Sport and Physical Education (NASPE).
 Physical Activity for Children: A Statement of Guidelines for Children Ages 5-12. Reston, VA: 2004.
- Alliance for a Healthier Generation. Healthy Schools Program
 Framework. 2009, www.healthiergeneration.org/uploadedFiles/
 For_Schools/Healthy_Schools_Program_Framework/Framework_
 July09_sp_highres.pdf (accessed April 2010).
- National Association for Sport and Physical Education (NASPE).
 Recess for Elementary School Students. Reston, VA: 2006, www. aahperd.org/naspe/standards/upload/Recess-for-Elementary-School-Students-2006.pdf (accessed April 2010).
- McMillan TE. Walking and Biking to School, Physical Activity and Health Outcomes. Active Living Research, 2009, www. activelivingresearch.org/files/ALR_Brief_ActiveTransport.pdf (accessed April 2010).
- 17. Longley CH and Sneed J. "Effects of Federal Legislation on Wellness Policy Formation in School Districts in the United States." *Journal of the American Dietetic Association*, 109(1): 95–101, 2009.
- National Center for Education Statistics. "Projection of Education Statistics to 2018." 2009, http://nces.ed.gov/programs/projections/ projections2018/tables/table 02.asp?referrer=list (accessed April 2010).

bridging the gap Research Informing Policies & Practices for Healthy Youth www.bridgingthegapresearch.org