



## Preventing Childhood Obesity in Michigan's Classrooms

A collaboration between Blue Cross Blue Shield of Michigan and statewide partners

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**Obesity rates have more than doubled in children and quadrupled in adolescents in the past 30 years.<sup>1,2</sup>**

In Michigan, 32.6 percent of children ages 0 to 17 are overweight or obese, compared to a national average of 31.3 percent.<sup>3</sup> In addition to the short- and

long-term health consequences, overweight or obese children are also more likely to have lower academic achievements and score poorly in math than their non-overweight peers.<sup>4</sup> To address the childhood obesity epidemic in Michigan, Blue Cross Blue Shield of Michigan (BCBSM) launched Building Healthy Communities (BHC), a school-based prevention program to help children adopt healthy habits at a young age. BHC targets children where they spend a large percentage of their time, in schools, and aligns with "The Michigan Health & Wellness 4 x 4 Plan."<sup>5</sup>

*"Building Healthy Communities was created by Blue Cross to help Michigan kids adopt healthy habits at a young age, increasing the likelihood they will carry those behaviors into adulthood and decreasing their risk of developing many serious health issues in the future."*

- Lynda Rossi, Executive Vice President, Strategy and Public Affairs for Blue Cross Blue Shield of Michigan

BHC focuses on two key healthy behaviors outlined in the health and wellness program—maintaining a healthy diet and engaging in regular exercise. By providing access to healthy food, health education, physical education and physical activity programs, BHC helps children lead and maintain healthy and active lives.

### Building Healthy Communities

BHC is a comprehensive, school-wide network of physical activity and healthy eating curricula and programs. BCBSM has invested more than \$5.6 million in BHC since 2009, and more than 390 schools and 180,000 students have participated in the program.<sup>6</sup> While the program initially began in 17 elementary schools, BHC now includes programs for elementary, middle and high school students across the state. This expansion was possible through collaborations with key health and wellness leaders, including the Michigan Department of Health and Human Services (MDHHS), Michigan Department of Education, Michigan Fitness Foundation, Michigan State University Extension, Michigan Team Nutrition, United Dairy Industry of Michigan, University of Michigan, Wayne State University's Center for School Health and Action for Healthy Kids. Partnering organizations have pooled funding, resources and expertise to expand the program. Participating schools are selected based on a demonstrated commitment and administrative support to implement the program and sustain it in future school years.

## Engaging Elementary Schools Through Partnership<sup>7</sup>

BCBSM, MDHHS, the Center for School Health at Wayne State University, Michigan Fitness Foundation and the United Dairy Industry of Michigan have joined together to offer the “Building Healthy Communities: Engaging elementary schools through partnership” program. To date, the elementary school program has reached 188 schools and more than 75,000 students. Participating schools enact six core components during their healthy school transformation:

- 1 School principals, support teachers, staff and students are fully engaged.
- 2 Classroom teachers integrate brief nutrition lessons aligned with the U.S. Department of Agriculture (USDA) *Dietary Guidelines for Americans*, conduct short physical activity breaks and share resources with parents.
- 3 Physical educators implement the Exemplary Physical Education Curriculum, developed by the Michigan Fitness Foundation.
- 4 Schools promote active recess by providing physical activity equipment and play guidance.
- 5 Schools use student leadership to implement “Fuel Up to Play 60,” with additional support from the United Dairy Industry of Michigan. “Fuel Up to Play 60” is the nation’s largest in-school nutrition and physical activity program, launched by the National Dairy Council and the National Football League, in collaboration with the USDA, to help encourage today’s youth to lead healthier lives.<sup>8</sup>
- 6 Schools create healthy kids clubs by initiating a new weekly after-school program or enhancing the activity offerings in existing programs.

Each school works with a hands-on coordinator provided by BHC to establish its program and ensure its success and sustainability. They also receive all program materials and training necessary for full implementation as well as ongoing support during the transition to a healthy school environment. Caryl Dazer, a physical education teacher at Cleveland Elementary School in Livonia, has seen a difference in the children’s faces: “they seem to be more engaged, more excited to come to physical education. There’s a ball for every student—no one’s waiting around anymore to get active.” Dazer hopes students take home what they learn at school about food and fitness and encourage their families to be healthy as well.

## Engaging Middle Schools Through Project Healthy Schools<sup>9</sup>

“Building Healthy Communities: Engaging middle schools through Project Healthy Schools” is a wellness program supported through a partnership that includes BCBSM, MDHHS and the University of Michigan. The program’s five goals are for students to eat more fruits and vegetables, choose less sugary food and beverages, eat less fast and fatty food, be active every day, and spend less time in front of a screen. To date, this program operates in 60 schools and has reached more than 41,000 students. The program has three main components:

- 1 The **education component** is delivered to sixth grade students through a “Project Healthy Schools” kickoff activity, educational lessons emphasizing the five goals and a healthy habits challenge.
- 2 **Environmental changes** are tailored to the specific needs of the school and can impact students of all grades. These changes include a school wellness event, collaboration between the program and the food service director to promote healthy food and beverage options, health promotion bulletin boards, dissemination of program and health promotion information to staff and families, creation of a school wellness team, and identification of wellness champions.
- 3 The **measurement component** includes a health outcomes evaluation for students and other quality assessment tools to be completed by teachers and students.

Schools receive and work with a hands-on coordinator during the first year of implementation to establish and ensure long-term sustainability of the program. Key personnel are identified early on, and the wellness champions are tasked with working with the school administration to ensure full implementation during year 2 and beyond.

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– Caryl Dazer, a physical education teacher,  
Cleveland Elementary School in Livonia, MI

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# Step Up for School Wellness Program<sup>10</sup>

BCBSM recently expanded the BHC program with the launch of the “Building Healthy Communities: Step Up for School Wellness” program. This program aligns with the initiatives of a greater number of partners in order to reach more schools across the state, and the partners include the MDHHS, Michigan Department of Education, Michigan State University Extension, Michigan Team Nutrition, the United Dairy Industry of Michigan and Action for Healthy Kids. This new program targets schools that may lack the building capacity or the administrative and teaching support staff to implement the BHC elementary or middle school programs. It differs from the other BHC programs in that it is designed for any grade level combination, from K-12, with a more flexible structure to meet the needs of individual schools and establish a foundation for future healthy school environment improvements. “Step Up for School Wellness” has already reached 69 schools and more than 33,000 students since its launch.

Participating schools work toward a culture of wellness through five program goals:

- ★ Build or re-energize a school health team
- ★ Assess the school health environment using the Healthy School Action Tools (HSAT)

- ★ Empower students to make healthy choices that include fruit, vegetables, low-fat dairy, whole grains and lean protein every day
- ★ Empower students to be more physically active every day
- ★ Evaluate, sustain and share successful implementation strategies

Schools work to achieve these goals by following five action-focused steps recommended by Michigan’s new “Steps to a Healthy School” website (Figure 1). The flexible structure allows each school to tailor the program to fit its unique needs and receive the necessary tools to support the selected elements. In the third step, “Gather your tools and take action,” schools choose two or more components, including at least one from each of the two focus areas. Component options include:

- ★ Classroom physical activity breaks using GoNoodle Plus (Grades K-5 or K-8)
- ★ Active recess using a mobile cart with physical activity equipment and suggested activities (Grades K-8)
- ★ Evidenced-based nutrition education using the Michigan Model for Health™ (Grades K-12)

## STEP UP FOR SCHOOL WELLNESS (FIG. 1)



**STEP 1:**  
**BUILD OR RE-ENERGIZE A  
SCHOOL HEALTH TEAM**



**STEP 2:**  
**ASSESS THE SCHOOL  
HEALTH ENVIRONMENT**



**STEP 3:**  
**GATHER YOUR TOOLS  
AND TAKE ACTION**

### **Focus Area 1: Physical Activity and Physical Education**

- Classroom Physical Activity Breaks
- Active Recess
- Quality Physical Education

### **Focus Area 2: Health Eating and Nutrition Education**

- Breakfast in the Classroom
- Smarter Lunchrooms<sup>11</sup>
- Healthy Parties & Celebrations
- Nutrition Education



**STEP 4:**  
**EVALUATE AND SUSTAIN  
YOUR ACTIVITIES**



**STEP 5:**  
**SHARE SUCCESSES AND  
PLAN FOR THE FUTURE**

## Program Outcomes and Next Steps

Each of these three programs has a unique evaluation plan—an important tool for understanding the success of these programs and ensuring impactful changes in children’s physical activity and healthy eating. BCBSM utilizes both internal and external evaluations—including evaluations and reports from Action for Healthy Kids, Altarum Institute, the University of Michigan, and Wayne State University. These evaluations measure changes to the school environment and the programs’ impact on students’ physical activity and nutrition. Schools are encouraged to participate in the evaluation process and must approve the evaluation plan and complete short surveys, interviews by students and school staff, and implementation reports. The data used throughout the program remain fully confidential, and specific project reports do not identify schools or individuals.

### KIDS IN BUILDING HEALTHY COMMUNITIES ARE INCREASINGLY PHYSICALLY ACTIVE (FIG. 2)

*On average, middle school students participating in BHC engaged in:*



**10:24** MORE MINUTES OF VIGOROUS EXERCISE



**26:34** MORE MINUTES OF MODERATE EXERCISE PER WEEK POST INTERVENTION



**26.4%** INCREASE IN STUDENT PARTICIPATION IN SCHOOL SPORTS

Source: Adapted from information provided by Blue Cross Blue Shield of Michigan

A main goal of the BHC “Engaging elementary schools through partnership” program is to increase the amount of time that students spend participating in moderate to vigorous physical activity (MVPA) during the school day. An evaluation conducted by Wayne State University found that fourth grade students significantly increased their daily MVPA by almost 4.5 minutes—from 7.37 to 11.67 minutes—representing a 58 percent increase. The study also found noteworthy changes in MVPA across ethnicities, with African American students increasing their MVPA significantly more than their peers.<sup>12</sup> Citing existing studies, BHC estimates that the health benefits achieved through the elementary school program will translate into \$200 million in future economic productivity and \$210 million in future health care savings.<sup>13</sup>

Evaluations of the middle school program have also reported positive results, with students increasing their vegetable and fruit consumption by 10.1 percent and 24.2 percent, respectively, in addition to having greater participation rates in physical activity (Figure 2).<sup>14</sup> Preliminary feedback on the “Step Up for School Wellness” program is promising, and evaluation results should be available after the end of the 2015-2016 school year.

BCBSM’s Building Healthy Communities program has grown into a collaboration supported by ten statewide organizations impacting 180,000 students in 390 schools. The program is currently being implemented in 117 elementary, middle and high schools across the state for the 2015-2016 school year, and it will continue to be evaluated and updated with the intention of reaching more students in the years to come. The BHC program is equipping children and adolescents with the knowledge and behaviors needed to lead healthy and active lives. Decreasing the rate of childhood obesity in Michigan will have a downstream impact by preventing chronic diseases associated with adult overweight and obesity, decreasing the economic burden associated with health care costs and lost productivity, and ultimately ensuring a healthier future for Michigan and its residents.

<sup>1</sup> Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of childhood and adult obesity in the United States, 2011-2012. *Journal of the American Medical Association* 2014;311(8):806-814.

<sup>2</sup> National Center for Health Statistics. Health, United States, 2011: With Special Features on Socioeconomic Status and Health. Hyattsville, MD; U.S. Department of Health and Human Services; 2012. <http://www.cdc.gov/nchs/data/has/has11.pdf>

<sup>3</sup> The Henry J Kaiser Family Foundation. State Health Facts: Percent of Children (ages 10-17) who are Overweight or Obese. 2011 data. <http://tinyurl.com/gnbh3zt>

<sup>4</sup> Trust for America’s Health, and Robert Wood Johnson Foundation. The State of Obesity: Better Policies for a Healthier America 2015. <http://tinyurl.com/jbmvmvm>

<sup>5</sup> Michigan Department of Community Health. Our Health Begins with: The Michigan Health and Wellness 4x4 Plan. June 2012. <http://tinyurl.com/a6ouuvg>

<sup>6</sup> Totals include schools and students that participated in a previously offered program, Building Healthy Communities: Breakfast in the Classroom.

<sup>7</sup> Blue Cross Blue Shield of Michigan. Building Healthy Communities: Engaging Elementary Schools Through Partnership. 2016-2017 Call for Applications. <http://tinyurl.com/hnlghps>

<sup>8</sup> Fuel Up to Play 60. About the Program. <http://tinyurl.com/hd895xy>

<sup>9</sup> Blue Cross Blue Shield of Michigan. Building Healthy Communities: Engaging middle schools through Project Healthy Schools. 2014-2015 Program Overview. <http://tinyurl.com/hpbumko>

<sup>10</sup> Blue Cross Blue Shield of Michigan. Building Healthy Communities: Step Up for School Wellness! 2016-2017 Call for Applications. <http://tinyurl.com/hev5lvs>

<sup>11</sup> Developed by the Cornell Center for Behavioral Economics in Child Nutrition Program to target the behavioral triggers that lead to the selection and eating of healthier food.

<sup>12</sup> Centeo, EE, et al. Physical Activity Change Through Comprehensive School Physical Activity Programs in Urban Elementary Schools. *Journal of Teaching in Physical Education*. 2014, 33, 573-591. [http://coe.wayne.edu/2011-2012/09\\_centeo\\_2014.pdf](http://coe.wayne.edu/2011-2012/09_centeo_2014.pdf)

<sup>13</sup> Blue Cross Blue Shield of Michigan. Building Healthy Communities Elementary School Program Infographic. 2016. <http://tinyurl.com/jhf7lxe>

<sup>14</sup> Blue Cross Blue Shield of Michigan. Building Healthy Communities Middle School Program Infographic. 2016. Provided by BCBSM.