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Leading the Way in Preventing Childhood Obesity in Georgia

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Childhood obesity is a serious public health issue.¹ Overweight and obesity are the products of multiple factors, including poor nutrition, lack of physical activity, home and school environments, genetics, and culture.² Prevention strategies, therefore, must address a wide range of factors. States and their local partners have the opportunity to make real changes in the policies, systems, and environments that influence what foods and opportunities for physical activity are regularly available to children. For more than 15 years, Georgia has been working to address childhood obesity. This supplemental issue of *Public Health Reports* highlights initiatives that are part of a statewide approach to addressing physical activity, nutrition, and weight status in Georgia's school-aged children and adolescents.

A Timeline of State Obesity Prevention Efforts

Georgia's efforts to curb obesity are the culmination of decades of foundational work. Prompted by state rates of childhood obesity that were among the highest in the nation, policy makers and public health partners in Georgia identified, developed, and launched state and local initiatives to prevent and control childhood overweight and obesity.³

In 2001, Georgia Senate Resolution 252 formed the Joint Study Committee on Physical Activity in Schools to identify strategies to achieve high-quality, school-based physical activity. The committee recommended the creation of a physical education coordinator at the Georgia Department of Education and the reestablishment of physical education as a required subject in Georgia's public schools.⁴ In 2000, House Bill 1187 had removed physical education as a required component of a comprehensive middle school curriculum; schools were required only to make health and physical education available.⁵

With funding from the Centers for Disease Control and Prevention, stakeholders across Georgia convened throughout 2003-2004 to create a state physical activity and nutrition

plan that used the socioecological model as a framework and focused on policy, systems, and environmental change strategies.⁶ In 2005-2006, a group of foundations that came together as the Philanthropic Collaborative for a Healthy Georgia recognized that a lack of data was a barrier to achieving statewide policy and programmatic support and implementation of various child health and wellness efforts.⁷ The group funded the Georgia Youth Fitness Assessment pilot study to assess body mass index (BMI) and fitness measurements in a sample of 5248 fifth and seventh graders in Georgia.⁸ The study served as a catalyst for other obesity prevention efforts. For example, in 2014, Georgia was recognized as the first state in the nation to achieve the best practice standards of the Presidential Youth Fitness Program.⁹ The study also led to creation of the Georgia childhood obesity systems dynamics model, which has been used to educate legislators and stakeholders on how various evidence-based child health interventions could affect the prevalence of childhood obesity during a 10-year period.¹⁰

These efforts led to the passage of the Student Health and Physical Education (SHAPE) Act of 2009, which laid the foundation for the work happening today in Georgia. Beginning October 1, 2012, this act requires the State Department of Education to submit an annual report on student fitness to the governor.¹¹

Assessing Overweight and Obesity in Georgia

All Georgia physical educators are required under the SHAPE Act to collect fitness data, including BMI

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measurements, through an annual assessment of all children enrolled in physical education classes in public elementary, middle, and high schools.¹¹ The Cooper Institute collects and analyzes BMI measurements using the FitnessGram, a noncompetitive health-related fitness assessment tool based on the scientifically established standards designed to help schools evaluate student fitness levels.¹²

Extensive planning and hard work by subject matter experts, local physical education instructors, and state leaders have enabled data collection on more than 1 million students annually from 2012 through 2016. The Georgia Departments of Public Health and Education worked closely with the Governor's Office, The Cooper Institute, and other public and private organizations to ensure that the state developed a systematic data collection process and created best practices that serve, and will serve, the state well for years to come. Local schools and communities across the state use collaborative public-private prevention and intervention efforts that contribute to this success.

FitnessGram classifies each student's BMI as inside or outside of a Healthy Fitness Zone, based on the Centers for Disease Control and Prevention's BMI weight status categories.^{13,14} Students classified as underweight (BMI <5th percentile), overweight (BMI 85th to <95th percentile), or obese (BMI ≥95th percentile) fall outside of the Healthy Fitness Zone. Students who have a normal or healthy weight (5th to <85th percentile) are considered to be inside the Healthy Fitness Zone.¹³ Schools confidentially report student data to parents or guardians, and state-level aggregate data are released by the Georgia Department of Education for public consumption.

Collective Impact Drives Georgia Shape Implementation

Governor Nathan Deal included reducing childhood obesity in his 2011 strategic goals for the state.¹⁵ In September 2011, a group representing child health and wellness foundations, the medical community, universities, the Governor's Office, and the Georgia Departments of Public Health, Education, and Agriculture defined a set of principles to guide efforts for the statewide implementation of the SHAPE Act. This multidisciplinary effort, known as Georgia Shape, serves as an umbrella initiative, allowing diverse stakeholders to work together to achieve strategic childhood obesity-related goals using a collective impact framework that promotes diverse partners working toward a common goal(s) by reinforcing messages in the hope of creating population-level change.¹⁶

Georgia Shape currently is governed by a 13-member Governor's Advisory Council on Childhood Obesity that includes members from government, philanthropic, academic, and business organizations. Five expert subgroups comprising academics and subject matter experts from public and private organizations (data and evaluation, nutrition, physical activity, health care, and marketing and communications) report to the council and lead initiatives. With

facilitation and organizational support from the Georgia Department of Public Health and the Governor's Office, Georgia Shape partners work through a collective impact framework to achieve the common goals of better fitness and decreased rates of childhood obesity among school-aged children in Georgia.¹⁷ To combat childhood obesity, partners use the shared measures of the FitnessGram fitness assessment, statewide participation rates in free and reduced-cost school meals, and documented achievement of best practices in preschool and school settings through various awards programs. The initiative has led to targeted communication approaches and evidence-based strategies for addressing obesity, physical activity, and nutrition in children.^{18,19}

Considerable progress has been made in Georgia. In the 2011-2012 school year, the first year of FitnessGram implementation, almost 1 million students were assessed. The results showed that 42% of the state's student population fell above or below the Healthy Fitness Zone for BMI.¹³ Subsequent annual data from 2012-2013 to 2015-2016 suggest that the proportion of students with a BMI outside the Healthy Fitness Zone has declined.²⁰ The proportion of Georgia public school students in grades 1 through 12 who were inside the BMI Healthy Fitness Zone during the 2015-2016 school year differed greatly by county (Figure).

Projects and programs in support of Georgia Shape have expanded beyond the original focus of FitnessGram to include many other approaches, such as early care and education environments targeting students aged 2-5, birthing hospitals, and health care providers.¹⁶ Although much of the work to date has focused on physical activity, partners are working to increase statewide nutrition efforts as well. For example, Georgia has engaged in extensive promotion of farm-to-school and farm-to-preschool efforts, training for school systems related to healthy school lunch and snack opportunities, healthy after-school programs, and baby-friendly hospitals.¹⁶

Georgia's Progress: Implications for Public Health

To document the work occurring under Georgia Shape, the Georgia Department of Public Health, in partnership with the University of Georgia, held the first research symposium on childhood overweight and obesity in Georgia in October 2015.²¹ The purpose of the symposium was to highlight the work of partners from public health practice, research, agriculture, and health care in reducing childhood overweight and obesity in the state.

This supplemental issue of *Public Health Reports* features research and practice findings presented at the symposium. Our aim in sharing these examples is to provide evidence that may assist public health practitioners working in other states to address childhood overweight and obesity. We believe that multipronged and multilayered approaches, such as those of the Georgia Shape initiative, are needed to control

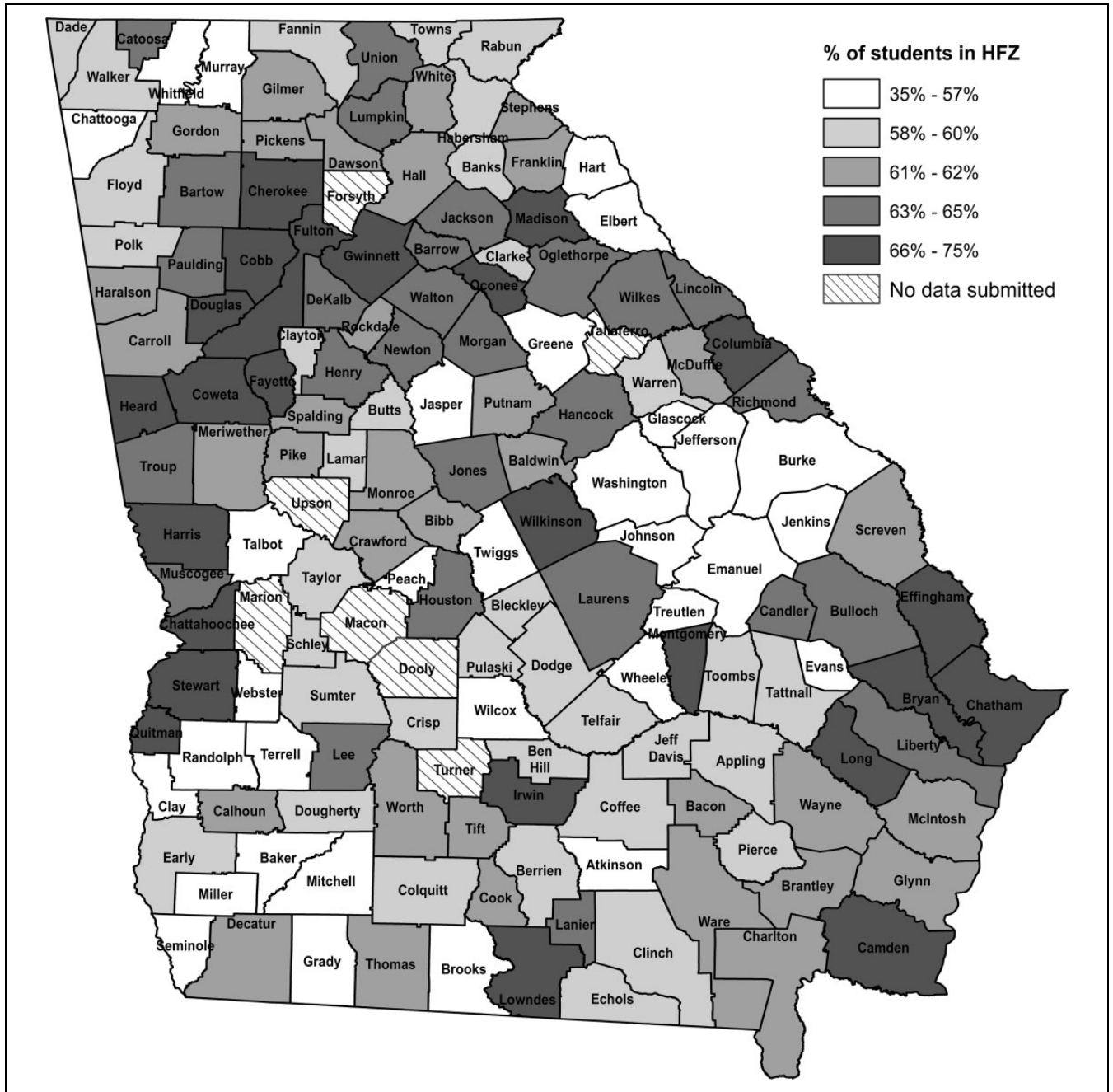


Figure. Public school students in grades 1-12 classified as in the Healthy Fitness Zone (HFZ) for body mass index (BMI), by county, Georgia, 2015-2016. Data source: Georgia Department of Education Annual Fitness Assessment Program Report.²⁰ HFZ criteria standards as per FitnessGram.¹² FitnessGram classifies each student’s BMI as inside or outside of the HFZ, based on the Centers for Disease Control and Prevention’s BMI weight status categories. Students classified as underweight (BMI <5th percentile), overweight (BMI 85th to <95th percentile), or obese (BMI ≥95th percentile) fall outside of the HFZ. Students who have a normal or healthy weight (5th to <85th percentile) are considered to be inside the HFZ.¹⁴ Used with permission from The Cooper Institute. Quantile method used for data class breaks. The percentage of students in the HFZ was between 35% and 75%.

childhood obesity. Exploring these approaches will help us understand the mechanisms by which healthier weight, better quality dietary intake, increased fitness, improved health status, and reduced disease risk can be obtained.

Georgia Shape will continue its work on childhood obesity. From 2013 through 2023, Georgia Shape and its

partners have agreed to work toward increasing the number of students in the Healthy Fitness Zone for BMI by 10 percentage points. The partners are committed to expanding efforts among students who remain at high risk of childhood obesity, including racial/ethnic minority students, and in schools in which a high percentage of students are of low

socioeconomic status. Future initiatives will also aim to increase (1) the aerobic capacity of Georgia's children and adolescents; (2) the breastfeeding rate across Georgia, especially among black women, who historically have had lower rates of breastfeeding than white women; and (3) the number of early care or preschool centers that excel in nutrition and physical activity measures.^{19,22} Many of the studies and efforts outlined in this supplement speak directly to these measures.

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