



Facts and Concerns About School-Based BMI Screening, Surveillance and Reporting

What Is Mandatory School-Based BMI Screening, Surveillance and Reporting?

A number of statesⁱ and school districts have enacted legislation and policy that requires schools to measure and report a student's BMI via "BMI report cards" or "Fitnessgrams." Some states have passed legislation requiring schools to measure BMI, but without a requirement to report this to parents. This screening and surveillance practice is often put into place as a perceived method for combating childhood obesity and seen as a way of promoting health. A January 2012 poll examined the possible association between school-based childhood obesity prevention programs and an increase in eating disorders among young children and adolescents. Following their children's participation in the program, 30% of parents reported at least one worrisome behavior in their children that could be associated with the development of eating disordersⁱⁱ. Eating disorders are the deadliest of all mental illnessesⁱⁱⁱ. As evidence of harm resulting from BMI screening and surveillance in schools emerges, some states and school districts are slowly beginning to rethink BMI screening and surveillance policies, but typically only after harm is done^{iv}.

What Is BMI?

BMI is the acronym for Body Mass Index, a measure of an individual's relative weight based on an individual's mass and height. BMI reporting is used in a wide variety of contexts as a way to assess how much an individual's body weight compares to what is considered medically desirable for a person of his or her height. BMI is well established as a poor way of measuring weight in young children, as it is influenced by issues such as muscle development. According to Centers for Disease Control and Prevention (CDC), "BMI is a number calculated from a child's weight and height. ... Although BMI is used to screen for overweight and obesity in children and teens, BMI is not a diagnostic tool." CDC also concludes, "It is important to remember, however, that BMI is not a direct measure of body fatness and that BMI is calculated from an individual's weight which includes both muscle and fat, some individuals may have a high BMI but not have a high percentage of body fat. For example, highly trained athletes may have a high BMI because of increased muscularity rather than increased body fatness." Additionally, using BMI as a predictor of health is limiting, as "weight is only one factor related to risk for disease."

Why Not Conduct BMI Screening and Surveillance in Schools?

There are numerous concerns associated with conducting BMI screening, surveillance and reporting in schools^{vi}.

- **There is little data available on the efficacy of BMI screening and surveillance in schools**: According to CDC, “Little is known about the outcomes of BMI measurement programs, including effects on weight-related knowledge, attitudes, and behaviors of youth and their families. As a result, no consensus exists on the utility of BMI screening programs for young people^{vii}.” Additionally, little is known about the impact such interventions have on changing behaviors related to weight and physical activity.
- **Schools are not "medical homes"**: The American Academy of Pediatrics recommends that BMI should *only* be conducted by family physicians “... as part of normal health supervision within the child’s medical home” (aka: by their primary care provider). Traditionally, schools are not a child’s medical home^{viii}.
- **Unless safeguards are solidly in place, a risk of harm exists**: Individuals, including children, who are simply told they are too fat can be at risk for using dangerous weight loss strategies such as the abuse of diet pills, fasting, and/or extreme caloric restriction. Furthermore, children who are overweight/obese are still at risk for eating pathology, although it is often overlooked^{ix}.
 - Unfortunately, there is currently no safeguard in place to fully ensure that the person doing the testing is free of weight-bias^x; not suffering body image issues themselves; not suffering an eating disorder themselves; able to support a child’s emotions upon hearing their BMI; ethically able to address questions about health. Further, often the person doing the screening is an older student, parent volunteers or a school gym teacher and all too often BMI numbers are called out in front of a group of students^{xi}.
- **Weight is not a behavior**: A child’s weight is not a reliable proxy for health or fitness and focusing on modifying weight may not be as effective as modifying behaviors. Prevention programs should thus target behaviors that promote a healthy lifestyle in a way that is weight-neutral. Interventions should focus not only on providing opportunities for appropriate levels of physical activity and healthy eating, but also promote self-esteem, body satisfaction, and respect for body size diversity^{xii}.
- **Screenings give information without meaningful strategies**: On a daily basis, the public is bombarded with contradictory information about healthy eating, healthy weight and strategies for weight loss. How do parents navigate all this data and properly guide their children? Little is known about how parents react to the screening information. Some parents may focus on the child’s weight as another important arena for achievement and encourage diets and other weight loss strategies that could inadvertently be harmful. There is no assurance that the communication of screening information and results will be done in a respectful and inclusive manner. Mandatory BMI reporting forces parents to walk the fine line between encouraging healthy eating and risky weight loss strategies that can put the child at risk for developing negative body image and eating disorder symptoms.

Why Not Conduct BMI Screening and Surveillance in Schools? *cont.*

- **BMI report cards may put children at risk for bullying and teasing:** Bullying has become an increasingly notable problem for schools and parents alike. BMI reporting is likely to promote weight and fat-related stigma where children are at risk for being called names and experiencing criticism and subsequent shame related to their appearance. Research shows that being fat is a common reason for taunting and teasing. Currently there is no assurance that BMI screening is taking place in a context where size discrimination is not tolerated. In addition to contributing to decreased self-esteem, such teasing can increase one's risk of developing an eating disorder. Prospective studies show that weight-related teasing is associated with binge eating and other eating disordered behaviors, lower levels of physical activity and increased weight gain over time. Thus, ensuring a school environment where all children are supported in feeling good about their bodies is essential to promoting health in youth^{xiii}.
- **BMI reporting may adversely impact children's self-esteem:** BMI reporting and Fitnessgrams have not been shown to increase psychological health. Such assessments provide potential detriment to students' self-esteem and can lead to dangerous peer-based comparisons and increased body dissatisfaction.

Requests for Solutions:

- CDC should work with experts in the field of eating and body image disorders to update their guidelines for BMI screening and surveillance in schools;
- CDC should conduct a study and issue a report on the impacts^{xiv} on children in schools that have already existing BMI screening and surveillance programs and Fitnessgrams; and
- CDC should provide additional guidance and best practices so that schools can administer BMI screening and surveillance without inflicting unintended harm on students.

"Facts and Concerns About School-Based BMI Screening, Surveillance and Reporting"

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ⁱ Arkansas implemented a statewide BMI screening and surveillance program in 2003 (State of Arkansas, 84th General Assembly, Regular Session. Act 1220 of 2003. HB 1583. 2003); In California, students participate in physical fitness testing that assesses BMI along with other fitness-related variables (California Department of Education. 2005 California physical fitness test: report to the governor and legislature. Sacramento, CA: California Department of Education; 2005).

ⁱⁱ Source: University of Michigan Health System. (2012, January 27). School obesity programs may promote worrisome eating behaviors and physical activity in kids. ScienceDaily. Retrieved June 4, 2014 from www.sciencedaily.com/releases/2012/01/120124151207.htm

ⁱⁱⁱ At least every 62 minutes someone dies as a direct result from suffering an eating disorder (meaning that every single day at least 23 people will die as a direct result of suffering an eating disorder. Source: Scott J. Crow, M.D. and Sonja Swanson, PhD.; Eating disorders are a source of significant morbidity and mortality among youth in the United States. Source: Swanson SA, Crow SJ, Le Grange D, Swendsen J, Merikangas KR. Prevalence and Correlates of Eating Disorders in Adolescents: Results From the National Comorbidity Survey Replication Adolescent Supplement. Arch Gen Psychiatry 2011;68:714-23.

^{iv} Senator Kim Hendren, an original supporter of the Arkansas legislation, introduced an act that would repeal the requirement, noting that since the policy's enactment some athletes are being incorrectly labeled as overweight; Maine enacted legislation in 2005 to address childhood obesity only after an amendment was added that eliminated a provision requiring BMI testing; Georgia introduced legislation in 2005 to mandate BMI testing and parental notification however a sponsor of the bill, Representative Stephanie S. Buckley, chose to not pursue the legislation after receiving voluminous concern from constituents that the measure could harm students' self-esteem; Maryland's measure to implement mandatory BMI testing of all students failed after receiving a negative report from the Education, Health and Environmental Affairs Committee; and in June 2014, a city in New York decided to rethink its policy on the delivery of Fitnessgrams --though they vowed to continue BMI testing (Source: <http://nypost.com/2014/05/24/city-to-rethink-distribution-of-schoolkids-fitnessgrams/>)

^v http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html#What%20is%20BMI

^{vi} For one example, please see <http://nypost.com/2014/05/22/nyc-says-this-girl-is-fat/>

^{vii} The Centers for Disease Control and Prevention: http://www.cdc.gov/healthyyouth/obesity/BMI/pdf/BMI_execsumm.pdf

^{viii} Nihiser AJ et al. (2009). BMI measurement in schools. Pediatrics; 124(Suppl 1):S89-97.

^{ix} Sim LA., Lebow J., & Billings M. (2013). Eating disorders in adolescents with a history of obesity. Pediatrics; 132:e1026-1030.

^x Such assessments provide potential detriment to students' self-esteem and can lead to dangerous peer-based comparisons and practices such as Fitnessgrams represent "fat-shaming," associated with the development of dieting and disordered eating practices. Source: The Academy of Eating Disorders:

www.aedweb.org/web/downloads/BMI_and_Fitnessgrams_Release_FNL.pdf

^{xi} The Academy of Eating Disorders opposes approaches that may be blaming, shaming or harmful and they urge media, health-care, educational and governmental organizations to focus on health-promoting policy and behavior. The AED further opposes narrow focus on body weight and BMI, which may promote shaming and weight-based stigma. The AED has published guidelines to address childhood obesity without doing harm: Child Obesity Position Statement:

www.aedweb.org/web/index.php/23-get-involved/position-statements/90-aed-statement-on-body-shaming-and-weight-prejudice-in-public-endeavors-to-reduce-obesity-4

^{xii} Dietz, Story & Leviton (2009) Introduction to Issues and Implications of Screening, Surveillance, and Reporting of Children's BMI Pediatrics; 124(Suppl 1) S1-S2.

^{xiii} Ibid.

^{xiv} Impacts including, but not limited to: self-esteem, body bullying, incidence of eating disordered behaviors and eating disorders, and health improvements or negative health consequences.