

In February 2005, the Office for Education Policy published a fact sheet detailing Arkansans' attitudes toward the Body Mass Index initiative (BMI) and found that the state was roughly divided on the issue. Since 2005, the results of BMI screening have been chronicled in a pair of government reports, and the General Assembly has acted to modify how BMI testing is undertaken. In this policy brief we outline what the research indicates after three years of BMI testing, and how the laws surrounding BMI have changed.

In response to growing concern over the phenomenon which is increasingly being referred to as the childhood obesity “epidemic,” Arkansas Legislative Act 1220 was signed into law by former Governor Mike Huckabee in April, 2003. The key component of Act 1220, more commonly known as the BMI Initiative, included requiring annual body mass index (BMI) screenings for Arkansas public school students, with results sent to parents in confidential reports.

THE DEBATE OVER BMI SCREENING

Proponents of tracking students' body mass index argue that children are increasingly at risk for long-term health problems stemming from obesity. They note that declines in student physical activity—exacerbated by shorter recess periods in elementary school—are contributing to the problem. The prevalence of vending machines, which serve as a source of revenue for local schools, also contributes to the so-called childhood obesity epidemic.

Critics of BMI testing often assert that BMI screening stigmatizes children and their parents by identifying a child as overweight. Moreover, they suggest that BMI screening lacks scientific credibility because it fails to take into account muscle mass, instead calculating a body mass index based simply on height and weight.

SIGNS OF PROGRESS

Three years after the program's implementation, the Arkansas Center for Health Improvement (ACHI), which has been studying the effectiveness of BMI screening, released its 2005-2006 results, “Tracking Progress: The Third Annual Arkansas Assessment of Childhood and Adolescent Obesity.” The report claims that “an analysis of the BMI assessments of public school students reveals that the progression of the childhood obesity epidemic has been halted in Arkansas.” Specifically, results of year three data indicate a .05% decrease in the number of public school students classified as “at risk for overweight” or “overweight.” While this drop is statistically significant given the number of valid reports gathered from student screenings, the fact that parents and students could opt out of screenings might compromise the validity of the results. This is particularly significant when considering that students most likely to opt out are those who are overweight.

Indeed, in year one of the ACHI study, 10% of those students whose BMI could not be measured were listed as “child refused to be measured.” In years two and three, this reason accounted for 17% and 19%, respectively, of those who could not be measured. The report also noted that another significant cause for a student not to be tested was absence from school during the assessment period. In 2007 ACHI released its year three study, which yielded more signs of progress. Perhaps most encouraging, the data indicate that many of the anticipated negative consequences of BMI screening – such as misuse of diet pills, teasing by students' peers, or excessive concern over weight – were not widely reported. Some of the key findings of the year three report include:

- The percentage of parents reporting that they put their child on a diet within the

past six months decreased from 9 percent in year one to 6 percent in year three.

- Student concern about weight has not increased.
- Reported teasing or embarrassment caused by the BMI measurements has declined. The report noted that students have not been teased because of their weight more frequently than before the BMI measurements.
- Student comfort with the BMI report from school has increased.
- The use of diet pills and herbal supplements has not increased.
- Students have not gone on diets at a greater rate than before the BMI measurements. In fact, the percentage of students reporting that they had started a diet dropped slightly, from 29 percent in year one to 26 percent in year three.
- Students have not skipped meals with greater frequency.¹

RACE, POVERTY AND BMI

For critics, analysis of BMI by ethnicity and gender also raises concerns about the overall efficacy of Act 1220 for all public school students. The greatest drops in percentage of students classified as at risk for overweight or obesity occurred in Caucasians of both genders. The percentage of African American females remained at approximately 44% through all three years of the study, and percentage of Hispanic males remained relatively stable at around 50%. According to the ACHI report, however, the highest obesity rates are among Hispanic males (53% to 56% in grades 3-7) and African American females (47% to 49% in grades 3-7). Most of the counties with the highest percentages of students with higher BMIs are located in those areas of the Arkansas Delta and Gulf Coastal Plain regions experiencing economic distress.

REVISITING ACT 1220

Act 1220, the first initiative of its kind in the nation, is claimed by many health advocates to be an important step toward improving the health of Arkansas public school students. The BMI initiative has also garnered national attention for 2008 presidential hopeful Huckabee as well as for Arkansas schools. However, its success in combating childhood obesity for all Arkansas public school students remains to be seen. Recently, Governor Mike Beebe stated that he supports changes to the law, and earlier this month, Representative Kevin Anderson, (R-Rogers), filed two bills concerning BMI testing. House Bill 1173 sought to repeal the BMI assessment program and House Bill 1174 favored leaving the decision of whether to assess or not to individual school districts. A revised version of HB 1173 subsequently passed in the General Assembly in the 2007 regular session, and Governor Beebe signed the bill, known as ACT 201, into law. Key provisions of Act 201 now mandate that screening will be done every other year (previously every year), beginning in kindergarten. Eleventh and twelfth graders will now be exempt from BMI screening. Parents will also have greater ability to opt out of screenings. Critics of Act 201 regard this legislation as a step back from improving the health of Arkansas students, and cite that greater awareness of childhood obesity, coupled with declining vending machine purchases, suggest that the legislature acted rashly in scaling back BMI screening.

For more information on BMI, see the Arkansas Center for Health Improvement (ACHI) report on the Body Mass Index initiative at

http://www.achi.net/current_initiatives/obesity.asp

Act 201, which repealed Act 1220, is available online at <http://www.arkleg.state.ar.us/ftproot/acts/2007/public/act201.pdf>

A comprehensive analysis of year three of BMI assessment, *Year Three Evaluation: Arkansas Act 1220 of 2003 to Combat Childhood Obesity*, published by the University of Arkansas for Medical Sciences Fay W. Boozman College of Public Health, is also available online at http://www.uams.edu/coph/reports/2006Act1220_Year3.pdf