

# BMI Measurements

*One of Eight Brief Reports*

YEAR 5 EVALUATION OF ARKANSAS ACT 1220 OF 2003 TO COMBAT CHILDHOOD OBESITY

## INTRODUCTION

Obesity is recognized as one of the most pressing health threats facing families and communities in Arkansas and in the nation overall. Arkansas Act 1220 of 2003, which mandated statewide policy changes aimed at preventing childhood obesity, included school-based policies that promote the sale of healthier foods and beverages, support physical activity and require annual body mass index (BMI) screenings with results provided to parents in a confidential report. During Year 5, schools worked with the Arkansas Department of Education to implement the new time schedule for BMI assessments that was mandated by Act 201 of 2007. Under the amended bill, public schools were required only to measure and report BMI levels for students in kindergarten and grades 2, 4, 6, 8 and 10.

The key findings presented in this brief report reflect data gathered from 832 school principals and 2,264 parents with children in Arkansas public schools regarding their experiences with the BMI assessments, as well as parental attitudes and concerns about the BMI screening and reporting processes. Information gathered through key informant interviews with school personnel (principals, superintendents, school nurses) and Wellness Committee members also is presented.

As in previous years, our research team at the Fay W. Boozman College of Public Health at the University of Arkansas for Medical Sciences conducted the evaluation with support from the Robert Wood Johnson Foundation. More details from the Year 5 evaluation and complete evaluation reports for Years 1-4 are available at: [www.uams.edu/coph/reports/#Obesity](http://www.uams.edu/coph/reports/#Obesity).



## KEY FINDINGS: BMI MEASUREMENTS

### School Experience with BMI Assessments

The proportion of schools that reported concerns regarding BMI screenings either remained low in Year 5 or returned to levels seen in previous years.

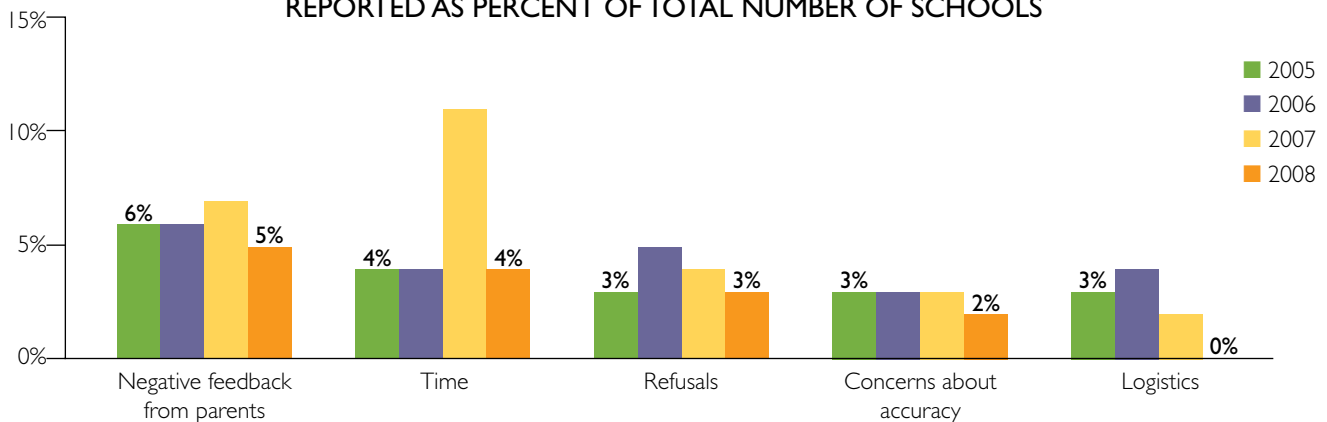
- In Year 5, 20 percent of principals reported their school had some level of difficulty with the BMI measurements, down from 32 percent in Year 4.
- In Year 5, the most common complaints concerning BMI assessments reported by principals continue to be negative feedback from parents (5 percent) and time taken away from academic instruction (4 percent).
- Interestingly, this is the first year during the course of the evaluation that no principals who completed the survey remarked on logistical problems associated with the BMI measurements.

### Feedback obtained during key informant interviews was consistent with the survey results

- The majority of principals, superintendents and school nurses were satisfied with the changes made in the last legislative session, and noted that negative parental response to the BMI screening and reporting process has abated.
- Most schools appear to have identified workable strategies to implement the new requirements regarding BMI measures with minimal disruption to other school activities.

- The major concerns about implementing BMI measurements related to the time burden placed on school nurses and the disruption of classroom instruction. Half of the principals reported that their school had developed solutions to help school nurses, including:
  - having the PE teacher assist with the BMI measures;
  - grouping school nurses from throughout the district to complete the assessments;
  - recruiting retired nurses from the community;
  - updating technology to allow data entry using laptops during assessments;
  - using student nurses from a nearby university; and
  - incorporating the required measurements into the biology or health curriculum.
- There was still some concern among parents and school nurses about the accuracy and usefulness of BMI measurements.
- Superintendents reported some concern about how the BMI measures may affect children's self-esteem and body image. However, this was not a major concern expressed by principals or school nurses.
- Wellness Committee members reviewed BMI assessment results, though several noted that the results were not used to make decisions about recommending policy changes.

TYPES OF BMI ASSESSMENT CONCERNS, REPORTED AS PERCENT OF TOTAL NUMBER OF SCHOOLS



These categories represent only the most common concerns expressed by schools and are not mutually exclusive.

Data were not gathered on this question in Year 1.

Parental knowledge and attitudes surrounding student BMI measures have remained essentially stable since Year 1.

- In Years 4 and 5, 89 percent of parents reported awareness of the BMI measurements.
- Since Year 4, concerns about confidentiality of the BMI measurement and reporting processes appeared to decline, while the percentage of parents who reported being comfortable with the child health reports, which include BMI information, appeared to increase.

- In Year 5, 96 percent of parents reported having read all or part of the child health report, and 48 percent reported finding the report useful.
- Key informant interviews revealed that many school personnel believed that parents did not read the child health reports.

### PARENTAL KNOWLEDGE AND ATTITUDES TOWARD BMI ASSESSMENT

Knowledge and attitudes	2004	2005	2006	2007	2008
Aware of school BMI measurements****	75%	83%	87%	89%	89%
Not at all or only a little concerned about classmates finding out BMI measurements	NA	71%	72%	68%	75%
Comfortable getting BMI report from school	69%	65%	66%	58%	63%
Read some or all of BMI report	NA	95%	95%	95%	96%
Found report at least somewhat helpful	NA	49%	49%	46%	48%

\*\*\*\*p ≤ .0001