Abbreviated History

As stated by one key informant: Arkansas Act 1220 of 2003 was the product of a “...remarkable confluence of political, private and institutional support, creating an environment conducive to a broad-based initiative”
Abbreviated History (cont.)

• 2 conferences set stage
  – January 2002 conference to develop obesity-related legislation and policy, sponsored by:
    • National Conference of State Legislatures (NCSL),
    • National Governors Association (NGA), &
    • Association for State and Territorial Health Officials (ASTHO)
  – March 2002 statewide conference, *The Arkansas Preventive Nutrition and Physical Activity Summit*, sponsored by:
    • UAMS Preventive Nutrition Project funded by NHLBI as part of a Nutrition Academic Award (Arlo Kahn, MD, PI), &
    • Arkansas Department of Health Cardiovascular Health Program funded by CDC
Abbreviated History (cont.)

- Series of planning meetings ensued between members of the legislature and members of the Arkansas Department of Health (ADH)
  - Speaker Cleveland asked the ADH to draft a bill
  - During the fall of 2002, ADH held focus groups, solicited input from healthcare providers and the Arkansas Department of Education, and reviewed legislation pending or being considered in other states

- Introduction and passage of the legislation occurred with little debate and in an extraordinarily timely fashion during the 2003 Legislative Session
Arkansas Act 1220 of 2003: Major Components

To address childhood obesity in Arkansas

1. Annual BMI measurements for all school children & report to parents
2. Restricted access to vending machines in elementary schools
3. State-wide Child Health Advisory Committee with prescribed membership and specific charge to examine future policies
4. Establishment of Local Nutrition and Physical Activity Advisory Committees in every school district
5. Public reporting of vending revenues
6. Hiring of Community Health Promotion Specialists to provide technical assistance to schools
Child Health Advisory Committee Recommendations

- Staged approach across years
- 2004-2005 School Year
  - Establish School District Nutrition and Physical Activity Advisory Committee with prescribed membership and responsibilities
  - Establish nutrition standards for competitive foods
  - Establish child nutrition standards, limiting Foods of Minimal Nutritional Value
  - Establish physical education/activity policies
Child Health Advisory Committee
Recommendations (cont.)

• 2005-2006 School Year
  – Enhanced School District Nutrition and Physical Activity Advisory Committee responsibilities
  – Establish grade-appropriate nutrition education standards
  – Establish enhanced nutrition standards for competitive foods
Child Health Advisory Committee Recommendations (cont.)

• 2006-2007 School Year
  – Required professional development for child nutrition professionals in Arkansas public schools
    • Certification standards for Director Level for Staff Development
    • Certification standards for Manager Level for Staff Development
    • Requirements for Worker Level Staff Development

• School Years beyond 2006-2007
  – Additional enhanced requirements addressing nutrition and physical activity
Act 1220 of 2003 Evaluation Project*

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- Zoran Bursac, PhD
- Leavonne Pulley, PhD
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- Rebecca Krukowski, PhD
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- C. Heath Gauss, MS
- Jennifer Ivory
- Amanda Philyaw Perez, MPH
- Blake Talbot
- Jada Walker, MEd

*Funding for this project was obtained from the Robert Wood Johnson Foundation grants 051737, 60284, and 30930.
Primary Concerns for Act 1220
Raised in Media Shortly After Law Signed
(mostly focused on BMI measurement)

1. Increase in non-medically recommended dietary practices
   - Unsupervised/inappropriate diets
   - Skipped meals
2. Increase in weight-based teasing
3. Increase in eating disorders
4. Excessive burden on healthcare providers
5. Violation of parental/student “rights”
Act 1220 Evaluation Timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>Spring</th>
<th>Fall</th>
<th>Spring</th>
<th>Fall</th>
<th>Spring</th>
<th>Fall</th>
<th>Spring</th>
<th>Fall</th>
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</thead>
<tbody>
<tr>
<td>2004</td>
<td>R</td>
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<td>R</td>
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<tr>
<td>Baseline Data Collection</td>
<td>Year 1 Follow-up Data Collection</td>
<td>Year 2 Follow-up Data Collection</td>
<td>Year 3 Follow-up Data Collection</td>
<td></td>
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</tbody>
</table>
Methods

• Telephone interviews
  – Parents
    • Approximately 2250 per year
    • Multistage stratified random sample
  – Adolescents
    • ≥ 14 years with assent/consent
    • Proxy survey from parents for younger

• Surveys
  – Principals – 70-80% response rate
  – Superintendents – 70-80% response rate

• Key informant interviews - ~90

• Other Activities at Selected Times
  – School vending validation “study”
  – Survey of primary care providers (family medicine, pediatricians)
  – On-site, enhanced evaluation school pilot
  – Planned, enhanced evaluation school studies
Primary evaluation questions:

1. What impact did the enacted policies and procedures have on:
   - School environments experienced by youth enrolled in Arkansas’ public schools?
   - Knowledge, attitudes and beliefs of parents and students regarding healthy physical activity and nutrition practices?
   - Self-reported changes in physical activity and nutrition among Arkansas youth and families?

2. What was the trend in weight status among Arkansas youth enrolled in public schools over the period of the 3-year evaluation?
Primary Concerns for Act 1220 (mostly focused on BMI measurement)

1. Increase in non-medically recommended dietary practices
   - Unsupervised/inappropriate diets
   - Skipped meals
2. Increase in weight-based teasing
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4. Excessive burden on healthcare providers
5. Violation of parental/student “rights”
Reporting Findings

1. Scientific Community
2. Legislators
3. School Personnel (annual conference)
4. Public (annual press releases, media interviews)
5. Other Sites Implementing State-wide Policy Initiatives (WV, DE, others to be added)
National Childhood Obesity Trends

# Participation in Arkansas BMI Assessments (Grades K–12)

<table>
<thead>
<tr>
<th>Category</th>
<th>Year 1 ('03–'04)</th>
<th>Year 2 ('04–'05)</th>
<th>Year 3 ('05–'06)</th>
<th>Year 4 ('06–'07)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Percent</td>
<td>Total</td>
<td>Percent</td>
<td>Total</td>
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<tr>
<td>Participation*</td>
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<tr>
<td>Public schools</td>
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<tr>
<td>Students (K–12)</td>
<td>94.4%</td>
<td>1,060/1,123</td>
<td>98.8%</td>
<td>1,115/1,129</td>
</tr>
<tr>
<td>Student data</td>
<td>92.7%</td>
<td>425,372/458,991</td>
<td>96.1%</td>
<td>443,632/461,815</td>
</tr>
</tbody>
</table>

*Results include all data available for years 1, 2 and 3 for grades K–12 and data received by June 6, 2007 for year 4. Some public schools and districts merged after year 2. The most common reason students were not assessed for BMI was absence from school (of total reporting 6.3 percent in year 1, 7.6 percent in year 2, 8.7 percent in year 3 and 8.1 percent in year 4). Annually up to 6 percent of students or their parents refuse to participate. Data source: Arkansas Center for Health Improvement. Year Four Assessment of Childhood and Adolescent Obesity in Arkansas (Fall 2006–Spring 2007), Little Rock, AR: ACHI, September 2007.
Percentage of students classified as overweight or at risk for overweight by Arkansas public school district (’05–’06)