

Appendices

YEAR 6 EVALUATION OF ARKANSAS ACT 1220 OF 2003 TO COMBAT CHILDHOOD OBESITY

APPENDIX I: BACKGROUND AND RESEARCH METHODS

In February 2004, the Fay W. Boozman College of Public Health (COPH) of the University of Arkansas for Medical Sciences secured funding from the Robert Wood Johnson Foundation to support its efforts to evaluate the implementation of Act 1220 of 2003. An initial, one-year award was followed by a two-year renewal, effective February 2005, and a further renewal in 2007. Each annual evaluation has been accompanied by the publication of a summary report.

A team of COPH investigators led by Drs. Jim Raczynski and Martha Phillips developed the plan for evaluating the implementation of the Act and the effects it may have on school environments, knowledge concerning weight control and family nutrition and physical activity behavior patterns experienced by Arkansas students. Additionally, the Arkansas Center for Health Improvement monitored the weight status of Arkansas students, using the annual BMI assessments mandated by Act 1220.

The evaluation is designed to assess the impact of the full range of Act 1220 components. Annual evaluation activities provide snapshots of policies and procedures and also enable researchers to determine the extent of change over time. The evaluation is based on a conceptual model which proposes that existing environments will be changed by the implementation of state and local policies, which will in turn change the knowledge, attitudes, beliefs and behaviors of families and students. Finally, those behavior changes would ultimately affect the weight status of Arkansas students, as measured by BMI.

The information presented in this report was gathered over the past year (2009) through a series of activities described below.

Researchers interviewed a total of 26 key informants who were either involved in or represented groups involved in the sixth year of the implementation of Act 1220. The research team identified these individuals through a review of public records, referrals from other interviewees and information gathered from prior evaluations. Participants

were then randomly selected from five geographical regions across the state: central, north, northwest, south and southwest. Those selected were representatives of: the state Child Health Advisory Committee; Community Health Nurses; Community Health Promotion Specialists; and school principals, superintendents and nurses. The interviews were completed by telephone, audio-taped for accuracy and transcribed to protect informant confidentiality. Discussions were focused by semi-structured interview guides.

Researchers also interviewed 10 principals and 10 superintendents. Each of these school leaders was randomly selected using a stratified selection procedure that ensured representation from each of the geographic regions of the state, as well as from each school level (elementary, middle and high school). Telephone interviews were completed using the same methods explained above. The principal and superintendent interviews focused particularly on their experiences with and reactions to key components of the Act (e.g., vending machine changes and BMI measurements), and how implementation progressed in 2009.

In addition to the interviews, the research team mailed surveys to all principals (1,040 total) and school district superintendents (245 total) in the state, and provided a stamped, self-addressed envelope to return the survey to the evaluation team. Those who failed to respond were sent a second survey and return envelope. Those who failed to respond to the second request received a third survey mailing. Of those who failed to return any of the three mailed surveys, a group of 50 principals and superintendents were randomly selected and faxed the survey. A total of 863 principals and 180 superintendents returned surveys, a return rate of 83% for principals and 73% for superintendents. All conclusions regarding changes were based on adjusted multivariate models.

Finally, researchers conducted telephone interviews with families whose children attended Arkansas public schools at the time of the interviews. A total of 485 schools were selected, using a multi-stage, stratified, random selection procedure to ensure the inclusion of schools located in all areas of the state, of various enrollment sizes, and at each

school level.¹ Of households with a listed phone number that were located in the zip codes surrounding the selected schools, a random sample was contacted by phone. A parent was interviewed if he or she had a child attending the selected school and agreed to complete the interview. If the student in the household was at least 14 years old, and if both the parent and adolescent consented, the adolescent was interviewed as well. In all, a total of 2,010 parents and 313 adolescents were interviewed in this manner. Data from these parents and adolescents were weighted so that the results presented in this report can be considered representative of the state overall. All conclusions regarding changes were based on adjusted, multivariate models.

APPENDIX II: ONLINE RESOURCES

Below is a list of Web sites of both Arkansas and national organizations that the research team found helpful and may be of interest to readers.

Arkansas Web Sites

Arkansas Center for Health Improvement
www.achi.net

Arkansas Child Health Advisory Committee
www.healthylarkansas.com/advisory_committee/advisory.html

Arkansas Coordinated School Health
<http://arkansascsch.org>

Arkansas Department of Education
<http://arkansased.org>

Arkansas Government Act 1220 of 2003
www.arkleg.state.ar.us/assembly/2003/R/Acts/Act1220.pdf

Arkansas Government Act 201 of 2007
www.arkleg.state.ar.us/assembly/2007/R/Acts/Act201.pdf

Arkansas Government Act 317 of 2007
www.arkleg.state.ar.us/assembly/2007/R/Acts/Act317.pdf

Arkansas Government Act 719 of 2007
www.arkleg.state.ar.us/assembly/2007/R/Acts/Act719.pdf

Blue and You Foundation for a Healthier Arkansas
www.blueandyoufoundationarkansas.org

Fay W. Boozman College of Public Health, University of Arkansas for Medical Sciences
www.uams.edu/coph

Healthy Arkansas Initiative
www.arkansas.gov/ha/home.html

National Web Sites

Action for Healthy Kids
www.actionforhealthykids.org

CDC School Health Policies and Program Study
www.cdc.gov/nccdphp/dash/shpps

Robert Wood Johnson Foundation
Childhood Obesity Program Area
www.rwjf.org/childhoodobesity
Obesity Publications & Research
www.rwjf.org/childhoodobesity/publications.jsp

School Health Index
www.cdc.gov/HealthyYouth/SHI

The Weight-Control Information Network, National Institutes of Health (NIH)
<http://win.niddk.nih.gov/index.htm>

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¹ Bursac Z, Phillips M, Gauss CH, Pulley L, West D, Raczynski J. (2006). **Arkansas Act 1220 Evaluation: Multi-stage Stratified Surveys with Probability Proportional to Size (PPS) Sampling, 2005 Proceedings of the American Statistical Association, Section on Health Policy Statistics [CD-ROM], Alexandria, VA: American Statistical Association: 1529-1531.**

2. Evaluation of Act 1220 Annual Reports

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- Phillips, M.M., Raczynski, J.M., and Walker, J.F. for the Act 1220 Evaluation Team (2005) **Year Two Evaluation: Arkansas Act 1220 of 2003 to Combat Childhood Obesity.** <http://www.uams.edu/coph/reports/2005Act1220Y2Eval.pdf>
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- Raczynski, J.M. (2009, April). **Addressing Childhood Obesity via Policy Interventions: Arkansas Schools, Parents & Adolescents Respond.** Presented at the 30th Annual Meeting of the Society of Behavioral Medicine, Montreal, Canada.
- Talbot, B.A., Walker, J., Ivory, J., Philyaw Perez, A., Phillips, M.M., Raczynski, J.M. (2008, October). **Evaluating the focus of statewide print media coverage of Arkansas obesity legislation.** Presentation at the 136th Annual Meeting of the American Public Health Association, San Diego, CA.

4. Parent & Student Perceptions of and Actions against Childhood Obesity

- Ivory, J., Phillips, M.M., West, D., Bursac, Z., Pulley, L., Gauss, C.H., Walker, J., Raczynski, J.M. (2008, October). **Parental knowledge and beliefs about childhood obesity-related co-morbidities.** Presentation at the 136th Annual Meeting of the American Public Health Association, San Diego, CA.
- Montgomery, B.E.E., West, D.S., Raczynski, J.M., Phillips, M.M., Gauss, C.H., Bursac, Z., & Walker, J. (2007, November). **Economic and educational factors do not explain racial differences in the accuracy of parental perception of overweight in their child.** Presented at the 135th Annual Meeting of the American Public Health Association, Washington, D.C.
- Philyaw, A., Phillips, M.M., Gauss, C.H., Evans, V.L., Bursac, Z., & Raczynski, J.M. (2007, November). **Parental actions for child health three years after Arkansas initiated BMI reports.** Presented at the 135th Annual Meeting of the American Public Health Association, Washington, D.C.

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