



Family and Consumer Sciences Extension

Reducing the Risk of Foodborne Illness in Children 2007

Learning for Life

The University of Georgia Cooperative Extension

The Problem

- An estimated 76 million Americans become ill from foodborne illness each year, resulting in 325,000 hospitalizations and 5,000 deaths. The Economic Research Service (ERS) estimates the cost from the five major foodborne illnesses to be \$6.9 billion per year, \$2.3 billion of that in children under age 10.¹
- Young children are more at risk for foodborne illness and associated complications such as blood poisoning, kidney disease, seizures, strokes, heart complications, death.¹
- The ERS estimates that the cost for a single case requiring hospitalization is \$9,840 for salmonellosis and \$6,550 for *E. coli* O157:H7 without complications of hemolytic uremic syndrome.²
- There are 1,370,481 children under the age of 9 in Georgia.³
- There are approximately 2,800 licensed childcare centers and over 6,100 registered family childcare homes in addition to the informal caregivers in Georgia.³
- Over 1.5 million meals are served daily in Georgia as a part of the school nutrition program.⁴

Research-based Solutions

- Food handler training programs can increase knowledge about the seriousness and causes of foodborne illness among childcare providers, school foodservice workers, teachers, children and parents.
- By controlling the major contributing factors (improper cooling, inadequate cooking, time lapse between preparation and serving, infected persons handling food, contaminated raw foods or ingredient), a high percentage of foodborne illnesses can be prevented.

Extension's Role

- Teach childcare providers and school foodservice workers the importance of cleanliness and temperature control in preparing and serving food.
- Teach childcare providers and school foodservice workers about how to prevent hazards that can occur at various stages during storing, preparing and serving foods.
- Provide training that fulfills state requirements for licensure and enables Georgians not only to maintain jobs, but also to provide safer environments for children in their care.
- Teach children and parents four steps to keeping food safe - clean, separate, cook, and chill.

Extension's Contribution to Solving the Problem in 2007

- Nearly 694 contact hours of food safety education were provided to 208 childcare providers.
- 2,536 contact hours of food handler training were provided to 11,894 school foodservice employees.
- Food safety programs reached over 3,979 school children.
- *Smart Kids Fight BAC!*[®], a nationally recognized food safety curriculum developed by UGA Extension, can be used to fulfill several Georgia Performance Standards for grades K-3 in terms of Language Arts, Math and Science.

Impact on Georgians

- 67% of the school and child care food service workers who completed *ServSafe*[®] Manager training offered through Extension passed the National Certification exam. 99% rated the training "good" or "excellent" and the vast majority of these food service workers indicated that they planned to follow recommended food handling practices. For example, 100% stated that they plan to wash, rinse and

sanitize cutting boards, especially after cutting raw meat, poultry, or fish, and 91% stated that they plan to check food temperatures with thermometers to see if the refrigerator keeps food at or below 41 degrees F.

- School and child care food service workers who completed the *ServSafe*® employee training improved their food safety knowledge test scores by an average of 20 percentage points. The vast majority of these food service workers indicated that they planned to follow recommended food handling practices. For example, 100% stated that they plan to wash, rinse and sanitize cutting boards, especially after cutting raw meat, poultry, or fish, and 91% stated that they plan to check food temperatures with thermometers to see if the refrigerator keeps food at or below 41 degrees F.
- School food service workers who attended the School Nutrition Conference increased their food safety knowledge test scores by an average of 13 percentage points. The vast majority of these food service workers indicated that they already do or plan to follow recommended food safety practices. For example, 97% stated that they already do or plan to clean surfaces and equipment with soap and water and then sanitize them with an approved sanitizer, and 96% stated that they already do or plan to wash their hands using soap and warm water for at least 20 seconds before putting on clean gloves.
- Childcare providers who participated in the *Smart Care Givers Fight BAC!*® food safety education program improved their food safety knowledge test score by an average of 21 percentage points.
- Elementary school students who completed the *Smart Kids Fight BAC!*® program improved their knowledge related to four basic food safety principles: cleaning, preventing cross contamination, cooking, and chilling by an average of 27 percentage points.

Sources

1. Buzby, J.C. ERS. (2001). Children and Microbial Foodborne Illness. *FoodReview*. Vol. 24 (2): 32-37.
2. Economic Research Service. <http://www.ers.usda.gov/data/foodborneillness/>. Accessed 12/05/07.
3. U.S. Dept. of Health and Human Services National Child Care Information Center. 2007 Child Care in the State of Georgia. <http://nccic.acf.hhs.gov/statedata/statepro/display.cfm?state=Georgia> Accessed 12/05/07.
4. Georgia Dept. of Education, <http://www.doe.k12.ga.us/schools/nutrition/about.asp> Accessed 12/05/07.

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