## Introduction

Child Nutrition Programs are offered in over 101,000 school districts, providing over 10 million children with breakfast and 31 million with lunch daily. Food safety is a major concern for all stakeholders.

Congress added specific food safety requirements in the Child Nutrition and WIC Reauthorization Act of 2004 in an effort to improve the safety of school meals. Each school was required to implement a food safety program based on hazard analysis and critical control point principles (HACCP).

In 2005, Guidance for School Food Authorities: Developing a School Food Safety Program Based on the Process Approach to HACCP Principles was developed by USDA to assist school districts in implementing a food safety program. There has been no research conducted to determine how schools have implemented food safety programs.

## Purpose

The purpose of this study was to determine how school districts have implemented food safety programs based on HACCP principles.

## Methodology

- A mega district (≥40,000 students) was randomly selected in each of the seven USDA Regions.
- A convenience sample of four other districts within 50 miles of the mega districts was selected and recruited.
- The final sample included 34 schools from 11 small districts (<2,500 students), nine medium districts (2,500-19,999 students), six large districts (20,000-39,999 students), and eight mega districts.
- Six researchers conducted on-site observations at one school in each of 34 school districts.
- To assure inter-rater reliability, extensive pilot testing was conducted and results were discussed after each observation until researchers were in agreement.

## Results

- The majority of schools (n=28) used the Process Approach to HACCP and had a conventional food production system (n=20).
- The majority of schools had standard operating procedures (SOPs) in place for cooking potentially hazardous food (PHF) (n=28), cooling PHF (n=25), and holding hot and cold PHF (n=30).
- Most schools did not have a procedure in place for handling a food recall (n=17) or using time as a control (n=21).
- While many schools had SOPs delineated in the HACCP plan, there was a disconnect between HACCP plan content and documented actions.
- State-wide plans were seldom customized to meet the needs of a specific school.

## Conclusions

- These data illuminate areas for improvements in food safety plans.
- Directors and supervisors may benchmark their operations to a larger national sample and use these results to build educational programs for directors, managers, and employees.