HACCP IMPLEMENTATION IN K-12 SCHOOLS - AN NSFSMI STUDY

NSFSMI conducted a study to determine the extent of HACCP implementation in school foodservice (NSFSMI, 2005). The overwhelming majority of respondents reported having standard or formal food safety procedures in their schools. More than half of the respondents reported that their schools had begun implementing HACCP. The lack of measures and the burden of required documentation were the most commonly reported barriers to HACCP implementation. The research report, HACCP Implementation in K-12 Schools, is available at www.nfsmi.org.

TRANSITIONS: 2006 AND BEYOND

As the foodservice industry changes with respect to HACCP, NSFSMI has responded. The “process approach” to HACCP has been incorporated into the measures and training that NSFSMI provides. Training resources have been developed to assist schools in implementing the food safety food program. Additional support for the overall food safety system includes development of standard operating procedures, emergency readiness, food defense, and food biosecurity resources. Resources developed will be available through NSFSMI’s Web site, www.nfsmi.org, as deemed appropriate. NSFSMI will continue to provide food safety training to assist foodservice professionals in meeting the ever-changing need.

For More Information


The information provided in this publication is the result of independent research produced by NSFSMI and is not necessarily in accordance with US Department of Agriculture Food and Nutrition Service (FNS) policy. FNS is the federal agency responsible for all federal domestic child nutrition programs including the National School Lunch Program, the Child and Adult Care Food Program, and the Summer Food Service Program. Individuals are encouraged to contact their local child nutrition program sponsor and/or their Child Nutrition State Agency with any questions. Federal child nutrition programs please visit http://www.fns.usda.gov/cnd. University, MS: Author.

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WHAT IS HACCP?

Hazard Analysis and Critical Control Point (HACCP) is a preventative system to reduce the risk of foodborne illness through appropriate food handling, monitoring, and recall efforts. HACCP differs from sanitation programs and personal hygiene programs with focus, although, all play an important role in providing safe food. Sanitation programs focus on equipment and facilities. Personal hygiene programs focus on employees. HACCP focuses on food to prevent food safety problems.

The acronym HACCP identifies two important roles: the Hazard Analysis and Critical Control Points. The typical HACCP plan is developed around seven principles:

1. Identify Hazards
2. Identify Critical Control Points (CCP)
3. Establish Critical Limits
4. Establish Monitoring Procedures
5. Establish Corrective Actions
6. Establish Verification Procedures
7. Establish Record-Keeping Procedures

WHAT IS HACCP?

HACCP began in the early 1960s at the National Aeronautics and Space Administration (NASA). A system was needed to make sure that astronauts did not become ill from their food while they were in space. The Pillsbury Company developed the HACCP system with cooperation from NASA, Natick Laboratories of the U.S. Army, and the U.S. Air Force Space Laboratory Project Group (U.S. Department of Agriculture, 2005). HACCP was mandated for meat and poultry processing and for seafood regulations based on USDA/FDA regulations in the 1990s. Commercial foodservice operations have implemented HACCP, as well as healthcare and school foodservice operations.

The History of HACCP

HACCP requires compliance with a food safety program. The law requiring school food authorities (SFAs) to implement a food safety program. The Reauthorization Act requires that, during the preparation and service of meals, the SFA requires compliance with this requirement by July 1, 2005. Few training programs and Critical Control Point (HACCP) in Schools Reauthorization 2004: Implementation Memo – SP 11

Twenty-three states took advantage of the opportunity to request support for their local HACCP training. Training was provided to over 3,000 local foodservice personnel.

Materials and Resources Available

Through NFSMI, in conjunction with Kansas State University, developed HACCP training materials and resources, which were adapted to include instructional materials and a CD-ROM containing Power Point presentations as well as all printed materials. Also provided were the USDA’s Quarterly Reports for School Food Service. These were adapted to include Critical Control Point activities. Participants in the HACCP orientation were provided a model training session and access to resources that prepared them to replicate HACCP training at the local level.

Listed below are many of the HACCP-based resources of NFSMI that have been developed in cooperation with USDA and other organizations.

HACCP-Based Standard Operating Procedures (SOPs) - Record Keeping

• Cooking and Reheating Temperature Log
• Damaged or Discontinued Product Log
• Food Contact Surfaces Cleaning and Sanitizing Log
• Refrigeration Log
• Thermometer Calibration Log

Developing a HACCP-Based Food Safety Program - Worksheets

• Components of a Comprehensive Food Safety Program
• Complex Food Process
• Employee Food Safety Training Record
• Summary Table for Monitoring and Verifying HACCP-Based SOP Records
• Summary of Corrective Actions for HACCP-Based SOPs

HACCP Related Projects at NFSMI

• HACCP Training Materials for Instructors (manual, video, presentations)
• HACCP Participant Materials for Food Service Directors and Employees (manual for each)
• HACCP Instructor Network
• USDA Quantity Recipes for School Food Service with CCP added
• USDA Child Care Recipes for Health and Fun with CCP added
• Standard Operating Procedures (www.nfsmi.org)

Instructor Network

Under the guidance of the USDA/NSD, NFSMI designed a program to educate state level instructors in the use of HACCP materials. Later these instructors would conduct training sessions for local states. The result was a national network of 386 trainers. NFSMI contracted with Kansas State University (KSU) to develop training materials suited for three target audiences: the instructor, the foodservice director, and the employee. Content of the manuals and the training sessions was determined by KSU with approval by NFSMI and USDA (FSNS). NFSMI and KSU-FNS staff reviewed the materials during the development stages and the materials were finalized after receiving feedback from participants during the 2001-2002 instructor training seminars.

Establishing an instructor network was a process with several stages of development. Below is a summary of the steps in the instructor network development:

• Provide state directors of child nutrition programs with the opportunity to submit names of potential instructors.
• Conduct orientation sessions for HACCP trainers, at NFSMI, to provide state directors of child nutrition programs with the opportunity to submit names of potential instructors.
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Legislation

“Section 111 of the Child Nutrition and WIC Reauthorization Act of 2004 (Public Law 108-265) amended section 9(h) of the Richard B. Russell National School Lunch Act by requiring school food authorities (SFAs) to implement a food safety program. The Reauthorization Act requires that, during the preparation and service of meals, the SFA comply with a HACCP system established by the Secretary of Agriculture. The SFA requires compliance with this requirement by July 1, 2005.” From HACCP and Critical Control Point (HACCP) in Schools Reauthorization 2004: Implementation Memo – SP 11

In February 2001, the first Orientation for HACCP Trainers was held at NFSMI in the University of Mississippi. Initial plans were to hold four orientation sessions, but demand was so great that

NFSM held 11 sessions from 2001-2004. A total of 386 trainers representing 48 different state participated in the training. The high level of participation was evidence of the commitment and importance of food safety to child nutrition programs.

ACTIVITIES BY NFSMI

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THE HISTORY OF HACCP
HACCP began in the early 1960s at the National Aeronautics and Space Administration (NASA). A system was needed to make sure that astronauts did not become ill from their food while they were in space. The Pillsbury Company developed the HACCP system with cooperation from NASA, National Laboratories of the U.S. Army, and the U.S. Air Force Space Laboratory Project Group U.S. Department of Agriculture, 2002.

HACCP was mandated for meat and poultry processing and for seafood regulations in the 1990s. Commercial sanitation programs and personal hygiene programs in its focus, although, all play an important role in providing safe food. HACCP became a national standard for food production and food service programs in the 1990s.

In February 2001, the first Orientation for HACCP Trainers at NFSMI, and training by the instructors who had attended the orientation sessions was determined by KSU with approval by NFMSI and USDA, PNS, NFMSI, and USDA. PNS-staff reviewed the materials during the development stages and the materials were finalized after receiving feedback from participants during the 2001-2002 instructor training sessions. Establishing an instructor network was a process with several stages of development. Below is a summary of the steps in the instructor network development:

- Provide state directors of child nutrition programs with an opportunity to submit names of potential instructors on a CD-ROM.
- Developed HACCP training materials and resources, which included an instructor manual, participant manual, PowerPoint presentations as well as all print materials. The result was a national network of 388 trainers.

Materials and Resources Available
Through NFMSI, in conjunction with Kansas State University, developed HACCP training materials and resources, which included an instructor manual, participant manual, PowerPoint presentations as well as all print materials. The result was a national network of 388 trainers. NFMSI contracted with Kansas State University (KSU) to develop training materials suited for three target audiences: the instructor, the foodservice director, and the employee. Content of the manuals and the training sessions was determined by KSU with approval by NFMSI and USDA, PNS, NFMSI, and USDA. PNS-staff reviewed the materials during the development stages and the materials were finalized after receiving feedback from participants during the 2001-2002 instructor training sessions.

Establishing an instructor network was a process with several stages of development. Below is a summary of the steps in the instructor network development:

- Provide state directors of child nutrition programs with an opportunity to submit names of potential instructors.
- Conduct orientation sessions for HACCP trainers, providing state directors with access to resources that prepared them to replicate HACCP training at the local level.
- Corresponding manuals were developed for two levels of participants - Child Nutrition directors and foodservice employees.

Twenty-three states took advantage of the opportunity to request support for their local HACCP training. Training was provided to over 1,000 local foodservice personnel.

HACCP RELATED ACTIVITIES BY NFMSI
Instructor Network
Under the guidance of the USDA/FAA, NFMSI designed a program to educate state level instructors in the use of HACCP resources. Later, these instructors would conduct training sessions in their states. The result was a national network of 388 trainers.

Instructor Orientation:
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HACCP Trainer Orientation:
HACCP Trainer Orientation:

- 11 Sessions
- 388 Participants
- 40 States Represented

HACCP RELATED Projects at NSFMI
- HACCP Training Materials for Instructors (manual, video, presentations)
- HACCP Participant Materials for Food Service Directors and Employees (manual for each)
- HACCP Instructor Network
- USDA Quantity Recipes for School Food Service with CCP added
- USDA Child Care Recipes for Health and Fun with CCP added
- Standard Operating Procedures (www.nfsmi.org)

Instructor Materials:
HACCP training materials for instructors included a comprehensive HACCP manual, participant manual, instructional video, and a CD-ROM containing PowerPoint presentations as well as all print materials. Chapter topics covered included:

- What is HACCP?
- Foodborne Illness and Food Safety Hazards
- Preliminary Steps to Developing a HACCP Plan
- Analyze Hazards
- Establish Critical Control Points
- Establish Critical Limits

HACCP Resources at NSFMI.org
Listed below are many of the HACCP-based resources NFMSI has developed in collaboration with the USDA/FAA (Food and Nutrition Service). These documents include the Critical Control Point (CCP) added

- HACCP-Based Standard Operating Procedures (SOPs)
- Developing a HACCP-Based Food Safety Program - Worksheets
- Components of a Comprehensive Food Safety Program
- Complex Food Process
- Employee Food Safety Training Records
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The research report, HACCP Implementation in K-12 Schools, is available at www.nfsmi.org.

HACCP Initiatives at NSFSMI: Building a Nationwide Network Dedicated to School Food Safety

Since 1999, the National Food Service Management Institute (NSFSM) has taken a leading role in studying Hazard Analysis and Critical Control Points (HACCP) implementation in public schools, and utilized those findings to help schools overcome barriers associated with the use of HACCP. One of the primary barriers faced was the lack of education and training opportunities and resources for foodservice managers and personnel. To help those schools succeed in their HACCP implementation, NSFSM made available many educational and training resources consistent with the United States Department of Agriculture (USDA) guidelines, the easiest source being downloadable electronic documents from the www.nfsmi.org Web site.

Overview

Between 1999 and 2005, the National Food Service Management Institute (NSFSM) established a unique and personable way to facilitate HACCP education and training by creating a nationwide network of HACCP trainers. Since 1999 and 2005, the National Food Service Management Institute developed an instructor network to assist school foodservice professionals in implementing HACCP as a primary food safety measure to assure the service of safe food in schools. The network, developed in coordination with State agencies, complemented other food safety resources developed by NSFSM to provide graswroots training for local school foodservice staff.