

**Identifying Emergency Preparedness and  
Readiness to Respond to Issues Faced by School  
Nutrition Professionals**



National Food Service Management Institute  
The University of Mississippi  
1-800-321-3054

**2012**

This project has been funded at least in part with federal funds from the U.S. Department of Agriculture, Food and Nutrition Service through an agreement with the National Food Service Management Institute (NFSMI) at The University of Mississippi. The contents of this publication do not necessarily reflect the views or policies of the U.S. Department of Agriculture, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. government.

The information provided in this publication is the result of independent research produced by NFSMI and is not necessarily in accordance with U.S. 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 should there appear to be a conflict with the information contained herein, and any state or federal policy that governs the associated Child Nutrition Program. For more information on the federal Child Nutrition Programs please visit [www.fns.usda.gov/end](http://www.fns.usda.gov/end).

The University of Mississippi is an EEO/Title VI/Title IX/Section 504/ADA/ADEA Employer.

© 2012, National Food Service Management Institute, The University of Mississippi

Except as provided below, you may freely use the text and information contained in this document for non-profit or educational use providing the following credit is included:

Suggested Reference Citation:

Cross, E. & Lofton, K. L. (2012). *Identifying Emergency Preparedness and Readiness to Respond to Issues Faced by School Nutrition Professionals*. University, MS: National Food Service Management Institute.

The photographs and images in this document may be owned by third parties and used by The University of Mississippi or The University of Southern Mississippi under a licensing agreement. The universities cannot, therefore, grant permission to use these images. For more information, please contact [nfsmi@olemiss.edu](mailto:nfsmi@olemiss.edu).

**National Food Service Management Institute  
The University of Mississippi**

**Building the Future Through Child Nutrition**

The National Food Service Management Institute was authorized by Congress in 1989 and established in 1990 at The University of Mississippi in Oxford and is operated in collaboration with The University of Southern Mississippi in Hattiesburg. The Institute operates under a grant agreement with the United States Department of Agriculture, Food and Nutrition Service.

**PURPOSE**

The purpose of the National Food Service Management Institute is to improve the operation of child nutrition programs through research, education and training, and information dissemination.

**MISSION**

The mission of the National Food Service Management Institute is to provide information and services that promote the continuous improvement of child nutrition programs.

**VISION**

The vision of the National Food Service Management Institute is to be the leader in providing education, research, and resources to promote excellence in child nutrition programs.

**CONTACT INFORMATION**

**Headquarters**

**Administrative Division**

The University of Mississippi

Phone: 800-321-3054

Fax: 800-321-3061

[www.nfsmi.org](http://www.nfsmi.org)

**Education and Training Division**

**Information Services Division**

The University of Mississippi

6 Jeanette Phillips Drive

P.O. Drawer 188

University, MS 38677-0188

**Applied Research Division**

The University of Southern Mississippi

118 College Drive #5060

Hattiesburg, MS 39406-0001

Phone: 601-266-5773

Fax: 888-262-9631



# **Acknowledgments**

**WRITTEN AND DEVELOPED BY**

**Evelina Cross, PhD  
Researcher**

**Kristi. L. Lofton, PhD, RD  
Assistant Director**

**Applied Research Division  
The University of Southern Mississippi**

**NFSMI EXECUTIVE DIRECTOR  
Katie Wilson, PhD, SNS**

---

---

## **IDENTIFYING EMERGENCY PREPAREDNESS AND READINESS TO RESPOND TO ISSUES FACED BY SCHOOL NUTRITION PROFESSIONALS**

---

---

### **EXECUTIVE SUMMARY**

School nutrition (SN) professionals have the responsibility of providing meals at scheduled times every day that schools are in session. Emergencies, which can include natural disasters, acts of violence, or illness, can occur anywhere with little or no warning and may cause short- or long-term food service disruptions. During an emergency, SN directors may face the challenge of providing meals despite damaged or inoperable food production facilities. A variety of emergency preparedness (EP) resources are available to SN professionals to address various emergencies that occur in schools (Story, 2006). However, research is limited on the effectiveness of EP resources in research literature. Although there is no federal requirement or mandate for emergency plans in schools at the time of this report; many states have laws or regulations requiring schools to develop, implement, and evaluate EP plans and conduct emergency drills on a regular basis (Council on School Health, 2008; United States Department of Agriculture [USDA], Food and Nutrition Service [FNS], 2004).

The purpose of this study was to identify SN directors' perceptions of the effectiveness of their EP plan and the directors' role in evaluating and implementing procedures to assure safe and nutritious food for students during emergency situations. The study was conducted in two phases. Phase I consisted of an expert panel of SN directors and state agency personnel representing the seven United States Department of Agriculture (USDA) regions that had assisted in the development of EP policies/procedures and/or had experienced an emergency in their SN program. The expert panel met at the site of the National Food Service Management

Institute, Applied Research Division (NFSMI, ARD). The agenda for the meeting was planned so that the issues addressed during the panel's discussions supported the development of a survey for Phase II of the research study. During the meeting, panel discussion topics included:

- common elements of EP plans;
- the extent to which EP plans were followed during an emergency/crisis;
- methods to evaluate the effectiveness of EP plans;
- types of training for EP;
- barriers to implementing an EP plan;
- expected and unexpected outcomes of emergency planning; and
- coordination among SN program personnel and other stakeholders to address emergencies.

A summary of the expert panel discussions was sent to panelists to confirm. The researchers then utilized the data to draft a quantitative survey in Phase II. A review panel of 14 SN professionals, including six members of the expert panel, examined and piloted the survey instrument and related documents. Revisions were made according to review panel recommendations. The survey was then formatted, printed, and mailed to a random sample of 700 SN directors representing the seven USDA geographic regions.

A total of 182 surveys were returned for a response rate of 26%. A majority (56.1%) of SN directors indicated that they had more than five years tenure in their current positions and were experienced in managing emergency situations. All respondents reported having an EP plan of which two-thirds (66.5%) of them were using their district's plan and one-third (33.5%) reported maintaining a separate SN EP plan. Additionally, respondents reported that EP plans had been implemented in a variety of emergency situations with lockdowns (51.4%) and power

failures (41.3%) as the most commonly reported emergency events. The majority of the respondents (52.8%) indicated that they were unaware of major barriers to successfully implement their most recent EP plan. However, the challenges cited most frequently (16%) were lack of staff to implement the plan and missing elements of the plan to guide in recovery efforts (29.7%). SN directors indicated that security provisions for deliveries (28%) and information about funding and other resources for emergencies (19.8%) were also necessary elements missing from EP plans. After experiencing a crisis, respondents indicated that they had provided advice and suggestions (54.5%) that contributed to the development, implementation, and revision of EP plans and served on committees to address EP issues (40.4%). Most respondents (63.9%) perceived that their current EP plan is effective for all types of emergencies but more training is needed in food safety/sanitation (83.1%), maintaining foodservice operations during emergencies (76.2%), EP drills (72.1%), and Hazard Analysis Critical Control Point management system (70.9%). Results of this study will provide baseline information for assessments of SN EP plans as well as develop resources and training materials to enhance SN professionals' ability to respond and recover from a variety of emergency situations.