# "Food Safety on the Go": A Course for Home-Delivered Meal Programs

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### INTRODUCTION

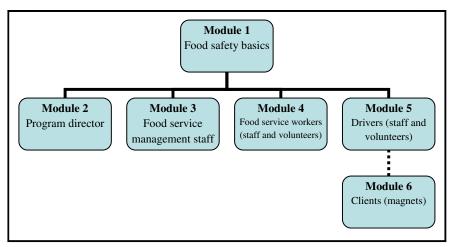
The goal of home-delivered meal programs is to help homebound adults maintain their health and stay in their homes. Roughly 1 million older adults in the US rely on home-delivered meals, and the demand continues to increase. 1,2

Home-delivered meal clients are especially vulnerable to foodborne illness, as they have a high prevalence of health conditions that can weaken the immune system.<sup>3</sup> Home-delivered meals can be a source of foodborne illness if staff, volunteers, or clients of home-delivered meal programs do not follow proper food safety practices.

The approximately 5,000 home-delivered meal programs across the US have lacked a standard food safety-course that addresses issues such as maintaining safe meal temperatures during delivery. In response to this need, "Food Safety on the Go" was developed. The goal of this course is to improve the food safety knowledge and practices of home-delivered meal program staff, volunteers, and clients, and thereby decrease the risk of foodborne illness among clients.

## **CURRICULUM**

To gather information for the course, a survey was administered to the State Units on Aging in all 50 states about their food safety policies, and a second survey was administered to



**Figure 1.** "Food Safety on the Go" modules. Module 1 is an overview of food safety for all staff and volunteers. Modules 2 through 5 are for specific individuals within a program; for example, a program director should complete Modules 1 and 2. Module 6 entails drivers giving out refrigerator magnets to clients.

approximately 360 home-delivered meal programs about their food safety training and meal delivery procedures. Focus groups of home-delivered meal program directors and dietitians from across the country were also convened. In addition, the US Food and Drug Administration Retail Food Protection Team reviewed the initial version of the course and provided recommendations.

"Food Safety on the Go" includes 6 modules from which program staff can select according to their training needs (Figure 1). Module 1, food safety basics, is for all staff and volunteers. It explains why food safety is essential when providing meals to

older adults. Module 2, for the program director, emphasizes the importance of food safety training for all staff and volunteers, and it describes the adverse consequences of a foodborne illness outbreak. It also outlines federal, state, and local food safety requirements for home-delivered meal programs. Module 3, for the food service management staff, discusses recommended food safety policies and procedures, from food purchasing through meal delivery. It describes a sample policy on food product recalls, as well as a policy on cases of foodborne illness. Module 4, for food service workers, focuses on how to safely handle food, as well as the importance of good health and personal hygiene when working with food. Module 5, for drivers, also stresses the importance of good health and personal hygiene during meal delivery, and it outlines procedures for delivering safe meals. Each of these modules takes between 15 and 45 minutes to complete and includes an activity such as a crossword puzzle, scenario for discussion,

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Figure 2. Magnet for clients (Module 6), in English and Spanish.

"Fill in the blanks," or "What's wrong with this picture?" Each of these modules also includes a pretest and an identical posttest, with 5–10 true/false questions on the main points covered in the module.

Module 6, for clients, is in the form of refrigerator magnets for drivers to distribute to clients. The magnets display 5 key food safety messages (Figure 2).

#### **EVALUATION**

"Train-the-trainer" pilot tests of "Food Safety on the Go" were conducted in Kansas and California. Attendees, who represented a variety of homedelivered meal programs, were asked to train staff and volunteers within their programs over the following 4 months. They were also asked to complete a written course evaluation at the end of the pilot tests, and an online evaluation 4 months later.

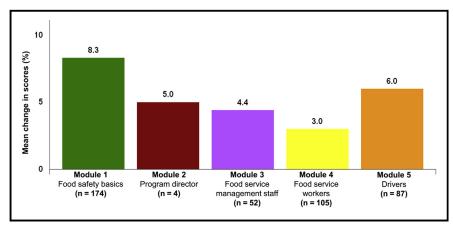
In the 4 months after the pilot tests, Kansas trainers trained over 380 staff and volunteers and California trainers over 1,200 staff and volunteers, for a total of over 1,580 individuals. Trainers provided preand posttests from 422 staff and volunteers they trained. Of this number, 308 (73%) either increased their

scores from pretest to posttest or had perfect scores on both the pretest and the posttest; 35 (8%) decreased their scores; and 79 (19%) did not show any change. Figure 3 shows the mean percent change in staff and volunteer scores from pretest to posttest by module.

Trainer responses in the initial course evaluation were similar to those in the 4-month evaluation. In the evaluations, trainers were asked to read a number of statements and check one of the following options: "strongly agree," "agree," "disagree," "strongly disagree," and "no opinion." In the initial evaluation, all

55 trainers strongly agreed or agreed that the course would be useful to their programs; that the information in the course was relevant to their programs; that the course was clear and easy to understand; and that the course was at the right level of difficulty for staff and volunteers in their programs. Fifty-four of the 55 trainers strongly agreed or agreed that they would recommend the course to other home-delivered meal programs, and one gave no opinion. Trainers were also asked to rate the overall course and various parts of the course according to the following scale: "excellent," "very good," "good," "fair," and "poor." In the initial evaluation, 85% of trainers rated the overall course as excellent or very good, 14% as good, and 1% as fair. Trainers gave similar ratings to individual components of the course, including the PowerPoint slides, the trainer guides, the activities, and the magnets for clients.

Forty percent of trainers stated that the most important information they learned in the course pertained to meal delivery or client handling of meals. These subjects included training drivers in food safety, keeping meals at safe temperatures, and checking that clients' refrigerators were at safe temperatures. In the 4-month evaluation, half of trainers reported that they had made changes to the food safety practices of their programs in the 4 months after the pilot tests. included: training all Changes volunteers and drivers in food safety; ensuring that meals were kept at appropriate temperatures; checking



**Figure 3.** Mean percent change in staff and volunteer scores from pretest to posttest by module (n = 422).

clients' refrigerator temperatures; adding labels with reheating instructions and a use-by date to home-delivered meals; ensuring that drivers had hand sanitizer in their vehicles; and instructing drivers not to leave meals at clients' doors.

#### **FUTURE APPLICATIONS**

"Food Safety on the Go" was disseminated through a webinar with representatives of State Units on Aging, as well as at national conferences. Future plans include providing the course on DVD and on the Internet, as focus groups expressed an interest in having the course available in these formats.

#### **ACKNOWLEDGMENTS**

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