



Study of Food Safety Needs of Adult Day Care Centers in the Child and Adult Care Food Program (CACFP)

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ABSTRACT

Foodborne illness adversely impacts 48 million Americans each year, resulting in an estimated more than 128,000 hospitalizations and 3,000 deaths. Older adults often participate in programs at adult day care centers, which provide nonresidential, supervised care in a community-based setting, outside of their homes, on a less than 24-hour basis. Food safety is a particularly important consideration for adult day care centers because older adults often have health conditions and suppressed immune systems, making them more susceptible to and less able to recover from foodborne illnesses. Adult day care centers can proactively lower the risk of foodborne illness by ensuring that staff, especially those responsible for procuring and handling food, employ proper food safety practices. To identify the food safety knowledge gaps of adult day care centers participating in the Child and Adult Care Food Program (CACFP), the study team conducted a nationally representative survey of 800 centers. The results of the analysis provide a snapshot of current food safety education at adult day care centers and identify the food safety education needs of these centers. Overall, this study provides information on knowledge gaps related to food safety techniques in adult day care centers that participate in CACFP and illuminates the best way for center staff to receive future food safety training and information support. Based on the key findings, the study led to the following recommendations:

- Offer new food safety trainings and information focused on food recalls, food safety considerations for older adults, foodborne illness prevention and response, and food allergies
- Deliver food safety training and information through online training videos, fact sheets or infographics, online self-paced training, and online lecture-style training
- Provide training and resources in both English and Spanish
- Alert centers of new food safety training and information by sending State Agency memos, email blasts, print mail, and announcing at CACFP training events.

1 INTRODUCTION

The Child and Adult Care Food Program (CACFP) of the United States Department of Agriculture (USDA) Food and Nutrition Service (FNS) plays a vital role in providing children and adults with access to adequate food, while improving the quality and affordability of day care for low-income families. Adult day care centers are nonresidential programs that provide older adults with supervised care in a community-based setting, outside of their homes, on a less than 24-hour basis.¹ For adult day care centers, participation in CACFP subsidizes the nutritious² meals and snacks served to adults aged 60 or older or adults of any age who are functionally impaired to an extent that limits their independence and ability to carry out activities of daily living. In 2017, on an average day, CACFP served more than 126,000 adults in adult day care centers.³ Food safety is a particularly important consideration for adult day care centers because older adults often have health conditions and suppressed immune systems, making them more susceptible to and less able to recover from foodborne illnesses.⁴ Overall, foodborne illnesses⁵ adversely impact 48 million Americans each year, resulting in an estimated more than 128,000 hospitalizations and 3,000 deaths.^{6, 7}

To participate in CACFP, adult day care centers must ensure proper storage and use of food and also carefully consider food safety and sanitation requirements. Adult day care centers can be proactive in lowering foodborne illness risk by ensuring that staff who procure and handle food know how to employ proper food safety practices. Centers can develop food safety plans, which can help to identify potential hazards and, when followed, reduce the risk of foodborne illness. In addition, adult day care centers that participate in CACFP must follow State and local health and sanitation regulations. State and local officials might develop their own State or local food safety codes or adopt food safety standards from the U.S. Food and Drug Administration.⁸

Food safety education can include both formal and informal training and information provision. Generally, food safety trainings focus on topics like time/temperature control, employee hygiene, cleaning, and sanitation and may take place at the center, offsite, or online.

¹ See more at https://fns-prod.azureedge.net/sites/default/files/cacfp/CACFP-Adult_Care_ktedits.pdf.

² See https://fns-prod.azureedge.net/sites/default/files/cacfp/CACFP_MealBP.pdf for updated CACFP meal patterns.

³ FNS provided aggregate data on FNS Form 44. The number of adults served in CACFP is extracted from those data.

⁴ U.S. Department of Health and Human Services, Foodsafety.gov. (2018). *Food safety for older adults*. Retrieved from <https://www.foodsafety.gov/risk/olderadults/index.html>

⁵ Foodborne illness (also known as food poisoning) is any illness that results from eating contaminated food. See more at <https://www.fda.gov/food/buy-store-serve-safe-food/safe-food-handling>

⁶ Scallan, E., Hoekstra, R. M., Angulo, F. J., Tauxe, R. V., Widdowson, M., Roy, S.L., Jones, J.L., & Griffin, P.M. (2011). Foodborne illness acquired in the United States—major pathogens. *Emerging Infectious Diseases*, 17(1), 7–15. <https://dx.doi.org/10.3201/eid1701.p11101>

⁷ Scallan, E., Griffin, P. M., Angulo, F. J., Tauxe, R. V., & Hoekstra, R. M. (2011). Foodborne illness acquired in the United States—unspecified agents. *Emerging Infectious Diseases*, 17(1), 16–22. <https://dx.doi.org/10.3201/eid1701.p21101>

⁸ U.S. Food and Drug Administration. (2016). *Adoption of the FDA food code by state and territorial agencies responsible for the oversight of restaurants and retail food stores*. Retrieved from <https://www.fda.gov/downloads/Food/GuidanceRegulation/RetailFoodProtection/FoodCode/UCM577858.pdf>

This study identifies the food safety education needs of adult day care centers and answers the following research questions:

RESEARCH QUESTIONS	1	What are the food safety knowledge gaps among center program directors?
	2	How do center directors want to receive food safety education ?
	3	What is the best way to communicate the availability of food safety education training and resources?

The study findings provide a snapshot of current food safety education at adult day care centers, identify food safety education needs, and differences by center type and geographic location. This information will help FNS identify food safety education gaps in adult day care centers and determine the best way for center staff to receive future food safety training and information support.

1.1 Study Methodology

To identify the food safety education needs of adult day care centers participating in CACFP, the study team administered a 20-minute survey to a nationally representative sample of 800 program directors of adult day care centers that participated in CACFP across the United States in 2018 ([Appendix C](#) for the survey instrument).⁹ The study team executed a multimodal data collection effort from May 6, 2019, to June 14, 2019. This effort leveraged web-based surveys, hard-copy mail surveys, and computer-assisted telephone interviews. Ultimately, the study obtained an overall response rate of 76.5 percent (Exhibit 1 as well as [Appendix A](#) for more details on the data collection effort).¹⁰

Exhibit 1: Survey Data Collection Efforts



⁹ The survey was sent to the center’s program director, but the instructions suggested that the survey should be completed by a staff member who knows the most about the center’s foodservice and food safety training and education needs. Throughout the report, all respondents are referred to as “center directors.”

¹⁰ The summary reports respondents as “adult day care centers” instead of program directors or center staff. In addition, for some sponsoring organization(s), the same staff completed the survey for multiple sampled centers within their organization.

After the data collection concluded, the study team conducted a nonresponse bias analysis to determine whether there were any systematic differences between respondents and nonrespondents that may impact the key survey estimates. The study team adjusted the base weights for ineligible records, non-response and systematic differences due to non-response between FNS Region to ensure that the final weights represented the overall population of adult day care centers that participated in CACFP. The study team received 568 completed survey responses, which reflects a weighted sample of 2,503 adult day care centers participating in CACFP according to the sample frame collected in October 2018 (Exhibit B.1 in [Appendix B](#)).¹¹ All survey responses presented in this summary report are weighted to be nationally representative of the population of adult day care centers participating in CACFP in 2018. The complete descriptive findings from the survey are reported in [Appendix B](#), including cross-tabulations by center characteristics such as type of center, FNS Region, and urbanicity. The study presents descriptive subgroup analysis only for those subgroups where the differences in response are statistically significant at 5 percent.

This summary begins with the descriptive characteristics of the adult day care centers that participate in CACFP. Next, the current food safety education completed by the center staff in the past year are presented. Further, future needs of the center related to food safety education training and knowledge, along with food safety resources, are described in Section 4. The final section concludes with overall key findings and recommendations.

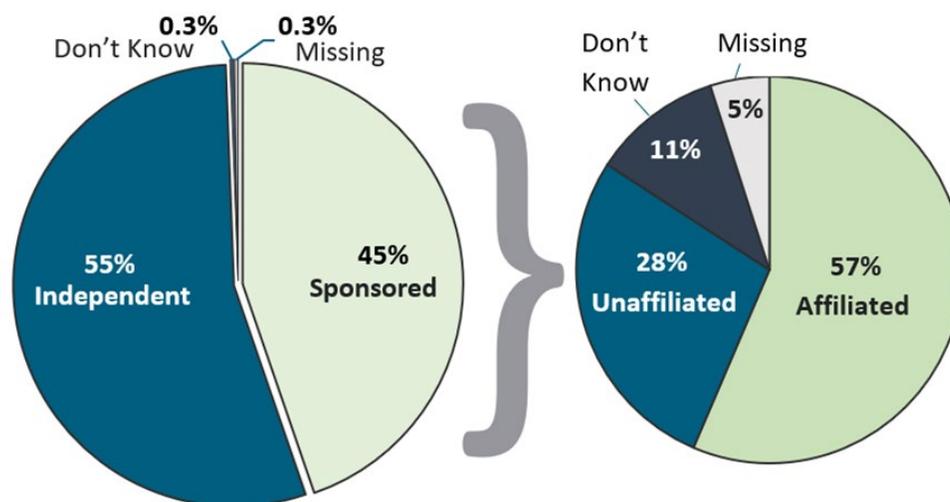
¹¹ The sample frame provided included 2,690 adult day care centers but some of the sampled centers were ineligible and were removed. The eligible sampled centers represent 2,503 of the initially provided adult day care centers in the sample frame.

2 CENTER CHARACTERISTICS

Adult day care centers, while similar in mission, do not all operate in exactly the same manner. Adult day care centers must either apply to the administering State Agency¹² as an independent center or enter into an agreement with a sponsoring organization that will oversee the center's program administration. Independent centers enter into an agreement directly with the State Agency and assume final administrative and financial responsibility for the operation of the program. Sponsored centers enter into an agreement with a sponsoring organization that oversees CACFP administration; in turn, the sponsoring organization works directly with the State Agency. Adult day care centers operating under the sponsoring organization may be affiliated or unaffiliated with the sponsoring organization. An affiliated center is owned, in whole or in part, by a sponsoring organization that participates in CACFP, whereas unaffiliated centers are not owned by the sponsoring organization. Meal reimbursements are received directly by the independent adult day care center, while sponsored centers receive meal reimbursements through the sponsoring organization.¹³

In 2019, slightly more than half of adult day care centers participate in CACFP independently (54.6 percent), and 44.7 percent of centers participate under the sponsorship of another organization (Exhibit 2).¹⁴ Among sponsored centers, the majority (57.2 percent) are affiliated with the sponsoring organization.

Exhibit 2: Distribution of Centers, by Type



Note: For more information, see Exhibit B.1 in [Appendix B](#). The percentages may not add up to 100 percent due to rounding.

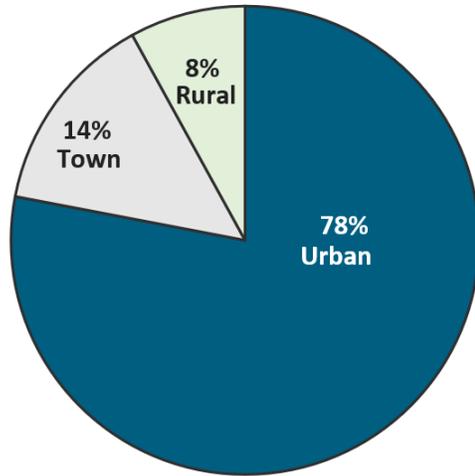
¹² CACFP for adult day care is usually administered by State Departments of Health or those agencies focused on older adults, such as Departments of Aging.

¹³ U.S. Department of Agriculture. (2014). *Adult day care: A Child and Adult Care Food Program handbook*. (p.12). Retrieved from <https://fns-prod.azureedge.net/sites/default/files/CACFPAdult%20DayCareHandbook.pdf>

¹⁴ In the sample, some centers had missing data for the sponsorship and affiliation status. The study team asked that those centers with missing sponsorship and affiliation status provide that information in the survey (see [Appendix A](#)). Four respondents did not provide missing information on sponsorship status, 10 centers are missing information on affiliation, and 26 centers reported not knowing their affiliation status.

Most adult day care centers that participate in CACFP are located in an urban¹⁵ area (78.3 percent; Exhibit 3), with the remaining centers located in towns and rural areas.

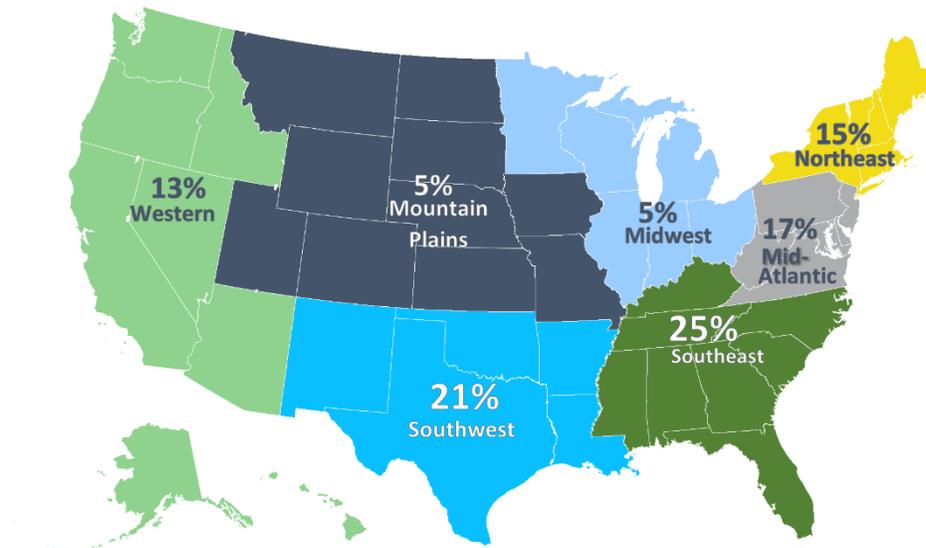
Exhibit 3: Distribution of Centers, by Urbanicity



Note: For more information, see Exhibit B.1 in [Appendix B](#).

A quarter of the adult day care centers that participate in CACFP are in FNS’s Southeast Region (24.8 percent), and 20.8 percent are in the Southwest Region (Exhibit 4). The Midwest and Mountain Plains Regions each contain only 5 percent of the total adult day care centers that participate in CACFP.

Exhibit 4: Distribution of Centers that Participate in CACFP, by FNS Region



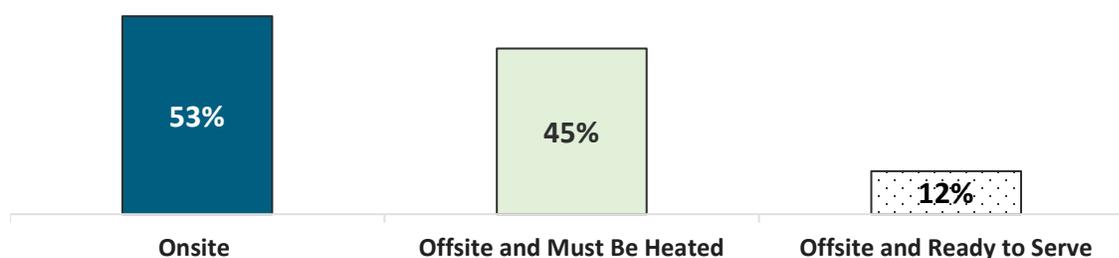
Note: For more information, see Exhibit B.1 in [Appendix B](#). The percentages may not add up to 100 percent due to rounding.

¹⁵ The study uses U.S. Census Bureau’s (Census) urban-rural classification to geocode the adult day care center’s address. For purposes of classification, the study team utilized the following Census definitions: (1) urban defined as areas that represent densely developed territory that contains 50,000 or more people; (2) town defined as densely developed territory that has at least 2,500 people but fewer than 50,000 people; and (3) rural defined as territory that is neither urban nor town.

Adult day care centers can serve breakfast, lunch, supper, or a snack; all menus must meet required food components for each meal type and must include the minimum required serving sizes for adults.^{16,17} A center can choose its food preparation method(s) depending on its clients' nutrition and dietary requirements and the center's capacity, among other factors. Generally, adult day care centers can prepare foods onsite or offer food that was prepared offsite, including but not limited to preparation by a food service management company (FSMC), at a local school that participates in the National School Lunch Program, or by a commercial vendor.¹⁸

Adult day care center directors reported preparing food onsite more often (53.5 percent) than preparing food offsite that must be heated onsite (44.7 percent). Centers tended to have some level of involvement in the food preparation process, as only 11.6 percent of adult day care centers used ready-to-serve meals (Exhibit 5). Approximately 5.7 percent of centers used both onsite as well as offsite and ready-to-serve food preparation methods.

Exhibit 5: Food Preparation Methods Used



Note: For more information, see Exhibit B.2 in [Appendix B](#).

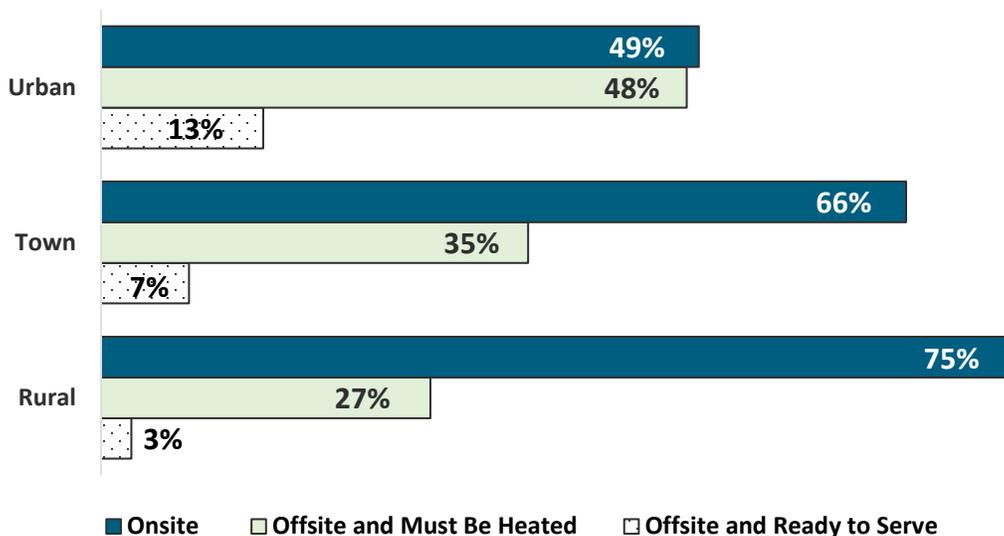
Onsite food preparation was most reported for adult day care centers in towns (65.6 percent) and rural locations (75.4 percent) (Exhibit 6). Center directors in rural locations were least likely to report that food was prepared offsite and ready to serve (2.5 percent).

¹⁶ U.S. Department of Agriculture. (2014). *Adult day care: A Child and Adult Care Food Program handbook* (pp.30–38). Retrieved from <https://fns-prod.azureedge.net/sites/default/files/CACFPAdult%20DayCareHandbook.pdf>

¹⁷ An adult day care center can adjust menus for client dietary needs if the center documents medical statements so that the center can claim meals that do not conform to regulatory meal patterns.

¹⁸ Adult day care centers may also opt to prepare certain meals onsite and others offsite to fulfill client nutrition and dietary requirements if the center fulfills CACFP requirements and maintains food safety requirements.

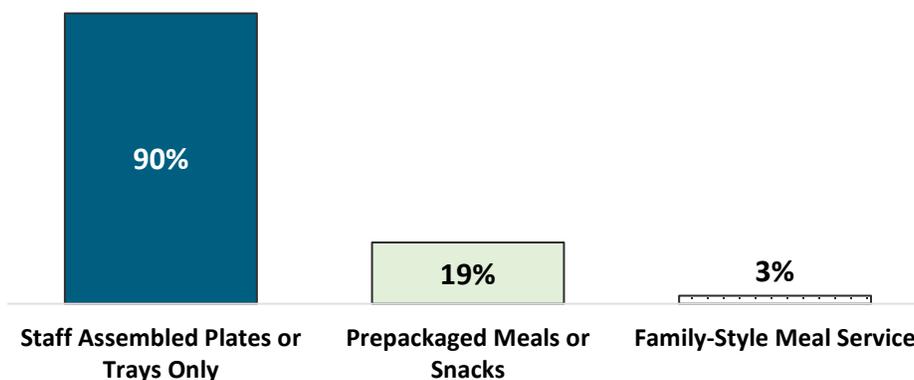
Exhibit 6: Food Preparation Methods Used, by Urbanicity



Note: For more information, see Exhibit B.2 in [Appendix B](#).

The majority of adult day care centers served meals and snacks to clients on plates and trays assembled by staff (89.5 percent). Approximately one in five centers (18.8 percent) served prepackaged meals or snacks (Exhibit 7).¹⁹

Exhibit 7: Type of Meal and Snack Service Used



Note: For more information, see Exhibit B.3 in [Appendix B](#).

On average, most adult day care centers have five food service staff,²⁰ with little variation across type of center. However, the number of foodservice staff varied by urbanicity; on average, urban centers tended to have twice the number of foodservice staff ($n = 6$) than centers in rural locations ($n = 3$) (Exhibit B.2 in [Appendix B](#)).

¹⁹ Respondents could select more than one option for the method used to serve meals.

²⁰ Foodservice staff includes any full-time or part-time staff who receive, prepare, handle, or serve food at the center.

Key Findings: Slightly more than half of the centers in CACFP are independent centers (54.6 percent) and 44.7 percent of centers are sponsored. Approximately three out of four centers are located in urban areas. Just over half (53.5 percent) of centers reported preparing food onsite; 44.7% prepared food offsite and 11.6% served ready-to-serve meals prepared offsite. Little variation exists across the type of center, but a larger proportion of centers in towns (65.6 percent) and rural (75.4 percent) areas reported using an onsite food preparation method. The majority of centers served meals and snacks on plates and trays assembled by staff (89.5 percent).

3 CURRENT FOOD SAFETY EDUCATION, AND KNOWLEDGE GAPS

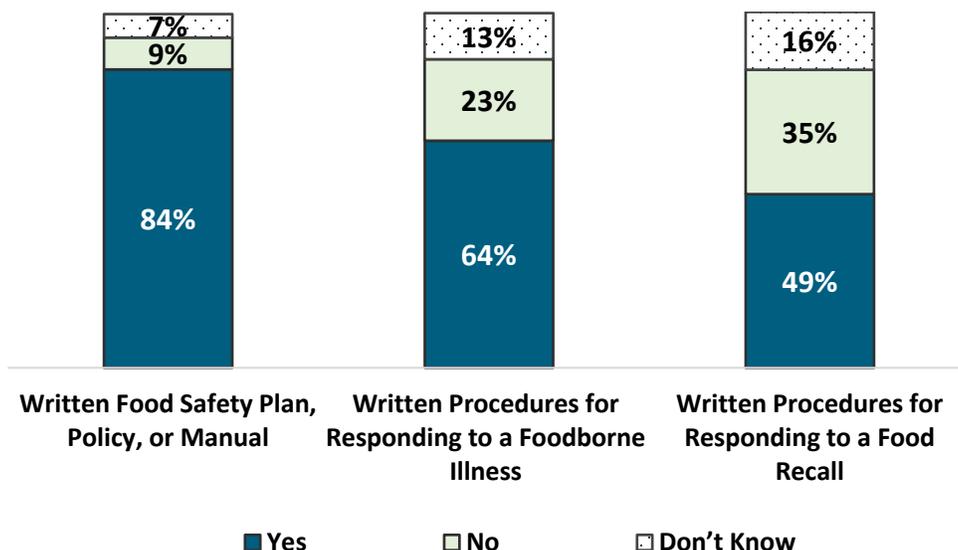
3.1 Existing Food Safety Policies

All adult day care centers, both independent and sponsored, must comply with administrative requirements.²¹ Administrative responsibilities of adult day care centers include maintaining operational activities, completing and submitting an application to participate in CACFP, complying and outlining meal patterns, having adequate staff, and maintaining program records. In addition to operating procedures, written procedures can focus on a variety of topics, including food safety policies, response plans to a food recall or foodborne illness outbreak, and food safety training plans.

The majority of adult day care center directors reported that they have a written plan, policy, or manual for food safety (84.0 percent) (Exhibit 8). Overall, a smaller proportion of centers (63.9 percent) reported that they have written procedures for responding to foodborne illness, but 23.1 percent of centers reported they do not have written procedures in place to respond to a foodborne illness outbreak. About two thirds (66.2 percent) of independent centers and 61.3 percent of sponsored centers reported having written procedures for responding to a foodborne illness outbreak (Exhibit B.4 in [Appendix B](#)). Additionally, less than half of rural center directors (46.6 percent) reported that they have written procedures for responding to a foodborne illness outbreak (Exhibit B.4 in [Appendix B](#)). Only about half of the center directors (48.9 percent) reported that they have written procedures for responding to a food recall. But 34.8 percent of directors reported that their center does not have any written procedures in place to respond to a food recall. This result did not vary across type of center or urbanicity (Exhibit B.4 in [Appendix B](#)).

²¹ U.S. Department of Agriculture. (2014). *Adult day care: A Child and Adult Care Food Program handbook* (pp.12–15). Retrieved from <https://fns-prod.azureedge.net/sites/default/files/CACFPAdult%20DayCareHandbook.pdf>

Exhibit 8: Availability of Written Food Safety Policies, Plans, or Procedures



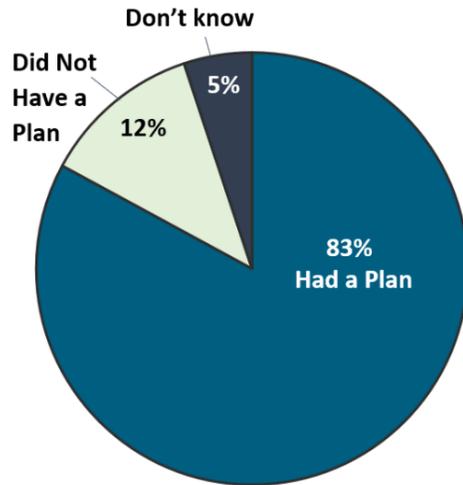
Note: For more information, see Exhibit B.4 in [Appendix B](#).

Approximately 13.0 percent of adult day care center directors reported that they did not know their center’s written procedures for responding to a foodborne illness²² and 16.3 percent did not know of written procedures for responding to food recall. Of those center directors that reported being unaware of written procedures for responding to a food recall, 47.4 percent were sponsored centers and 51.5 percent were independent; however, most of these centers were in urban areas (77.6 percent).

3.2 Current Staff Food Safety Training

More than 80 percent of adult day care center directors reported having a plan for annual food safety staff training at the center (Exhibit 9). Twelve percent of adult day care center directors reported not having a written plan for annual food safety staff training and about 5 percent reported not knowing whether such a plan existed.

²² Of those centers that reported being unaware of written procedures for responding to a foodborne illness, 52 percent were sponsored centers, and 48 percent were independent. Most of the 13 percent were in urban areas (76 percent).

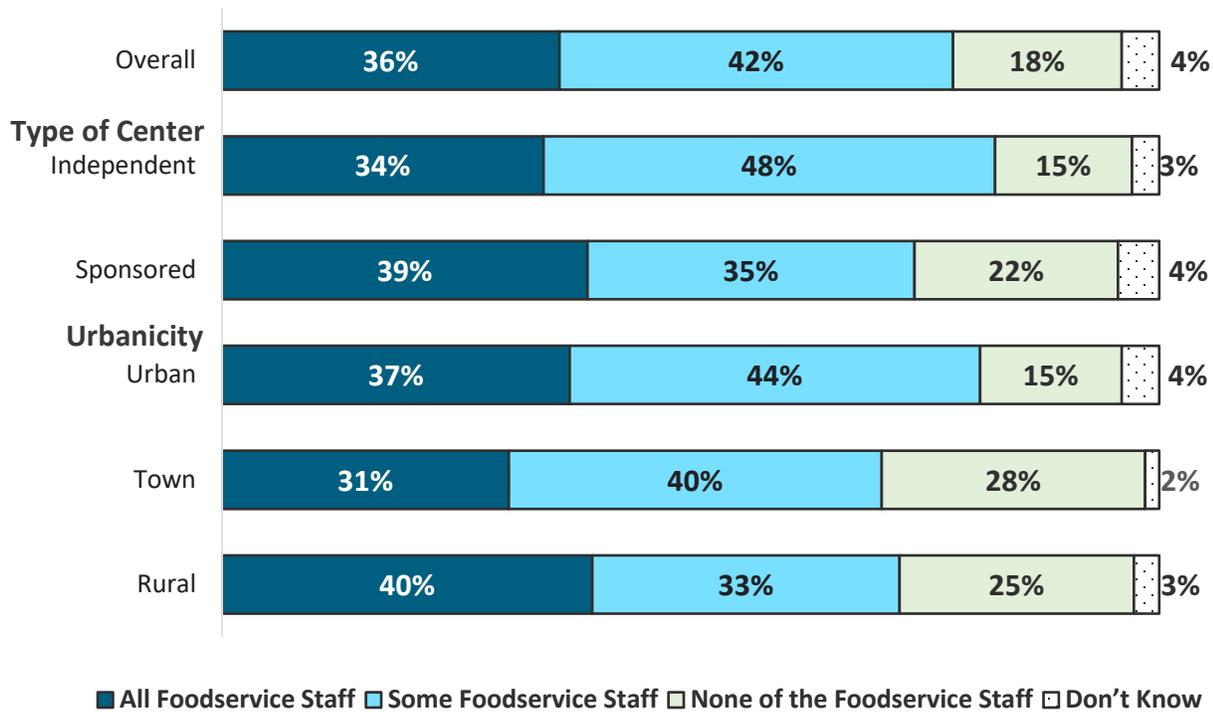
Exhibit 9: Availability of Written Plans for Annual Food Safety Training for Staff

Note: For more information, see Exhibit B.4 in [Appendix B](#).

Most center directors reported that some or all of their foodservice staff had received a food safety certification like ServSafe (78.7 percent) in the last year, but approximately one-fifth of adult day care center directors (17.7 percent) reported their foodservice staff did not have a food safety certification, (Exhibit 10).²³ Directors at more than four in five independent centers (82.5 percent) reported that some or all of their foodservice staff received food safety certification in the past year, compared to 73.9 percent reported by the sponsored centers (Exhibit B.5 in [Appendix B](#)). In addition, 21.7 percent of directors of sponsored centers reported that none of their foodservice staff have food safety certification, compared to 14.6 percent of independent centers.

²³ The USDA Adult Day Care CACFP Handbook does not require foodservice staff to complete food safety certification, although such requirements may differ by local or state requirements.

Exhibit 10: Proportion of Staff Who Received Food Safety Certification, by Type and Urbanicity



Note: For more information, see Exhibit B.5 in [Appendix B](#).

At least 80 percent of all directors of urban centers reported that some or all staff members had attained food safety certification. Comparatively, directors of centers located in towns (28.1 percent) and rural areas (25.0 percent) reported that none of their foodservice staff had attained food safety certification (see Exhibit B.5 in [Appendix B](#)).

On average, adult day care center directors reported that foodservice staff are required to complete 5.5 hours of food safety training for most of their foodservice staff each year. Centers in urban and rural areas required foodservice staff to receive approximately 6 hours of food safety training per year, compared to 4 hours required for staff of centers located in towns. Similar to the 17.7 percent of staff members who had not obtained any food safety certification (Exhibit 11), 18.6 percent of adult day care center directors reported that no food safety training was required at their center. Furthermore, another 18.5 percent of center directors reported that they did not know the number of food safety training hours required for the year.

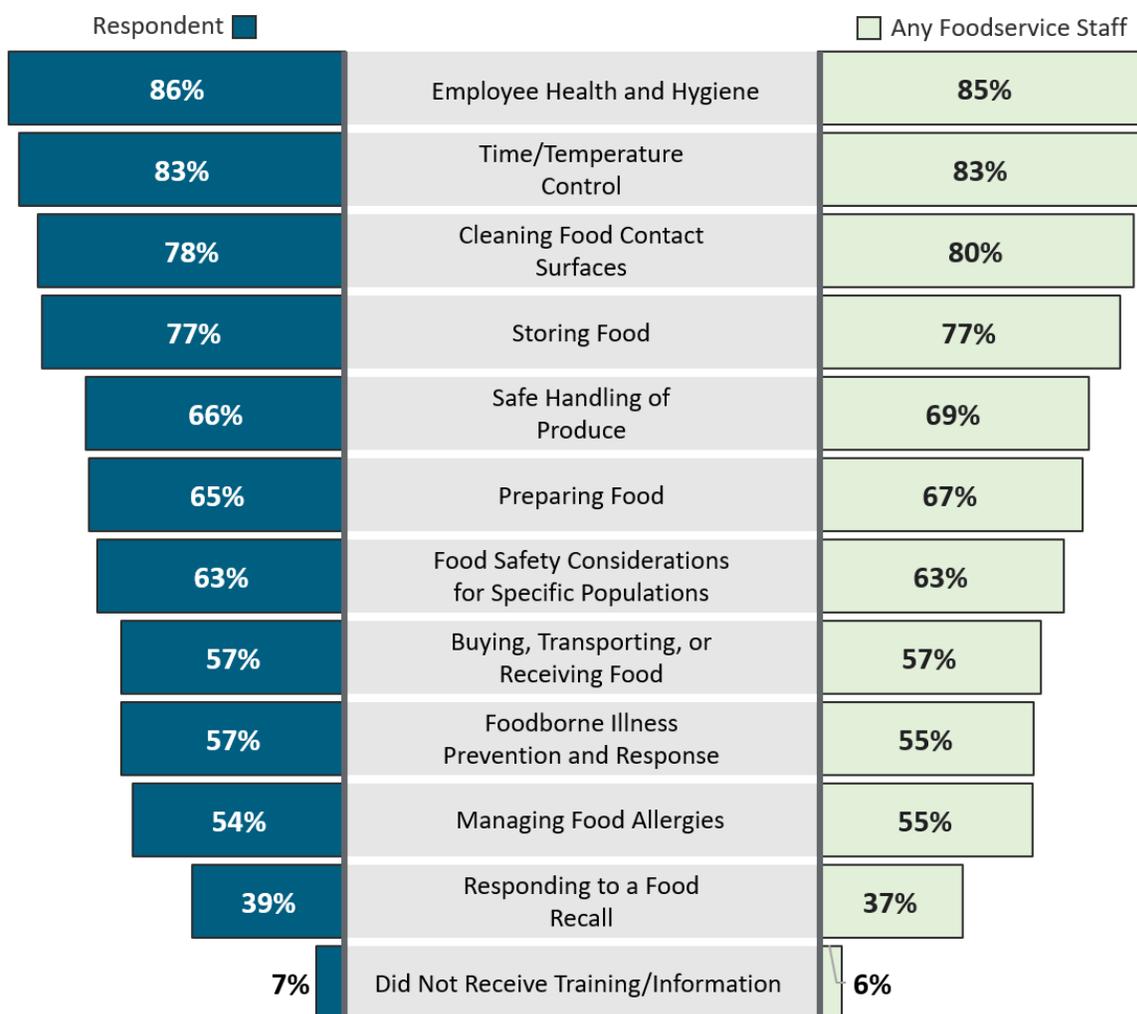
Exhibit 11: Center Requirements for Food Safety Training



Note: For more information, see Exhibit B.6 in [Appendix B](#).

In the 12 months preceding the survey, center directors reported that they themselves and other foodservice staff received food safety education focused on similar topics (Exhibit 12) with little variation across type and urbanicity. Employee health and personal hygiene were the most popular training topics for both adult day care center respondents (85.6 percent) and foodservice staff (85.4 percent). Slightly greater than three-quarters of the respondents and foodservice staff received food safety training or information on time/temperature control; cleaning and sanitizing food contact surfaces; and storing food. Slightly greater than half of the respondents’ reported that foodservice staff at their center received food safety education on buying, transporting, or receiving food; responding to foodborne illness; managing food allergies. Much smaller percentages of respondents (39.0 percent) and foodservice staff (36.9 percent) received training or information on responding to a food recall.

Exhibit 12: Proportion of Respondents and Foodservice Staff Who Received Training or Information on Food Safety Topics in the Past Year



Note: For more information, see Exhibits B.7 and B.8 in [Appendix B](#).

3.3 Available Food Safety Information Sources

Adult day care centers may have access to a variety of resources, including FNS guides, manuals, webinars, and technical assistance; State Agency resources; and resources from the center’s meal vendors, which can include foodservice management companies.²⁴ The study team asked the center directors, over the last 12 months, which resources were available to them for providing answers to questions related to food safety as well as the sources that provided food safety training or information. The center directors reported similar resources for both questions (Exhibit 13) with little variation across type and urbanicity.

Exhibit 13: Primary Sources of Food Safety Education Available for Reference and Used



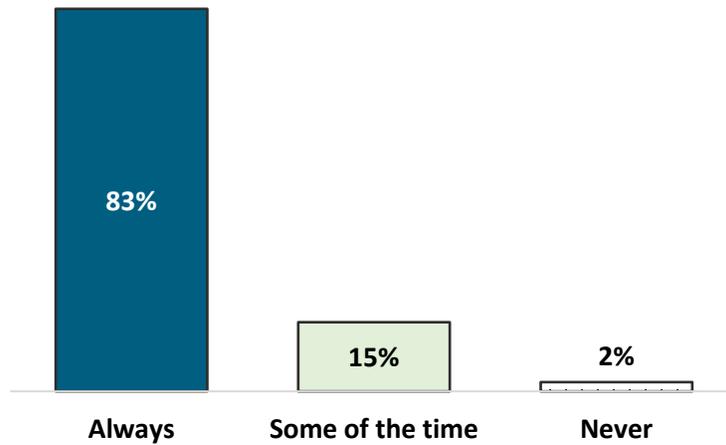
Note: For more information, see Exhibit B.9 and B.10 in [Appendix B](#).

Adult day care center directors reported commonly used resources for general inquiry related to food safety and food safety education used in the past year, including their State Agency (65.5 percent and 67.5 percent, respectively); food safety certificate programs such as ServSafe (29.8 percent and 46.6 percent, respectively); and State and local Departments of Health (41.1 percent and 43.2 percent, respectively). Less frequently reported were the foodsafety.gov website and the center’s sponsoring organization. The top five categories reported were fairly consistent across type of center and urbanicity. A higher percentage of directors of rural centers reported using FNS’ Office of Food Safety (OFS) website (15.5 percent) and Center for Food Safety in Child Nutrition Programs (14.9 percent) for access to food safety training or information. However, usage of most resources by rural centers was reported to be somewhat lower (please refer to [Appendix B](#), Exhibits B.9 and B.10).

Although the centers used a variety of different sources to find answers to food safety questions, 82.9 percent of center directors reported they were able to obtain answers to all food safety questions (Exhibit 14).

²⁴ U.S. Department of Agriculture. (July 2016). *Child and Adult Care Food Program: Adult day care centers: Adult day care*. Retrieved from <https://www.fns.usda.gov/cacfp/adult-day-care-centers>.

Exhibit 14: Proportion of Respondents Receiving Answers Related to Food Safety Questions

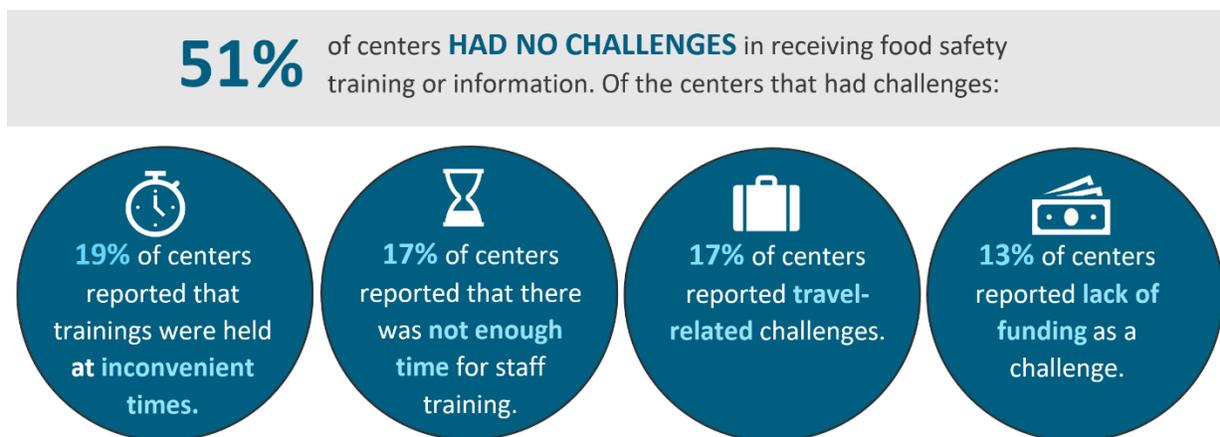


Note: For more information, see Exhibit B.13 in [Appendix B](#).

3.4 Challenges Related to Receiving Food Safety Training and Information

More than half of adult day care center directors (51.4 percent) reported that their center had not faced any challenges related to receiving food safety training or information in the past 12 months. The most common challenges reported were: trainings were offered at times when staff were unavailable (19.1 percent), a lack of time for staff training (17.4 percent), staff inability to travel to attend meetings overall (17.3 percent), and a lack of funding for trainings (13.4 percent). Center directors also reported more specific challenges. For example, directors of rural centers reported they did not have training materials in desirable formats (12.2 percent).

Exhibit 15: Challenges Faced in Receiving Food Safety Training or Information



Note: For more information, see Exhibit B.11 in [Appendix B](#).

Key Findings: Regarding food safety education, 84.0 percent of adult day care center directors reported they had a written food safety plan, policy, or manual, while 23.1 percent reported they did not have written procedures for foodborne illness and 34.8 percent did not have procedures for responding to food recall.

Most foodservice staff received food safety certification and food safety education focused on employee health and personal hygiene, time/temperature control, cleaning and sanitizing food contact surfaces, storing food, and safe handling of produce. Staff are less likely to be trained in topics including managing food allergies, responding to foodborne illness, and responding to a food recall. The three most popular resources that centers commonly used for food safety education and for general inquiries are State Agencies, food safety certification programs, and State and local Health Departments.

More than half of the center directors reported that they do not face any challenges in receiving food safety training or information.

4 FUTURE FOOD SAFETY EDUCATION NEEDS

The study team asked adult day care center directors to identify which additional or new food safety training or information their foodservice staff need. Approximately half of the respondents requested training or information on how to respond to a food recall (50.1 percent), food safety considerations for specific populations served (48.6 percent), preventing and responding to foodborne illness (47.4 percent), and managing food allergies (45.8 percent) (Exhibit 16). The desired training themes reflect the same food safety education topics for which the centers' program directors and foodservice staff received the least training (see Section 3.2). For all the four topics outlined above, the percentage of directors that reported needing additional food safety education was 3 to 9 percent higher among sponsored centers compared to independent centers. Additionally, the percentage of directors that reported a need for new training or information was approximately 1 to 10 percent higher among urban centers compared to centers in towns or rural areas.

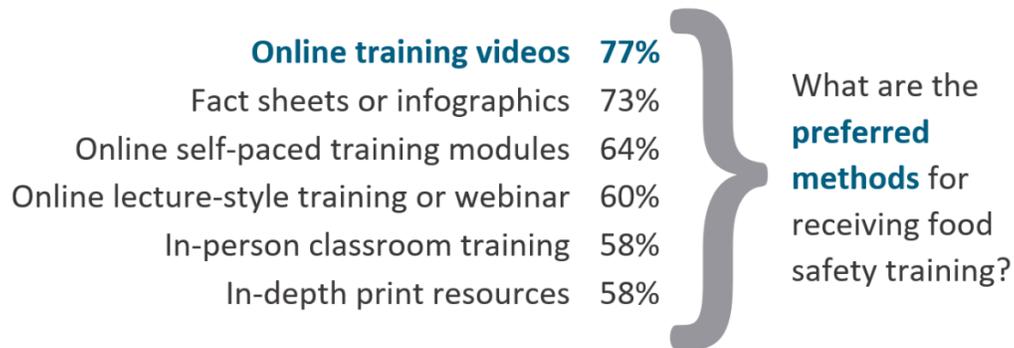
Exhibit 16: Additional or New Food Safety Education Needed by Centers

What additional or new food safety training do foodservice staff need?	}	50%	Responding to a food recall
		49%	Food safety considerations for specific populations served
		47%	Preventing and responding to a foodborne illness
		46%	Managing food allergies

Note: For more information, see Exhibit B.14 in [Appendix B](#).

The survey included a question on preferred methods to receive food safety training and information. Generally, center directors responded that they prefer online training resources over in-person trainings (Exhibit 17). This preference could possibly be related to a lack of accessible in-person training or a lack of resources available for travel. Roughly three-quarters of center directors would prefer that food safety education be provided through online training videos (76.6 percent) or fact sheets or infographics (72.5 percent). Center directors also reported online self-paced training modules (63.7 percent) and online lecture-style training or webinars (59.5 percent) as preferred modes of training and information. More than half reported in-person classroom training (58.3 percent) and in-depth print resources (e.g., manuals, magazines, or textbooks) (58.1 percent) as preferred modes of training. Fewer than half of respondents chose prepared lesson plans and in-person immersion training (see Exhibit B.15 in [Appendix B](#)).

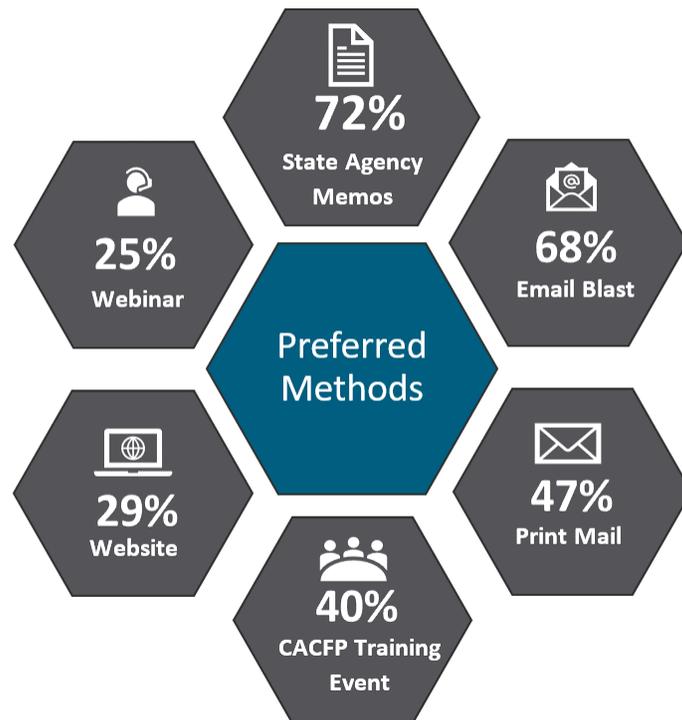
Exhibit 17: Preferred Method for Receiving Food Safety Training and Information



Note: For more information, see Exhibit B.15 in [Appendix B](#).

To alert them about available trainings and information on food safety, directors reported that the center preferred memos from the State Agency that administers CACFP (71.6 percent), email blasts (67.9 percent), print mail (47.1 percent), and CACFP training events (40.1 percent). Only about one-quarter of centers preferred websites and webinars and less than 10 percent of centers preferred social media or ads in professional journals or magazines to find out about food safety training and information available, with little variation by center type and center location.

Exhibit 18: Preferred Methods for Learning About Available Food Safety Training and Information

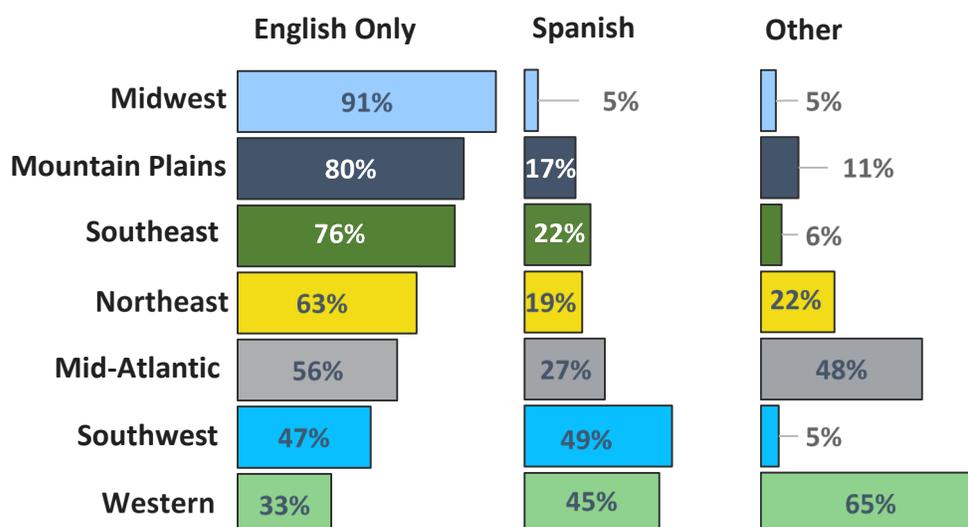


Note: For more information, see Exhibit B.16 in [Appendix B](#).

In addition to new food safety education topics, about 40 percent of the center directors also reported needing food safety training and materials in languages in addition to English. The need for training and information in other languages was greater in independent centers and urban centers, reflecting the demographic compositions of the populations.

This need was evident at the FNS Regional level as well. For example, approximately half of center directors in the Southwest (49.0 percent) and Western (44.8 percent) Regions reported the need for food safety education materials in Spanish, compared to the Midwest Region (4.5 percent). About 7.0 percent of center directors in the Mid-Atlantic and Mountain Plains Regions reported the need for education materials in Russian and 10.0 percent of Mid-Atlantic center directors reported the need for materials in Hindi or Gujarati. Center directors in the Western Region also requested education materials be available in Mandarin (20.8 percent), Tagalog (13.3 percent), and Vietnamese (7.4 percent).

Exhibit 19: Requested Languages for Food Safety Training and Information



Notes: For more information, see Exhibit B.12 in [Appendix B](#).

Other languages requested included Mandarin, Gujarati/Hindi, Russian, Tagalog, Korean, Vietnamese, Chinese (Cantonese), French, Creole, Albanian, Arabic, Armenian, Farsi, Hebrew, Laos, Nepali, Polish, Portuguese, Ukrainian, and Thai.

Key Findings: Around half of the center directors reported that they need new or additional training or information on how to respond to a food recall, on food safety considerations for specific populations served, on preventing and responding to foodborne illness, and on managing food allergies—all topics that align with the food safety education topics on which staff are least trained. Generally, centers seemed to prefer online training resources to in-person trainings and reported they would like to learn about new trainings through memos from their State Agency and email blasts. The need for food safety trainings and information in languages other than English and Spanish depends is dependent on the demographics of the region.

5 CONCLUSIONS

5.1 Key Findings

In 2018, 2,503 adult day care centers participated in CACFP. Slightly more than half of adult day care centers are independent centers (54.8 percent) and 44.8 percent of centers operate under sponsoring organizations. Approximately three out of four centers are located in urban areas (78.3 percent) followed by towns (13.9 percent) and rural areas (7.8 percent). Most centers reported preparing food onsite (53.5 percent) rather than offsite (44.7 percent) or serving ready-to-serve meals that were prepared offsite (11.6 percent). Little variation in meal preparation method exists by center type and region, although higher proportions of centers in towns (65.6 percent) and rural areas (75.4 percent) reported preparing food onsite.

Regarding food safety education, 84.0 percent of adult day care center directors reported they had a written food safety plan, policy, or manual. A slightly smaller percentage of center directors reported they had written procedures for responding to foodborne illness (63.9 percent) and about half reported they had written procedures for responding to a food recall (48.9 percent).

Most center directors reported they had a written plan or schedule for identifying annual food safety training for staff. Additionally, most foodservice staff received food safety certification and food safety education focused on employee health and personal hygiene, time/temperature control, cleaning and sanitization food contact surfaces, storing food, and safe handling of produce. Center directors reported that foodservice staff received less training or information in food safety topics such as managing food allergies, responding to foodborne illnesses, and responding to a food recall. The three most popular resources that centers used for food safety education and for general inquiries were the State Agencies that administer CACFP, food safety certification programs, and State and local Departments of Health. More than half of the center directors reported that they did not face challenges in receiving food safety training or information.

Around half of the center directors reported that they need new or additional training or information on how to respond to a food recall, on food safety considerations for specific populations served, on preventing and responding to foodborne illness, and on managing food allergies—all of which align with the food safety education topics on which staff members reported the least training. Generally, centers preferred online training resources to in-person trainings and reported they would like to learn about new trainings or information through memos from their State Agency and by email blasts.

5.2 Recommendations

Based on the study's key findings, the following items are recommended:

- **Offer new food safety education focused on the following topics:**
 - (1) How to respond to food recalls
 - (2) Food safety considerations of specific populations served
 - (3) Prevention of and response to foodborne illness

- (4) How to manage food allergies
- **Deliver food safety training and information through the following methods:**
 - (1) Online training videos
 - (2) Fact sheets or infographics
 - (3) Online self-paced training modules
 - (4) Online lecture-style training or webinar
- **Provide training and resources in English and Spanish.** Food safety trainings and information in other languages depending on the region.
- **Alert centers of new food safety training and information through the following methods:**
 - (1) State Agencies memos
 - (2) Email blasts
 - (3) Print mail
 - (4) CACFP training event

APPENDIX A: DATA COLLECTION

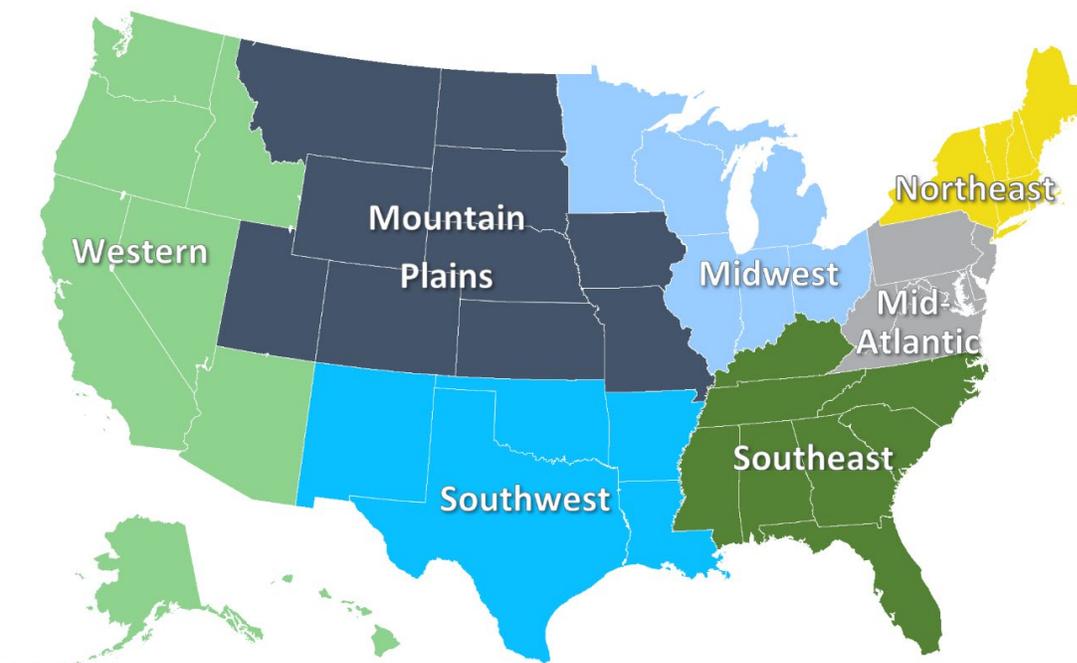
This Appendix includes the explanation of the data collection and sampling plan to survey a nationally representative sample of adult day care centers. The data collection period lasted approximately 6 weeks starting on May 6, 2019 and ending June 14, 2019, and comprised both recruitment and survey completion. The study team used a multimodal approach for data collection through a web-based survey, a hard-copy mail survey, and a computer-assisted telephone interviewing survey. A driving factor throughout the data collection period was the need to update adult day care centers' contact information. As a consequence, the study team conducted significant online research to update the contact information, even though it was provided by State Agencies only months before recruitment. Ultimately, the study team collected 568 complete responses from a sample of 742 eligible adult day care centers that participate in CACFP and achieved a 76.5 percent response rate. To achieve this response rate with an unknown population, the study team planned and executed strategic recruitment and collection efforts.

Sample Selection from Adult Day Care Centers Sample Frame

The sample frame of adult day care centers included, for each adult day care center, location information (mailing address), contact information for the program director (email and phone number), and information on the center type (sponsored or independent). However, certain adult day care centers were missing information such as email addresses, physical mailing addresses, and telephone numbers. The study team added FNS Region and urbanicity²⁵ using ZIP codes from the mailing address for each adult day care center. FNS organizes the States and territories into seven regions: Mid-Atlantic, Midwest, Mountain Plains, Northeast, Southeast, Southwest, and Western Regions (Exhibit A.1).

²⁵ The study uses U.S. Census Bureau's (Census) urban-rural classification to geocode the adult day care center's address. For purposes of classification, the study team utilized the following Census definitions: (1) urban defined as areas that represent densely developed territory that contains 50,000 or more people; (2) town defined as densely developed territory that has at least 2,500 people but fewer than 50,000 people; and (3) rural defined as territory that is neither urban nor town.

Exhibit A.1: States Belonging to Each FNS Region



Note: For more information, see Exhibit B.1 in [Appendix B](#).

The study team systematically and randomly selected a nationally representative stratified sample of 800 adult day care centers, based on FNS Region and sponsorship status, from a sample frame of 2,690 centers. Within FNS Region and sponsorship strata, the study team randomly selected centers through systematic sampling, while controlling for State, so that the centers selected were proportional to the overall distribution of centers across States. During the data collection phase, some centers reported that they were emergency centers, they did not participate in CACFP, or had closed. The study team removed those centers from the sample to achieve a final sample frame of 2,503 centers. Four states (Idaho, South Dakota, North Dakota, and Wyoming) in the Mountain Plains Region and three territories (the U.S. Virgin Islands, American Samoa, and Guam) do not have adult day care centers that participate in CACFP.

During the data collection period, the study team determined that specific adult day care centers were ineligible as either they did not participate in CACFP, were closed, or were emergency shelters, and removed these centers from the original sample of 800 respondents. In total, the study removed 58 centers, resulting in a base sample size of 742 adult day care centers (see breakdown of ineligible centers in Exhibit A.3).

Data Collection Procedures

To overcome missing contact information and to move closer to the expected 80 percent response rate, the study team executed a multimodal data collection effort using strategic communication processes in an effort to collect complete survey responses and updated contact information. The study team

applied the communication and recruitment processes listed below to the initial outreach and also to continued data collection efforts:

- First, the FNS study liaison notified FNS' Regional Offices (ROs) of the study; the ROs then notified appropriate State Agencies about the center and the associated sponsoring organizations (if a sponsored center) selected to participate in the study.
- The study team emailed the sponsoring organization of the sampled adult day care centers about the centers in their organization being selected to participate in the study.
- Next, the study team emailed an invitation packet to the sampled program directors. The packet contained background information on the study, answers to frequently asked questions, instructions for accessing the survey online, and online help systems that provided guidance for unanswered questions.
- For the adult day care center program directors for whom no email address was available, the study team sent a hard-copy invitation packet by postal mail. The packet included a hard copy of the survey and a prepaid postage return envelope to return the survey to the study team, along with answers to frequently asked questions and instructions for accessing the help systems (either online or by phone).

Following the initial outreach efforts, the study team provided a combination of reminder phone calls and emails to allow respondents to ask questions, to provide the opportunity for respondents to finish the survey over the phone, to collect additional contact information, and to verify provided responses. The survey team took care to schedule telephone reminders and emails to avoid emailing and telephoning in the same week, which decreased burden on recipients of these communications.

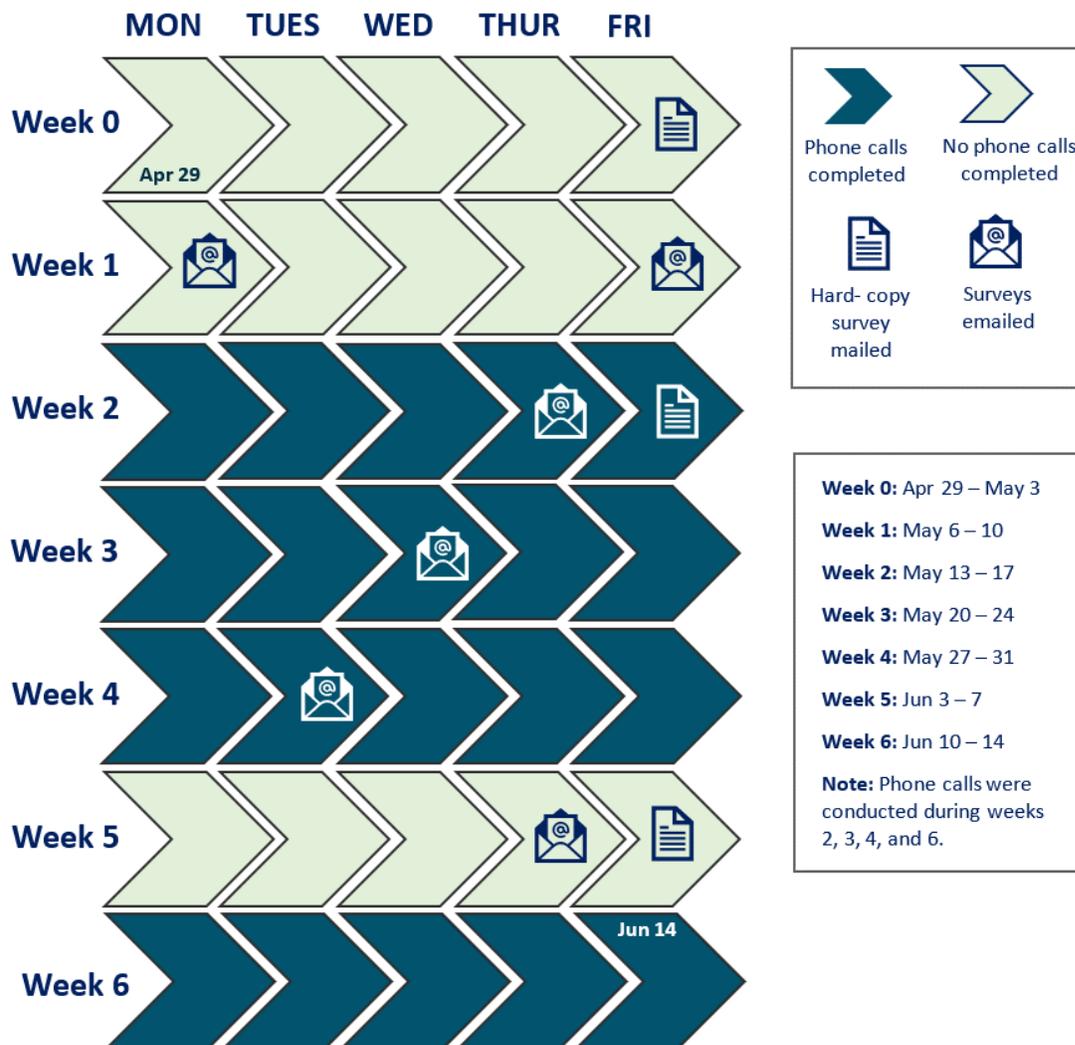
DATA COLLECTION TIMELINE AND SCHEDULE

The study's data collection schedule involved a six-week data collection period in an effort to achieve a high response rate following scheduled recruitment strategies:

- **Reminder emails** went out every four days, instructing respondents to complete the survey.
- **Follow-up telephone calls** began one week after the study team sent the initial email or hard copy, for respondents who had not completed the survey. During the telephone call, a member of the study team offered the respondent the option to complete the survey by telephone due to the survey's short duration.
- **Hard-copy surveys** were mailed with prepaid postage return envelopes two weeks after the study team sent the initial emails to respondents who had never logged on to complete the survey online.

Exhibit A.2 presents the survey support staff's schedule of data collection activities.

Exhibit A.2: Recruitment and Data Collection Schedule



STAFF TRAINING AND PREPARATION

Throughout the data collection period, the survey support staff addressed technical survey issues, responded to survey respondent questions by providing substantive questions within a few hours, and offered respondents the opportunity to complete the survey over the phone. Prior to data collection efforts, the survey support staff received in-depth training including an overview of the research objectives, instrument, and data collection procedures, as well as a review and practice of follow-up scripts for both respondents and nonrespondents. Additionally, survey support staff conducted follow-up calls when survey responses required further clarification. In particular, the study team followed up with respondents who provided outlier information on number of hours of training and number of foodservice staff. For survey responses with missing subgroup data such as center type, the responses associated with that survey were dropped from the descriptive analysis of that particular subgroup but included in the overall and other subgroup analysis.

Data Collection Response Rates

At the completion of the data collection effort, the study team had collected a total of 568 responses via the web survey, phone, and mail. As mentioned, certain adult day care centers were found ineligible, and were removed from the base sample of 800 adult day care centers. The following scenarios categorized adult day care centers as ineligible: (1) adult day care centers were emergency shelters; (2) adult day care centers that were closed;²⁶ (3) centers that were not adult day care centers; and/or (4) adult day care centers no longer participated in CACFP. Exhibit A.3 presents the 58 adult day care centers that were determined to be ineligible for a final sample of 742 eligible centers. Of note, approximately 80 percent of ineligible adult day care centers were emergency centers or had closed.

Exhibit A.3: Ineligibility Status and Total Base Sample

Base Sample Calculation	Number of Centers
Total Number of Adult Day Care Centers Sampled	800
Number of sampled centers that were emergency shelters	22
Number of sampled centers that were closed	24
Number of sampled centers that were not adult day care centers	1
Number of sampled centers that was not participating in CACFP	11
Total number of Eligible Adult Day Care Centers Sampled	742

The study team achieved an overall 76.5 percent response rate and FNS regional response rates that ranged from 68.5 to 84.7 percent, as presented in Exhibit A.4. Furthermore, the study team achieved approximately an 80 percent response rate for each group of sponsored and independent adult day care centers.

²⁶ This included adult day care centers that could not be contacted via email, mail, or phone and, therefore, were not aware of the study. The study team deemed them to be closed centers as there was no contact possible.

Exhibit A.4: Survey Data Collection and Response Rate by State

Mid-Atlantic RO										
State	DC	DE	MD	NJ	PA	PR	Total	Response Rate ²⁷		
Sampled	1	2	47	76	5	1	132			
Removed from Sample	-	-	-	4	-	1	5			
<i>Completed</i>	1	1	41	53	5	-	101	79.5%		
Mountain Plains RO										
State	CO	IA	KS	MO	MT	NE	UT	Total	Response Rate	
Sampled	10	7	5	31	1	6	5	65		
Removed from Sample	1	-	2	2	-	-	1	6		
<i>Completed</i>	8	7	3	21	1	6	4	50	84.7%	
Midwest RO										
State	IL	IN	MI	MN	OH	WI	Total	Response Rate		
Sampled	1	7	15	23	17	5	68			
Removed from Sample	1	-	11	2	3	-	17			
<i>Completed</i>	1	6	4	15	12	5	43	84.3%		
Northeast RO										
State	CT	MA	NH	NY	RI	VT	Total	Response Rate		
Sampled	6	38 ²⁸	3	60	4	2	113			
Removed from Sample	-	-	-	5	-	-	5			
<i>Completed</i>	6	26	3	35	2	2	74	68.5%		
Southeast RO										
State	AL	FL	GA	KY	MS	NC	SC	TN	Total	Response Rate
Sampled	18	43	29	25	21	16	19	5	176	
Removed from Sample	-	4	1	2	1	2	1	-	11	
<i>Completed</i>	14	28	19	20	18	14	15	5	133	80.6%
Southwest RO										
State	AR	LA	NM	OK	TX	Total	Response Rate			
Sampled	30	3	2	7	104	146				
Removed from Sample	2	1	-	-	7	10				
<i>Completed</i>	24	2	2	6	64	98	72.0%			
Western RO										
State	AK	AZ	CA	HI	NV	OR	WA	Total	Response Rate	
Sampled	1	2	85 ²⁹	3	2	2	5	100		
Removed from Sample	1	-	1	1	-	1	-	4		
<i>Completed</i>	-	2	59	1	1	1	5	69	71.9%	

²⁷ Response rate is calculated as number of completes divided by the eligible sample population (sampled – removed from sample)

²⁸ Of the 38 adult day care centers sampled in Massachusetts, the study team sent 36 centers invitations to participate in the survey via regular mail and sent 2 centers invitations via email.

²⁹ Of the 85 adult day care centers sampled in California, the study team sent 78 centers invitations to participate in the survey via regular mail and sent 7 centers invitations via email.

APPENDIX B: SUMMARY DATA TABLES

Exhibit B.1: Characteristics of Adult Day Care Centers that Participate in CACFP

Characteristics	Percentage of Centers	Total Weighted Sample	Total Unweighted Sample
Overall	-	2,503	568
Type of Center			
Independent	54.6%	1,368	316
Sponsored	44.7%	1,119	248
<i>Affiliated</i>	57.2%	640	142
<i>Unaffiliated</i>	27.6%	309	70
<i>Don't know</i>	10.7%	120	26
<i>Missing</i>	4.4%	49	10
Don't know	0.3%	8	2
Missing	0.3%	8	2
FNS Region			
Mid-Atlantic	16.9%	424	101
Mountain Plains	5.4%	134	50
Midwest	4.7%	119	43
Northeast	14.5%	362	74
Southeast	24.8%	620	133
Southwest	20.8%	520	98
Western	12.9%	324	69
Urbanicity			
Urban	78.3%	1,959	444
Town	13.9%	349	81
Rural	7.8%	195	43

Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Questions 18 and 19.

Exhibit B.2: Average Number of Foodservice Staff and Food Preparation Methods Used, by Center Characteristics

Characteristics	Average Number of Foodservice Staff						Food Preparation Location and Method Used				
	Mean	Median	Min	Max	Total Weighted Sample	Total Unweighted Sample	Onsite	Offsite and Must Be Heated	Offsite and Ready to Serve	Total Weighted Sample	Total Unweighted Sample
Overall	5	4	1	75	2,453	557	53.5%	44.7%	11.6%	2,499	567
Type of Center											
Independent	6	4	1	44	1,343	311	51.9%	47.4%	11.7%	1,368	316
Sponsored	5	3	1	75	1,101	244	55.2%	41.8%	11.8%	1,114	247
FNS Region											
Mid-Atlantic	6	4	1	30	412	98	38.4%	53.7%	17.9%	424	101
Mountain Plains	4	3	1	22	134	50	55.5%	43.0%	10.1%	134	50
Midwest	5	4	1	20	119	43	57.0%	47.5%	11.3%	119	43
Northeast	6	4	1	38	352	72	55.4%	39.2%	20.2%	362	74
Southeast	4	2	1	44	602	129	48.3%	50.4%	9.2%	620	133
Southwest	6	3	1	75	520	98	81.8%	20.2%	2.1%	520	98
Western	6	4	1	26	315	67	33.7%	67.7%	14.7%	319	69
Urbanicity											
Urban	6	4	1	75	1,930	438	49.2%	48.2%	13.4%	1,955	443
Town	4	2	1	38	332	77	65.6%	35.1%	7.2%	349	81
Rural	3	2	1	12	191	42	75.4%	27.3%	2.5%	195	43

Notes: Respondents could select multiple response options. 5.7 percent of centers reported using combinations of both onsite and offsite ready-to-serve food preparation methods. The study team called the survey respondents that reported higher number of foodservice staff in a follow-up phone call. Two respondents confirmed their number of foodservice staff. The study team was not able to confirm the responses from two respondents who did not return our voicemails.

Counts calculated for foodservice staff include any full-time and part-time staff who receive, prepare, handle, or serve food at the adult day care center. Respondents provided whole numbers.

Data are missing for 2.0 percent of respondents for the mean number of foodservice staff (Question 3) and for 0.4 percent of respondents for the type of center.

Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Questions 1 and 3.

Exhibit B.3: Types of Meals and Snacks Service Used, by Center Characteristics

Characteristics	Meals and Snacks Service Used			Total Weighted Sample	Total Unweighted Sample
	Staff Assembled Plates or Trays	Prepackaged Meals or Snacks	Family-Style Meal Service		
Overall	89.5%	18.8%	2.5%	2,499	567
Type of Center					
Independent	90.3%	17.4%	2.8%	1,368	316
Sponsored	88.3%	20.8%	2.3%	1,114	247
FNS Region					
Mid-Atlantic	92.0%	27.8%	3.0%	424	101
Mountain Plains	94.1%	13.8%	7.9%	134	50
Midwest	84.2%	22.6%	4.5%	119	43
Northeast	85.2%	21.6%	6.7%	362	74
Southeast	88.9%	17.7%	0.8%	620	133
Southwest	91.0%	11.9%	1.0%	520	98
Western	89.7%	17.6%	0.0%	319	68
Urbanicity					
Urban	88.6%	20.1%	2.6%	1,955	443
Town	92.8%	14.3%	3.7%	349	81
Rural	92.4%	13.6%	0.0%	195	43
<p>Notes: Respondents could select multiple response options. 9.4 percent of centers reported using both staff-assembled plates or trays and prepackaged meals or snacks. Data are missing for 0 percent of respondents in Question 2. Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Question 2.</p>					

Exhibit B.4: Availability of Written Policies, Plans, or Procedures on Food Safety and Training, by Center Characteristics

Characteristics	A Written Food Safety Plan, Policy, or Manual	Written Plan or Schedule Identifying Annual Food Safety Staff Training	Written Procedures for Responding to a Foodborne Illness	Written Procedures for Responding to a Food Recall	Total Weighted Sample	Total Unweighted Sample
Overall	84.0%	82.9%	63.9%	48.9%	2,503	568
Don't Know	6.6%	5.1%	13.0%	16.3%		
Type of Center						
Independent	86.5%	84.0%	66.2%	50.4%	1,368	316
Sponsored	81.9%	82.0%	61.3%	47.4%	1,119	248
FNS Region						
Mid-Atlantic	89.9%	85.9%	73.1%	54.0%	424	101
Mountain Plains	71.5%	72.8%	54.8%	42.1%	134	50
Midwest	83.5%	95.5%	73.8%	50.5%	119	43
Northeast	77.1%	67.6%	62.2%	45.3%	362	74
Southeast	81.2%	83.6%	68.1%	52.2%	620	133
Southwest	85.7%	84.0%	59.7%	47.5%	520	98
Western	92.6%	92.4%	52.9%	44.6%	324	69
Urbanicity						
Urban	86.3%	82.5%	64.5%	48.4%	1,959	444
Town	76.8%	80.9%	70.5%	49.0%	349	81
Rural	73.8%	89.8%	46.6%	53.4%	195	43
<p>Notes: Data are missing for 0.7 percent of respondents for a written food safety plan, policy, or manual; 2.3 percent of respondents for a written procedures for responding to a food recall; 2.1 percent of respondents for written procedures for responding to a foodborne illness; 0.5 percent for a written plan or schedule identifying annual food safety staff training; and 0.4 percent for respondents for the type of center.</p> <p>Respondents could select multiple response options. Reported combinations of available written policies, plans, or procedures available include having all policies, procedures, plans, and schedules (40.7 percent); written food safety plan, written procedures for foodborne illness, and written plans or schedule for staff training (9.9 percent); written food safety plan, written plan or schedule for scheduling (9.5 percent); written food safety plan, written procedure for responding to a foodborne illness, and written plan or schedule for scheduling (4.9 percent).</p> <p>Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Questions 4 and 5.</p>						

Exhibit B.5: Percentage of Foodservice Staff that Receive Food Safety Certification, by Center Characteristics

Characteristics	All Foodservice Staff	Some Foodservice Staff	None of the Foodservice Staff	Don't Know	Total Weighted Sample	Total Unweighted Sample
Overall	36.3%	42.4%	17.7%	3.5%	2,503	568
Type of Center						
Independent	34.3%	48.2%	14.6%	2.9%	1,368	316
Sponsored	39.0%	34.9%	21.7%	4.4%	1,119	248
FNS Region						
Mid-Atlantic	30.8%	50.3%	13.9%	5.0%	424	101
Mountain Plains	30.9%	47.8%	19.3%	2.0%	134	50
Midwest	22.4%	55.0%	18.1%	4.5%	119	43
Northeast	23.0%	56.8%	16.2%	4.0%	362	74
Southeast	28.5%	42.5%	28.3%	0.7%	620	133
Southwest	63.3%	22.5%	9.0%	5.1%	520	98
Western	37.6%	40.8%	17.3%	4.3%	324	69
Urbanicity						
Urban	37.1%	43.8%	15.1%	4.0%	1,959	444
Town	30.6%	39.8%	28.1%	1.5%	349	81
Rural	39.5%	32.8%	25.0%	2.7%	195	43

Notes: Data are missing for 0.4 percent of respondents for the type of center.

The survey question provided ServSafe as an example of a food safety certification program.

Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Question 6.

Exhibit B.6: Number of Hours of Food Safety Training Required for Most Foodservice Staff Each Year, by Center Characteristics

Characteristics	Number of Hours				No Training Required	Don't Know	Total Weighted Sample	Total Unweighted Sample
	Mean	Median	Minimum	Maximum				
Overall	5.5	4.0	1	40	18.6%	18.5%	2,485	564
<i>Range: 1 hour (17.5%)</i>							272	61
<i>2 hours (23.0%)</i>							357	82
<i>3–5 hours (24.5%)</i>							381	87
<i>6–10 hours (15.1%)</i>							236	53
<i>11 + hours (20.0%)</i>							311	68
Type of Center								
Independent	5.7	3.0	1	40	15.5%	16.6%	1,115	247
Sponsored	5.1	3.0	1	29	22.0%	20.8%	1,354	313
FNS Region								
Mid-Atlantic	4.8	2.0	1	20	19.9%	14.9%	420	100
Mountain Plains	5.1	3.0	1	20	18.4%	27.8%	134	50
Midwest	5.3	3.0	1	20	21.6%	21.0%	119	43
Northeast	4.5	2.0	1	24	24.3%	13.5%	352	72
Southeast	5.0	3.0	1	29	20.4%	14.2%	616	132
Southwest	6.8	5.0	1	20	13.3%	25.2%	520	98
Western	6.4	3.0	1	40	14.6%	21.6%	324	69
Urbanicity								
Urban	5.6	3.0	1	40	19.3%	18.4%	1,945	441
Town	4.4	3.0	1	18	17.0%	17.0%	349	81
Rural	5.7	3.0	1	20	14.4%	22.8%	191	42

Notes: Training hours were only reported in whole numbers. Hours do not include time for food safety certification such as ServSafe.

Data are missing for 0.7 percent of respondents for the number of hours required for food safety training and for 0.4 percent of respondents for the type of center.

Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Question 7.

Exhibit B.7: Training or Information on Food Safety Topics Received by Respondent, by Center Characteristics

Characteristics	Employee Health and Personal Hygiene	Time/Temperature Control	Cleaning and Sanitizing Food Contact Surfaces	Storing Food	Safe Handling of Produce	Preparing Food	Food Safety Considerations for Specific Populations Served ¹	Buying, Transporting, or Receiving Food	Preventing and Responding to Foodborne Illness	Managing Food Allergies	Responding to a Food Recall	Did Not Receive Any Training or Information	Total Weighted Sample	Total Unweighted Sample
Overall	85.6%	82.8%	78.4%	77.2%	66.1%	65.1%	63.4%	57.1%	57.0%	54.3%	39.0%	7.5%	2,498	567
Type of Center														
Independent	86.7%	83.5%	78.8%	75.9%	65.9%	65.2%	67.1%	56.5%	57.7%	52.4%	40.1%	8.2%	1,363	315
Sponsored	84.9%	82.3%	78.4%	79.0%	66.5%	65.1%	59.1%	58.1%	56.3%	56.6%	37.5%	6.7%	1,119	248
FNS Region														
Mid-Atlantic	85.1%	84.1%	82.1%	79.1%	65.2%	63.2%	71.2%	57.7%	66.2%	64.6%	42.3%	9.9%	424	101
Mountain Plains	76.3%	79.8%	69.9%	68.0%	60.5%	60.5%	49.6%	48.7%	54.4%	36.4%	19.3%	12.1%	134	50
Midwest	90.3%	80.6%	73.8%	73.8%	50.5%	61.9%	61.8%	48.9%	52.1%	48.9%	20.4%	5.2%	119	43
Northeast	85.0%	79.5%	69.9%	78.1%	63.0%	56.2%	61.7%	52.1%	56.2%	61.7%	38.4%	8.2%	357	73
Southeast	89.3%	83.4%	82.6%	76.7%	65.5%	64.3%	60.7%	61.9%	60.0%	51.4%	46.7%	6.1%	620	133
Southwest	81.8%	83.7%	80.7%	79.7%	71.5%	73.7%	63.5%	56.3%	54.1%	53.9%	37.7%	7.0%	520	98
Western	88.4%	83.9%	76.7%	75.4%	70.9%	68.0%	66.6%	60.8%	47.7%	48.0%	37.7%	5.8%	324	69
Urbanicity														
Urban	86.5%	83.3%	77.8%	77.6%	67.7%	63.8%	62.5%	56.4%	57.0%	53.8%	38.0%	7.5%	1,954	443
Town	78.0%	76.0%	77.3%	72.4%	61.0%	66.1%	61.5%	58.9%	55.6%	57.2%	41.4%	7.8%	349	81
Rural	90.8%	88.9%	86.7%	81.1%	58.9%	75.7%	74.9%	61.7%	59.9%	53.3%	45.0%	6.5%	195	43

¹ Specific populations served include seniors and people with disabilities, as indicated on the survey question.

Notes: Questions 8 and 9 provided the same response options to determine training or information received by respondents and *foodservice staff*, respectively.

Respondents could select multiple food safety trainings or information that they individually received within the past 12 months. 4 respondents selecting “other” as a response were recoded with existing survey responses; no new response options were created. Respondents also reported receiving training on CACFP dietary requirements, food labeling, civil rights, nutrients, meal components, and portion sizes.

24.5 percent of respondents reported received training and information for each response category listed above in the past year.

Data are missing for 0.4 percent of respondents for the type of center.

Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Question 8.

Exhibit B.8: Training or Information on Food Safety Topics Received by Any Foodservice Staff, by Center Characteristics

Characteristics	Employee Health and Personal Hygiene	Time/Temperature Control	Cleaning and Sanitizing Food Contact Surfaces	Storing Food	Safe Handling of Produce	Preparing Food	Food Safety Considerations for Specific Populations Served ¹	Buying, Transporting, or Receiving Food	Preventing and Responding to Foodborne Illness	Managing Food Allergies	Responding to a Food Recall	Did Not Receive Any Training or Information	Total Weighted Sample	Total Unweighted Sample
Overall	85.4%	82.7%	80.4%	76.9%	68.9%	67.3%	62.6%	56.7%	54.9%	54.7%	36.9%	6.3%	2,503	568
Type of Center														
Independent	86.4%	83.5%	81.2%	76.2%	69.8%	65.9%	68.1%	56.5%	56.3%	54.8%	37.5%	6.6%	1,368	316
Sponsored	84.7%	82.3%	79.9%	78.1%	68.2%	69.4%	56.0%	57.0%	53.2%	54.5%	36.0%	5.9%	1,119	248
FNS Region														
Mid-Atlantic	90.1%	89.1%	85.1%	82.1%	69.2%	71.2%	69.2%	60.6%	59.2%	65.2%	41.4%	6.0%	424	101
Mountain Plains	74.4%	76.5%	68.6%	62.7%	64.5%	54.6%	45.2%	46.3%	54.6%	40.1%	21.3%	16.0%	134	50
Midwest	83.5%	76.1%	78.4%	73.8%	53.4%	58.0%	62.5%	41.5%	56.7%	42.2%	25.0%	9.7%	119	43
Northeast	82.5%	79.7%	77.0%	71.6%	64.9%	64.8%	60.9%	54.0%	54.1%	60.8%	32.4%	5.4%	362	74
Southeast	87.5%	84.0%	80.9%	77.3%	69.9%	67.8%	60.9%	58.1%	60.0%	55.3%	43.4%	5.4%	620	133
Southwest	80.7%	77.6%	79.7%	76.6%	68.5%	69.6%	61.4%	56.3%	49.9%	51.8%	38.7%	7.0%	520	98
Western	91.3%	88.4%	83.9%	82.6%	79.6%	69.5%	68.0%	62.4%	47.7%	48.0%	31.8%	2.9%	324	69
Urbanicity														
Urban	85.8%	82.7%	80.5%	76.7%	69.6%	66.1%	61.2%	55.9%	55.4%	53.8%	36.4%	6.2%	1,959	444
Town	80.3%	78.2%	76.8%	73.1%	64.4%	67.1%	65.2%	57.3%	50.8%	58.8%	36.9%	7.8%	349	81
Rural	90.3%	90.8%	86.1%	85.6%	70.7%	80.7%	71.8%	63.3%	56.7%	55.5%	42.1%	4.3%	195	43

¹ Specific populations served include seniors and people with disabilities, as indicated on the survey question.

Notes: Questions 8 and 9 provided the same response options to determine training or information received by *respondents* and *foodservice staff*, respectively. Respondents could select multiple food safety trainings or information that staff received within the past 12 months. Three respondents selecting “other” as a response were recoded with existing survey responses; no new response options were created for Question 9. Respondents also reported foodservice staff receiving training on CACFP dietary requirements, food labeling, civil rights, nutrients, meal components, and portion sizes. 24.5 percent of respondents reported foodservice staff receiving training and information for each of the response category listed above in the past year. Data are missing for 0.4 percent of respondents for the type of center.

Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Question 9.

Exhibit B.9: Used Sources of Food Safety Training or Information, by Center Characteristics

Characteristics	State Agency or Department that Administers CACFP	Food Safety Certification Program (e.g., ServSafe)	Health Department or Health Inspector (State, County, or Local)	www.foodsafety.gov	Sponsoring Organization ²	FNS Office of Food Safety (OFS) Website	Center for Food Safety in Child Nutrition Programs	Other: Dietitian/Nutritionist ¹	Foodservice Management Company ³	Other: Center-Developed Training ¹	Cooperative Extension	Other: Online Training ¹	Institute for Child Nutrition (ICN)	Don't Know	Total Weighted Sample	Total Unweighted Sample
Overall	67.5%	46.6%	43.2%	17.0%	14.5%	9.6%	9.0%	7.8%	7.1%	3.6%	3.5%	3.3%	3.2%	0.8%	2,503	568
Type of Center																
Independent	69.6%	51.6%	44.0%	18.8%	4.4%	9.8%	8.9%	8.1%	8.6%	2.2%	2.9%	4.6%	3.4%	0.6%	1,368	316
Sponsored	65.2%	40.5%	42.4%	15.1%	16.8%	9.6%	9.3%	7.6%	5.5%	5.4%	4.4%	1.8%	2.3%	1.0%	1,119	248
FNS Region																
Mid-Atlantic	71.1%	58.2%	55.0%	14.6%	4.8%	10.0%	7.9%	10.9%	4.2%	5.0%	0.0%	7.0%	0.0%	1.0%	424	101
Mountain Plains	65.1%	52.4%	48.1%	19.5%	24.6%	8.2%	13.0%	0.0%	2.2%	4.0%	2.2%	4.2%	4.5%	1.5%	134	50
Midwest	77.1%	42.0%	57.4%	14.3%	4.8%	19.1%	2.4%	4.5%	9.6%	0.0%	4.8%	0.0%	4.8%	2.4%	119	43
Northeast	64.3%	50.0%	37.2%	15.7%	19.2%	7.2%	7.2%	4.1%	10.0%	2.7%	2.9%	2.7%	2.9%	1.4%	362	74
Southeast	62.3%	35.0%	36.7%	15.6%	16.6%	5.6%	10.0%	3.0%	7.3%	5.5%	3.3%	2.2%	4.4%	0.0%	620	133
Southwest	67.7%	49.5%	50.5%	23.9%	18.9%	15.2%	10.6%	5.2%	8.7%	2.1%	7.6%	2.7%	2.2%	0.0%	520	98
Western	73.2%	45.0%	28.2%	13.4%	9.0%	7.4%	8.9%	26.0%	5.9%	2.9%	3.0%	2.9%	6.1%	1.5%	324	69
Urbanicity																
Urban	65.9%	49.7%	45.0%	16.6%	14.3%	8.6%	7.8%	9.7%	6.0%	3.4%	2.2%	2.4%	2.7%	0.8%	1,959	444
Town	75.2%	37.0%	42.3%	17.7%	20.0%	11.8%	12.6%	1.6%	9.3%	4.0%	9.5%	5.1%	7.0%	0.8%	349	81
Rural	70.3%	31.7%	26.1%	19.4%	7.1%	15.5%	14.9%	0.0%	14.8%	5.3%	6.9%	9.0%	1.4%	0.0%	195	43

¹ Respondents provided these response options in the “other” category that were recoded when possible. 8 “other” response options were recoded with existing response options. 82 respondents were recoded into new response options “Dietitian/Nutritionist” (43) and “Center Training” (39). Those “other” response options that are not recoded include the name of the training received or community college name (2 respondents) or food bank name (2 respondents).

² Respondents who were in centers that were sponsored or had missing center type in the sample file were provided this response option.

³ Respondents were asked to select a foodservice management company response option if the center used one.

Notes: Respondents could select multiple options. Respondents were asked to report the source of food safety training or information used by their center within the past 12 months. Data are missing for 0.4 percent of respondents for the type of center.

Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Question 10.

Exhibit B.10: Information Sources Available for Reference to Answer Food Safety Questions, by Center Characteristics

Characteristics	State Agency or Department that Administers CACFP	Health Department or Health Inspector (State, County, or Local)	Food Safety Certification Program (e.g., ServSafe)	www.foodsafety.gov	Sponsoring Organization ²	Foodservice Management Company ³	FNS Office of Food Safety (OFS) Website	Center for Food Safety in Child Nutrition Programs	Other: Dietitian/Nutritionist ¹	Other: Online ¹	Cooperative Extension	Institute for Child Nutrition (ICN)	Other: Center or Center Contracted Staff ¹	Did Not Seek Information	Total Weighted Sample	Total Unweighted Sample
Overall	65.5%	41.1%	29.8%	18.1%	11.7%	7.4%	7.2%	5.9%	5.4%	2.9%	2.2%	2.2%	1.5%	8.8%	2,499	567
Type of Center																
Independent	66.4%	41.3%	32.0%	18.1%	9.6%	6.5%	5.2%	5.2%	6.2%	1.7%	2.0%	1.5%	0.9%	8.8%	1,368	316
Sponsored	64.4%	41.0%	26.8%	18.4%	12.3%	8.6%	9.8%	6.7%	4.5%	4.3%	2.5%	2.2%	2.3%	8.9%	1,114	247
FNS Region																
Mid-Atlantic	69.6%	46.3%	33.4%	15.9%	1.1%	7.0%	7.0%	3.0%	5.0%	2.0%	1.0%	0.0%	3.0%	8.9%	424	101
Mountain Plains	63.8%	45.4%	23.7%	15.1%	24.8%	7.9%	5.3%	9.4%	2.0%	2.0%	2.2%	2.2%	4.2%	8.1%	134	50
Midwest	61.8%	43.7%	18.2%	26.2%	8.6%	6.8%	6.8%	6.8%	2.3%	2.3%	2.3%	2.3%	0.0%	8.1%	119	43
Northeast	59.4%	44.6%	31.1%	21.6%	21.4%	9.4%	5.4%	4.1%	5.4%	1.4%	2.7%	2.7%	1.4%	12.2%	362	74
Southeast	61.7%	38.4%	27.4%	17.0%	16.1%	10.6%	7.5%	5.1%	3.3%	3.7%	3.1%	4.5%	1.6%	10.2%	620	133
Southwest	68.3%	46.7%	35.1%	21.6%	11.0%	7.2%	12.3%	8.2%	5.2%	2.0%	3.1%	1.1%	0.0%	5.9%	520	98
Western	72.1%	23.1%	26.0%	11.7%	0.0%	0.0%	1.5%	7.3%	13.2%	6.0%	0.0%	1.6%	1.5%	7.3%	319	68
Urbanicity																
Urban	65.1%	43.0%	30.4%	18.5%	8.8%	6.2%	6.0%	5.8%	6.8%	2.1%	1.1%	1.7%	1.7%	7.5%	1,959	444
Town	64.2%	40.8%	23.0%	19.0%	22.0%	13.1%	13.9%	5.0%	0.8%	4.9%	8.1%	6.0%	1.4%	15.7%	344	80
Rural	70.3%	21.8%	36.0%	12.9%	13.4%	9.5%	7.4%	7.4%	0.0%	6.8%	2.5%	0.0%	0.0%	9.5%	195	43

¹ Respondents provided these response options in the “other” category that were recoded when possible. 11 “other” response options were recoded with existing response options. 54 respondents were recoded into new response options: “Dietitian/Nutritionist” (29), “Center or Center Contracted Staff” (9) and “Online” (16).

² Respondents who were in centers that were sponsored or had missing center type in the sample file were provided this response option.

³ Respondents were asked to select a foodservice management company response option if the center used one.

Notes: Respondents could select multiple options. Respondents were asked to report the source available for reference to answer questions related food safety used by their center within the past 12 months.

Data are missing for 0.4 percent of respondents for the type of center.

Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Question 13.

Exhibit B.11: Challenges Faced in Receiving Food Safety Training or Information, by Center Characteristics

Characteristics	Trainings Offered at Inconvenient Times	Not Enough Time for Staff Training	Challenges for Travel	Lack of Funding	Lack of Relevant Training Materials	Training Materials Not Available in Needed Language	Training Materials in Undesirable Formats	Lack of Qualified Food Safety Trainers	Limited or No Internet Access at Center	Limited Ability to Print Training Materials	No Challenges Faced	Don't Know	Total Weighted Sample	Total Unweighted Sample
Overall	19.1%	17.4%	17.3%	13.4%	9.3%	5.6%	5.4%	5.1%	1.6%	0.2%	51.4%	2.9%	2,498	567
Type of Center														
Independent	19.4%	17.4%	18.4%	15.5%	9.5%	6.7%	5.3%	4.7%	1.3%	0.3%	51.1%	2.7%	1,363	315
Sponsored	19.1%	16.4%	16.4%	10.6%	9.3%	4.3%	5.5%	5.6%	2.1%	0.0%	52.3%	3.2%	1,119	248
FNS Region														
Mid-Atlantic	20.5%	10.9%	15.9%	6.6%	3.0%	7.0%	5.0%	7.0%	1.0%	1.0%	58.7%	3.0%	424	101
Mountain Plains	18.2%	18.6%	15.8%	15.8%	10.1%	4.0%	8.1%	8.8%	0.0%	0.0%	42.8%	3.3%	134	50
Midwest	27.2%	18.8%	18.2%	15.9%	9.7%	2.3%	6.8%	4.5%	4.5%	0.0%	39.1%	6.8%	119	43
Northeast	21.9%	19.2%	17.8%	12.4%	6.8%	4.1%	5.5%	4.1%	2.7%	0.0%	49.3%	1.4%	357	73
Southeast	14.7%	15.9%	12.8%	11.2%	7.8%	0.7%	3.9%	3.3%	0.0%	0.0%	61.7%	3.8%	620	133
Southwest	24.6%	21.7%	25.5%	18.5%	17.3%	11.4%	5.2%	4.1%	4.1%	0.0%	42.0%	1.0%	520	98
Western	11.5%	18.9%	14.6%	17.5%	10.1%	7.2%	7.2%	7.2%	0.0%	0.0%	47.9%	4.3%	324	69
Urbanicity														
Urban	18.7%	18.1%	17.0%	14.1%	9.3%	6.6%	4.7%	5.0%	1.9%	0.2%	50.2%	2.8%	1,954	443
Town	24.0%	16.1%	19.9%	12.3%	11.3%	3.1%	5.0%	5.7%	0.0%	0.0%	53.7%	3.5%	349	81
Rural	14.8%	12.7%	15.8%	8.4%	6.1%	0.0%	12.2%	4.7%	1.4%	0.0%	59.5%	2.7%	195	43

Notes: Respondents could select multiple options. Respondents selecting “other” as a response were recoded when possible. 4 “other” response options were recoded with existing response options. Other responses included staff turnover, trainings not being long enough, and not enough staff.

Data are missing for 0.4 percent of respondents for the type of center.

Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Question 11.

Exhibit B.12: Food Safety Training or Information Needed by Language, by Center Characteristics

Characteristics	English Only	Spanish	Mandarin	Other: Russian ¹	Tagalog	Other: Korean ¹	Other: Gujarati/Hindi ¹	Vietnamese	Other: Chinese (Cantonese) ¹	French	Other: Creole ¹	Other Languages ¹	Total Weighted Sample	Total Unweighted Sample
Overall	60.2%	29.8%	5.4%	3.2%	2.2%	2.0%	1.9%	1.9%	1.5%	0.9%	0.7%	3.5%	2,465	560
Type of Center														
Independent	54.0%	32.3%	6.7%	3.1%	3.5%	2.0%	0.7%	2.3%	1.1%	1.0%	1.1%	5.0%	1,334	309
Sponsored	67.1%	27.2%	4.0%	3.3%	0.8%	2.0%	3.4%	1.4%	2.1%	0.8%	0.4%	1.8%	1,114	247
FNS Region														
Mid-Atlantic	56.2%	26.7%	10.0%	7.0%	3.0%	7.0%	10.0%	1.0%	2.0%	2.0%	1.0%	5.0%	420	100
Mountain Plains	79.6%	17.1%	0.0%	7.2%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	2.0%	134	50
Midwest	90.9%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.5%	119	43
Northeast	63.0%	19.2%	1.4%	5.5%	0.0%	0.0%	0.0%	1.4%	2.7%	2.7%	2.7%	5.5%	357	73
Southeast	76.4%	21.9%	0.8%	1.6%	0.0%	0.8%	0.0%	0.0%	0.8%	0.7%	0.7%	0.8%	606	130
Southwest	46.9%	49.0%	3.2%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	514	97
Western	33.0%	44.8%	20.8%	3.0%	13.3%	4.4%	1.5%	7.4%	4.5%	0.0%	0.0%	10.4%	315	67
Urbanicity														
Urban	52.0%	35.2%	6.9%	4.0%	2.8%	2.5%	2.4%	2.4%	1.9%	1.2%	0.9%	4.5%	1,930	438
Town	88.2%	11.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	340	79
Rural	92.4%	7.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	195	43

¹ Respondents provided these response options in the “other” category. Other languages include Albanian, Arabic, Armenian, Farsi, Hebrew, Laos, Nepali, Polish, Portuguese, Ukrainian, and Thai. 56 respondents provided “other” language response options including Russian (19 respondents), Gujarati/Hindi (11 respondents), Korean (11 respondents), Chinese (8 respondents), Creole (4 respondents).

Notes: Respondents could select multiple response options. Reported combinations of needed languages include Spanish and English (23.4 percent). Data are missing for 0.4 percent of respondents for the type of center.

Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Question 12.

Exhibit B.13: Percentage of Respondents Finding Answers to Food Safety Questions, by Center Characteristics

Characteristics	Food Safety Questions Answered			Total Weighted Sample	Total Unweighted Sample
	Always	Some of the Time	Rarely or Never		
Overall	82.9%	14.8%	2.3%	2,264	514
Type of Center					
Independent	80.5%	17.7%	1.8%	1,232	285
Sponsored	86.8%	10.7%	2.5%	1,015	225
FNS Region					
Mid-Atlantic	85.8%	12.0%	2.2%	386	92
Mountain Plains	86.6%	11.0%	2.4%	123	46
Midwest	82.7%	14.8%	2.5%	109	40
Northeast	88.9%	7.9%	3.2%	308	63
Southeast	86.2%	11.6%	2.3%	557	119
Southwest	79.2%	18.6%	2.2%	489	92
Western	71.1%	27.3%	1.6%	291	62
Urbanicity					
Urban	81.7%	16.0%	2.3%	1,797	407
Town	87.2%	10.4%	2.4%	290	68
Rural	88.2%	9.4%	2.4%	177	39

Notes: Respondents were asked to report the frequency of finding food safety answers within the past 12 months. Data are based on respondents who reported seeking source of information/training in Question 13 and who did not select “Did not seek information” (Exhibit 10).
Data are missing for 9.6 percent of respondents for receiving answers regarding food safety and 0.4 percent of respondents for the type of center.

Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Question 14.

Exhibit B.14: Additional or New Food Safety Training or Information Needed by Foodservice Staff, by Topic and Center Characteristics

Characteristics	Responding to a Food Recall	Food Safety Considerations for Specific Populations Served ¹	Preventing and Responding to Foodborne Illness	Managing Food Allergies	Safe Handling of Produce	Storing Food	Cleaning and Sanitizing Food Contact Surfaces	Time/Temperature Control	Buying, Transporting, or Receiving Food	Preparing Food	Employee Health and Personal Hygiene	Total Weighted Sample	Total Unweighted Sample
Overall	50.1%	48.6%	47.4%	45.8%	31.7%	30.4%	28.5%	28.5%	27.4%	26.1%	25.9%	2,476	562
Type of Center													
Independent	46.3%	45.6%	44.7%	44.8%	30.6%	27.4%	27.1%	27.3%	26.1%	23.0%	25.5%	1,354	313
Sponsored	55.6%	53.1%	51.4%	47.6%	33.4%	34.3%	30.6%	30.5%	29.4%	30.2%	26.8%	1,105	245
FNS Region													
Mid-Atlantic	46.8%	42.2%	42.8%	38.9%	24.2%	22.9%	21.7%	25.2%	20.1%	18.0%	18.9%	420	100
Mountain Plains	60.1%	54.4%	44.1%	53.3%	36.5%	31.4%	29.4%	39.7%	30.6%	26.5%	27.7%	134	50
Midwest	47.3%	50.0%	48.4%	35.5%	19.0%	18.6%	18.5%	11.6%	21.6%	18.6%	25.5%	119	43
Northeast	44.2%	45.0%	37.7%	41.4%	25.3%	23.1%	26.0%	24.6%	20.6%	17.6%	21.7%	353	72
Southeast	43.0%	42.1%	39.9%	45.0%	30.9%	28.2%	26.6%	25.7%	25.3%	23.8%	26.0%	616	132
Southwest	58.4%	59.8%	64.6%	55.2%	44.0%	45.7%	40.3%	37.5%	40.0%	40.2%	37.3%	520	98
Western	58.2%	53.0%	51.6%	46.8%	32.7%	30.9%	28.2%	29.8%	29.8%	30.3%	20.2%	315	67
Urbanicity													
Urban	52.7%	50.9%	49.8%	47.1%	31.9%	31.1%	30.3%	30.7%	28.1%	26.2%	27.0%	1,941	440
Town	40.8%	39.4%	37.5%	39.3%	27.7%	25.2%	19.4%	19.1%	23.0%	25.0%	23.4%	340	79
Rural	41.3%	41.9%	40.2%	44.4%	36.4%	31.8%	26.7%	23.9%	28.5%	27.1%	20.0%	195	43

¹Specific populations served include seniors and people with disabilities, as included on the survey question.

Notes: Respondents could select multiple response options. Respondents selecting “other” as a response were recoded where possible. No responses were recoded into existing categories because respondents already selected survey responses aligning with their “other” response.

Data are missing for 1.1 percent of respondents for future needs for food safety training and 0.4 percent of respondents for the type of center.

Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Question 15.

Exhibit B.15: Preferred Methods for Receiving Food Safety Training and Information, by Center Characteristics

Characteristics	Online Training Videos	Fact Sheets or Infographics	Online Self-Paced Training Modules	Online Lecture-Style Training or Webinar	In-Person Classroom Training	In-Depth Print Resources, Like Manuals, Magazines, or Textbooks	Prepared Lesson Plans	In-Person Immersion Training	Podcasts	Total Weighted Sample	Total Unweighted Sample
Overall	76.6%	72.5%	63.7%	59.5%	58.3%	58.1%	47.6%	43.1%	19.2%	2,493	566
Don't Know	4.6%	4.3%	5.0%	3.9%	5.0%	6.8%	9.0%	7.7%	11.6%		
Type of Center											
Independent	78.5%	69.9%	66.9%	62.4%	57.8%	58.4%	52.2%	42.6%	18.6%	1,357	314
Sponsored	75.2%	75.8%	60.9%	57.1%	59.0%	58.7%	42.7%	43.8%	20.2%	1,119	248
FNS Region											
Mid-Atlantic	71.5%	72.5%	60.9%	59.8%	62.1%	56.7%	36.3%	45.1%	15.6%	424	101
Mountain Plains	77.6%	76.5%	74.6%	52.9%	48.2%	65.5%	42.0%	25.4%	24.6%	134	50
Midwest	84.4%	59.1%	76.9%	63.0%	51.8%	42.7%	44.3%	27.0%	25.7%	119	43
Northeast	73.2%	75.3%	57.2%	59.4%	61.2%	47.2%	50.7%	45.7%	18.9%	362	74
Southeast	77.0%	71.4%	64.7%	56.8%	51.8%	52.1%	48.7%	33.1%	20.0%	620	133
Southwest	73.8%	71.3%	54.7%	53.0%	69.8%	76.6%	52.2%	59.1%	20.5%	514	97
Western	88.6%	76.3%	80.8%	76.9%	49.2%	55.0%	53.4%	41.9%	15.6%	319	68
Urbanicity											
Urban	76.7%	71.9%	63.7%	59.0%	59.6%	59.2%	47.1%	44.3%	18.0%	1,955	443
Town	69.6%	74.7%	60.3%	58.6%	56.0%	54.5%	49.4%	39.3%	25.0%	349	81
Rural	87.9%	74.3%	70.1%	66.2%	49.5%	52.8%	49.6%	37.3%	21.4%	190	42
<p>Notes: Respondents could select multiple response options. Respondents selecting "other" as a response were recoded when possible. 1 "other" response option was recoded with existing response options.</p> <p>Data are missing for 1.1 percent of respondents for preferred method to receive food safety training and information and 0.4 percent of respondents for the type of center.</p> <p>Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Question 16.</p>											

Exhibit B.16: Preferred Methods for Learning About Available Food Safety Training and Information, by Center Characteristics

Characteristics	Memos from State Agency	Email Blast	Print Mail	At a CACFP Training Event	Website	Webinar	Social Media	Ads in Professional Journals or Magazines	Total Weighted Sample	Total Unweighted Sample
Overall	71.6%	67.9%	47.1%	40.1%	28.5%	24.6%	7.5%	4.3%	2,503	568
Type of Center										
Independent	72.9%	70.9%	49.6%	36.1%	31.8%	26.0%	7.1%	3.6%	1,368	316
Sponsored	69.7%	65.3%	44.3%	45.3%	24.7%	23.3%	8.2%	5.2%	1,119	248
FNS Region										
Mid-Atlantic	75.1%	67.2%	43.3%	47.7%	25.8%	21.9%	3.0%	5.0%	424	101
Mountain Plains	63.4%	73.0%	48.9%	28.5%	35.5%	34.0%	8.5%	2.2%	134	50
Midwest	73.2%	60.9%	35.3%	31.7%	27.8%	18.1%	15.9%	2.3%	119	43
Northeast	78.4%	78.4%	46.0%	28.4%	18.9%	24.3%	5.4%	6.7%	362	74
Southeast	72.6%	62.0%	48.4%	41.8%	29.5%	22.9%	7.5%	4.2%	620	133
Southwest	67.1%	66.9%	52.3%	43.4%	36.6%	26.2%	12.5%	3.1%	520	98
Western	67.6%	70.7%	45.7%	42.7%	24.9%	27.8%	4.6%	4.4%	324	69
Urbanicity										
Urban	71.8%	69.2%	47.7%	39.3%	28.4%	26.5%	7.6%	4.9%	1,959	444
Town	73.4%	65.5%	50.4%	45.3%	23.1%	17.2%	8.6%	3.5%	349	81
Rural	67.0%	58.8%	34.5%	39.0%	38.9%	18.6%	4.4%	0.0%	195	43
<p>Notes: Respondents could select multiple response options. Respondents selecting “other” as a response were recoded when possible. No “other” response options were recoded with existing response options because respondents had already selected survey responses aligning with their “other” response. Data are missing for 0.4 percent of respondents for the type of center. Source: Survey of Food Safety Education Needs of CACFP Adult Day Care Centers, 2019, Question 17.</p>										

APPENDIX C: SURVEY OF FOOD SAFETY NEEDS OF CACFP ADULT DAY CARE CENTERS INSTRUMENT



***Survey of Food Safety Education Needs of CACFP
Adult Day Care Centers***

Hard Copy Version

September 2018

Sponsored by:

U.S. Department of Agriculture
Food and Nutrition Service

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0584-0613. The time required to complete this information collection is estimated to average 20 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, 3101 Park Center Drive, Room 1014, Alexandria, VA 22302, ATTN: PRA (0584-0613). Do not return the completed form to this address.

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INTRODUCTION

The United States Department of Agriculture (USDA) Food and Nutrition Service (FNS) has contracted with 2M Research (2M) and Mathematica Policy Research to conduct a study on adult day care centers (ADCC) that participate in the Child and Adult Care Food Program (CACFP). The study will allow FNS to identify the food safety education needs of ADCC program directors and improve the means by which FNS provides them with information (training and resources) to support their needs. Your answers will help USDA find useful ways to provide your center with resources and guidance. In addition to providing us with valuable data, they also represent other centers like yours across the country.

This survey should be filled out by the staff member who knows the most about foodservice operations and the food safety training and education needs of your center.

Thank you in advance for completing this survey. **The survey is designed to be completed in approximately 20 minutes.**

Please note that your participation is voluntary. The report prepared as a result of this survey will summarize findings across respondents and will not associate responses with a specific individual. *Your answers will be kept private.* We will not provide information that identifies you to anyone outside of the study team, except as required by law.

If you have any questions about this study or would like to complete the survey over the phone, please contact the study team by email at foodsafetyneeds@2mresearch.com or at 1-833-728-7369 (toll-free) from 9am to 4pm Monday – Friday EST. If you call outside of this time, please leave a message and we will return your call the following business day.

After you have completed the survey, please return it in the enclosed prepaid envelope. If you have misplaced the envelope, please send your completed survey to *Food Safety Education Needs of CACFP Adult Day Care Centers Study* c/o Dr. Hiren Nisar at 1521 North Cooper Street, Suite 600, Arlington, TX 76011 or fax it to 866-250-2447 or scan it and email it to foodsafetyneeds@2mresearch.com.

INSTRUCTIONS

You may complete the survey using blue or black pen.

Please provide only one response per question unless the question says **MARK ALL THAT APPLY**.

Answer questions:

By marking the box next to the option(s) that best matches your answer.

Mark box like this →

Or,

By clearly writing your answer in the spaces provided.

Write numbers in blank spaces like this → 2 5 NUMBER

Not like this → 2 5 NUMBER

If you need to change a response, circle the correct response. Put a line through the incorrect response.



Circle the response you want to keep.



Put a line through the incorrect response.

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A. BACKGROUND ON YOUR ADULT DAY CARE CENTER

These questions ask about foodservice operations at your adult day care center.

1. Considering all meals and snacks served at your center, how is food prepared?

MARK ALL THAT APPLY

- 1 Food is prepared and/or cooked onsite.
- 2 Food is prepared and/or cooked mostly offsite and must be heated before being served.
- 3 Food is prepared and/or cooked mostly offsite and is received ready to serve.
- 4 Don't know.

2. How are meals and snacks served to clients at your center?

MARK ALL THAT APPLY

- 1 Staff serve prepackaged meals or snacks to clients.
- 2 Staff assemble plates or trays of food and serve them to clients.
- 3 Staff assemble large platters of food and clients serve themselves family-style from the platters.
- 4 Don't know.

3. How many foodservice staff does your center have?

Foodservice staff are any full-time or part-time staff who receive, prepare, handle, or serve food at your center.

NUMBER OF STAFF

(For example, if your center has one full-time and one part-time foodservice staff, please enter 02)

- 4 Don't know.

4. Does your center have any of the following?

SELECT ONE RESPONSE PER ROW

	YES	NO	DON'T KNOW
a. A written food safety plan, policy, or manual?	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
b. Written procedures for responding to a food recall?.....	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
c. Written procedures for responding to a foodborne illness? <i>Foodborne illness (also known as food poisoning) is any illness that results from eating contaminated food.</i>	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>

B. CURRENT FOOD SAFETY EDUCATION

These questions ask about food safety training and information that your center *currently* receives or uses. Please consider only the past 12 months when answering these questions.

Foodservice staff are any full-time or part-time staff who receive, prepare, handle, or serve food at your center.

Food safety education may include formal trainings or information that is provided informally.

- *Food safety training* includes trainings that focus on food safety topics (e.g., time/temperature control, employee hygiene, cleaning, and sanitizing). Trainings may happen at your center, offsite, or online.
- *Food safety information* includes written educational resources that focus on food safety topics and are available for you, or foodservice staff, to reference.

5. Does your center have a written plan or schedule that identifies the food safety trainings that staff will receive each year?

- 1 Yes
 0 No
 4 Don't know

6. How many foodservice staff at your center receive food safety certifications through certification programs such as ServSafe?

MARK ONE ONLY

- 1 All
 2 Some
 3 None
 4 Don't know

7. How many hours of food safety training are required for most foodservice staff at your center each year? Please do not include time for food safety certification programs such as ServSafe.

____ HOURS

- 0 Not applicable – Foodservice staff are not required to receive food safety training each year
 4 Don't know

8. In the past 12 months, have you received food safety training or information on any of the following topics?

MARK ALL THAT APPLY OR MARK NOT APPLICABLE

- 1 Employee health and personal hygiene (e.g., handwashing, wearing gloves, procedures for sick employees)
- 2 Buying, transporting, or receiving food
- 3 Storing food
- 4 Preparing food
- 5 Safe handling of produce
- 6 Cleaning and sanitizing food contact surfaces
- 7 Time/temperature control
- 8 Managing food allergies
- 9 Responding to a food recall
- 10 Preventing and responding to foodborne illness
- 11 Food safety considerations for seniors and people with disabilities
- 12 Other (*specify*) _____
- 0 Not applicable – I have not received any food safety training or information
- d Don't know

9. In the past 12 months, have any foodservice staff at your center received food safety training or information on any of the following topics?

MARK ALL THAT APPLY OR MARK NOT APPLICABLE

- 1 Employee health and personal hygiene (e.g., handwashing, wearing gloves, procedures for sick employees)
- 2 Buying, transporting, or receiving food
- 3 Storing food
- 4 Preparing food
- 5 Safe handling of produce
- 6 Cleaning and sanitizing food contact surfaces
- 7 Time/temperature control
- 8 Managing food allergies
- 9 Responding to a food recall
- 10 Preventing and responding to foodborne illness
- 11 Food safety considerations for seniors and people with disabilities
- 12 Other (*specify*) _____
- 0 Not applicable – Foodservice staff have not received any food safety training or information
- d Don't know

10. Where did you get the food safety training or information that your center has used in the past 12 months?

MARK ALL THAT APPLY OR MARK NOT APPLICABLE

- 1 State agency or department that administers the Child and Adult Care Food Program (CACFP)
- 2 Health department or health inspector (State, county, or local)
- 3 Food safety certification program (e.g., ServSafe)
- 4 Sponsoring organization (if center is sponsored)
- 5 Foodservice management company (if center uses one)
- 6 Cooperative extension
- 7 Institute for Child Nutrition (ICN)
- 8 Center for Food Safety in Child Nutrition Programs
- 9 FNS Office of Food Safety (OFS) website
- 10 www.foodsafety.gov
- 11 Other (*specify*) _____
- 0 Not applicable – We have not used any food safety training or information in the past 12 months
- d Don't know

11. In the past 12 months, what challenges has your center faced related to receiving food safety training or information?

MARK ALL THAT APPLY OR MARK NOT APPLICABLE

- 1 Not enough time for staff to be trained
- 2 Lack of qualified food safety trainers or teachers
- 3 Trainings offered at times when staff cannot attend
- 4 Staff cannot travel to attend trainings
- 5 Lack of funding
- 6 Difficulty finding relevant trainings, training materials, or food safety information
- 7 Trainings, training materials, or food safety information are not offered in desired formats
- 8 Limited or no internet access at center
- 9 Limited or no ability to print training materials or food safety information
- 10 Trainings, training materials, or food safety information are not offered in needed language
- 11 Other (*specify*) _____
- 0 Not applicable – We have not faced any challenges related to receiving food safety training or information
- d Don't know

12. Other than English, in what language(s) do you need food safety training or information for staff at your center?

MARK ALL THAT APPLY OR MARK NOT APPLICABLE

- 1 Spanish
- 2 Mandarin
- 3 French
- 4 Tagalog
- 5 Vietnamese
- 6 Other (*specify*) _____
- 0 Not applicable – We only use materials in English

13. In the past 12 months, where did you go for information when you had a question related to food safety?

MARK ALL THAT APPLY OR MARK NOT APPLICABLE

- 1 State agency or department that administers the CACFP
- 2 Health department or health inspector (State, county, or local)
- 3 Food safety certification program (e.g., ServSafe)
- 4 Sponsoring organization (if center is sponsored)
- 5 Foodservice management company (if center uses one)
- 6 Cooperative Extension
- 7 Institute for Child Nutrition (ICN)
- 8 Center for Food Safety in Child Nutrition Programs
- 9 FNS Office of Food Safety (OFS) website
- 10 www.foodsafety.gov
- 11 Other (*specify*) _____
- 0 Not applicable – We did not seek answers to food safety questions → **GO TO QUESTION 15**

14. In the past 12 months, how often were you able to get answers when you had a question related to food safety?

MARK ONE ONLY

- 1 Always
- 2 Some of the time
- 3 Rarely or never

C. FOOD SAFETY EDUCATION NEEDS

These questions ask about food safety training and information that your center needs or would like to have in the future.

Foodservice staff are any full-time or part-time staff who receive, prepare, handle, or serve food at your center.

Food safety education may include formal trainings or information that is provided informally.

- **Food safety training** includes trainings that focus on food safety topics (e.g., time/temperature control, employee hygiene, cleaning, and sanitizing). Trainings may happen at your center, offsite, or online.
- **Food safety information** includes written educational resources that focus on food safety topics and are available for you or foodservice staff to reference.

15. Do foodservice staff at your center need any new or additional training or information on the following food safety topics?

SELECT ONE RESPONSE PER ROW

	YES	NO	DON'T KNOW
a. Employee health and personal hygiene (e.g., handwashing, wearing gloves, or procedures for sick employees).....	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
b. Buying, transporting, or receiving food	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
c. Storing food.....	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
d. Preparing food.....	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
e. Safe handling of produce	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
f. Cleaning and sanitizing food contact surfaces	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
g. Time/temperature control	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
h. Managing food allergies.....	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
i. Responding to a food recall	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
j. Preventing and responding to foodborne illness	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
k. Food safety considerations for seniors and people with disabilities	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
l. Other (<i>specify</i>)..... _____	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>

16. Food safety training and information can be provided in different ways. Which of the ways below do you and your foodservice staff prefer?

	SELECT ONE RESPONSE PER ROW		
	PREFER	DO NOT PREFER	DON'T KNOW
a. In-person classroom training	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
b. In-person immersion training (in-depth, hands-on training in a foodservice environment)	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
c. Online lecture-style training or webinar	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
d. Online self-paced training modules	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
e. Online training videos	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
f. Prepared lesson plans	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
g. Podcasts	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
h. Fact sheets or infographics.....	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
i. In-depth print resources, like manuals, magazines, or textbooks	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>
j. Other (<i>specify</i>)	1 <input type="checkbox"/>	0 <input type="checkbox"/>	d <input type="checkbox"/>

17. How would you prefer to hear about the availability of food safety trainings and information for your center?

MARK ALL THAT APPLY

- 1 Memos from State agency or department that administers the CACFP
- 2 At a CACFP training event
- 3 Email blast (a single email message sent to a large group of recipients)
- 4 Website
- 5 Webinar
- 6 Social media
- 7 Print mail (mailers, flyers, etc.)
- 8 Ads in professional journals or magazines
- 9 Other (*specify*) _____

Thank you for taking the time to complete this survey.

Please remember to return the survey back in the enclosed prepaid envelope.

If you have misplaced the envelope, please send your completed survey to:
Food Safety Education Needs of CACFP Adult Day Care Centers Study
c/o Dr. Hiren Nisar
1521 North Cooper Street, Suite 600,
Arlington, TX 76011

or fax it to 866-250-2447
or scan it and email it to foodsafetyneeds@2mresearch.com.