



## Network Delivers Impact in Food Safety Education 2016 to 2023

**Introduction:** Extension professionals in the North Central Food Safety Extension Network (NCFSEN) have delivered high impact food safety programs to consumers and food entrepreneurs across the region since 2016. Regional impact is being seen in **home food preservation education**, in **outreach to emerging food entrepreneurs**, and in direct support of **safe food handling by consumers**.

**Background:** Formed in 2016 with support from North Central Extension Family and Consumer Science Program Directors, NCFSEN has developed and delivered food safety education to home food preservers, to emerging food entrepreneurs and to consumers seeking up-to-date safe food handling information.

The Network encompasses work by food safety educators and specialists at the Land Grant Institutions in the 12 states of the North Central region. Work of Network professionals across the region is supported by research and informed by input from national experts. Through strong collaboration, NCFSEN has helped expand the outreach of the North Central Region Food Safety Modernization Act (NCR FSMA) center based at Iowa State University into more support of value-added food production.

Network professionals focus on **safe home food preservation**, **food safety for food entrepreneurs**, and **consumer food safety**.

**Impact in education of safe preservation of food at home.** Since 2017, Network educators have supported safe home food preservation through direct education and resource development. An end-of-session tool for evaluation of home food preservation training was developed and piloted in 2017 and has been revised and used across the region with thousands of individuals since that time.

Over 8,700 participants completed the end-of-session food preservation evaluation between 2017 and 2022. Based on in-person and online workshops presented from 2020 to 2022, evaluation results revealed:

Before taking the class, 37% of participants felt confident in their knowledge of safe home food preservation practices and 39% felt confident in their ability to share safe food preservation methods with others. Thirty percent of respondents considered themselves new to home food preservation.

After the workshops, participants confident in their knowledge of safe home food preservation practices increased to 81% and 78% had confidence to share safe food preservation methods with others. As a result of the workshops, participants said they would use the home food preservation resources provided (92%), check to see if the food preservation resources they had at home were up to date (69%) and preserve food more often at home (78%).

Network professionals have also developed a series of publications in support of safe home canning: ***Jar it Right!***, ***Put a Lid on It***, ***Pressure Can it Right***, and ***Steam Can it Right***. The Network provided research-based information on the use of new appliances such as multi-cookers and an electric pressure canner in ***Pressure Can it Right***.

Social media marketing of safe home food preservation information reached a large audience. Data from Facebook from 2020 linked to infographic-based food safety messages in home food preservation revealed, for 9 infographics: 1,100 engagements; 301 reactions; 160 shares; and a reach of 17,762.

**Impact in outreach to food entrepreneurs.** In 2022, NCFSEN hosted a three-part webinar series on “**Food Safety for Food Entrepreneurs.**” The series covered home kitchen basics, labeling basics, and cleaning and sanitizing basics.

The webinar series was recorded and put on a playlist on the Iowa State University Human Science Extension [YouTube page](#) (also at <https://www.ncrfsma.org/north-central-food-safety-extension-network-ncfsen>). Supplementary fact sheets were also developed and [posted](#). The fact sheet series had 271 downloads as of April 2023.

The series hosted 124 total for the entire series. Each session for the series had 64 registered participants. Twelve participants attended all three sessions and were awarded certificates of completion.

A follow-up survey was sent to participants, who ranked the webinar series on a Likert scale of 1 to 5. The participants highly rated the relevance of the information, the quality and knowledge of the instructors, the webinar platform, and the overall quality of the series. They also indicated that the webinars met their expectations and they would recommend the series to others. In rating the most liked aspects of the series, participants responded that it was up to date with detailed and cohesive information, and thought that the instructors were able to make complex information relatable.

**Impact in support of safe food handling by consumers.** NCFSEN professionals organized a “**Consumer Food Safety Summer School**” professional development webinar series in the summers of 2021 and 2022 (with another series planned for the summer of 2023), including 3 sessions per year. Topics covered current food safety concerns, including produce handling, food donations, food safety when camping/traveling, and low-moisture food handling. Pre- and post-survey data were collected to assess the effectiveness of the webinars in informing the audiences and their willingness to share the information with their clientele.

More than 600 people registered for the webinars in 2021 (n=256) and 2022 (n=354). Of those registered, 66% attended the live webinars (2021-79%; 2022- 53%). All registrants received recordings and other resource materials on the webinars’ content. In 2021, 102 attendees completed both the pre- and post-surveys and 60 completed both in 2022.

Post-survey results showed that 97% of the attendees at the 2021 live sessions indicated they were likely to use the information specifically in their job, and 100% of the attendees stated they were likely to share the information learned.

In 2022, post-survey results showed that 97% of attendees were likely to share the information learned, 90% said they will apply what they learned from the webinars, and 94% learned some new information from the topics discussed.

**Recognition and Outreach:** The Network has received regional and national recognition for educational efforts. In 2019, the Network received the national multistate collaboration award from the National Extension Association of Family and Consumer Sciences (NEAFCS) for regional food preservation programming. The team gave three presentations about the programming at the NEAFCS annual conference in Hershey, PA in 2019, presented project outcomes at the Consumer Food Safety Education conference in Orlando, FL (2019) and in Washington, D.C. (2023). In addition, group members presented at the International Association for Food Protection (2020), the National Urban Extension Conference in Kansas City, MO (2022), and the Joint Council of Extension Professionals (JCEP) Extension Leadership Conference in Kansas City, MO (2022). Manuscripts describing the regional approach to program evaluation were published in [2019](#) and [2021](#) in the Journal of NEAFCS (<https://www.neafcs.org/journal-of-neafcs>). The team also created three publications and corresponding recorded webinars on the topic of “Working Regionally” (available at <https://www.ncrfsma.org/north-central-food-safety-extension-network-ncfsen>).