

Produce Safety Alliance Growers Training One-Year Follow-Up Survey Results: Iowa



North Central Region
Center for FSMA Training, Extension
and Technical Assistance

IOWA STATE UNIVERSITY
Extension and Outreach

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Results compiled by Arlene Enderton, evaluator for the North Central Region Center for FSMA Training, Extension, and Technical Assistance at Iowa State University

and Ellen Johnsen, program coordinator for the North Central Region Center for FSMA Training, Extension, and Technical Assistance at Iowa State University

Introduction

Congress passed the Food Safety Modernization Act (FSMA) and President Obama signed it into law in 2011. The law is the first in decades to regulate fruit and vegetable farms and handlers. The law includes seven rules, one of which is the Produce Safety Rule.

One requirement of the Produce Safety Rule is that produce growers who are covered under the rule participate in an approved food safety course. The Produce Safety Alliance Grower Training is the only approved course at this time.

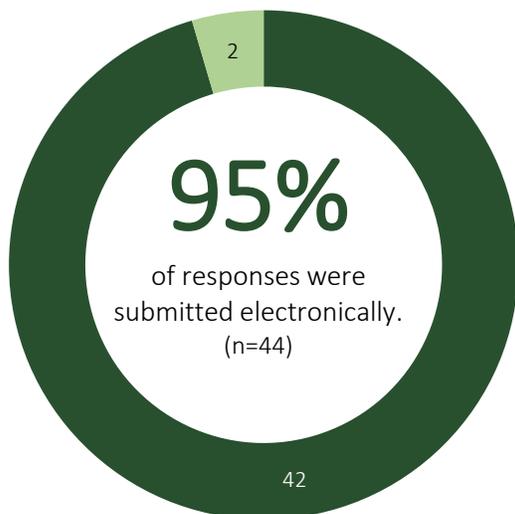
Iowa State University Extension offered nine trainings from October 2017 to March 2018 in the state of Iowa.

Approximately one year later, we followed up with training participants with a survey to learn what changes they made following the training.

Methods

The survey was conducted electronically using Qualtrics™. Iowa State University Extension and Outreach staff sent an invitation to participate in the survey to 125 growers via email and 58 growers via mail.

Figure 1



Arlene Enderton, evaluator for the North Central Region Center for FSMA Training, Extension, and Technical Assistance, analyzed the data using SPSS™ (version 12).

We received 44 responses, for a 24% response rate. The vast majority of responses (95 percent) were submitted electronically. Only two people returned the survey by mail, as shown in Figure 1.

Forty-one of the respondents work in Iowa, as shown in Figure 2. One Wisconsin and two Minnesota growers attended the trainings and completed the survey.

Figure 2: Most respondents work in Iowa, but also in Wisconsin and Minnesota.

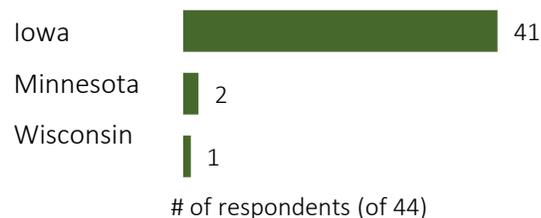


Figure 3: Respondents most commonly attended training in Cedar Rapids, IA.



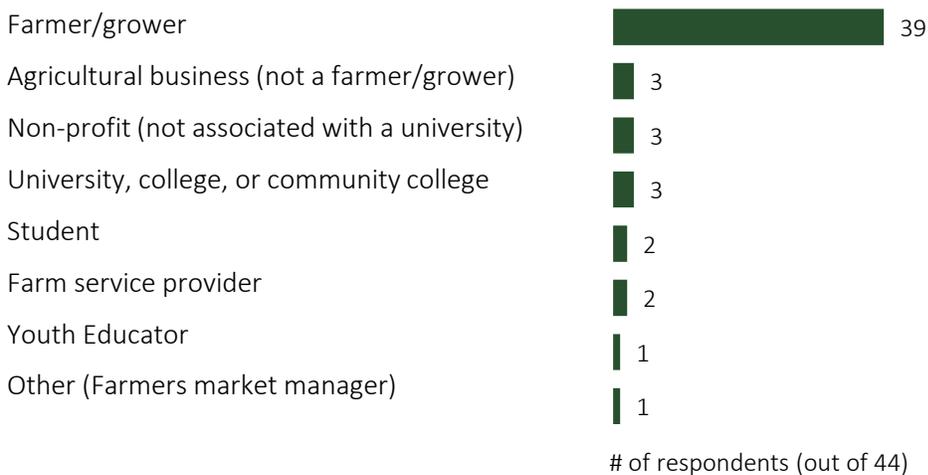
Figure 3 shows the trainings in which the respondents took part. At least one participant from each training responded to the survey, with the most responses coming from the training in Cedar Rapids, Iowa.

Results

In what industries do respondents work?

Respondents were able to choose more than one category for their industry. The vast majority of respondents (89 percent) were produce farmers/growers. The remaining respondents fill a variety of occupations, such as agricultural business (3 respondents), non-profit staff (3 respondents), and college/university staff (3 respondents), as shown in Figure 4. These results show that the PSA Grower Training is useful to others besides produce farmers/growers.

Figure 4: Most respondents were farmers or growers.



What kinds of changes did non-farmers make as a result of the training?

Figure 5



Non-farmers/growers were asked if they changed anything in their work as a result of attending the PSA Grower Training. They were asked this question because some of the other questions in the survey applied only to farmers/growers, rather than non-growers.

Figure 5 shows two out of five non-growers indicated that they had made some sort of change as a result of participating in the training.

Are farmer/grower respondents required to comply with the FSMA Produce Safety Rule?

Respondents most commonly were not required to comply with the FSMA Produce Safety Rule, as shown in Figure 6. Twenty-four farmer/growers indicated they are not required to comply with FSMA because they sell less than \$25,000 of produce per year on average. Five are eligible for a Qualified Exemption. For one grower, part of the operation is required to comply, but not the whole operation. One operation sends the produce to a kill-step process. In contrast, only five grower respondents are required to comply with FSMA, indicating that they grow and sell fresh produce that is not included in any exemptions.

Figure 6: Most respondents know their coverage status. Respondents most commonly are not required

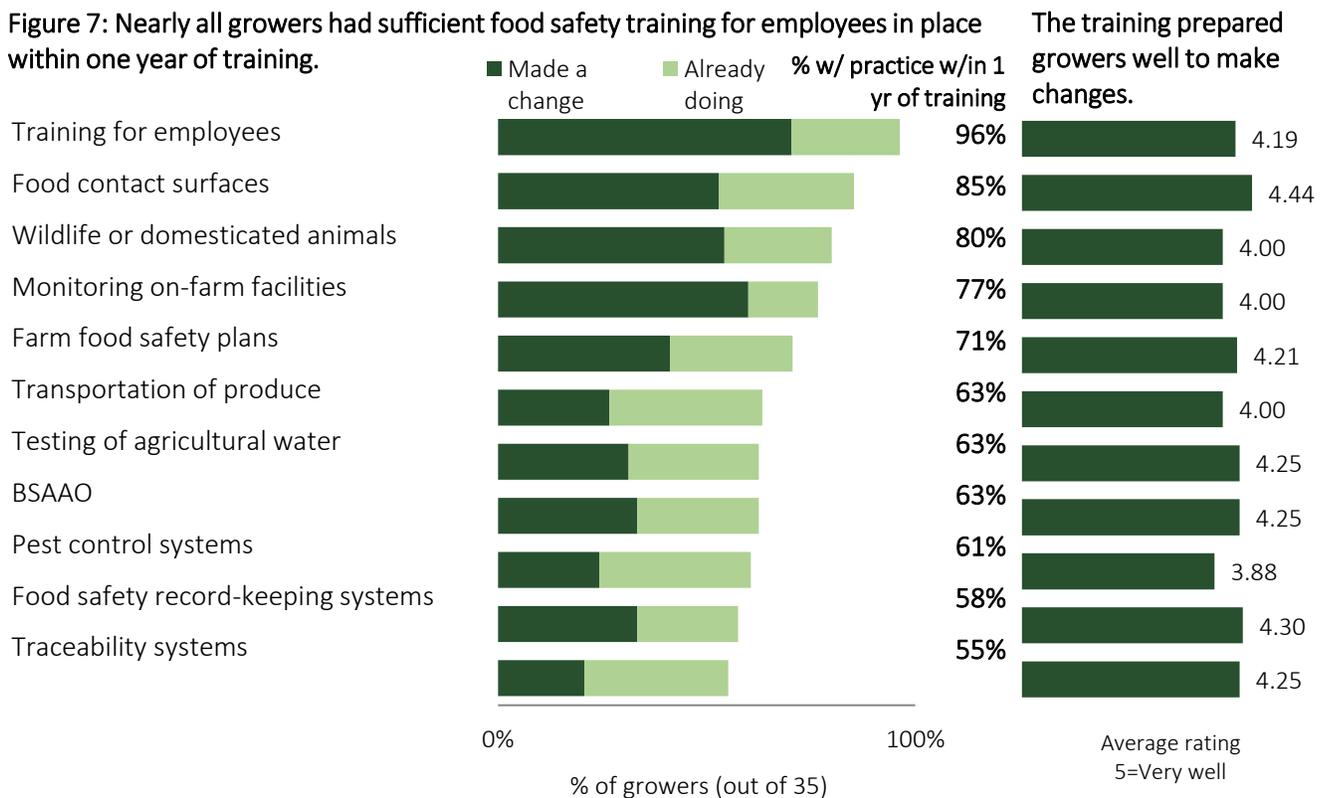


What kinds of changes have farmers made since attending the training?

89% of grower respondents (32 of 36) made some sort of change on their farm to improve food safety practices since attending the training.

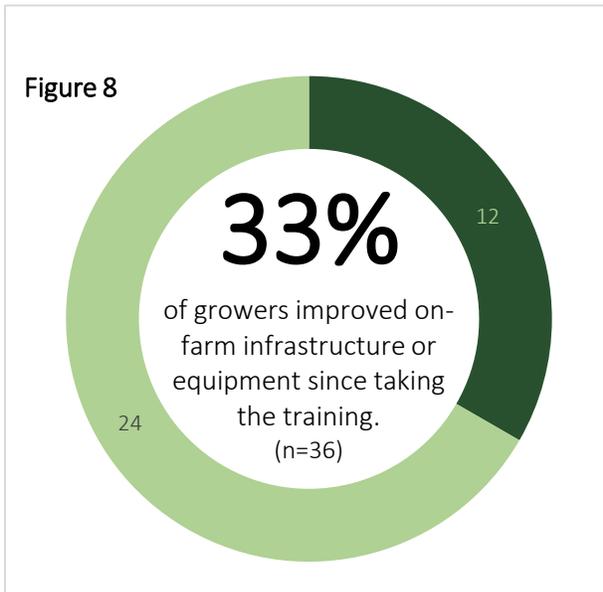
Figure 7 shows which changes farmers/growers made, as well as which practices they already had in place prior to the training (and therefore did not need to change). By the time we conducted the follow-up survey (approximately one year after the training), 96 percent of farms had an employee-training program in place, making it the most common food safety practice for this group.

Eighty-five percent had a plan for cleaning and sanitizing food contact surfaces after one year, and 80% had a system for monitoring and addressing wildlife and domesticated animals on the farm.



How well did the PSA Grower Training prepare growers to make such changes?

Growers felt the training had prepared them well for making these changes. The right-hand side of Figure 7 shows the average rating for each category. Only growers who reported making a change in that area were asked to rate how well prepared they were. They used a five-point scale to assess their preparedness, with five being “very well.”



What kinds of infrastructure or equipment changes have growers made to improve on-farm food safety?

Approximately one in three growers made changes to infrastructure or equipment to improve food safety practices after taking the training, shown in Figure 8. This demonstrates that they made not only practice changes, but systems changes to support food safety, which is a higher level of change.

Changes included the following:

Six growers upgraded or added new **handwashing stations**.

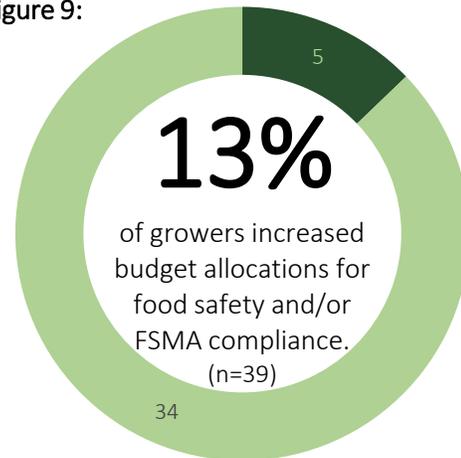
Three growers upgraded or added **washing equipment**.

Other infrastructure and equipment changes include: upgrading packing facilities, adding barriers/fencing, improving toilet facilities, and increasing separation between clean and dirty tools/equipment.

What other changes have respondents made since the training?

A small percentage of growers have invested money in food safety and FSMA compliance since participating in the PSA Grower Training. Thirteen percent of growers (5 of them) have increased their budget allocated for food safety and/or FSMA compliance, as shown in Figure 9. While it is encouraging that some growers are willing to invest in food safety, it also demonstrates that FSMA compliance may affect profitability of some produce farms.

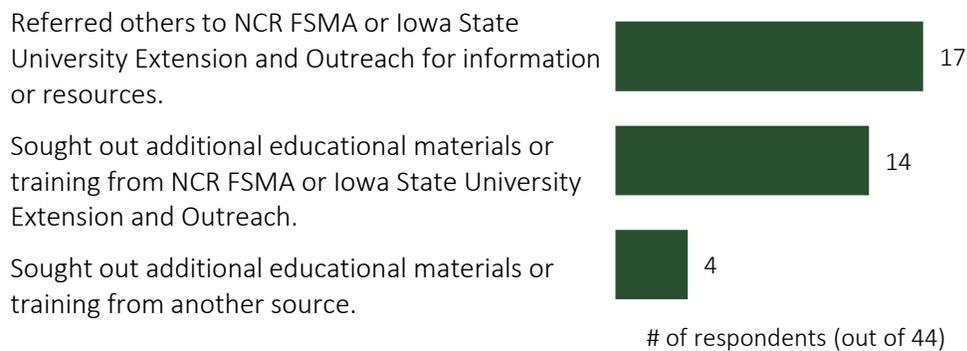
Figure 9:



In addition, approximately forty percent of respondents have referred others to NCR FSMA and/or Iowa State University Extension and Outreach for information or resources related to food safety and/or FSMA, as shown in Figure 10. This demonstrates that they trust NCR FSMA and Iowa State University Extension and Outreach as reliable sources of information.

Similarly, 14 respondents have sought out additional educational materials or training from NCR FSMA or Iowa State University Extension and Outreach, while only four respondents have sought them from other sources.

Figure 10: Respondents sought out additional food safety resources after the training.



How has Iowa State University Extension and Outreach provided Produce Safety Alliance Grower Training participants with guidance regarding FSMA?

Twenty-four respondents described in their own words how Iowa State University Extension and Outreach has provided them with guidance regarding FSMA. Their responses were coded for themes, below, showing that Iowa State University Extension and Outreach:

Provided materials/ resources and answered questions: Nine respondents appreciated receiving high-quality material and getting individual questions answered, making this the most common theme. As one respondent said, the trainers “Answered our questions well. Made us think about some things differently.”

Increased participants’ knowledge about food safety: Eight respondents cited their increased knowledge as the greatest benefit of the training. One respondent wrote, the training, “made us aware of contamination possibilities.”

Increased participants’ understanding of FSMA requirements: Five respondents said that they better understand the specifics of FSMA as compared to other food safety trainings. One person wrote, the trainers “presented FSMA in a detailed way that removed the overwhelming nature of the Act.”

“We've made a number of changes in our practices as a result.”

Grower from Iowa

The trainings “promoted how Food Safety can make us all more profitable, even those of us that are presently exempt.”

Grower from Iowa

Recommendations and conclusions

How can Iowa State University Extension and Outreach better help produce growers attain FSMA compliance?

Thirteen respondents shared suggestions for how the NCR FSMA and Iowa State University can help growers attain FSMA compliance. Their responses were coded for themes, shared here:

Be available to answer specific questions: Four respondents wrote they needed Iowa State University Extension and Outreach to provide individual assistance. One suggested, “I think being able to point you in the right direction with specific questions after the initial training is the main thing.”

Provide outreach to small and marginalized growers: Two respondents were concerned that not everyone was receiving information about trainings and the new law. “Make it a priority to reach, engage, and collaborate with farming communities that experience inequities and are impacted most by structural racism and historical trauma.”

Water testing resources: Two respondents shared that they were concerned about accessing water testing. One wrote, “Continue helping with water testing. Delivering the samples to the lab within the time limits is very difficult for me.”