**Day 1, Wednesday, Feb. 17th, 2021**

**Produce Safety Workgroup Meeting**

***Welcome and Review Group’s Previous Discussion by Chris Callahan (University of Vermont Extension)***

Chris walked through the group’s discussion held at the 2020 NECAFS Annual Conference and Meeting and reminded the group that last year they brainstormed and discussed what challenges remain, what gaps exist, and what can we do about it in the following categories:

* Research
* Education/training
* Practice

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| --- | --- | --- | --- |
| **Research** | Votes | **Education** | Votes |
| Financial incentives-implementing practices | 44 | **Share results of research more effectively** | 35 |
| Risk of growing on soil, stacking boxes | 27 | **Best practices for drying equipment** | 33 |
| **Cleaning & sanitizing efficacy-small farms** | 18 | **Aquaponics/Hydroponics guide** | 31 |
| **Hygienic design** | 18 | Food safety for beginning farmers | 26 |
| Quality increases from food safety practices | 18 | Don’t power wash and here’s why | 15 |
| Risk of ingesting soil/water on produce | 14 | Water change schedule-decision making | 12 |

The results from the 2020 discuss led to group voting and prioritization of research and education topics. The table below shows the results of that voting and the topic highlighted in yellow are areas where NECAFS is taking concerted action.

***Overview of Plan for this year’s group by Elizabeth Newbold (University of Vermont Extension)***

NECAFS is a regional collaboration in support of improved practice of food safety principles among our varied stakeholders. Since a year of inspections has begun, the regulators across the Northeast have summarized a list of common misunderstanding and noncompliance needs seen on farms. To address those needs in a tailored way, this year will host virtual breakout groups where the priority areas identified by regulators will be discussed, barriers identified, tailored needs articulated, and forms of new knowledge needed to improve practice identified. We will conduct a root cause analysis through breakout sessions that will identify problems observed by regional state produce safety program regulatory partners and educators, collect examples and perspectives from all members of the network, identify any issues that contributed to the problem, determine the root causes or barriers to change, identify possible solutions, and determine activities to facilitate those solutions.

***Report-out from regulator one-day working meeting, a consolidation of inspectional observations from across the region by Leah Cook (Maine Dept. of Ag, Conservation and Forestry)***

Leah compiled observation from Northeast Produce Safety State Regulators based on responses from 3 questions.

1. What common misunderstandings about food safety or the PSR did farms have in 2020?
2. What were the most common noncompliance issues you observed during inspections in 2020?
3. What types of technical assistance do you see a need for in your state?

She summarized that the top 5 common **misunderstandings** are:

1. Cleaning, Sanitizing, Food Contact Surfaces
2. Audits vs FSMA Produce Safety Rule
3. Who the Produce Safety Rule Applies To
4. Record Keeping
5. Hand-Washing

She summarized that the top 5 common **noncompliance** issues are:

1. Record Keeping
2. Cleaning, Sanitizing, Cleanability of Materials
3. Worker Training
4. Building & Facilities
5. Hand-Washing Stations

***Break out group 1 - sorted by common misunderstanding and noncompliance issues***

Breakout 1: Issues and Needs

The main objective of Breakout 1 was to discuss and expand on common noncompliance issues and misunderstandings of the Produce Safety Rule on farms across the Northeast. The goal was to identify issues that inspectors and educators observe in growers’ understanding and implementation of the Rule, and the grower needs that these issues represent.

Audits vs. FSMA

A variety of factors were discussed as contributing to confusion around the difference between GAP audits and FSMA. The most common issue was the prevalence of buyers asking for GAPs or proof of FSMA inspection, without understanding whether a farm is covered or fully knowing what they are asking for. Other points of confusion grow out of the fact that, in some states, the same individual conducts inspections and audits; and that there is a general lack of understanding around GAPs vs. FSMA requirements and scope of coverage. Regulators and educators identified growers' needs for follow-ups and continuing education, greater understanding of food safety risks in a way that is more common-sense, and support from auditors and inspectors by keeping language consistent to reduce confusion.

Buildings and Facilities

The most common issue identified among growers was the lack of familiarity around human health pests, what attracts and harbors them, and best pest control strategies. Other significant areas of need identified were assistance in best practices around cleaning equipment, improving cleanability, maintaining equipment and materials, conducting pack house activities safely, and keeping domestic and working animals away from produce. Food safety culture and balancing the farm’s budget with food safety were also identified as important angles for ensuring commitment to compliance with FSMA.

Water

The leading issue related to water was growers’ discomfort with water testing requirements, including confusion about when, how, and how often to test their water; reading their water test results; and establishing a water quality profile. Other themes discussed were the need for more information about how to identify and mitigate risk from water sources and water temperature, as well as support for implementing water testing requirements.

Who the PSR Applies To

The most common issue discussed was growers’ difficulty in calculating whether they are covered or qualified exempt under the PSR, whether due to time, resources, or difficulty tracking end users. Several harder-to-reach groups, including small-scale community and urban gardens, were identified as needing additional outreach so as to understand their coverage status, even though many will not qualify. Additionally, clarity is needed around how tribal nations can apply for variances and what resources apply to them. Finally, the importance of creating relationships with and providing culturally relevant resources to Mennonite and Amish growers was discussed.

Cleaning & Sanitizing / Cleanability

Many misunderstandings related to cleaning and sanitizing were discussed, with the leading issues being lack of understanding around what type of sanitizers to use and how often, confusion around the cleanability of wood and whether it should be phased out, and what standard of cleanliness is considered “adequate.” The group highlighted that one-on-one follow-up education with farmers is important for understanding the importance of and best practices for cleaning and sanitizing, though cultivating food safety culture on-farm is difficult.

Record Keeping

The biggest issue identified with record keeping is the burden growers feel, particularly when it is not incentivized. There is also confusion around what record keeping requirements are for audits vs. FSMA. Regulators find records are often lacking or not sufficiently thorough, that there is a lack of communication on the farm about who is responsible for keeping records, and that borrowed SOPs are not customized to a farm’s operation.

Handwashing / Handwashing Stations

The most significant need identified here was the importance of buy-in and accountability from workers, which was recognized as often difficult to make happen. There is also a need for better understanding of handwashing best practices, additional outreach beyond workshops to reinforce good practice, greater accessibility of handwashing stations, and more on-farm monitoring of porta-potties and compliance with policies.

Worker Training

A number of gaps in worker training were identified, with the leading issue being the need for strong food safety culture among workers and ensuring their comfort in reporting problems to their managers. Other gaps included training specific to job duties in a way that workers can better retain, sufficient training as to why not to harvest contaminated produce, grower confidence in training their workers, and training of mid-season workers, visitors, and family members. Another significant need is for trainings that best suit workers’ needs in terms of literacy, language, and format of presentation.

Handling Covered Produce / Dropped Produce

Regulators and educators reported a general misunderstanding of what surfaces qualify as “ground,” what qualifies as dropped produce, and what containers and surfaces are risky. Growers seem to resist changing practices because of reduced productivity, time, money, materials, farm terrain limiting access to better practices, or not wanting to change their methods.

***Break out group 2 – sorted by common misunderstanding and noncompliance issues***

Breakout 2: Questions/Action Items/Solutions

The main objective of Breakout 2 was to further expand on the issues identified in Breakout 1 and discuss the barriers to adopting these practices. Participants brainstormed what new knowledge was needed (where research needs to be focused), what knowledge exists but needs to be packaged better (e.g., conduct a literature review), and what knowledge exists but needs to be distributed or delivered more effectively.

Audits vs. FSMA

Regulators and educators identified several ways to clear up confusion between GAPs and FSMA requirements, including the need for continuing technical assistance and supplementary trainings for both growers and inspectors and making audit standards available for farmers in advance. Follow-ups to PSA trainings can also reinforce the importance of understanding risk and the value of food safety. Additionally, education around FSMA coverage directed towards buyers could clarify for them what they are asking of growers.

Buildings and Facilities

A variety of technical assistance materials were suggested to help growers understand and prioritize cleaning and sanitizing buildings and facilities. These include How Tos around building a food-safe DIY cooler, designing a packing area to prioritize cleanability, maintaining cooling equipment, and finding co-benefits of food safety practices. Providing guides to manage pests and find pest control companies, a non-regulator resource location (e.g., a website), and guidance around what materials are most cleanable were also discussed. Areas of research need included risks associated with DIY/COOL-BOT, risks of animal handling outside of food production areas, best practices for cleaning floors and maintaining cleanliness, how to manage risk in high tunnels and greenhouses, and dry cleaning of buildings and facilities as an alternative to wet cleaning.

Water

Given the widespread confusion around Subpart E and water testing requirements, many resource needs were identified to assist growers in conducting water tests and mitigating risk. These include education around where to access municipal water test results, tools to assess risk and inspect a water system, assistance in establishing a water quality profile, and outreach around the financial decision-making component of making improvements to a water system. A number of research needs were identified, including what a proper inspection of a water system looks like, specific risk factors that affect water quality from different sources, risk associated with water temperature issues and turbidity, and the advantages of using sanitizers on water management and crop quality.

Who the PSR Applies To

Regulators and educators discussed the need for repackaging and expanding on existing resources to clarify PSR coverage, including more resources on qualified end users, fact sheets on variances for tribal nation and the approval process, and buyer education on who the PSR applies to. Additionally, outreach to urban farmers and relationship-building with Amish and Mennonite producers were identified as next steps.

Cleaning & Sanitizing / Cleanability

Widespread lack of knowledge around cleaning and sanitizing brought up the need for a number of educational materials, including SOPs for cleaning and sanitizing procedures, fact sheets of cleanable materials, education on sanitizers for wash water and food contact surfaces, guidance around identifying food contact surfaces and their associated risk, and how to identify when to replace old equipment. A long list of research questions covered topics from how to adequately clean wood and the risks associated with the type or condition of that wood, to what the pathogen survivability is on hard-to-clean materials and whether scratch marks that appear dirty are actually harboring pathogens.

Record Keeping

Because the biggest barriers to record keeping seemed to be the perceived burden and lack of motivation, regulators and educators identified the need to incorporate more recordkeeping and traceability in grower trainings, expand on current templates for ease of use on-farm, and better explain the “why” behind recordkeeping with specific examples of outbreaks.

Handwashing / Handwashing Stations

To increase worker buy-in and commitment to good handwashing practices, regulators and educators identified the need for a guide on developing food safety culture on-farm. Other resource needs include peer learning opportunities for farmers to learn from peers that prioritize food safety culture, more translation of handwashing resources, and a list of experts in the field that speak different languages and could meet directly with growers.

Worker Training

A recurring need across non-compliance issues, and worker training in particular, is for a strong food safety culture among workers. Outreach materials identified to meet this need include guidance and experiential learning for growers on how to train their workers effectively in a way that will stick, how to incentivize good practices, and tips for creating a comfortable communication flow between workers and managers. To address language barriers, more multilingual food safety curricula are needed, as well as approved trainings with materials for growers who do not read, write, or speak any of the approved PSA training languages.

Handling Covered Produce / Dropped Produce

Fact sheets clarifying common instances of ground contact, guidance for keeping produce and containers off the ground, and education around increased market opportunities with improved food safety practices were identified as educational materials that could clarify misunderstandings around dropped produce. Additional research may be needed on alternatives to uncleanable food contact surfaces, a review of existing research on soil and pathogens, and the risks associated with ground contact of produce or containers.

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**Preventive Controls Workgroup Meeting**

***Subgroup Updates Awareness, Luke LaBorde (Penn State), Amanda Kinchla (UMass); Evaluation, Nicole Richard (URI); Resources, Beth Demmings (Cornell), Annie Fitzgerald (UVM/NECAFS)***

As part of the Preventive Controls conference session, four breakout groups were formed to identify useful resources for the forthcoming Preventive Controls for Human Food website. The goal was to specifically identify resources related to allergens, environmental monitoring programs, and sanitation SOPs. Additional discussion points focused on funding opportunities for food processors and FAQs that food safety communicators most often hear from food processors.

The breakout groups identified 28 new resources to be added to the website. They also identified 16 funding opportunities, including funding specifically for processors in Massachusetts, Maine, Rhode Island, and New York. Eleven additional leads for food processor funding were identified and are currently undergoing review for inclusion on the site. There was a great deal of consensus on which questions food safety professionals receive most often. Seven individuals identified the core question that the receive as “What do I have to do and in what order?” Another seven identified “What parts of the PCHF Rule (if any) apply to me?” In addition to these popular questions, there were a range of questions focused on both how to comply with the rule and how to better understand the nuances of the rule.

In addition to the guided discussion points, the breakout groups discussed several other resources that would be useful for the new site. This included publications that would serve as useful resources, contacts that processors would benefit from speaking to, and general observations about what would make the site most successful. Participants were encouraged to contact NECAFS Research Specialist Annie Fitzgerald at anne.fitzgerald@uvm.edu if they had additional useful resources.

***FSOP and Long-Term Workgroup Planning Discussion – facilitated by Amanda Kinchla (UMass)***

The Preventive Controls conference group had two planning group discussions to collaborate on possible FSOP grant projects and to discuss the future direction of the working group. The first discussion was to identify possible projects that could be funded with 2021 or 2022 Food Safety Outreach Program grants, as well as specific deliverables and collaborators. The second discussion was to plan future NECAFS projects, evaluate the current PC working group structure and decide if that structure could accommodate planned projects.

The FSOP discussion focused on three possible projects. One was the development of a better process control school specifically for small processors. The focus would be on food processing that involves glass jars and would seek to be compliant with 21 CFR 117 and 114. Another project would be to expand online office hours for processors, a concept developed in part by Sam Alcaine. These would be a regularly occurring, informal opportunity for processors to connect with food safety experts remotely, with a possibility of in-person meetings in the future. While these events are well regarded, the need for consistency and longevity could require funding beyond the tenure of an FSOP grant. The third project is a continuation of NECAFS mission to use the awareness group to develop an outreach network that can keep processors informed of NECAFS resources and opportunities. This would not require an additional grant but was an exploration of continuing and expanding existing work.

The second discussion group focused on the future of the NECAFS Preventive Controls working group and its future organization and projects. The three-group structure of resources, awareness, and evaluation was found to be a useful and effective tool, and one that should continue forward to manage ongoing projects. There was some discussion of whether the evaluation group would be necessary long-term, but it is regarded as useful for the time being. Evaluation will focus of a PC training course evaluation tool and developing an analysis system for that tool. Resources will focus identifying gaps in the developing website collection and filling them. Awareness will focus on building a working list of state-level organizations for outreach and developing a strategic communications plan. Working jointly, these projects seek to fulfill the NECAFS mission and serve stakeholders.