Background

Chris Callahan

This work is supported by the Food Safety Outreach Program grant no. 2018-70020-28878 and 2021-70020-35497 from the USDA National Institute of Food and Agriculture.
Enhance produce safety and preventive controls
Enhance produce safety and preventive controls training, education, and outreach
Enhance produce safety and preventive controls training, education, and outreach among small and medium sized farms and small processors.

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Enhance produce safety and preventive controls training, education, and outreach among small and medium sized farms and small processors in the Northeast.

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Who:
- University researchers, educators and extension specialists
- State regulatory and enforcement agency partners
- Local food and farming organizations, NFP’s
- Consultants & Industry associations
- Small and medium sized producers, small processors, buyers
- Other regional centers and initiatives, national center, USDA/FDA

Goal:
Enhance produce safety and preventive controls training, education, and outreach among small and medium sized farms and small processors in the Northeast.

Objectives:
1. Establish Foundational Network Structure
2. Build Capacity, Competency, and Collaboration
3. Develop and Deliver Educational Programs
4. Evaluate and Assess Progress and Impact
5. Sustain Good Work

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NECAFS started with NE-PHRESH

(Northeast Postharvest Research and Extension Service Hub)

• Disparate opinion, accuracy and location of knowledge. Overlapping and non-coordinated effort in region.
• Based on field experiences. Shared by peers.
• Lacking regional relevance and research base.
• NEED/NERA* Planning Grant ($4k) to focus on postharvest research and educational needs. Together.

* Northeast Extension Directors / Northeastern Regional Association of State Agricultural Experiment Station Directors
What Came from this?

• Expressed need for consolidated resources – sharing work
• Expressed desire for collaborative research and educational programming – e.g. drafted collective research questions
• Concerns about how to "train up" to "train up" for anticipated FSMA rules (PCHF and PSR) (this was Jan '15)
• Concerns about maintaining regional relevance of information, educational programs and best practice
• Sustained, nascent network with willingness to collaborate

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Summary of NECAFS 2021 Activities

Elizabeth Newbold
Sean Fogarty
Annie Fitzgerald
Summary List of NECAFS Activities - Preventive Controls

Roadmap to Resources

Regional Preventive Controls Needs Assessment

Regional Processing Data Snapshot
Summary List of NECAFS Activities - Produce Safety

- National Water Lab Map
- Buyer Handbook
- Summarizing and Extending Existing Produce Safety Research
- Produce Safety Research Consortium
- Resources for Hydroponic & Aquaponic Growers
- Systematic Produce Safety Needs Assessment
- Decision Support Tool
- PSA Pre- and Post-Test Evaluation
Summary List of NECAFS Activities – Cross Cutting - Preventive Controls & Produce Safety

- Extension Legal Services Initiative project with the Center for Ag and Food Systems at Vermont Law School
- Food Safety Resource Clearinghouse
- Collaborative Framework Literature Review
- Google Analytics Data Visualization of Usage Metrics from the Food Safety Resource Clearinghouse
### Regional Summary of Produce Safety Alliance Pre- and Post-Test Evaluations 2019 - 2021

#### Summary of Class by Module

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**Pre-test knowledge has increased.**

**Post-test knowledge has increased.**

**The change from pre to post has narrowed.**
Problem Statement / Issue Definition:
Increasing nationwide prevalence of hydroponic and aquaponic (HP/AP) operations + Lack of educational resources
Lack of shared understanding among growers about produce safety and among regulators, educators, and other stakeholders around the diversity of system designs and operational principles and how they relate to produce safety risk assessment and FSMA compliance.

Approach / Methods:
1. Organize and facilitate advisory board meetings → Educational resource need and project scope
2. Informal grower interviews → On-farm experiences and educational delivery mode and approach preferences
3. Review existing resources and literature
4. Draft factsheet content
5. Factsheet graphic design
6. Advisory group and grower focus group feedback, revision of factsheets
7. Multimedia (web and video) content development

Results / Outcomes:
Print (PDF), web, and video produce safety educational resources for HP/AP growers, regulators, educators, and other stakeholders. Resources will be disseminated through NECAFS Clearinghouse and the other regional center networks to improve produce safety knowledge among growers and knowledge of HP/AP operations among others, ultimately leading to increased produce safety practice adoption, FSMA enforcement and compliance, and ultimately reduced produce safety risk.
Factsheet topics

- Hydroponics and Aquaponics 101
- Cleaning and Sanitizing
- Fish Health and Handling
- Harvest and Postharvest Handling
- Personal Health and Hygiene
- Waste Management
- Water Quality
- Wildlife and Domesticated Animals

First release expected in summer 2022.
Problem Statement / Issue Definition:
Wide-ranging approaches and inconsistent FSMA implementation and inspection decisions across states, due to the diversity of producer features, food safety needs, educational approaches, research project development, and individualized regulatory programs in the Northeast. There are unique aspects of the growing systems in the Northeast which are worth investigating using quantitative methods to improve both knowledge, but more importantly practice, to reduce the risk of human pathogens in the fresh produce industry.

Approach / Methods:
1. Provide a framework for on-going region-wide on-farm sampling and analysis targeting pathogens of concern at regional university and FDA labs.
2. Provide a framework for identified data gap research for the Office of Analytics and Outreach (OAO) and for the Office of Food Safety (OFS).
3. Provide a unique framework to evaluate specific FSMA-related guidance and implementation.

Results / Outcomes:
Samples and interview data are collected across various cropping systems most common to the Northeast region and analyzed by regional university labs and FDA leading to an understanding of human pathogen prevalence and survivability.
Producers gain increased knowledge about human pathogen prevalence and survivability across cropping systems and adopted practices as informed by research activities.
Producers demonstrate improved fundamental understanding and prioritized adoption of practice when seeking compliance with FSMA PSR.
Curating Resources for Processors
Annie Fitzgerald

- Food safety communicators needed a single, user-friendly resource for small and very small processors
- Surveyed local, state, and federal food safety resources
- Developed a site that supports processors
- Currently in user experience testing
- Peer review is next
- Anticipated launch, late spring 2022
Agenda Review

Wednesday, January 19th

10:00  Break
10:10  Concurrent Workgroup Meetings
11:30  Virtual Poster Session
12:00  Lunch
1:00   Concurrent Workgroup Meetings
3:00   Networking

Thursday, January 20th

8:30   Morning Coffee Networking
9:30   Federal Updates
10:20  Break
10:30  Concurrent Workgroup Meetings
12:30  Lunch
1:30   Report Out and Closing Remarks

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Expectations

• Connect with partners
• Meet new collaborators and peers
• Ask questions
• Share resources and experiences
• Engage in discussion
• Workgroup approach is intended to provide time together to move topics along through dialog
  ... and to promote co-discovery
  ... and to hatch new plans and projects