



Produce Safety
ALLIANCE

Outreach and Education to Help Growers Meet the Requirements of the FSMA Produce Safety Rule



*Association of Food and Drug
Officials (AFDO) Annual Conference
June 28, 2016*



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Key Topics

- Produce Safety Alliance Overview
- Curriculum Development Process
- Training Courses and Trainer Development
- Collaboration & the PSA
- Resources and the PSA team





The Food Safety Modernization Act (FSMA)

- FSMA includes:
 - **Produce Safety Rule**
 - Preventive Controls for Human Food
 - Preventive Controls for Animal Food
 - Foreign Supplier Verification Programs
 - Accreditation of Third-Party Auditors/Certification Bodies
 - Sanitary Transportation of Human and Animal Food
 - Prevention of Intentional Contamination/Adulteration
- Focused on prevention of food safety issues and encompasses the entire food system





FSMA Produce Safety Rule

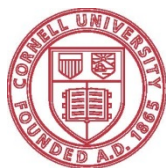
- First regulation of fresh produce
- Focused on practices, not commodities
- Not intended to be one size fits all
- Does have exemptions and exclusions
- Markets may have their own expectations and requirements, beyond the regulation





Produce Safety Alliance

- Cooperative agreement between Cornell University, FDA, and USDA
- Established in 2010
- Focused on outreach and education
- Assist with meeting regulatory requirements



Cornell University



Produce Safety
ALLIANCE



Primary Goals

- **Develop** a standardized educational curriculum to increase understanding of produce safety
 - PSA training will satisfy §112.22 (c) *At least one supervisor from the farm must complete food safety training at least equivalent to the standardized curriculum recognized by the FDA*
- **Build** national networks
- **Train** trainers to build cadre of qualified instructors
- **Conduct** Grower and Train-the-Trainer courses
- **Collaborate** on training, domestic and international



AFDO & PSA Mission Alignment

- “Promoting education, communication and **cooperation** among government, industry and consumers.”
- “Fostering understanding and **cooperation** between industry, regulators and consumers.”
- “Providing guidance and **training programs** for regulatory officials, to promote nationally and internationally uniform inspections, analyses, interpretations, and investigations.”



AFDO & PSA Involvement

- AFDO representatives included on the PSA Executive and Steering Committees
- AFDO to help maintain and manage database of grower participants who have taken the courses
- Participants who successfully complete the PSA Train-the-Trainer and PSA Grower Training Courses will receive PSA/AFDO certificates of course completion
 - \$50/certificate for trainers, \$35/certificate for growers



Target Audience

- Fresh produce growers, packers, and grower cooperatives with special emphasis on small and very small scale farms and packinghouses
 - All growers included!
- **Regulatory personnel**
- Educators and Extension professionals
- All others interested in produce food safety, GAPs, and co-management



PSA Curriculum Development

June 2011 - May 2012

March - June 2012

July - December 2012

Jan 2013 - July 2016

Identify GAPS Challenges

Set Goals

Develop Learning
Objectives

Create
Content

PSA Curriculum Development Process

Identify GAPS Challenges

Set Goals

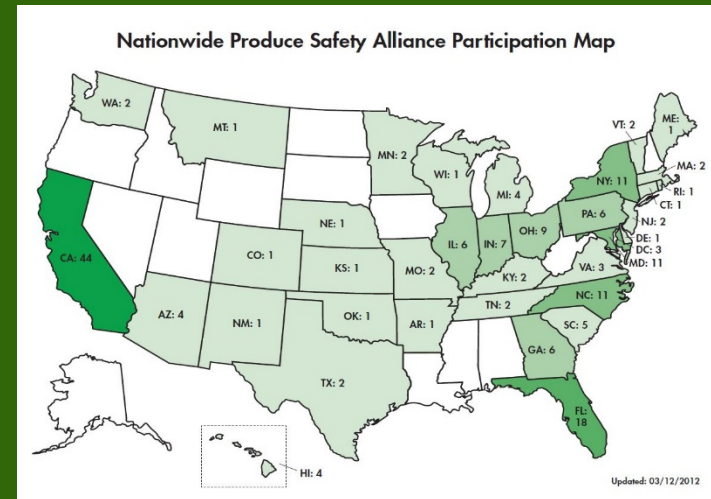
Develop Learning Objectives

Create Content

Evaluate Programs

Launch

- Educational Materials Conference (2011)
- Working Committee Process (2012-2013)
 - 10 WCs
 - 72 WC Meetings
 - 178 Unique Members
 - 549 Total Members



PSA Curriculum Development Process

Identify GAPS Challenges

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- 8 Nationwide Grower Focus Groups (2012)



PSA Curriculum Development Process

Identify GAPS Challenges

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- 2014-2015
- Based on WC and Focus Group Recommendations
- Educational Materials Conference as resources
- Proposed Produce Safety Rule Requirements

PSA Curriculum Development Process

Identify GAPS Challenges

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- **Pilot Train-the-Trainer**
 - December 2014
 - 38 attendees
 - 14 states and Canada represented
- **Pilot Grower Training**
 - January 2015
 - 31 growers

PSA Curriculum Development Process

Identify GAPS Challenges

Set Goals

Develop Learning Objectives

Create Content

Evaluate Programs

Launch

- **Launch January 2016***
- ***Train-the-Trainer**
 - 2 in June 2015
 - 44 states represented
- **FDA Final Review**
 - Incorporation of final PSR language



PSA Grower Training Curriculum

- ~Seven hours of dedicated instruction time
- Completion of course results in certificate from Association of Food and Drug Officials (AFDO)
- Curriculum modules include:
 - Introduction to Produce Safety
 - Worker Health, Hygiene, and Training
 - Soil Amendments
 - Wildlife and Domesticated Animals
 - Agricultural Water: Production & Postharvest
 - Postharvest Handling & Sanitation
 - How to Develop a Farm Food Safety Plan



Navigating the Regulatory Language

- The PSA curriculum covers both FSMA Produce Safety Rule requirements and produce safety practices including Good Agricultural Practices (GAPs)
- PSA engaged with FDA Division of Produce Safety staff to conduct a thorough review of the curriculum's accuracy and alignment with the final FSMA Produce Safety Rule
- Section (§) symbols on slides indicate FSMA Produce Safety Rule requirements
- Very careful delineation of 'musts' and 'shoulds' in slides help growers and trainers navigate between GAPs and FSMA



Microbial Water Quality Profile: Surface Water

START:

Establish initial water quality profile
At least 20 samples over 2-4 years



ANNUALLY AFTER START:

Collect at least 5 samples for analysis
Insert annual data into rolling data set



IF YOUR WATER CHANGES:

If the water quality profile no longer
represents the quality of the water
source, establish a new profile

IF YOUR PROFILE DOES NOT MEET GM OR STV CRITERIA:

As soon as practicable and no later
than the following year, discontinue
use of the water unless an allowed
corrective measure is applied



ALLOWED CORRECTIVE MEASURES:

1. Apply a time interval to allow die-off (before harvest or end of storage) or removal
2. Re-inspect the water system, identify problems, and make necessary changes
3. Treat the water



EXAMPLE

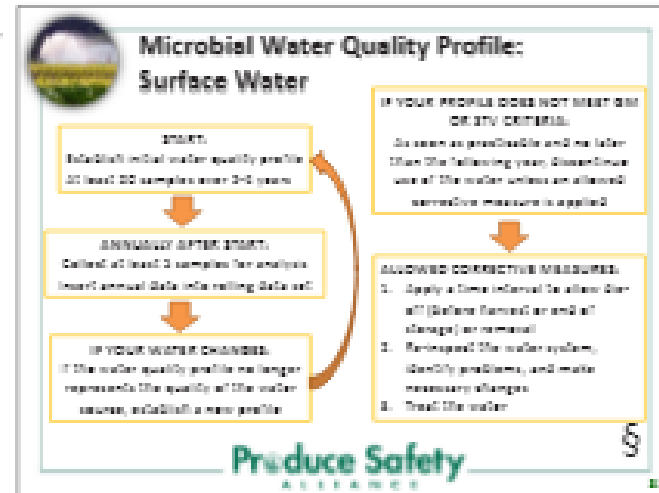
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Example Training Manual Teaching Notes

33 Additional Information

- This slide is optional.
- The microbial water quality profile allows growers to assess their the microbial quality of their production water source over time, and make any necessary management decisions to address suitability for intended uses.
- The following references to the Produce Safety Rule are sometimes repetitive with information presented earlier in this module, but they offer a comprehensive overview of the statutory framework developed over the prior slides in this module. The trainer can use this as an effective summary slide covering this aspect of the Produce Safety Rule.



START:

- § 112.46(b)(1)(i)(A) requires that the surface microbial water quality profile is first created over 2 to 4 years by analyzing at least 20 samples. The GM and STV are calculated for that water source using the initial microbial water quality survey samples.

ANNUALLY AFTER START:

- §§ 112.46(b)(1)(iii) and (b)(2)(i)(A) require that after the profile is developed, at least 5 samples must be taken annually to update the profile. The rolling profile consists of at least 20 samples from within the previous four years.



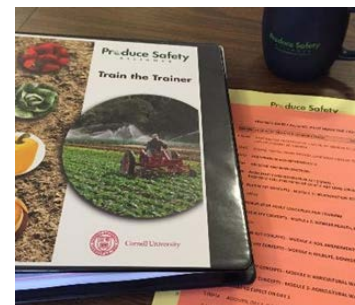
PSA Train-the-Trainer Course

- Two-day training
- Must attend TTT to provide PSA Grower Training
- Expect those interested in training will come with knowledge and experience
 - Four outlined competency areas
- Additional process to become PSA Lead Trainer, more details coming soon
- All trainings must have at least one PSA Lead Trainer present through the entire training



PSA Training Course Manuals

- Seven modules with extensive notes
- FSMA reference table aligns modules with Produce Safety Rule requirements
- Resources for developing written farm food safety plans, SOPs, recordkeeping practices, & GM/STV calculations
- Resources from FDA and USDA (AMS & NRCS)
- Train-the-Trainer Manual additions
 - Covers principles of adult education, developing training partnerships, how to incorporate PSA modules in multi-day trainings

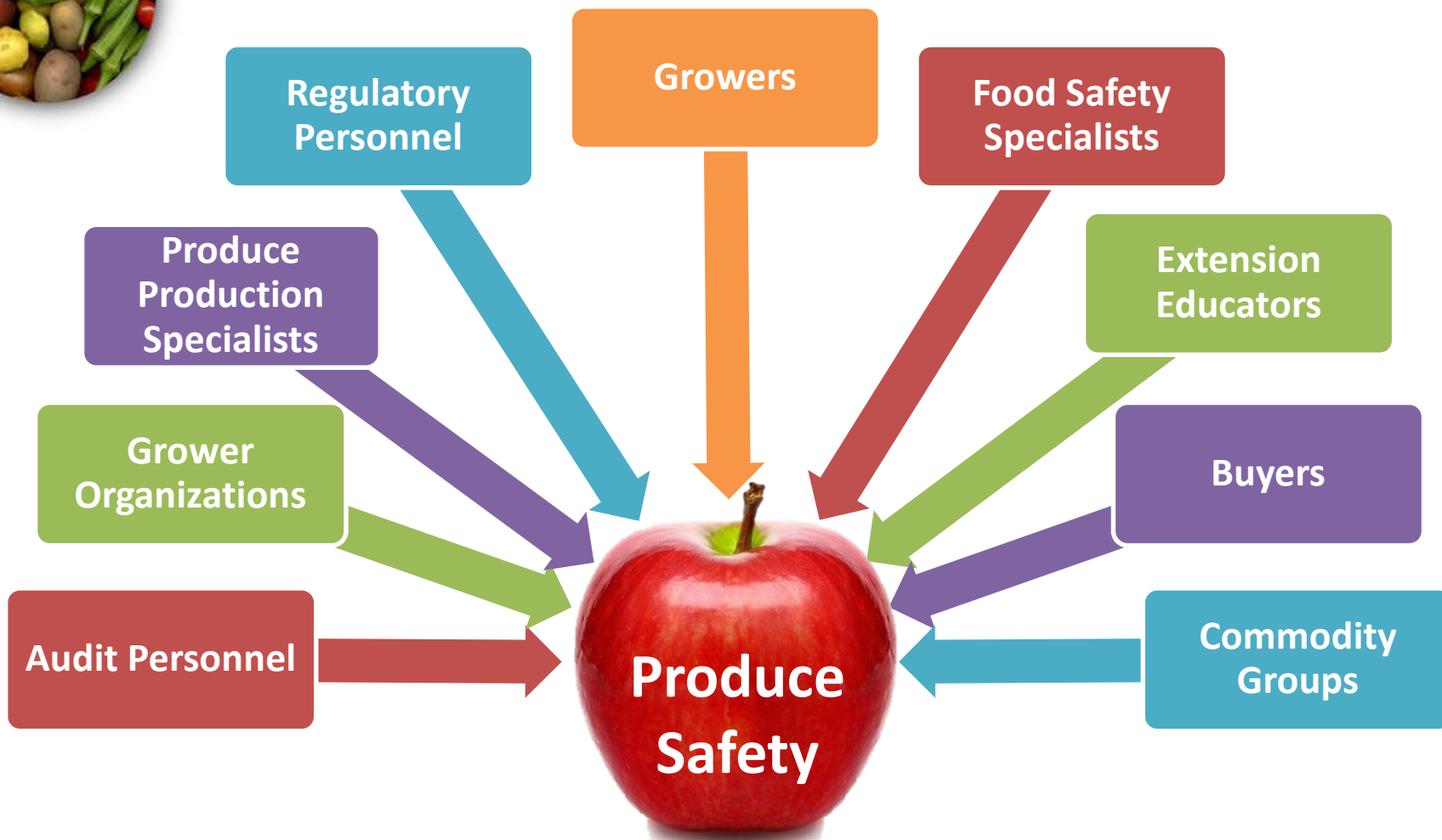




PSA Trainer Competency Areas

- **Fruit & Vegetable Production Knowledge**
 - Understand produce safety risks in an agricultural environment
- **Produce Safety Scientific Knowledge**
 - Basic understanding of bacteria, viruses, parasites
- **Effective Training Delivery**
 - Ability to present technical scientific information and regulatory language to a nontechnical audience
- **Knowledge of the FSMA Produce Safety Rule**
 - Understand the new FSMA Produce Safety Rule and how it may impact produce growers







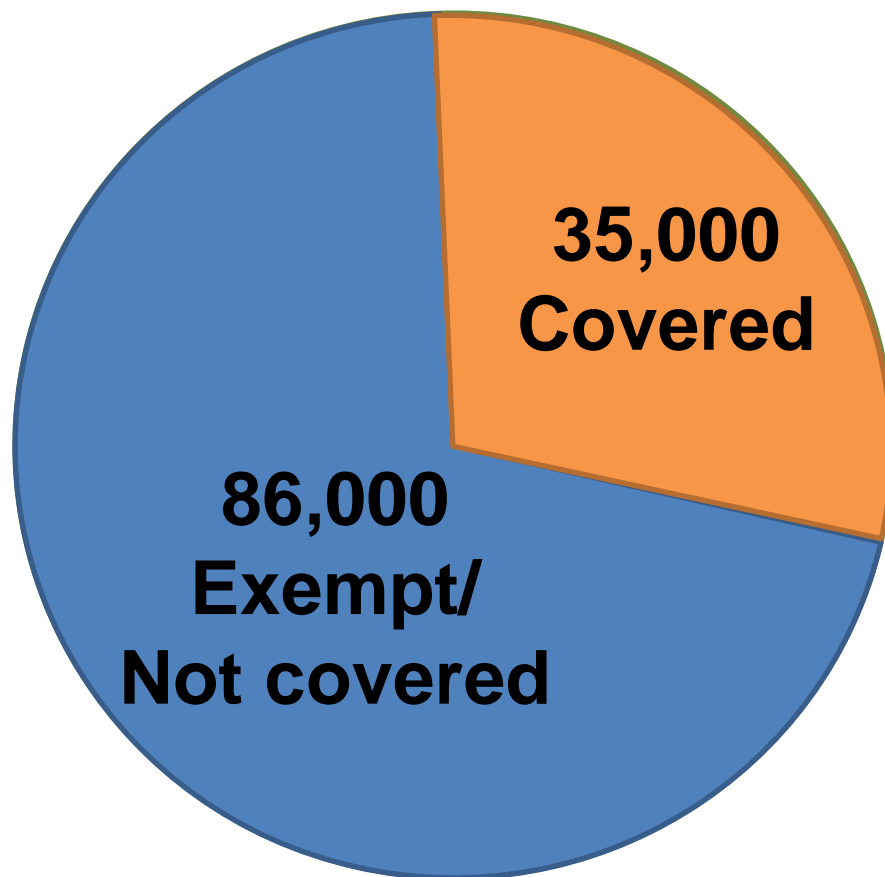
Challenges of Training & Outreach

- Identifying and mentoring trainers
 - Broad knowledge of many subjects required
- Reaching growers
 - Located in rural areas, many different commodities
 - First ever regulation, so many uninformed or concerned about government overreach
- Funding
 - Growers have limited funds
 - Trainers have limited funds





Produce Farms Exempt From or Not Covered by the Rule





Improving Access to Education and Training

- Some growers may be exempt from the regulation, but not from the market place
- EVERY produce grower should have some produce safety knowledge AND access to education and training





Empowering Growers

- Training can improve growers' abilities to communicate what they are doing for produce safety on their farms as well as comply with regulations
- This benefits their:
 - Prioritization and implementation of produce safety practices
 - Interactions with buyers and regulatory personnel
 - Ability to maintain business and farm economic viability





Collaboration is Key

- **Extension**
 - Supporting programs that exist
 - Developing programs that lack expertise and experience
 - Building bridges
- **Research**
 - Incorporating new research
 - Identifying areas that need research answers



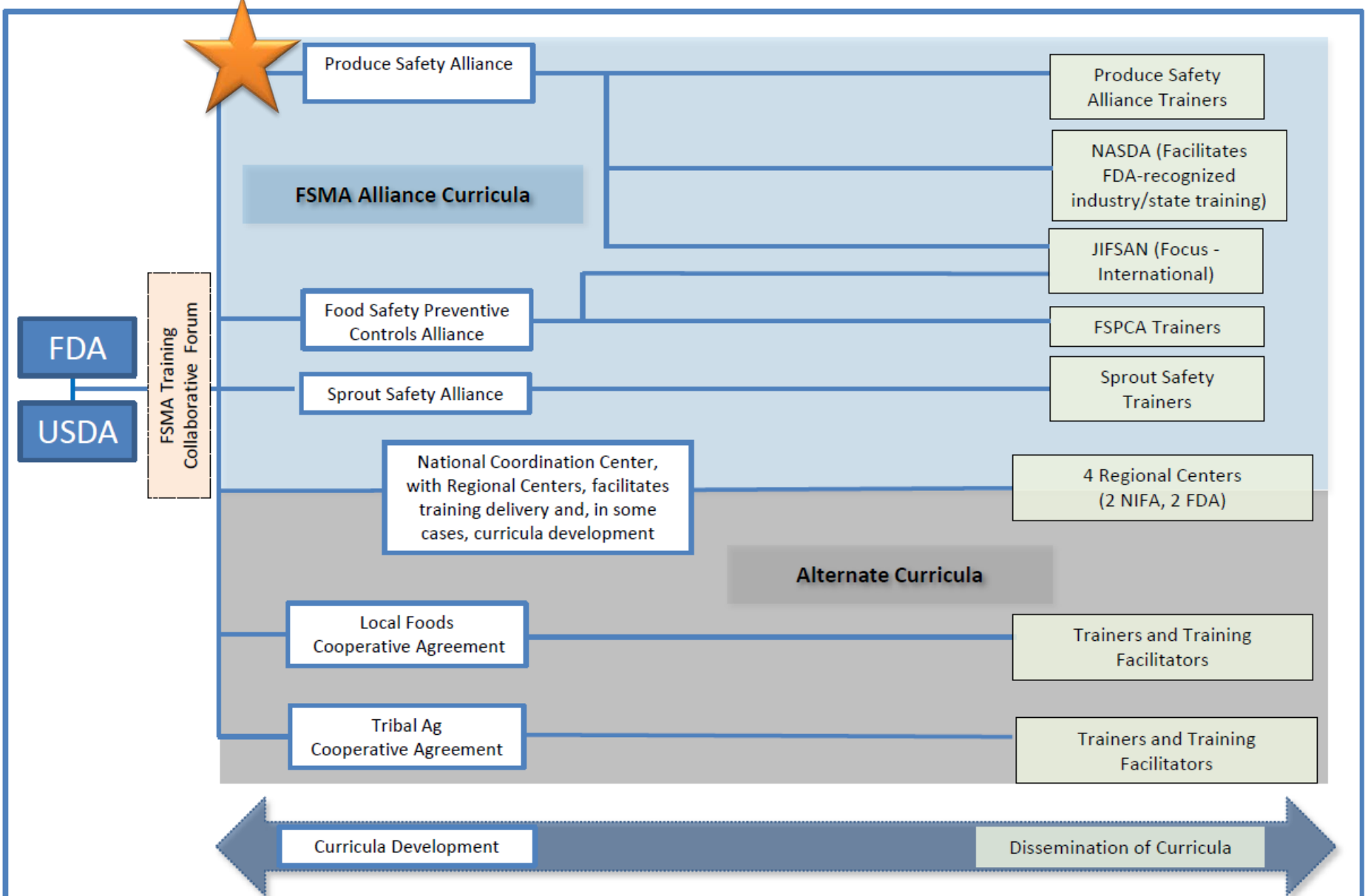


FSMA National and Regional Coordination Centers

- In January 2015, FDA announced partnership with USDA's National Institute of Food and Agriculture (NIFA) to establish the National Food Safety Training, Education, Extension, Outreach, and Technical Assistance Program, as mandated in Section 209 of FSMA
- Grants issued through this program will fund:
 - A National Coordination Center (NCC)
 - Four Regional Coordination Centers (RCs)
- Trainers should consider engaging with the NCC and RC established in their region to discuss and facilitate additional training opportunities and collaboration

FSMA Framework for Industry Curriculum Development and Dissemination

October 2015



This is not an all-inclusive list of entities that will be developing training curricula and delivery for domestic and foreign food businesses.



Sister Alliances

- **Food Safety Preventive Controls Alliance**
 - Helping navigate where growers may fall into this regulation
 - e.g., packinghouses, fresh cut processors
 - Interfacing with International Sub-Committees and FSVP curriculum
 - PSA team cross-trained as FSPCA Lead Instructors
- **Sprout Safety Alliance**
 - Sharing training modules, Subpart M - Sprouts



The PSA Educator's Group

- PSA hosts monthly meetings for produce safety educators
- Toll-free conference call
- Provide training updates, opportunities to learn more about FSMA, new resources, discuss other challenges in GAPs
- Visit the website for more info:
<http://producesafetyalliance.cornell.edu/resources/educators-group>





Bringing New Ideas to the Table

- PSA training programs
 - Partnering to host and facilitate hosting PSA Grower and Train-the-Trainer Courses
- Modify existing educational materials to meet changing needs
- Develop new materials to satisfy continuing education needs
 - More on postharvest water sanitation, detergents and sanitizers, sanitary design of equipment, impact of viruses in the farm environment, small and very small scale produce safety solutions
- Translations and international training opportunities
- Synergistic projects most likely to be successful
- Open to other ideas!



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The PSA Website

<http://producesafetyalliance.cornell.edu/>

- Join the listserve!
- Contact us
- 'Friend' us on Facebook



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