

PSR-Equivalent Food Safety Curriculum for Diversified Farmers

A Hands-On, Culturally Sensitive Approach to GAPs & FSMA Compliance

Presented by: Sara Runkel, Local Food Program Director, CFSA Date: August, 2026



Project Overview & Core Mission

The Need

Small, mid-sized, diversified, and organic producers face unique barriers to meeting Produce Safety Rule (PSR) standards. They require:

- Scale-appropriate and culturally sensitive instruction.
- Education grounded in Good Agricultural Practices (GAPs) alongside regulatory mandates.
- Preparation to pass third-party audits and formal FDA requirements.

Project Overview & Core Mission

Our Solution

A 1.5-day, FDA reviewed PSR-Equivalent Curriculum designed to replace PowerPoint lectures with on-farm, activity-driven, interactive workbook learning.

FDA Review Status (21 CFR 112.22(c)):

"FDA has reviewed these training modules for technical accuracy and to establish that they accomplish the same course goals and learning objectives as the standardized curriculum recognized as adequate by FDA."



Project Partners & Governance

Key Lead Organizations	Primary Contributor / Role
National Sustainable Agriculture Coalition (NSAC)	National Coordination & Curriculum Core, Curriculum Writing, Evaluation Development, Advisory Group
Carolina Farm Stewardship Association (CFSA)	FSOP Grant Holder, Project Execution, Curriculum Writing, Training Team, Advisory Group
Community Alliance with Family Farmers (CAFF)	Curriculum Writing, Training Team, Advisory Group
M&T Enterprises	Curriculum Writing, Training Team, Advisory Group

Project Contributors & Authors



Kali Feiereisel • Grace Perry • Dave Runsten •
Paulina Hernandez • Arabelle Schoenberg • Sara
Runkel • Roland McReynolds • Connor Kippe •
Sarah Hackney • Steve Warshawer

(Former Contributors: Kim Butz, Kelly Nuckolls)

Special Acknowledgments:

- **Advisor:** Marty Mesh (Florida Certified Organic Growers)
- **Curriculum Copy Edits:** Lindsay Gilmour
- **Reviewers:** Dedicated FDA & USDA Technical Review Teams

Curriculum Architecture & Structure

The curriculum is structured into **6 Core Chapters**.

1. Introduction —> 2. Water Safety —> 3. Worker Health & Hygiene —>
6. Traceability <— 5. Land Use & Inputs <— 4. Animal Contamination

Every chapter follows a 3-part instructional loop:



Chapter Breakdown

1. Introduction to Farm Food Safety & PSR

Focus: Understanding coverage, exemptions, and basic risk management.

2. Water on the Farm (Pre- & Post-Harvest)

Focus: Water sources, testing, system inspection, and risk mitigation.

3. Worker Health, Hygiene & Sanitation

Focus: Human health practices, worker training, farm cleanliness, and facility sanitation.

4. Animals on the Farm

Focus: Managing wild and domestic animal risks on diversified operations.

5. Land Use, Soil Inputs & Co-Management

Focus: Soil amendments, land-use history, and environmental co-management.

6. Labeling, Traceability & Recalls

Focus: Lot tracking systems, mock recall exercises, and emergency response.

Experiential Learning: Classroom & Field Activities



Instead of passive slides, participants build real skills through practical, scenario-based exercises in every module:

- **PSR Status Assessment:** Determining exact regulatory coverage and compliance paths.
- **Glo-Germ™ Handwashing:** Visualizing contamination pathways and good hygiene practices.
- **Label Interpretation:** Reading and safely applying sanitizers on diversified farms.
- **On-Farm Risk Inspections:** Water system evaluation and land-use hazard assessments.
- **Animal Contamination Protocols:** Monitoring wildlife/livestock hazards and establishing corrective actions.
- **Mock Traceability Drill:** Running an actual lot-tracing and recall simulation.

Sanitizer Label Comparison - Lesson Plan

Content Area(s):

Cleaning & Sanitizing

Lesson Topic:

Interpreting sanitizer labels and assessing sanitizer uses

Learning Objective: Explain the importance of selecting the right sanitizer for the application(s). Explain the importance of using sanitizer products correctly in direct contact with covered produce and food-contact surfaces.

Outcome(s): After reading the sanitizer labels and talking about them as a group, trainees will understand how to assess correct uses and practices for 5 common EPA-labeled sanitizers and how to select the correct sanitizer for a variety of applications.

Background Info for Trainer:

Read through the Produce Safety Alliance 2018 article titled *Introduction to Selecting an EPA-Labeled Sanitizer* (<https://resources.producesafetyalliance.cornell.edu/documents/Sanitizer-Factsheet.pdf>) and understand the 4 key elements of a sanitizer label:

1. EPA registration number
2. Labeled use(s) for the sanitizer
3. Instructions for use
4. Efficacy statement listing organisms the sanitizer is labeled to treat

If desired, watch the Basic Tutorial video on PSA's searchable Web Tool for Sanitizers (https://www.youtube.com/watch?v=wETvnPpO_6o).

Download and print at least 5 copies of each of the following five sanitizer labels:

- [Sanidate 12.0](#)
- [Victory](#)
- [Tsunami 100](#)
- [Sanidate 5.0](#)
- [Accutab](#)

Instructional Delivery

Opening Activities/Motivation: It's essential that people use sanitizer products correctly for them to work and for the safety of workers and consumers to be protected.

Activity 1: Divide the group into pairs (if applicable) Distribute one of each of the printed sanitizer labels to each pair of trainees. Give them 10 minutes to read through the materials and prepare to share back two things: 1) the EPA registration number for each product, and 2) the labeled use(s) for each product. Call on each pair to share back these two pieces of info (one sanitizer product per pair).

Activity 2: Scenarios

Instructor will read the following scenarios to the large group, and pairs of trainees will have 3-4 minutes to discuss and select one sanitizer that fits the needs described in each scenario.

- 1) You are looking for a general sanitizer that can serve multiple needs in your wash/pack systems, including as a sanitizer in your dunk tank water for washing lettuces and sanitizing packhouse tables at the end of a packout. (Acceptable answers: Sanidate 5.0, Tsunami 100)
- 2) Your farm is certified organic and you are looking for a sanitizer to put in your wash water (dunk tank or single pass spray water) for vegetables that will increase the shelf life of your produce. (Acceptable answers: Victory, Tsunami 100)
- 3) Your farm uses canal water for your irrigation and you are looking for a sanitizer that is safe to run through your drip irrigation system. (Acceptable answers: Sanidate 12.0, Sanidate 5.0)

Activity 3 (if possible): Briefly introduce the PSA's searchable sanitizer comparison tool to the group: <https://resources.producesafetyalliance.cornell.edu/sanitizer/>. Explain how to search and compare allowable uses, OMRI certification, and purchasable quantity for dozens of sanitizer products.

Assessment/Evaluation (Formative/Summative)

Closure: Hopefully those exercises were helpful in teaching you how to understand the essential information on EPA-labeled sanitizers. Our goal has been to prepare you to select the appropriate sanitizer product for a variety of applications.

Initiative Roadmap (2018 – 2026)



Initiative Launched (2018)

NSAC coordinates the Diversified Farm FSMA Training Initiative. Core PSR learning objectives identified.

Curriculum Development & FSOP Grant Award (2018–2021)

Module content drafted and submitted for initial FDA review iterations. CFSA awarded 4-year FSOP grant (2021–2025).

Stakeholder Review & Workbook Pivot (2022–2023)

Walkthrough conducted with FDA, USDA, Extension, and producers. Content converted from slides into an **interactive student workbook**. Focus on farmer friendly language and examples.



Piloting Phase (CA & NC) (2024–2025)

- **July 2024:** First pilot using workbook format (19 participants).
- **2025:** California pilot (14 participants) and two North Carolina grower trainings (12 participants across 1.5-day and 2-day formats).

Train-the-Trainer & Socialization (2025)

- First Train-the-Trainer (TTT) pilot conducted (8 participants).
- Pre/post evaluations, action plan templates, and instructional guides completed.
- FDA alignment on curriculum socialization and formal compliance language.

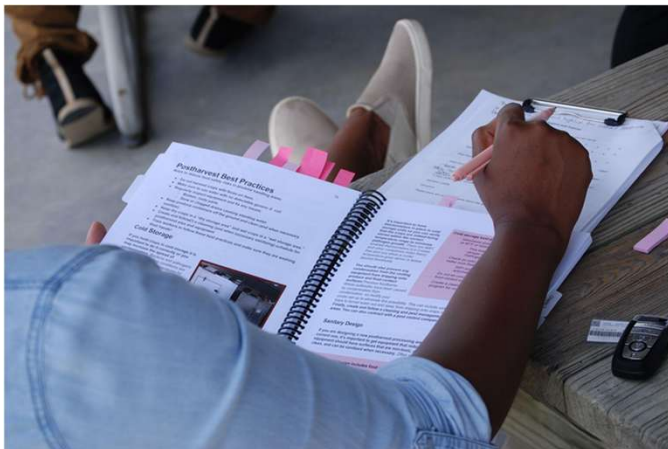
Production & Deployment (2026)

Graphic design of student workbooks, CRM tracking deployment, writing-finalized FDA sign-off, and train-the-trainer scale-up.

Evaluation Results & Stakeholder Feedback

Grower Training Impact (CA & NC Pilots): High engagement and practical application.

- **Pacing & Format:** The majority of farmers rated the 1.5-day pace as "just right."
- **Key Takeaway:** Farmers valued peer-to-peer discussion, hands-on activities, and GAPs integration over rigid lecture slides.
- **Farmer Quote:** *"I left a better, more responsible farmer... Delivery modality, structure, examples, and activities enhance engagement."*



Evaluation Results & Stakeholder Feedback

Train-the-Trainer (TTT) Impact: Evaluation sample size: n=8.

- **100%** stated the curriculum meets the specific needs of small and mid-sized producers.
- **100%** indicated high likelihood of using this curriculum in their future outreach.
- **100%** feel prepared to lead trainings (25% independently; 75% with co-training support from CFSA staff).
- **Trainer Quote:** *"Great job! Keep the activities and discussion even though they take more time. It makes this training unique and worth the effort."*



Student Manual Branding

#272d66 Navy blue horizontal line along top margin of pages with PSR-specific content

#f57600 Box with orange 20 pt weight outline, rounded corners at 40%: Activities & Discussion Items

#c44601 Red fill box, white text, rounded corners at 40%: Condensed version of page content

#37579a Box with light blue 20 pt weight outline, rounded corners at 40%: Plain language regulatory definitions

#272d66 Box with dark blue 20 pt weight outline, rounded corners at 40%: FDA definitions

Supplemental
Iconography:



Font: Helvetica
Color: #000000
Helvetica Bold
Helvetica Italic
Helvetica Underline

Font Size Hierarchy:

Chapter Titles: 36
Heading 1 (Section Titles): 21
Heading 2 (Section Sub-Titles): 18
Heading 3 (Learning Objectives): 16
Body: 12
Footnotes and PSA Section References: 8

Photos: Black, 5 pt weight outline
at 15% rounding



Draft logo

Why Do You Care and What is Your Role in Produce Safety?

Let's all discuss: Why do you care about food safety?

- Foodborne illness outbreaks?
- Reducing your food safety risks?
- Reducing farm's "legal" liability?
- Improve product quality?
- Buyer requirements?
- Good Agricultural Practices (GAPs) Certification?
- Food Safety Modernization Act Produce Safety Rule (FSMA PSR)?

Write down a few reasons why you care about produce safety:

Good Agricultural Practices: The Foundation of Farm Food Safety

We have had food safety regulations in the United States for a long time, that have prohibited the sale of adulterated food. Since 1938, it has been illegal to sell a contaminated product under the Federal Food, Drug, and Cosmetic Act. The Federal Food, Drug, and Cosmetic Act prohibits the introduction of adulterated food into commerce and allows the FDA to condemn and detain products or request a recall.

Good Agricultural Practices¹ (GAPs) are guidance growers can use to reduce the possibility of on-farm contamination of fresh produce. Farms of all sizes can and should implement GAPs to reduce their food safety risks. GAPs address direct and indirect contamination sources and include physical, chemical, and biological hazards. They are the basic environmental and operational conditions and practices necessary to safely grow, harvest, wash and pack fresh fruits and vegetables on your farm.

Farm Food Safety and the Produce Safety Rule

It's important for every farm to understand how they are affected by the **Produce Safety Rule**. If your farm grows, harvests, packs, and/or holds raw agricultural commodities (i.e. fruits and vegetables that are typically consumed raw) in the United States and/or exports produce to the United States, your farm is subject to the Produce Safety Rule. However, some farms are not covered by the Produce Safety Rule, and some farms are eligible for modified requirements.

Produce safety is the responsibility of every grower even if you are not affected by the Produce Safety Rule.

Your farm's requirements under the Produce Safety Rule depends on the **type of produce grown**, whether your produce undergoes a "**kill step**", your farm's **annual sales**, and who you sell to. In this section, we introduce Produce Safety Rule exemptions and exclusions, and help farmers understand how the Rule affects their operation.

Not Covered by the Produce Safety Rule

Not covered = Not subject to the law and its requirements

Note: Farms that are not covered by the Rule are sometimes described as "fully exempt" from the rule. There are specific instances where a farm may be exempt from the Rule, which we will discuss in the next few pages.

1. **Crops** on FDA's Rarely Consumed Raw List are not covered by the Produce Safety Rule. If your farm **only** grows or packs crops on this list, you do not have to abide by law's requirements. If your farm grows a **combination** of produce on this list and not on this list, **only the Rarely Consumed Raw crops are not subject to the law's requirements**. In addition to the crops on this list, FDA issued enforcement discretion for hops, wine grapes, pulse crops, and almonds, meaning they are not enforcing the rule for these items at this time.

Section references: 21 CFR § 112.1, 112.2

My Farm is Exempt from the Produce Safety Rule

Farms who are eligible for the **Qualified Exemption** and the modified requirements must:

1. Display farm name and complete business address of where the produce was grown on the packaging, label or at the point-of-purchase.
 - a. The business address must include the street address or post office box, city, state, and zip code for domestic farms.



- b. When a food packaging label is required under the Federal Food, Drug, and Cosmetic Act or its implementing regulations, you must include the name and the complete business address of the farm where the produce was grown on the food packaging label.



- c. When a food packaging label is not required the farm name and business address must be prominently displayed at the point of purchase. For example: a farm could put a label on the outside of a CSA box or post a sign at the Farmer's Market with the farm name and address.

Section references: 21 CFR § 112.2, 112.2 (3)(b)(1), 112.6, 112.7

Take-home Activity: Mapping

Mapping out activities on your farm can help identify areas of increased risk. For example, you might realize that workers regularly walk through an area with unfinished compost en route to the post-harvest wash station.

In this activity, create a map of your farm or use an existing farm map to identify places where contamination can spread within your farm or from adjoining properties.

Reference this list of infrastructure and areas to include on your map:

- Fields
- Bathroom facilities
- Irrigation water source(s)
- Location of livestock (including on adjacent land)
- Workflow to and from the fields
- Break or eating areas for employees
- Tools, equipment, and production supply area
- Parking / visitor access areas
- Compost making or manure storage
- Wildlife habitat
- Packing / Post-Harvest Handling area
- Supply storage
- Trash and food waste / cull holding area
- Finished product / cold storage area
- Other hand wash areas
- Anything else that you can think of ...



²² Seo KH, Frank JF. Attachment of *Escherichia coli* O157:H7 to lettuce leaf surface and bacterial viability in response to chlorine treatment as demonstrated by using confocal scanning laser microscopy. *J Food Prot.* 1999;62(1):3-9.

²³ Herman KM, Hall AJ, Gould LH. 2015. Outbreaks attributed to fresh leafy vegetables, United States, 1973-2012. *Epidemiol Infect* 143:3011-3021. doi:10.1017/S0950268815000047.

Next Steps & Immediate Priorities

- 1. Finalize FDA Review in Writing:** Complete official documentation with the dedicated FDA review team.
- 2. Publish Professional Workbook:** Complete graphic design for the student workbook and train-the-trainer manual.
- 3. Deploy CRM & Certificate System:** Build data management systems for tracking attendance, certificates, and trainer rosters.
- 4. Socialization & Expansion:** Roll out public messaging using FDA-aligned text; host expanded Train-the-Trainer workshops.
- 5. Secure Long-Term Funding:** Secure grants and institutional support to sustain ongoing training delivery and network growth.

Draft certificate format

Training Location: _____

This certifies that

Training Date: _____

INSERT NAME



Has successfully completed the

PRACTICAL PRODUCE SAFETY FOR FARMERS

TRAINING CURRICULUM

FDA has reviewed these training modules for technical accuracy and to establish that they accomplish the same course goals and learning objectives as the standardized curriculum recognized as adequate by FDA. 21 CFR 112.22(c)

Course ID: _____

Participant ID: _____

Questions about this training should be directed to:

Acknowledgements



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and

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CESA



Thank You! Questions?

sara@carolinafarmstewards.org