



# PRODUCE SAFETY ON SMALL FARMS

Preparing for the Food Safety and Modernization Act and the Produce Safety Rule

The webinar will begin promptly at 11:00 am Pacific / 12:00 pm Mountain

Funded by:



United States Department of Agriculture  
National Institute of Food and Agriculture



University of Idaho  
Extension





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# “FSMA?”

- The Food Safety and Modernization Act, or FSMA for short, was signed into law on January 4, 2011.
  - Gives FDA the authority to regulate food from farm to fork
  - Establishes science-based minimum standards for safe growing, harvesting, packing and holding of fresh fruits and vegetables
- First sweeping food safety regulation overhaul in a very, very, very long time.

# The Produce Safety Rule

- The Produce Safety Rule is one of 7 new federal rules pertaining to food production, processing, transportation and importation
- Other rules include:
  - Preventative Controls for Human Food (processed food)
  - Preventative Controls for Animal Food
  - Sanitary Transportation of Human and Animal Food



Idaho Produce Safety Series Part 1- Introduction to the FSMA, Produce Safety Rule

<https://youtu.be/VjUcJ8DHqLU>

# Why is this important?

- In 2015 alone, the Centers for Disease Control (CDD) documented 902 foodborne disease outbreaks were reported, resulting in 15,202 illnesses, 950 hospitalizations, 15 deaths, and 20 food recalls.
- Single food categories associated with the most outbreak illnesses:
  - Seeded vegetables, such as cucumbers or tomatoes (1,121 illnesses)
  - Pork (924 illnesses)
  - Vegetable row crops, such as leafy vegetables (383 illnesses)

# Who or what is to blame?

- Bacteria, viruses, and parasites!
- No farm is too big or too small to be implicated
  - farms of all sizes have been associated with outbreaks
- Data doesn't tell the whole story
  - Many cases go unreported or unidentified
  - Person to person transmission is often not included in the numbers

# Why are we here?

- Many small farms will not be required to comply with all the new federal food safety regulations
- However, all farms are responsible for producing, packing, transporting and selling safe food!
- How the rule will affect you and *your* farm will depend on what you grow, how much you sell, and who your customers are

# What produce is subject to the rule?

Covered produce (or RAC, Raw Agricultural Commodities) can be **ANY** produce item **EXCEPT**:

Asparagus; beans, black; beans, great Northern; beans, kidney; beans, lima; beans, navy; beans, pinto; beets, garden (roots and tops); beets, sugar; cashews; cherries, sour; chickpeas; cocoa beans; coffee beans; collards; corn, sweet; cranberries; dates; dill (seeds and weed); eggplants; figs; ginger; hazelnuts; horseradish; lentils; okra; peanuts; pecans; peppermint; potatoes; pumpkins; squash, winter; sweet potatoes; and water chestnuts.

# Not covered by the rule

- Farms which do not grow covered produce (RAC)
- Farms on which all produce grown is for personal use/consumption
- Farms which grow RAC specifically for processing\*
  - \*more later on this
- Farms grossing \$25K or less in produce sales

# Exempt\* from the rule

- Farms that sell \$500K or less of total food

AND

- Sell 50% or more of their products to a qualified end user
  - Qualified end users include farmers markets or CSA customers, a retail grocery store, farm stand or Co-op, and restaurants

# Does exempt mean *totally exempt*?

- A qualified exemption means your farm will not be subject to inspection or much of the documentation associated with the Produce Safety Rule
- *However*, a qualified exemption does not protect your farm from complying with the rule if a foodborne illness outbreak is traced back to your farm
- You are also required to keep records that document your qualified exemption

# Are you covered by the Produce Safety Rule?

- You will need to know your:
  - Types of produce you grow
  - Average annual gross sales of produce
  - Average annual gross sales of all food
  - Percentage sold directly to a “qualified end user,” or:
    - Individual or family
    - Restaurant
    - Local grocery store or retail food store



# **Wait, it looks like I might be covered?**

- If your farm does not meet the requirements for an exemption or qualified exemption, you will likely be required to comply with all parts of the Produce Safety Rule
- Talk to your University Extension or State Dept. of Agriculture to learn more about how to prepare and get the appropriate training you will need

# Compliance dates that may affect you

- The rule went into effect on January 26, 2016

Business Size	 Compliance Dates for Sprouts	 Compliance Dates For Most Produce	 Water Related Compliance Dates <sup>1</sup>	Compliance Date for Qualified Exemption Labeling Requirement <sup>2</sup>	Compliance Date for Retention of Records Supporting a Qualified Exemption
All other businesses (>\$500K)	1/26/17	1/26/18	1/26/22		
Small businesses (>\$250K-500K) <sup>3</sup>	1/26/18	1/28/19	1/26/23	1/1/2020	1/26/16
Very small businesses (>\$25K-250K) <sup>4</sup>	1/28/19	1/27/20	1/26/24		

*Very small businesses that do not fit the qualified exemption criteria*

# What does the rule do?

- The Produce Safety Rule enlists a science based, proactive approach to managing food safety risks on farms and farm facilities
- Sets standards for the growing, harvesting, packing and holding of produce for human consumption
- Includes some very specific *requirements* and a whole lot of *suggested activities or best practices*

# Like GAP...

- The rule focuses on preventative best practices that minimize food safety risks on farm
- Protect the farm and the consumer
- Requires some similar record-keeping or documentation



# But unlike GAP...

- GAP, or Good Agricultural Practices, is a third party certification audit that is often required by distributors, large retail markets or institutions
  - GAP is market driven, no laws require the certification
- FSMA Produce Safety Rule is different.
  - These are **Federal Laws** that affect all farmers, whether they are aware of them or not! That's why we're here!

# What is addressed in the rule?

- #1 Personnel qualifications and training
  - Who is in charge of food safety on the farm and what do they need to know?
- #2 Health and Hygiene
  - What practices reduce risk from human pathogen contamination (at its most basic: poop and germs)?

- #3 Agricultural Water

- What's in the water you use to grow, cool and clean your crops and does it pose a hazard? How do you find out?

- #4 Biological Soil Amendments of Animal Origin and Human Waste

- How are manures and composts managed on your farm?

- #5 Domesticated and Wild Animals

- What can you do to reduce the risk of contamination by wildlife, livestock and pets?

- #6 Growing, Harvesting, Packing & Holding Activities
  - What practices reduce risk from field to pack house to market?
- #7 Equipment, Tools, Buildings and Sanitation
  - How do you clean *everything*, identify and fix risky situations, and manage pests?
- #8 Recordkeeping
  - What are required records to keep, and what makes good sense to track in your operation?

# What does this mean for small farms?

- First, know where you fit into the picture.
  - Are you covered? Exempt?
- Second, understand the records you need to keep in order to document and prove your exemption
- Third, realize that the practices outlined in the rule will reduce the risk of produce contamination on farms of any size. Where can you make changes?



# Key Elements

How each component of the rule may affect small farm production

# **“Does this really apply to me?”**

- If you are an exempt or qualified exempt farm, you are not required to keep records on the practices presented in the next section
- **HOWEVER**, as these practices will lead to increased food safety (and sometimes food quality) on your farm
- If your business grows, you may be compliant!



# Humans are a major food safety concern!

- People contract, share and transfer pathogens!
  - When sick
  - When injured (blood and bodily fluids)
  - When hands have been contaminated by
    - Human feces (the fecal-oral route)
    - Animal feces and manures
    - Contaminated surfaces, clothing, footwear, tools, and equipment
    - Contaminated water

# Personnel Qualifications & Training

- Who is in charge of food safety on your farm?
  - Designate an individual who will be the point of contact and responsible for designing and implementing food safety on your farm

# Worker Health, Hygiene and Training

- Train everyone on your farm's food safety policies and practices
  - Family, employees, customers, visitors to the farm
  - Document trainings and have sign in sheets for visitors



# Visitors to the Farm

- Make sure all visitors know:
  - Where toilet and handwashing facilities are located
  - What activities are allowed/not allowed (pets, eating, etc.)
  - What areas of the farm are off limits
  - What kinds of sanitation or protective gear is required (hair or beard nets, boot covers, etc.)
  - Use signage if appropriate





# Agricultural Water

- The section of rules governing agricultural water for farms subject to the rule are yet to be finalized



# Agricultural Water: In the Field

- Defined as: water used in production that is likely to contact produce
  - Includes irrigation, water in spray mixes, etc.
- All agricultural water must be safe and of adequate sanitary quality for its intended use.
- The rule will set minimum standards for irrigation water quality and testing no matter the source

# Agricultural Water: After Harvest

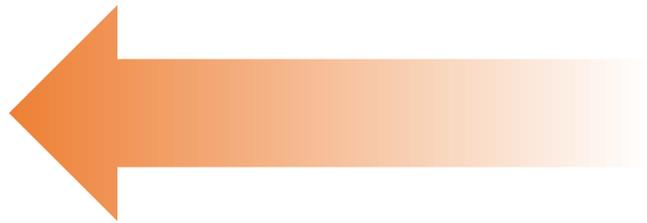
- Defined as water that comes in contact with fresh produce during and after harvest
  - Rinsing, washing, moving produce, cooling, ice making, fungicide and wax applications, handwashing, etc.
- Water can be become contaminated with human pathogens and easily transmit these to produce
- ONLY use potable water for post-harvest activities

# Risk of contamination from ag water

Surface water

Ground water

Public water supply



Higher risk of contamination

Lower risk of contamination

# Reduce your risk

- Know your water – where it comes from
- Test your water – keep records for public water supply, test well water annually, consider testing irrigation water throughout the season
- Protect your water – manage waste, livestock and wildlife to avoid contamination of surface water, inspect wells often



# Soil Amendments and Human Waste

- This section of the rule covers the use of biological soil amendments of animal origin, particularly:
  - Manures
  - Composts
  - Compost and Manure Teas
  - Other biological amendments



# Why should we be concerned?

- Animal manures often contain bacteria, viruses or parasites that can potentially make people sick if:
  - used as a soil amendment in its raw state
  - applied to the edible portion of growing crops
  - it contaminates hands, clothes, shoes, equipment, tools or fresh produce
  - stored in a way that allows for leaching, drift or runoff

# Reducing the risk on your farm

- Never use human waste to fertilize crops
- Use a scientifically valid method of composting to treat raw manures
- Allow a time interval of 90-120 days between application and harvest
- Carefully store, manage, and transport raw and treated soil amendments separately



# **Wildlife, Livestock and Pets**

- Animals of all kinds are a constant presence on many small farms
- Animals, and their waste products, can contaminate fresh produce
- What are the potential sources for animal intrusion or contamination on your farm?
- Can conservation and farming co-exist?

# Managing risk from animals

- Know your risks and develop a plan
- Exclude wildlife, livestock, birds and pets whenever possible from areas actively growing produce crops
- Inspect crops during the growing season and pre-harvest for any signs of intrusion or contamination
- **DO NOT PICK POOP!** Train self and workers to leave any contaminated produce in the field



# Sanitation from Harvest to Market

- How produce is handled as it travels from the field to the end consumer is vitally important
- There are many opportunities along the way for produce to become contaminated with pathogens
- How is your produce harvested, handled, cooled, washed, packaged, stored, transported and/or displayed?
- What are the risks associated with each step?

# Identify areas of risk

- Surfaces of any kind that do or could come in contact with fresh produce
  - Harvest tools, harvest totes, tables, conveyer belts, storage bins, packaging materials, storage racks, coolers
  - AND don't forget worker hands, worker clothing, walls, ceilings and floors
- Can these be adequately cleaned and when necessary, sanitized?

# **Pest management**

- Establish a pest management plan in packing, storage or cooling facilities to reduce contamination from rodents, birds, insects, etc.
- Maintain a regular schedule of inspection, trapping, removal and record-keeping

## Worker Training Record *Template*

Name and address of farm: \_\_\_\_\_ Date: \_\_\_\_\_

Trainer: \_\_\_\_\_ Training time: \_\_\_\_\_

Topic Covered: \_\_\_\_\_

Training materials: Please attach any printed materials related to the training. Also reference any relevant SOPs or sections of the farm food safety plan that apply.

Employee Name (please print)

Employee Signature

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_

## Qualified Exemption Review *Template*

Name and address of farm: \_\_\_\_\_ Date: \_\_\_\_\_

**Total food sales** (in addition to produce, these sales include all other food for humans, feed for animals, and sales of live food animals)

Year 1 (Sales year: \_\_\_\_\_) \$ \_\_\_\_\_

Year 2 (Sales year: \_\_\_\_\_) \$ \_\_\_\_\_

Year 3 (Sales year: \_\_\_\_\_) \$ \_\_\_\_\_

**Average** total food sales \$ \_\_\_\_\_ **A**

Inflation adjusted<sup>1</sup> threshold for (range) \$ \_\_\_\_\_ **B**

(for example, B is \$539,982 for 2015-2017)

A must be  
smaller than B  
for eligibility

**Sales to qualified end users** (QEU) (e.g. consumers anywhere, or grocery stores and restaurants)

# **Recordkeeping checklist - Farms not covered by the rule:**

- Sales documents or tax information showing produce sales of \$25,000 or less averaged over three years, adjusted for inflation *dating from January 1, 2016*

# Recordkeeping checklist - Qualified Exempt Farms:

- Sales or tax documents that show total food sales average under \$500,000 per year over three years (beginning in 2016), adjusted for inflation AND
- Documentation that direct sales to qualified end users exceed sales to all other buyers AND
- “Prominently and conspicuously” display farm name and complete business address at the point of sale (by 2020)



*Red Barn Produce Company*

*PO Box 1234*

*Northwest City, WA*

*98003*

Labeling to be displayed at Farmers Markets, Farm Stands, CSA pickup up,  
included in produce delivery **beginning January 1, 2020**

# Records and Farm Food Safety Plans

- The Produce Safety Rule does not require a farm to have a food safety plan
- **HOWEVER**, a written plan helps farms of all sizes:
  - keep organized and focused on food safety
  - have a written record of practices, policies and standard operating procedures on farm
  - keep track of important records
  - know what to do if a situation occurs

# Summary

- The FDA Food Safety Modernization Act and the Produce Safety Rule affect farms of all sizes
- Some very small farms will not be covered by the rule
- Some farms will be eligible for a qualified exemption and will have modified requirements to follow
- All farms will continue to be under pressure to grow, harvest and sell safe food to customers

# Food Safety in the Pacific Northwest

- This webinar is first in a series
- Four-state collaboration to prepare small scale growers and food processors for FSMA
- [www.pnwfoodsafety.org](http://www.pnwfoodsafety.org)



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**GROW IT, MAKE IT, SELL IT – SAFELY**



**FREE FOOD SAFETY WEBINAR COURSE FOR SMALL SCALE GROWERS AND SPECIALTY FOOD PRODUCERS IN THE PACIFIC NORTHWEST**

**Ready to Grow: An Introduction to the Produce Safety Rule**  
MONDAY, APRIL 22, 2019 - 10 am AKDT/11 am PST/12 pm MST  
This webinar will share how new Federal Food Safety laws may (or may not) affect your farm, where to go for more information, and how to assess and plan for enhanced food safety on your farm.

**Compost Happens: Managing Food Safety Risks in Biological Soil Amendments**  
TUESDAY, MAY 28, 2019 - 10 am AKDT/11 am PST/12 pm MST  
This webinar will focus on the pathogen risks associated with the use of manures and composts, and guide participants through best practices for making compost, as well as handling, storage and use of these materials.

**All Hands on Deck: Health and Hygiene for Farm Food Safety**  
MONDAY, MAY 6, 2019 - 10 am AKDT/11 am PST/12 pm MST  
Ensure that the people who live and or work on your farm or processing facility practice healthy habits that keep everyone safe.

**Intro to Preventive Controls for Human Food for Very Small Value-Added Food Processors**  
MONDAY, JUNE 3, 2019 - 10 am AKDT/11 am PST/12 pm MST  
Go more in depth on exemptions, terminology, and best practices for producing safe food for your customers, no matter where you fall under this rule.

**Ready to Grow: An Introduction to the Produce Safety Rule**  
TUESDAY, May 14, 2019 - 10 am AKDT/11 am PST/12 pm MST  
Repeat.

**Starting Out Right: Food Safety for Safe and Wholesome Foods**  
MONDAY, JUNE 17, 2019 - 10 am AKDT/11 am PST/12 pm MST  
Find out more about Cottage Foods, and how to ensure that everything you make for your family and to sell is as safe as possible.

**Ready to Eat: An Introduction to Preventative Controls for Human Food Rule**  
MONDAY, MAY 20, 2019 - 10 am AKDT/11 am PST/12 pm MST  
Learn about this rule, how to determine if the rule affects you, if you qualify for an exemption, and what you should be doing to stay up to date and in compliance.

**What are Good Manufacturing Practices?**  
MONDAY, JUNE 24, 2019 - 10 am AKDT/11 am PST/12 pm MST  
Keep your small food business on the cutting edge of food safety and efficiency with this webinar.

**Food Safe from Field to Market: Harvest and Post-Harvest Sanitation Practices**  
TUESDAY, MAY 21, 2019 - 10 am AKDT/11 am PST/12 pm MST  
This webinar will guide you through your entire harvest and packing flow, and help you identify any areas of risk along the way.

**Register & learn more at**  
[www.pnwfoodsafety.org](http://www.pnwfoodsafety.org)

**Funded by:**  
University of Idaho Extension, Oregon State University, Washington State University Extension, Cooperative Extension Service, USDA, NIFA

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# Webinar Recording & Resources

Upcoming Webinars:

[www.cultivatingsuccess.org](http://www.cultivatingsuccess.org)

Food Safety Resources:

<https://www.uidaho.edu/extension/food-safety-for-produce-growers>



The screenshot shows the homepage of the Cultivating Success website. At the top, the logo reads "CULTIVATING SUCCESS™" with a small green plant icon, and below it, "sustainable small farms education". A navigation menu includes links for HOME, ABOUT US, PROGRAMS, FARM LINK, FARMER MENTOR, RESOURCES, and CONTACT US. A tagline states, "Increasing the number and success of small farmers and ranchers in Idaho." Below this is a section titled "Featured Programs Winter-Spring 2019" with three buttons: "Webinar Series" (blue), "Idaho Farm Link" (green), and "Cultivating the Harvest: Conference" (dark blue). To the left of the featured programs is a photograph of a green plant with yellow peppers. At the bottom right of the featured programs section is a small icon of a golden wheat stalk. The background of the website is a light green color.



# Next Steps

Please complete our post-webinar evaluation!  
This will be sent to you in your email.

To contact Ariel Agenbroad:

[ariel@uidaho.edu](mailto:ariel@uidaho.edu)



L

Coca-Cola

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