Organics, Food Safety & FSMA's Produce Safety Rule

DEPARTMENT OF maine Agriculture Conservation & Forestry
QUALITY ASSURANCE & REGULATIONS

Leah Cook
Food Inspection Supervisor
Fed/State Inspection Service
Maine Dept. of Agriculture

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
Quality Assurance & Regulations

MEETING ON COMMON GROUND

Our farms are fertile places where we cultivate the health of much more than just our crops. Today we'll explore where the stewardship of organic practices intersects with the public health protection of food safety systems.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

What is FSMA?

The Food Safety Modernization Act is:

- Mandatory food safety law passed in 2011.
- First major update to the federal food code since 1938.
- Establishes science-based minimum standards for produce handling on farms.
- Applies a preventive approach to ensuring food safety.
- Uses systems-based thinking to provide adaptability of Rules to a wide range of businesses.
- Implemented in 7 different parts—the **Produce Safety Rule** is the Part affecting produce farms.

What are the Underlying Food Safety Ideas?

The **Produce Safety Rule** is based on consumer health and produce safety fundamentals:

- Microbiological pathogens can make people sick.
- Pathogens are more likely to make vulnerable people sick, including the **young**, the **elderly**, the **pregnant**, and the **immunocompromised**.
- Pathogens are commonly found in animal and human feces.
- Pathogens most commonly contaminate food via:
  - People
  - Water
  - Food contact surfaces, including equipment
  - Biological soil amendments

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

What is the NOP?

The National Organic Program is:

- Structured program authorized by the Organic Foods Production Act in 1990.
- Establishes minimum standards for organic production, handling, and marketing in the US.
- Requires 3rd party certification of compliance with organic regulations (7 CFR 205).
- Organic certification is optional, but certification and inspection is mandatory if using the term 'organic' to market product.*

*There is a micro-exemption from certification available to producers selling under $5,000 annually.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

What are the Underlying Organic Ideas?

The **NOP** is based on fundamentals of environmental sustainability and stewardship of resources:

- Production practices should **foster cycling of resources**, **promote ecological balance**, and **conserve biodiversity**.
- Farming systems are explicitly committed to place by land histories, crop rotations, and site-specific solutions.
- Practices integrate cultural, biological, and mechanical practices and use chemical solutions as a last resort.
- Organic farming cannot use prohibited synthetic chemicals.
- Genetic engineering is not allowed in seed or propagation stock.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

Overlaps, Parallels, & Tension Points

OVERLAPS:

- There are places where food safety and organics overlap nicely.

Huzzah! Accentuate the positive!

PARALLELS:

- There are some farm areas where the way we already do things can help us adapt to a new framework.

Right on! Let's connect the dots…

TENSION POINTS:

- And there are some natural tension points between our organic practices and our food safety measures, no doubt about it.

Okay then! Let's navigate them together, eh?

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

On a healthy, organic produce farm, what are some things we might see?

We hope that everywhere we look we see an **integrated, thriving living system** that **fosters life and interacts at every species level**.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

1. CONTAMINATION – our first parallel.

Both **ORGANIC** and **FOOD SAFETY** systems look to control contamination risks by using systems thinking.

As we look around our farm, we look for the potential **sources** of contamination, and the potential **routes** of contamination.

We then figure out **preventive measures** to minimize and control those potential risks.

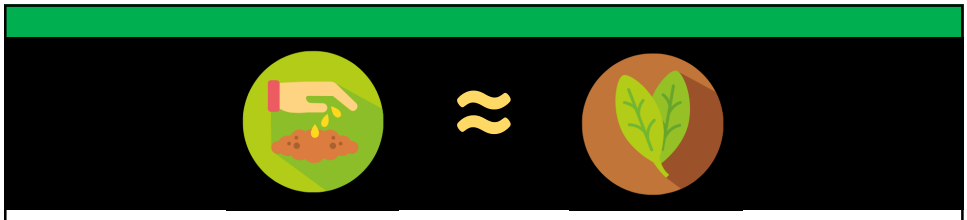
MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

1. CONTAMINATION – our first parallel.

ORGANIC PROGRAM REQUIRES:	≈	PRODUCE SAFETY RULE REQUIRES:
Identifying sources and routes of contamination by **PROHIBITED SUBSTANCES** or **GE MATERIALS** and preventing their introduction onto the farm or contamination of produce.		Identifying sources and routes of contamination by **PATHOGENS** and controlling those risks.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

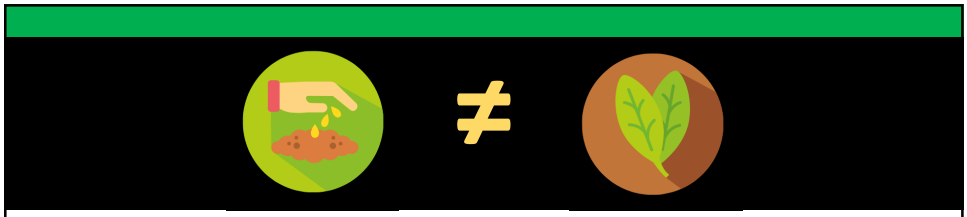
Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.



1. CONTAMINATION – BOTTOM LINE

- **Scope out** potential sources and routes of contamination.
- **Develop** preventive measures to prevent contamination of **ORGANIC** production by prohibited substances and GE materials.
- **Develop** preventive measures to prevent **FOOD SAFETY** contamination by pathogens.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/



2. MICROBIAL LIFE– a key tension point.

In our **ORGANIC** system we want to **promote microbial life** as part of a healthy ecosystem, particularly in our soils.

FOOD SAFETY, however, focuses on minimizing and controlling the risks of **pathogenic microbes** making vulnerable eaters sick.

The same conditions that **promote microbial life** can also provide **PRIME CONDITIONS** for the growth of **pathogenic microbes.**

Let's take a look at what's required for organics & food safety.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

2. MICROBIAL LIFE– a key tension point.

ORGANIC PROGRAM REQUIRES:	≠	PRODUCE SAFETY RULE REQUIRES:
1. Select and implement tillage & cultivation practices that maintain or improve the physical, chemical, and biological condition of the soil and minimize erosion. 2. Manage crop nutrients and soil fertility through plant, animal, or mineral materials. 3. Manage plant and animal materials (inputs) to maintain or improve soil organic matter without contributing to contamination of surroundings. 4. Manage crop nutrients and soil fertility without the use of prohibited synthetic substances, sewage sludge, or burning as a of disposing of crop residues.		1. Manage the risks of microbiological hazards. 2. Prevent contamination of produce and food contact surfaces with pathogens. 3. Identify and address *sources & routes* of microbiological contamination. **4. Do not allow adulterated produce to enter commerce.**

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

2. MICROBIAL LIFE– a key tension point.

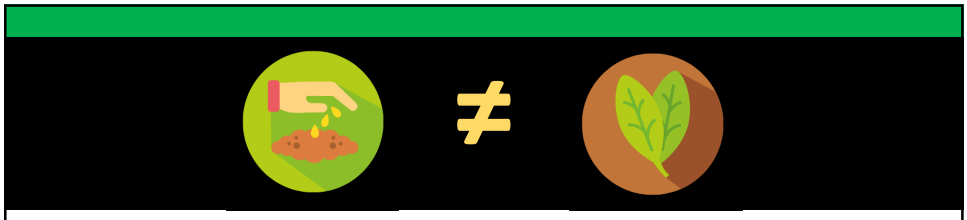
On **ORGANIC FARMS** we ***need*** to maintain or enhance our **biological soil condition** and **soil organic matter**.

The **GOOD NEWS** is that:

1. Soils with higher organic matter correlate with greater bacterial diversity (*Jones et al, 2019).*
2. Greater soil bacterial diversity is correlated with decreased survivorship of *E. coli* o157:H7 **in controlled studies.**
3. Organic agriculture has positive effects on soil bacteria in a wide range of soils, surrounding landscapes, and climatic variation.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

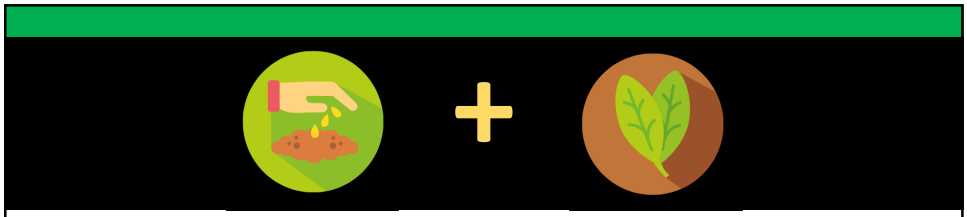


2. MICROBIAL LIFE – BOTTOM LINE

- **DON'T** try to control or limit ALL microbial life.
- **DO** everything you can to **enhance soil organic matter** and **promote biodiversity**.
- **Target** your sanitation and hygiene activities to the most likely sources and routes of **pathogen contamination**.

Which leads us to…

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/



3. SOIL AMENDMENTS – great overlap!

In **ORGANIC** farming we intentionally manage our **soil fertility** using soil amendments, crop rotations, and more.

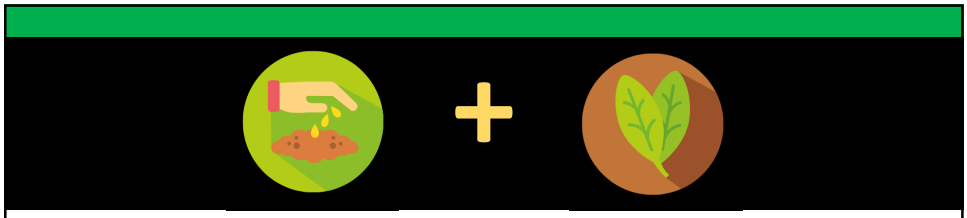
Healthy soils = healthier food.

We often use **composts** and **manures** to maintain and enhance the biological soil condition and the soil organic matter on our farms.

The **NOP** has rules for compost process controls, micronutrient soil amendments, and a waiting period between applying raw manure and harvesting crops.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.



3. SOIL AMENDMENTS – great overlap!

FOOD SAFETY knows that some of our best soil amendments made from animal manures and parts have a greater chance of containing pathogens. Remember:

Pathogens most commonly come from poop.

To control those risks we focus on **scientifically validated treatment methods** to reduce pathogens to safe levels, and safe storage and applications methods.

The **PRODUCE SAFETY RULE** has rules for handling, storage, treating, and application intervals for animal-based soil amendments.

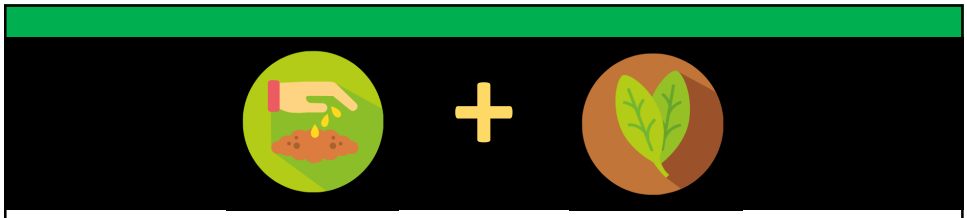
MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

3. SOIL AMENDMENTS – great overlap!

ORGANIC PROGRAM REQUIRES:	PRODUCE SAFETY RULE REQUIRES:
1. Minimize erosion = cover crops, tillage & cultivation practices. 2. Manage crop nutrients & soil fertility = crop rotations, cover crops, testing, apply inputs. 3. Minimize risks of contamination by properly composting inputs, or using the 90/120 days manure waiting period. 4. Maintain or improve Soil Organic Matter = apply plant or animal materials. 5. No application of prohibited substances = at least 3 years. 6. No use of sewage sludge.	1. Control risks from biological soil amendments of animal origins. 2. Manage your inputs to prevent contamination of produce or food contact surfaces with potential pathogens. 3. No use of sewage sludge. 4. No requirements about soil fertility or condition.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.



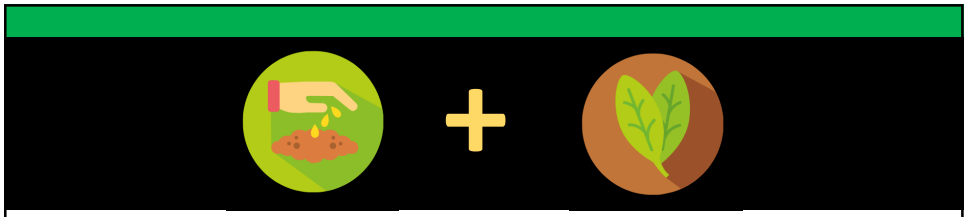
3. SOIL AMENDMENTS – GOOD NEWS!

1. The **PRODUCE SAFETY RULE** was aligned with the **NOP** standard for compost treatment processes:
   - 3 days at 131°F for static aerobic piles.
   - 5 turns & 15 days at 131°F for turned aerobic piles.

   BOTH require you to document any composting you do on-farm.

   The **PRODUCE SAFETY RULE** requires you to get a written statement of adequate treatment if you buy it from a 3rd party supplier.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/



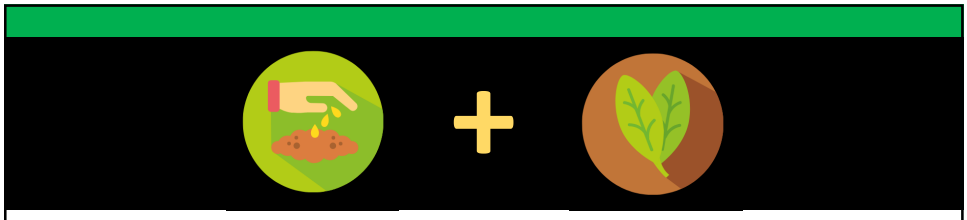
3. SOIL AMENDMENTS – GOOD NEWS!

2. Manure application intervals for untreated animal soil amendments are **UNDER REVIEW** for the **PRODUCE SAFETY RULE**, but the FDA recommends using the **NOP** standard:
   - Incorporate into soil 120 days before harvest for crops with edible portions in direct contact with soil.
   - Incorporate into the soil 90 days before harvest for crops not in contact with soil.

   The **PRODUCE SAFETY RULE** has additional requirements for application methods depending on the type of animal soil amendment. It does not require application records.

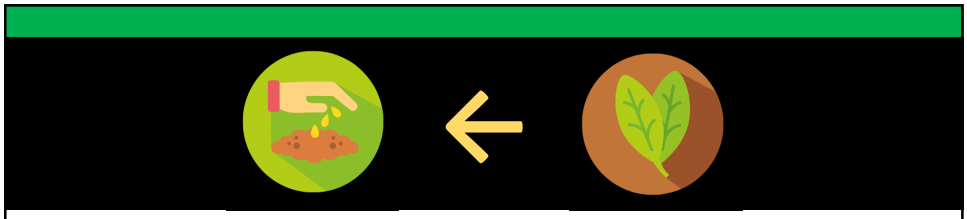
MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.



3. SOIL AMENDMENTS – BOTTOM LINE

- **Handle** manures and soil amendments so they don't leach into or contaminate the environment or produce.
- **Document** any on-farm compost processing.
- **Keep** all records required for untreated soil amendments of animal origins.
- **Follow** the **NOP** standard for manure application waiting periods for raw soil amendments of animal origin.
- **DON'T** use sewage sludge.



4. PEOPLE – a new integration.

The **PRODUCE SAFETY RULE** introduces new requirements for workers and visitors on farms.

While we likely spend time training our workers and taking care of visitors already, there are basic things we need to address for **FOOD SAFETY** reasons.

People are an important part of our thriving, living farms.

But **people** can also be **sources and routes of pathogen contamination**.

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

4. PEOPLE – a new integration.

ORGANIC PROGRAM REQUIRES:	PRODUCE SAFETY RULE REQUIRES:
1. Follow OSHA requirements for worker safety and chemical application. 2. No specific worker or worker training requirements.	1. Train all workers in principles of food safety and food hygiene. 2. Ensure workers follow health & hygiene policies. 3. Train workers to recognize symptoms of communicable health condition. 4. Don't allow sick workers to handle produce or containers. 5. Train harvest workers to recognize & control harvest risks. 6. Make visitors aware of health & hygiene policies. 7. Make toilets and hand-washing stations available to visitors. 8. Have a qualified, trained person designated as responsible for food safety.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

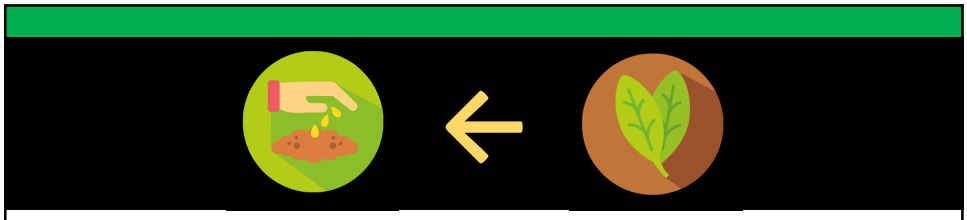
4. PEOPLE – a new integration.

Health & hygiene practices include:

- Maintaining adequate personal cleanliness.
- Avoiding contact with animals where possible, and minimizing likelihood of contamination when using working animals.
- Washing hands with soap and water: **before work**, **before wearing gloves, after toilet breaks, when returning to work, as soon as practical after handling animals or animal waste, or any other time hands are likely to be contaminated**.
- Maintaining any gloves used in clean and intact condition, and replacing them when no longer able to maintain them in that condition.
- Removing or covering hand jewelry that can't be cleaned and sanitized.
- Not chewing gum, eating, or using tobacco products in areas used for covered activities.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.



4. PEOPLE – a new integration.

Symptoms of **communicable health conditions** include:

- Vomiting.
- Diarrhea.
- Open lesions.
- Infection.
- Jaundice.
- Fever.

Workers who are **ill** with communicable health conditions **cannot** handle covered produce or food contact surfaces.

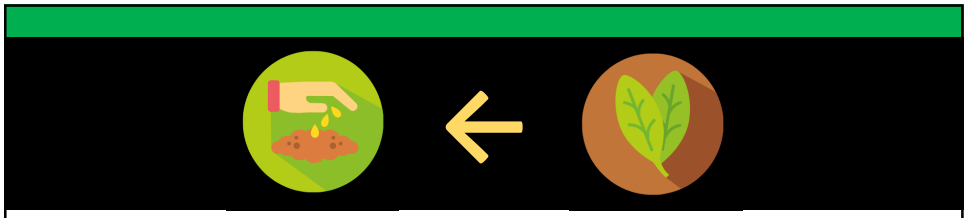
4. PEOPLE – a new integration.

Harvest workers need to be trained to:

- Recognize produce that shouldn't be harvested, including produce that is or is likely to be contaminated.
- Inspect harvest containers to make sure they're clean, functioning properly, and maintained so as not to be a source of contamination.
- Correct any problems with harvest containers, or report the problem to a responsible supervisor.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.



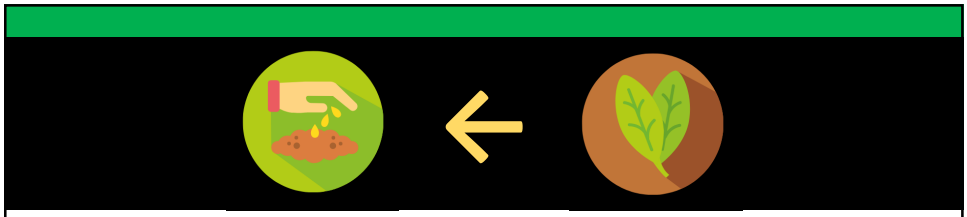
4. PEOPLE – a new integration.

Trainings need to:

- Be given upon hiring.
- Be given at least annually after hiring.
- Be repeated whenever necessary or appropriate.
- Be given in a manner that's easily understandable by the people being trained.
- Be documented in your records including the **topics trained in**, **names of the people trained**, and the **date of the training**.

The **PRODUCE SAFETY RULE** has additional requirements for setting up and maintaining records.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

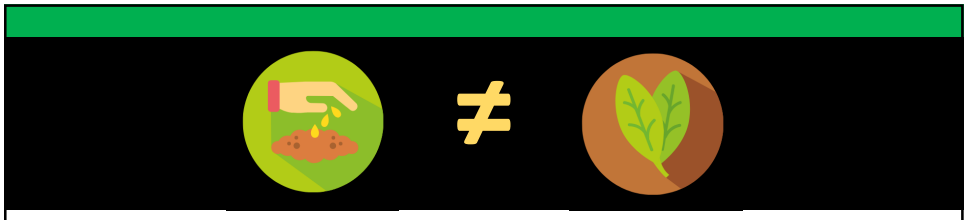


4. PEOPLE – BOTTOM LINE

- **Attend** a PSA Grower Training in the **PRODUCE SAFETY RULE**.
- **Focus** on training your workers in the required **health & hygiene practices**.
- **Train** your harvest workers in the required **harvest practices**.
- **Decide** how best to inform your visitors of good food safety practices.
- **Provide** a toilet and handwashing facility for your visitors.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.



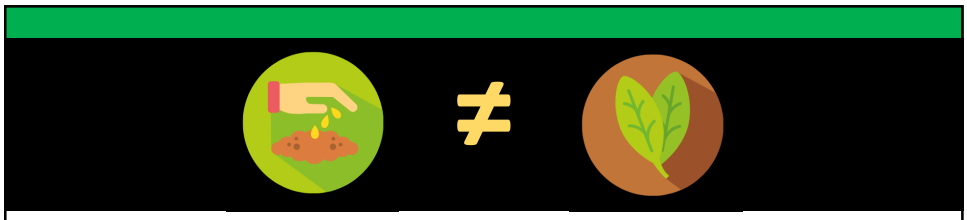
5. CONTACT WITH SOIL – another tension point.

Our thriving **ORGANIC** soils are filled with diverse and essential microbes that help to build our healthy soils.

But the soil can be a reservoir for pathogens too.

The **PRODUCE SAFETY RULE** navigates this by requiring pre-harvest checks to identify contaminated produce, preventing the harvest of contaminated produce, and minimizing contact with the ground after produce has been harvested.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/



5. CONTACT WITH SOIL – another tension point.

Keeping our harvested crops out of the dirt they grew in may sound funny to our **ORGANIC FARMS**. Dirt is good for you after all, right?

But remember:

FOOD SAFETY is concerned with our <u>most vulnerable eaters</u>—the **young**, the **elderly**, the **pregnant,** and the **immuno-compromised**.

Dropping produce on the ground can cause infiltration of pathogens into the pulp. Stacking harvest bins up after sitting on the ground can spread soil pathogens to other produce below it.

And pathogens are what make people sick.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

5. CONTACT WITH SOIL – another tension point.

ORGANIC PROGRAM REQUIRES:	≠	PRODUCE SAFETY RULE REQUIRES:
1. Removing any plastic mulch materials at the end of the season. 2. Using newspaper that is free from color printing/ink.		1. Pre-harvest visual assessments to identify produce that may be contaminated and prevent its harvest. 2. Not harvesting produce contaminated with feces. 3. Not distributing covered produce that has dropped to the ground. *(Drops are covered produce that don't already grow in contact with the ground.)* 4. Handling harvested covered produce in a manner that protects against contamination with known or reasonably foreseeable hazards—for example, by avoiding to the degree practicable, contact of cut surfaces of harvested produce with soil.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

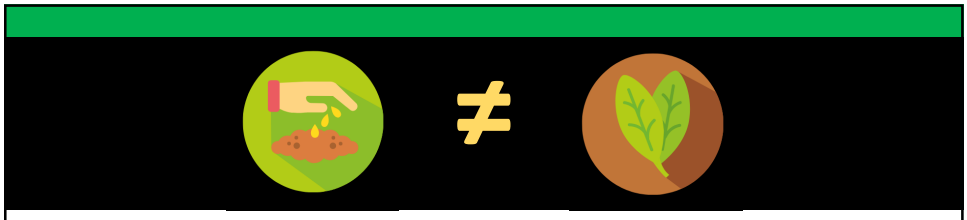
5. CONTACT WITH SOIL – another tension point.

The **GOOD NEWS** is that:

1. The soil is reservoir for spoilage organisms as well as pathogens.
2. Until skin surfaces are broken, most vegetables and fruits are protected from spoilage organisms by naturally occurring pectins on their skins and rinds.
3. Keeping cut ends of harvested produce out of the soil can minimize the introduction of **spoilage organisms** as well as **pathogens**.
4. Minimizing contact with the soil can improve the quality and shelf-life of produce.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

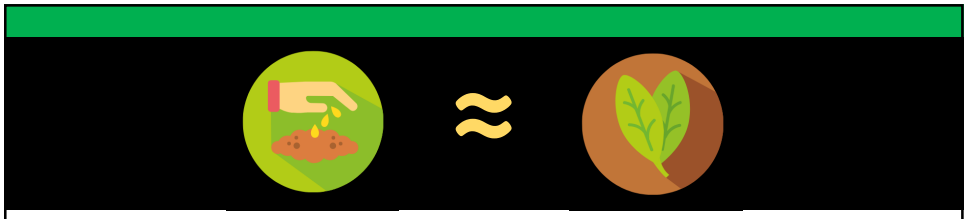
Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.



5. CONTACT WITH SOIL – BOTTOM LINE

- **Black plastic** can be a great way to control weeds and keep produce off the ground.
- **Remember** to clean up any **plastic mulches** at the end of the growing season.
- **Consider** marking a few harvest containers as ground-contact-only and nest other harvest containers in them.
- **Use sleds** or **living mulches** to keep harvest containers and produce off the ground.
- **Find ways** to minimize contact with the ground for your harvested produce.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/



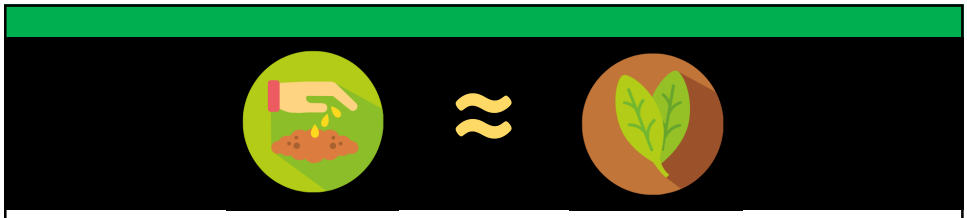
6. FOOD CONTACT SURFACES – another parallel.

Food contact surfaces can include things like **tools**, **equipment**, **containers**, **tables**, **food packaging**, and even **hands**.

Both **ORGANIC** and **FOOD SAFETY** systems consider how to manage food contact surfaces to prevent contamination.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.



6. FOOD CONTACT SURFACES – another parallel.

ORGANIC systems are concerned with preventing contamination of organic products with **prohibited** substances and **GE materials**.

FOOD SAFETY systems are concerned with contamination with **pathogenic microorganisms**.

BOTH the **NOP** standard and the **PRODUCE SAFETY RULE** have requirements around food packaging and equipment.

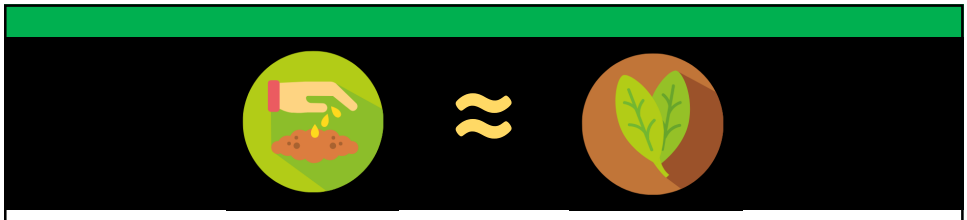
MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

6. FOOD CONTACT SURFACES – another parallel.

ORGANIC PROGRAM REQUIRES:	≈	PRODUCE SAFETY RULE REQUIRES:
1. Use of approved materials for cleaning. 2. Records of materials that are used. 3. Prevent commingling of organic and non-organic products from contact with prohibited substances . 4. Use or re-use of bags or containers that have been in contact with any substance that would compromise the organic integrity or organically produced product is prohibited, unless they have been thoroughly cleaned and pose no risk.		1. Food contact surfaces that are intended or likely to contact covered produce prevent growth of microorganisms of public health significance: • Be of adequate design and construction to be cleaned and properly maintained. • Be sanitized when necessary. 2. Food packaging materials to be: • Cleanable or designed for single use. • Unlikely to support growth or transfer of bacteria. 3. All food contact surfaces should be stored so as not to be contaminated by pests.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.



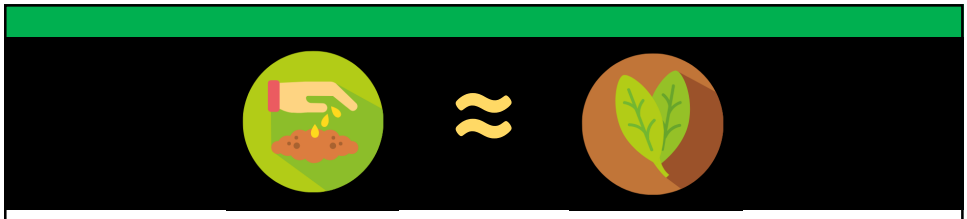
6. FOOD CONTACT SURFACES – lining up parallels.

The **materials** you use in **construction or equipment** need to limit potential for contamination:

1. For the **PRODUCE SAFETY RULE**, food contact surfaces need to be constructed of materials that <u>can</u> be cleaned.
2. Materials like cardboard, duct tape, carpet, or porous foam can't be adequately cleaned.

1. For **ORGANIC** production, **treated wood** can't be used anywhere it can contaminate plants, soil, animals, water, or crops.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/



6. FOOD CONTACT SURFACES – lining up parallels.

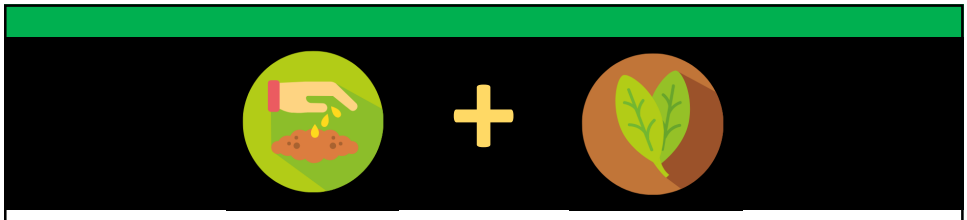
Cleaning and **sanitizing** is necessary to prevent contamination:

1. For the **PRODUCE SAFETY RULE**, food contact surfaces must be cleaned and sanitized as often as necessary.
2. **Records** must be kept of cleaning with <u>dates</u> and <u>methods</u> of cleaning.

1. For **ORGANIC** production, **equipment used** for both **organic** and **non-certified** production <u>MUST</u> be adequately purged and cleaned before use on organic crops.
2. Cleaning must use **approved cleaning agents** and **records** must be kept.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

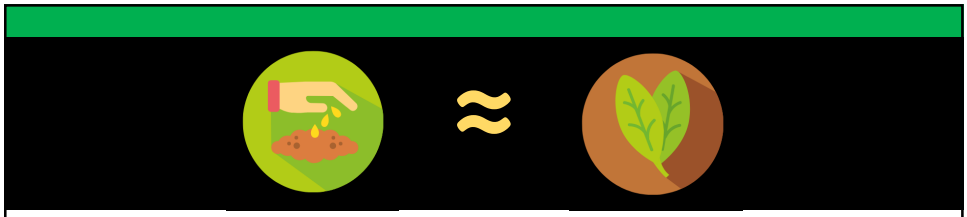


6. FOOD CONTACT SURFACES – BONUS OVERLAP!

Food packaging:

1. Must protect the product from contamination.
   - Contamination = **pathogens** for **FOOD SAFETY**.
   - Contamination = **prohibited substances, non-certified produce,** and **GE materials** for **ORGANICS**.
2. Must be single-use, or cleaned so as to prevent contamination prior to re-use.
   - **PRODUCE SAFETY RULE**, food packaging can be lined if being re-used.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/



6. FOOD CONTACT SURFACES – BOTTOM LINE

- **Materials** used to make **equipment, food contact surfaces**, and **facilities** should be suitable for use (not treated wood for **ORGANICS**, cleanable for **FOOD SAFETY**).
- **Cleaning requirements** use a similar logic of cleaning to prevent contamination. Use **approved cleaning agents** for **ORGANICS**.
- **Keep** good cleaning records for both.
- **Food packaging** shouldn't be re-used unless you have taken measures to prevent contamination of produce.
- **Only re-use** food packaging if it <u>can</u> be cleaned and <u>is</u> clean.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

7. PEST CONTROL – lots of overlap!

Both **ORGANIC** and **FOOD SAFETY** systems take a similar approach to food pest control by addressing the three major factors for food pests: attractants, harborage, and access.

Attractants = food sources that draw pests to them.

Harborage = protected places for pests to hide, nest, and live.

Access = ways for pests to access areas where food is.

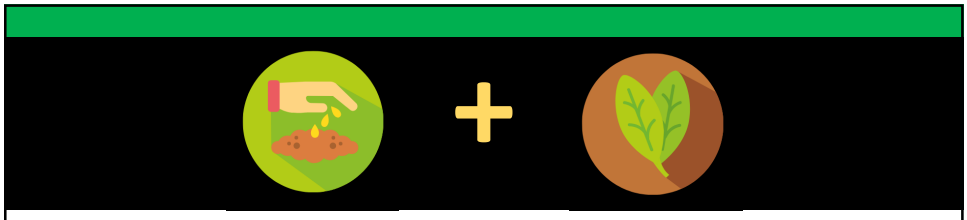
MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

7. PEST CONTROL – lots of overlap!

ORGANIC PROGRAM REQUIRES:	PRODUCE SAFETY RULE REQUIRES:
1. Removal of pest habitat, food sources, and breeding areas. 2. Prevention of access to handling facilities. 3. Manage factors to prevent pest production.	1. Prevent attractants and harborage. 2. Exclude from fully-enclosed buildings. 3. Prevent establishment in partially-enclosed buildings. 4. Manage conditions to minimize growth of pests or pathogens.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

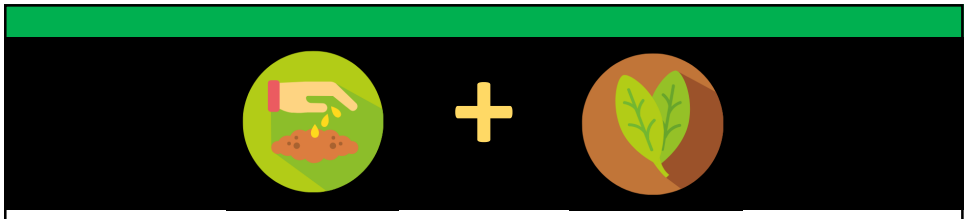


7. PEST CONTROL – lots of overlap!

Pest <u>management</u> for **BOTH** systems include:

1. **Minimizing** habitat/**harborage**.
2. **Controlling** food waste, standing water, & food sources/**attractants**.
3. **Preventing access** to food areas.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/



7. PEST CONTROL – lots of overlap!

Pest <u>control</u> for **BOTH** systems include:

1. **Monitoring** for food pests.

The **PRODUCE SAFETY RULE** requires taking measures to:

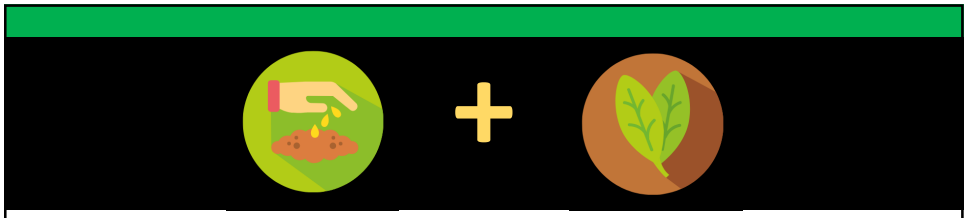
- **Exclude** pests from <u>fully-enclosed</u> buildings.
- **Prevent establishment** of pests in <u>partially-enclosed</u> buildings.

The **NOP** standard requires taking measures to:

- Using **approved substances** for pest control in facilities.
- In crop production, use **preventive measures** first, then **mechanical/physical controls** or **approved substances** to control pests.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

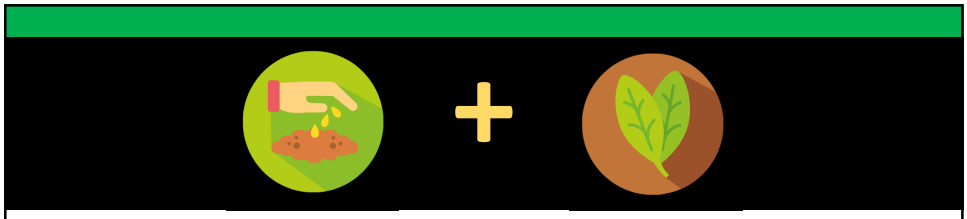
Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.



7. PEST CONTROL – BOTTOM LINE

- **Keep** perimeters around buildings and greenhouses cleared.
- **Organize** stored materials to minimize **harborage** for pests.
- **Remove** food sources and **attractants** for pests.
- **Close up** entry points pests can use to **access** food areas.
- **Monitor** your food areas for signs of pest presence.
- **Periodically clean** the areas you monitor so you know which signs of pest activity are active or old.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/



8. RECORDS – solid overlap!

BOTH systems have specific documentation requirements.

ORGANIC certification requires more records.

Many **PRODUCE SAFETY RULE** records require more specific information on each form and a supervisor review of the record.

Existing records can be used for **PRODUCE SAFETY RULE** compliance—you can use your **ORGANIC** logs if they have all the required information!

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

8. RECORDS – solid overlap!

ORGANIC PROGRAM REQUIRES:	+ PRODUCE SAFETY RULE REQUIRES:
• Seed/seedling/perennials purchase records • Field activity records (amendments, pesticides, planting dates, manure applications, crop rotation, field histories, etc.) • Compost production records. • Clean out log for equipment used on non-certified land • Receipts and labels for purchased inputs • Harvest and sales records (depend on scale and complexity of farm). • Keep records for minimum 5 years.	• Worker training. • Process controls for BSAAO treatments. • Written assurances of safe handling/storage/treatment of treated BSAAO from 3rd party suppliers. • Cleaning logs for equipment & tools. • Sales records for Qualified Exempt farms. • Annual review and verification of Qualified Exempt status. • Water records (*pending*). • Keep records for minimum of 2 years for most, and maximum of 4 years for some.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

8. RECORDS – BOTTOM LINE

- **Use** existing records to satisfy requirements for both **ORGANICS** and **FOOD SAFETY**.
- **Make sure** records are adapted to your **specific farm.**
- **Update** existing templates to include information required for both.
- **Add** regular **supervisor reviews** of key records into your operations.
- **Hang on** to your records for **5 years** to meet the longest requirement (**ORGANICS**).

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

SUMMARY

OVERLAPS:

- With small tweaks, we're mostly aligned on **SOIL AMENDMENTS**, **PEST CONTROL**, and **RECORDS**.

PARALLELS:

- We can use what we already know about addressing **CONTAMINATION**, **FOOD CONTACT SURFACES**, and **PEST CONTROL** to adapt to new food safety considerations.

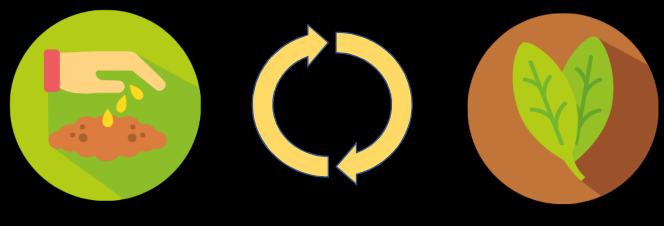
TENSION POINTS:

- Tension points like **MICROBIAL LIFE** and **CONTACT WITH SOIL** can be navigated by enhancing soil biodiversity, watching our sanitation, and adapting how we handle harvested produce.

NEW GROUND:

- We can learn more about training and taking care of our **PEOPLE** to minimize food safety risks.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/



Now when we look at our healthy, organic produce farm, what do we see?

We hope that everywhere we look we see an **integrated, thriving living system** that **keeps our most vulnerable eaters safe**.

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

MORE RESOURCES

ORGANIC FARMING:

- Maine Organic Farmers & Gardeners Association (MOFGA):
  https://www.mofga.org/
- Northeast Organic Farming Organization (NOFA):
  https://nofa.org/
- Rodale Institute:
  https://rodaleinstitute.org/
- Organic Farming Research Foundation:
  https://ofrf.org/
- National Sustainable Agriculture Coalition:
  https://sustainableagriculture.net/

MORE RESOURCES

NATIONAL ORGANIC PROGRAM:

- United States Department of Agriculture (USDA):
  https://www.ams.usda.gov/about-ams/programs-offices/national-organic-program

MOFGA CERTIFICATION SERVICES:

- MOFGA Certification Services (MCS):
  https://mofgacertification.org/
- MCS 2020 Practice Manual (includes full NOP Rule):
  https://mofgacertification.org/wp-content/uploads/All_PracticeManual2020-FINAL-1.pdf

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

MORE RESOURCES

PRODUCE SAFETY:

- Maine Department of Agriculture, Conservation & Forestry:
  Leah Cook
  207-764-2100
  https://www.maine.gov/dacf/qar/fsma/index.shtml
- University of Maine Cooperative Extension:
  Dr. Robson Machado & Christina Howard
  207-581-3144
- Produce Safety Alliance (PSA):
  https://producesafetyalliance.cornell.edu/
- Northeast Center to Advance Food Safety (NECAFS) Food Safety Resource Clearinghouse:
  https://www.uvm.edu/extension/necafs/clearinghouse

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

MORE RESOURCES

FSMA & THE PRODUCE SAFETY RULE:

- Federal Food and Drug Administration (FDA):
  https://www.fda.gov/food/guidance-regulation-food-and-dietary-supplements/food-safety-modernization-act-fsma
- FDA Technical Assistance Network (TAN):
  https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-technical-assistance-network-tan
- The FULL TEXT of the Produce Safety Rule (21 CFR Part 112):
  https://www.federalregister.gov/documents/2015/11/27/2015-28159/standards-for-the-growing-harvesting-packing-and-holding-of-produce-for-human-consumption

MAINE DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY www.maine.gov/dacf/qar/

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.

THANK YOU!

QUESTIONS?

Call us at: 207-764-2100
Email us at: leah.cook@maine.gov
www.maine.gov/dacf/qar/
207-764-2100

Funding for this presentation was made possible, in part, by the Food and Drug Administration through grant PAR-16-137.