On-Farm Food Safety Certifications and Regulations

WSDA Regional Markets Team

Small Farm Direct Marketing and Farm to School Team
Why food safety?

- Customer Safety
- Market Requirements
- Risk Management
- Laws and Regulations

Outline

- What is on-farm food safety?
- What are Good Agricultural Practices (GAP)?
- What is the Food Safety Modernization Act (FSMA)?
- How does FSMA impact farmers?
- Next steps and resources
On-Farm Food Safety

How to prevent and respond to the risk of contamination caused by the following factors:

1. Biological
2. Physical
3. Chemical

On-Farm Food Safety

Core Principles

1. Keep pathogens off the food
2. Keep pathogens from spreading
3. Keep pathogens from growing
Tip: Think like a pathogen

Environments pathogens love

- Dirty, moist surfaces
- Standing water
- Warm temperatures
- Human or animal host
- Cracks, holes and other hard to reach places to harbor and multiply

Pathogen Movement on the Farm

**Source:** Carrier that produce and/or spread pathogens from one point of the farm to another

<table>
<thead>
<tr>
<th>1</th>
<th>Humans</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Animals</td>
</tr>
<tr>
<td>3</td>
<td>Soil</td>
</tr>
<tr>
<td>4</td>
<td>Water</td>
</tr>
<tr>
<td>5</td>
<td>Equipment</td>
</tr>
</tbody>
</table>

https://www.sciencedaily.com/releases/2010/12/10120611534.htm
Steps to Food Safety

1. Assess Produce Safety Risk
2. Implement Practices
3. Monitor Practices
4. Use Corrective Actions
5. Keep Records

Farms are unique ecosystems
Farms are pathogen free

GAP as Guidance

Good Agricultural Practices (GAP): Set of best practices to minimize food safety risk on the farm

- Fruit and vegetable only
- Industry-driven
- Voluntary standard
- Public and private certifications available
Why USDA GAP/GHP?

- Widely recognized
  (Farms should always double-check with their buyer!)
- Cost-effective compared to private certifiers
- WSDA staff conducts audit
  (Yakima, Wenatchee, Mt. Vernon)
- Many resources available

Designed for Diversified Farms

Step-by-Step Guide to USDA GAP/GHP Audit Checklist:
What is FSMA?

FDA FOOD SAFETY MODERNIZATION ACT

- Produce Safety Rule
- Preventive Controls for Human Food
- Produce Safety Rule
- Foreign Supplier Verification Programs
- Sanitary Transportation of Food
- Intentional Adulteration of Food
- Accredited Third Party Certification Rule

First Federal Rule for Produce Farms

1938 Federal Food, Drug, and Cosmetic Act

Adulterated Food - Impure, unsafe, unwholesome or otherwise unfit for human consumption
Is your farm “covered” by FSMA?

Covered Farm Activity Examples

grow  →  harvest  →  pack  →  hold

- cool
- field core
- filter
- gather
- hull
- remove stems/husks
- shell
- sift
- thresh
- trim outer leaves
- wash (intact produce)

- sort
- cull
- grade
- label
- weigh
- coat with wax/oil/resin

- store food
- fumigate
- dry/dehydrate
- break down pallets
- distribution
Covered Produce

- Fruits or vegetables, including mushrooms, sprouts, peanuts, tree nuts, and herbs
- Not including food grains (ex: barley, corn, sorghum, oats, rice, rye, wheat, amaranth, quinoa, buckwheat, oilseeds)

Excluded Produce

- Personal or on-farm consumption
- Commercial processing
  [provided method and documentation as per §112.(b)(2) – (b)(6)]
- Foods rarely consumed raw (exhaustive list):
  asparagus; black beans, great Northern beans, kidney beans, lima beans, navy beans, and pinto beans; garden beets (roots and tops) and sugar beets; cashews; sour cherries; chickpeas; cocoa beans; coffee beans; collards; sweet corn; cranberries; dates; dill (seeds and weed); eggplants; figs; horseradish; hazelnuts; lentils; okra; peanuts; pecans; peppermint; potatoes; pumpkins; winter squash; sweet potatoes; and water chestnuts
Small Business Exemptions

<table>
<thead>
<tr>
<th>Exempt</th>
<th>Qualified Exemption</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ $25,000 average annual <strong>produce sales</strong> (in previous 3 years)</td>
<td>&lt; $500,000 average annual <strong>food sales</strong> (in previous 3 years) and A majority (by value) sold directly to “qualified end-users” [112.3(c)]:</td>
</tr>
</tbody>
</table>

- Consumer (not a business)
- Restaurant or retail food establishment:
  - in the same state or reservation, or
  - within 275 miles of farm

Retail Food Establishment

An establishment that sells food products directly to consumers as its primary function *(annual monetary value to sales of food products directly to consumers exceeds the annual monetary value of sales of food products to all other buyers)*.

Examples:
- Farmers Market
- Roadside stand
- Community Supported Ag (CSA)
- Grocery store
- Convenient stores
Best Practices Transfer to Market

- Encourage good personal hygiene and hand washing
- Maintain proper product temperatures as best possible
- Avoid cross-contamination
- Educate consumers to wash products at home
- Encourage product labeling, handling instruction and source-identification

Knowledge Test

A farm sells $240,000 in grains to a grain mill for processing, and then also has a CSA that grosses $250,000 selling to members in the same state.

(A) Full Exemption
(B) Qualified Exemption
(C) No Exemption
Knowledge Test

Farm selling $475,000 in produce — $200,000 wholesale, $200,000 to a local restaurant, and $75,000 to a local grocery store.

(A) Full Exemption
(B) Qualified Exemption
(C) No Exemption

Qualified Exemption Requirements

1) Records claiming status (**EFFECTIVE NOW**)
   - Sales records including farm info, product, date and buyer
   - Annual review with signature and date from farm manager

2) Food packaging label (by 2020)
   - Farm name
   - Complete business address where food grown
   - Displayed “prominently and conspicuously” on label, poster, sign, placard, documents or electronic invoice

3) Compliance/Enforcement

4) Exemption Withdrawal/Reinstatement. FDA will:
   - Provide written notice of circumstances
   - Give owner opportunity to respond
   - Consider how farm address circumstance
Rules Finalized, Compliance Staggered

<table>
<thead>
<tr>
<th>Year</th>
<th>Signed</th>
<th>Draft</th>
<th>Final</th>
<th>Last Date of Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Farm Size (annual produce sales) | Covered Farms
--- | ---
Large (> $500,000) | Jan 2018*
Small ($250,000 < $500,000) | Jan 2019*
Very Small (< $250,000) | Jan 2020*

*Two additional years to meet water standards

Includes Labeling Requirement for Qualified Exempt Farms

Compliance and Enforcement

Roger Beekman
Produce Safety Program Manager
producesafety@agr.wa.gov or (360) 742-8472
http://agr.wa.gov/FoodAnimal/ProduceSafety/
FSMA Sets the Floor, GAP Sets the Ceiling

Good Agricultural Practices (GAP)

FDA Produce Rule
“*You must take appropriate measures to minimize the risk of serious adverse health consequences or death from use of, or exposure to covered produce, including those measures reasonably necessary to prevent the introduction of known or reasonably foreseeable hazards into covered produce, and to provide reasonable assurance that produce is not adulterated*” (§112.11)

More Similarities than Differences

<table>
<thead>
<tr>
<th></th>
<th>GAP</th>
<th>FDA PR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sales Records (Qualified Exemption)</td>
<td>✔️</td>
</tr>
<tr>
<td>2</td>
<td>Employee Training</td>
<td>✔️</td>
</tr>
<tr>
<td>3</td>
<td>Water Monitoring &amp; Testing</td>
<td>✔️</td>
</tr>
<tr>
<td>4</td>
<td>Manure &amp; Compost Management</td>
<td>✔️</td>
</tr>
<tr>
<td>5</td>
<td>Cleaning &amp; Sanitation Schedules</td>
<td>✔️</td>
</tr>
<tr>
<td>6</td>
<td>Monitoring and Corrective Actions</td>
<td>✔️</td>
</tr>
<tr>
<td>7</td>
<td>Food Safety Plan</td>
<td>✔️</td>
</tr>
</tbody>
</table>
Water Testing Frequency

<table>
<thead>
<tr>
<th>Water Source</th>
<th>Municipal</th>
<th>Ground</th>
<th>Surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test per Year</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- **GAP**
- **FSMA**

Quality Standards Based on Use

**Production or Irrigation**
- Direct application method where produce is likely to or intended to contact covered produce (harvested or harvestable part of product)

**Harvest or Post-Harvest**
- Produce washing
- Food contact surfaces
- Cooling/Hydrating
- Hand washing
- Treated agricultural tea
- Irrigating sprouts

**Standard**
- Geometric Mean (GM): \( \leq 126 \text{ CFU generic E. coli} / 100 \text{ mL } H_2O \)
- Standard Deviation (STV): \( \leq 410 \text{ CFU generic E. coli} / 100 \text{ mL } H_2O \)

Zero detectable E. coli in 100 mL of agricultural water
## Compost App Best Practice

<table>
<thead>
<tr>
<th>Type</th>
<th>Application Timing</th>
<th>Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>USDA GAP</td>
<td>No time interval</td>
<td>No time interval (depends on inputs)</td>
</tr>
<tr>
<td>FDA Produce Rule</td>
<td>No time interval</td>
<td>Scientifically valid treatment process:</td>
</tr>
<tr>
<td>National Organic</td>
<td></td>
<td>(1) On-farm time, temperature, turnings, etc. records</td>
</tr>
<tr>
<td>Standard</td>
<td></td>
<td>(2) Supplier analysis reports on production/handling</td>
</tr>
<tr>
<td>Treated/Stabilized</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Untreated/Raw Manure</td>
<td>2 week prior to planting or minimum 120 days prior to harvest</td>
<td>120 days for crops in contact with soil</td>
</tr>
<tr>
<td></td>
<td>Recommend National Organic Standard until further research</td>
<td>90 days for crops not in contact with soil</td>
</tr>
</tbody>
</table>

### Actionable Next Steps

1. Keep sales records (qualified exemption status)
2. Post hand washing signage near bathrooms
3. Inspect agricultural water sources at least annually and consider water testing
4. Adopt practices to mitigate animals from crop fields
5. Consider compost type and application method
6. Call for assistance or interest in hosting workshops in your area
Contact Info

Karen Ullmann
On-Farm Food Safety Specialist
Washington State Department of Agriculture
Regional Markets Team
kullmann@agr.wa.gov
(206) – 256 – 6151
agr.wa.gov
wafarmtoschool.org