Best Practices: Food Safety & Regulations for Value-Added Food Production in Vermont
VT New Farmer Webinar Series

http://www.uvm.edu/newfarmer

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Outline

• State Food Regulations
• Federal Food Regulations
• Food Safety Best Practices
Foodborne Illness (FBI)

- Each year, CDC estimates 1 in 6 people get sick from foodborne illness
  - ~48 million get sick
  - ~128,000 are hospitalized
  - ~3,000 deaths
  - Highly under-reported
- Large outbreaks occurring recently
- Does occur in small-scale ag
Persons of interest

- Young - day care facilities
- Old
- Pregnant
- Sick - chronic illness, immune disorder
Which Food Regulations??

- If selling in state, need to meet state regs
- Out of state: federal requirements
  - No size exemptions
  - FSMA proposed rules- upcoming slides
- Selling to grocery stores/coops, distributors- check with buyer!
- Restaurants- state regs
- Farmers Markets- fact sheets
VT Health Dept Regs

• Food processor license if selling >$10,000/year
  – Scheduled process- low acid, acidified foods
• Bakery license if selling >$6,500/year
• Juice
  – Food processor license if >$10,000
  – HACCP plan requested (required if out of state)
• Seafood
  – No size exemption, HACCP plan required
VT Ag Agency Regs

- Dairy, maple, pet food
  - No size exemptions
  - Specific regs for each

- Meat: >3% meat or poultry by raw weight
  - HACCP plan required (for selling meat)
  - Poultry exemption: < 1000 birds- no inspection
  - More details in meat fact sheets

- Ag also responsible for all labeling
Applying for state licenses

- [www.uvm.edu/extension/food/](http://www.uvm.edu/extension/food/)
  - Food Safety for Producers and Processors
- Publications

Food Safety

Food Safety Requirements for Vermont Food Processors

UVM Extension Fact Sheet - Revised November 2012

Starting a specialty food business can be very rewarding, but it also requires a great deal of planning and attention to details, including meeting food safety regulations.

The regulations you need to meet depend on the type of food and processing method and where you are selling it. If you are selling food products within Vermont, you need to meet state regulations as listed below. If you are selling products within and outside of Vermont, you must meet state and federal requirements. In addition, selling to the following venues entails specific requirements:

- **Restaurants, grocery stores/coops, distributors:** Check with your buyer on their requirements, as they may be stricter than state or federal requirements.

- **Farmers Markets:** Detailed information on the food safety requirements, as well as recommended best food safety practices for selling at Vermont Farmers Markets are included in UVM fact sheets on this subject.

Restaurants and caterers must also meet specific food safety requirements of the Department of Health to sell their food products. If you are selling products to restaurants or caterers, the product sold will need to be licensed (see more information on licensing below).

Note that products such as fresh fruits and vegetables do not currently
USDA Regulations

• Meat: >3% meat or poultry by raw weight
  – Or > 2% meat by cooked weight
  – HACCP plan required
  – No size exemptions
  – VT Meat inspection “equal to” USDA inspection

• Nutrition facts labeling requirement: Mar 2012
  – Major whole muscle cuts, products with >2 ingredients
  – Ground products (from small processors) exempt
FDA Regulations

• No size exemptions
• Processed foods, baked goods
• Dairy products, maple syrup, pet food
  – Regulated by Agency of Ag in VT
• Seafood, fruit juice
  – HACCP plan required
Registering with FDA

• Obtain licensing from VT Agency
• Register on-line: free
• Re-register every 2 years (fall of even years)
• FDA may inspect your facility (~1x /7 years)
• Must meet GMPs
  – Code of Federal Regulations (CFR) Title 21 Part 110 (google)
# Preventative Controls: What is Covered

<table>
<thead>
<tr>
<th>Type of operation</th>
<th>Preventive Control Requirements</th>
<th>Good Manufacturing Practices (GMPs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jams, jellies, honey, maple syrup</td>
<td>Exempt</td>
<td>Must comply</td>
</tr>
<tr>
<td><strong>Juice/ cider</strong></td>
<td>Follow current HACCP requirements</td>
<td>Must comply</td>
</tr>
<tr>
<td>Processed food sales of &lt;$500,000/ year AND majority of sales direct to consumer</td>
<td>~Comply with state laws</td>
<td>Must comply</td>
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<tr>
<td>(or restaurant or retail store) &lt;275 miles away.</td>
<td></td>
<td></td>
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<tr>
<td>A very small business. Three definitions being proposed: &lt;$250,000, &lt;$500,000,</td>
<td>~Comply with state laws</td>
<td>Must comply</td>
</tr>
<tr>
<td>or &lt;$1,000,000 total annual sales of food.</td>
<td></td>
<td></td>
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<tr>
<td>Activities within the definition of “farm” (production of food)</td>
<td>May be covered by Produce Safety rules Exempt</td>
<td>Exempt</td>
</tr>
<tr>
<td>Warehouses only storing packaged foods that are not exposed to the environment</td>
<td>If refrigeration is not required for safety:</td>
<td>Must comply</td>
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<tr>
<td>(production of food)</td>
<td><strong>exempt.</strong></td>
<td></td>
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<tr>
<td>Warehouses that store raw fruits and vegetables intended for further distribution</td>
<td>Generally, must comply</td>
<td>Exempt</td>
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<tr>
<td>or processing.</td>
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Preventative Controls- FSMA

• IF covered, need the following:
  – Written food safety plan similar to a HACCP plan
    • “Preventative controls plans” require monitoring, records, and corrective actions for items such as food allergen controls, sanitation and a recall plan.
  – Comply with updated Good Manufacturing Practices (GMPs) (important for everyone!)

• If NOT covered, why is this important?
  – State may be updating its regulations
  – Buyers will likely increase requirements
Other steps to starting...

- Contact town/ city clerk for local zoning restrictions, licensing, permit requirements
- Other agencies to contact:
  - **Environmental Conservation- waste water**
  - Dept of Public Safety- Electrical, fire, plumbing
    - Must be in compliance with above 2 for licensing
  - Taxes
  - Secretary of State- name of business

www.healthvermont.gov/enviro/food_lodge/food_lodge_guide.aspx
Food Safety Best Practices

• Use Good Manufacturing Practices (GMPs) and associated programs (21 CFR 110)
  – Basic sanitary and processing requirements needed to ensure production of wholesome food
    • Good idea for everyone to follow
  – Needed to meet current and future state, federal regulations: USDA and FDA
  – Pre-requisite for HACCP programs
    • Required for some food products and by some buyers
Good Manufacturing Practices
Buildings and Facilities

- Grounds – free of weeds, good drainage.
- Facilities – cleanable surfaces, good ventilation and lighting, chemical control.
- Well-maintained handwashing and restroom facilities.
- Water – potable, backflow prevention.
Equipment and Utensils

- Sanitary design: constructed of adequately cleanable materials, food-grade, suitable for intended use, precludes contamination
- Equipment installed and maintained to facilitate cleaning of equipment and adjacent areas
- Use only food-grade lubricants
Personnel

• Disease Control
  – No sick workers
  – Prevent contamination (open sores, wounds).

• Hygienic Practices
  – Handwashing and personal cleanliness.
  – Hair restraints, no jewelry or loose articles.
  – No eating, drinking, tobacco products in production.
  – Proper attire (gloves, aprons, uniforms).
Raw Material/Supplier Control

Systems to check incoming raw materials, assure that suppliers have effective food safety programs.

– Written specifications are in place for ingredients, packaging, and chemicals.
  • Need food grade packaging, appropriate for use
– Inspection procedure for incoming loads.
– Procedures for handling and storage.
  • At proper temperature, clean conditions, etc.
Process control

- Use First In- First Out (FIFO)
- Date and log incoming products
- Store materials in safe manner
  - Written SOPs for handling and storage of raw materials, in-process product and finished product
  - Including time/temperature control
SSOPs – Sanitation Standard Operating Procedures

• SSOPs should be in place for the cleaning and sanitizing of all food processing equipment.
  – Need to document what you are doing!

• A Master Sanitation Schedule for verification of routine cleaning
  – Include areas needing periodic cleaning such as coolers and storage facilities
Allergen Control Program

System in place to control allergens

8 Major Allergens
- Peanuts
- Tree Nuts
- Milk (Dairy)
- Wheat

- Soy
- Fish
- Crustacean shellfish
- Eggs
Allergen Control Program

• Raw materials containing allergens are properly labeled and stored.

• Movement of allergen-containing ingredients within facility is controlled to not cause cross contamination.

• Sanitation procedures to ensure complete removal of allergens from equipment.

• Procedures to ensure the labeling of finished product and rework containing allergens.
Pest Control Program

An effective program that controls pests (ex. Insects, rodents, birds).

1. Prevent entry into facilities.
2. Deny them food and water sources.
3. Exterminate as necessary.

Use of a licensed, insured PCO (Pest Control Operator) recommended.
Chemical Control Program

Cleaners, sanitizers, lubricants, pesticides, and all other non-food chemicals.

• Properly labeled- all containers.
• Properly stored- away from food.
• Properly used.
  – Put away food and packaging or cover before cleaning or using chemicals
  – Use according to label instructions
Glass Control Program

Program to control glass and glass-like (brittle plastic) foreign material.

• Cover glass light bulbs
• Monitor glass packaging and other glass in facility
  – Try to prevent or at least detect breakage
Foreign Material Sources

• Metal
  – Nuts, bolts, mixers, knives, thermometers, grinders

• Wood
  – Crates, pallets

• Plastic
  – Box bands, packaging, broom handles

• Hair, gum, jewelry, pens, cigarette butts, etc.
  – Poor personal hygiene
Foreign material control

- Visual inspection
  - Raw materials during receiving
  - In process - carefully add ingredients to products
  - Final product/ outgoing food

- Good personal hygiene

- Practice good housekeeping
  - watch for potential contaminants
Traceability and Recall

Need to know:

• Where your ingredients came from
• Which ingredients went into every batch of product
• Where your products are going

Needed in case of a recall (of ingredients or your product)
Traceability and Recall

Needed elements:

• Accurately documented receiving and tracking of ingredients through facility (handout)

• Lot coding system
  – May be one day of production, one batch, etc.

• Accurately documented distribution (next slide)

• Plan in place to conduct the recall process, verified with mock recall.

• Crisis response plan in place.
Distribution Record example

<table>
<thead>
<tr>
<th>Buyer</th>
<th># Cases</th>
<th>Bottles/Case</th>
<th>Jar Size</th>
<th>Shipper</th>
<th>Shipping Parameters (2-day, refrigerated, etc.)</th>
<th>Date Sent</th>
<th>Initials</th>
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</table>

Product Name: _______________________________  Finished Product Code: __________________

Signed:  Date:
Reviewed  Date:
Other Prerequisite Programs

Complaints – System to log, track, and trend consumer complaints for appropriate corrective action.

Labeling – System to ensure proper labeling.

Food defense/ Security- Prevention of intentional contamination of food.
Additional information

- UVM Extension Food Safety information
  - Upcoming trainings
  - Fact sheets
  - Links
    - [www.uvm.edu/extension/food/?Page=food_safety.html](http://www.uvm.edu/extension/food/?Page=food_safety.html)

- VT Food Safety Task Force
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