Creating a Food Safety Culture for RI Farmers Markets

good practices for vendors

Sejal Lanterman
Community Engagement & Outreach Coordinator
Why Food Safety Matters

People most at risk

• Infants & children
• Pregnant women
• Elderly
• People with a weakened immune system
Why Food Safety Matters

For vendors!
Why Food Safety Matters

We are eating more fruits and vegetables.

National increase in Farmer’s Markets
Why Food Safety Matters

Foodborne Illnesses

• Cases: 48 million cases per year (1 in 6 people)

• Hospitalizations: 128,000 per year

• Deaths: 3,000 per year
Why Food Safety Matters

Foods that sickened people in outbreaks, 2009-2013

- Eggs 13%
- Chicken 12%
- Fruits 11%
- Beef 8%
- Pork 8%
- Vegetable row crops 7%
- Turkey 7%
- Dairy 7%
- Seeded Vegetables 5%
- Fish 5%
- Grains-Beans 3%
- Sprouts 3%
- Other 7%
- Mollusks 3%

Source: CDC National Outbreak Reporting System, 2009-2013
Why Food Safety Matters

Produce Outbreaks by Item, 1998-2008

- Leafy greens: 34.1%
- Tomatoes: 17.1%
- Melons: 15.9%
- Herbs: 8.5%
- Berries: 8.5%
- Others: 9.8%
- Green onions: 3.7%
- Unknown: 2.5%

Source: FDA 2009
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Common pathogens & incubation period

– Norovirus 12-48 hours
– Salmonella 6-72 hours
– E.coli 0157:H7 1 to 10 days
– Listeria 3-70 Days

Source: From E. Julian talk, 2012, Food Safety conference
Why Food Safety Matters

Top Five Foodborne Illness Risk Factors

1. Improper hot/cold holding temperatures of certain foods.
2. Improper cooking temperatures of food
3. Dirty and/or contaminated utensils and equipment
4. Poor employee health and hygiene
5. Food from unsafe sources

http://ocfoodinfo.com/illness/risk
Examples of Farmer’s Market Outbreaks

1. 2002, Colorado, Farmers Market
   - E. coli 0157:H7, linked to produce samples, 14 ill, 2 children required dialysis

2. 2003, Canadian Farmer’s Market
   - E. coli 0157:H7, cheese vendor

3. 2010, Iowa Farmer’s Market
   - Salmonella, Salsa, Guacamole, Tamales, 5 markets affected, 25 illnesses, hospitalizations

4. 2008 Alaska Farmer’s Market
   - Campylobacter, Peas, 5 markets affected, 18 illnesses

Source: www.foodsafetynnews.com
What license do I need to sell at a Farmers Market in Rhode Island?
Requirements

No license is needed if you are selling whole UN CUT produce or honey.*

*Unless you are giving out cut produce samples, then a Retail Food Peddlers license is needed.
Farm Home Food Manufacturer License

- Allows farmers to produce certain types of products in their residential farm home kitchen to be sold at farmers’ markets and farm stands.
- Limited to the types of food you can produce.
- NO ACIDIFIED or LOW-ACID HOME CANNED PRODUCTS are allowed (i.e. salsa, soups, tomato sauce, pickles)
Examples of foods you can produce with this license

- Candies and fudges
- Double crust fruit pies (made with RI grown fruit)
- Dried herbs and spices
- Jams, jellies and preserves (made with RI grown fruit and vegetables)
- Maple syrup (from trees on farm or trees within 20 mile radius of farm)
- Vinegars (with herbs grown in RI)
- Yeast breads
Requirements

Food Service Mobile License

- Allows for the sale of food by food truck operators.
Requirements

Retail Food Peddler’s License

- Allows for food products (sold or given as free samples) from a licensed retail, wholesale facility, or foodservice operation for direct sale/service to the consumer at another site (e.g. farmers’ market).*
Requirements

Food Processor License OR a Food Service License

• Allows vendors to process or prepare food products at their licensed processing or food service operation.

A Retail Food Peddler’s License IS needed to bring these products to the farmers’ market!
How can I sell fish at a RI Farmers’ Markets?

- Fresh fish **CANNOT** be directly brought from off the boat. It must first go to a licensed food processor following seafood regulations.

A Retail Food Peddler’s License **IS** needed to bring these products to the farmers’ market!
Requirements

Dealer’s License for Shellfish Businesses
(for shipper, reshipper, repacker, shucker/packer)

- Required for sale of shellfish as wholesale.
- Shellfish harvester tags must be kept on file per regulatory requirements

A Retail Food Peddler’s License IS needed to bring these products to the farmers’ market!
Selling Shellfish without a Dealers License

- A Food Processor license or a Food Service License is required.
- Shellfish harvester tags must be kept on file for 90 days.

A Retail Food Peddler’s License IS needed to bring these products to the farmers’ market!
**Requirements**

**Farm Warehouse License** (meat products)

- Allows farmers to take their animals to a USDA slaughterhouse and then to a licensed meat packing plant, where it must be packaged and frozen.

A Retail Food Peddler’s License IS needed to bring these products to the farmers’ market!
Sources of Potential Risks

- Water
- Products
- Animals
- Vendor hygiene
- Consumer contamination
- Product displays
- Transportation
- Airborne Contaminates
- Food sampling
When should vendors wash their hands?
• **Before**, during, and after preparing food
• **Before**, eating food
• **Before**, and after caring for someone who is sick
• **Before**, and after treating a cut or wound
• **Before**, putting on single-use gloves
• **After**, eating
• **After**, using the toilet
• **After**, blowing your nose, coughing, or sneezing
• **After**, touching an animal, animal feed, or animal waste
• **After**, touching garbage
How should you wash your hands?

• **Wet** your hands with clean, running water (warm or cold), turn off the tap, and apply soap.

• **Lather** your hands by rubbing them together with the soap. Be sure to lather the backs of your hands, between your fingers, and under your nails.

• **Scrub** your hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.

• **Rinse** your hands well under clean, running water.

• **Dry** your hands using a clean towel or air dry them.
Handwashing station

Set-up includes a;

- Container with a continuous flow spigot filled with potable (drinkable) water
- Bin to collect wash water
- Soap
- Disposable paper towels
- Garbage can

Hand-sanitizers are NOT as effective as handwashing!
Gloves can be helpful for avoiding bare-hand contact with food, but keep in mind;

- Gloves are capable of spreading pathogens
- Gloves are NOT a substitute for washing hands
- Gloves must be used for single task & discarded
- Gloves must be non-latex in RI (allergies)
Best Practice: Implement good personal hygiene!
Make sure you have a clean body, hair, and clothes. Open sores should be covered and vendors should be free from any signs of illness.
More recommendations

• Vendors should not be smoking or eating while selling and/or handling food.
Handling Money

Best practice:
- Have one person be responsible for the money.
- Only person at your booth? Use tongs to gather your food product instead of your hands that are constantly handling money. You could also use single-use gloves.
- WASH HANDS OFTEN!
Customers

What about my customer’s touching and possibly contaminating my product?

**Best Practice:** Don’t allow or limit customers touching/handling your product. You could also make sure consumers have access to a hand washing station with signage for how to properly wash hands. You could even mention that “**Food Safety is a Priority at our Market.**” Please wash your hands before entering market. Hand sanitizers are not the best choice.”
Customers

Food safety is a shared responsibility.

We work hard to keep our produce clean and you should too. Please wash before eating.

Post a simple sign to get your message across!
Since 2000, petting zoos and organized farm visits around the U.S. have caused at least 32 publicized outbreaks of E. coli, Salmonella and Cryptosporidium.

Between 1996 and 2010, CDC received reports of approximately 150 animal-to-human disease outbreaks in public settings.

Source: foodsafetynews.com
Example of ‘Petting Zoo’ Outbreaks*  
(*not from farmers markets)

1. Cleveland County Fair, NC
   – E.coli 0157:H7, 106 illnesses, 1 toddler died

2. A Pumpkin Patch in Washington State
   – E.coli 0157:H7, 4 children tested positive, 5 other reported illnesses
     • Breakout occurred even after new sinks were installed and hand washing signs and information about the risks were posted around the farm.

3. North Carolina State Fair
   – E.coli 0157:H7, 108 illnesses

4. Oak Leaf Dairy Goat Farm, Connecticut March 2016
   – E.coli 0157:H7, 15 confirmed illnesses
**Best Practice: Don’t have one!**

If you still plan on having live animals keep them segregated from food and vendors and, ideally, located downwind from foods being sold in the market.
Petting Zoos—More recommendations

- Food should not be allowed to be consumed in animal area

- Have a hand-wash station with signs reminding people to wash hands after leaving animal area. Hand sanitizers are not the best choice!
Reusable bags and containers

Bags for customers to bring home food products
• Make sure single-use bags you supply for food sales are food grade.
• Reusable bags can harbor pathogens, especially if it had raw meat in them.

Reusable Containers
• Best Practice: Do not reuse containers for customers. Containers can harbor harmful pathogens. Some can be sanitized and some cannot.
Cross Contamination

- Keep raw meat, poultry, eggs and seafood are segregated from ready-to-eat foods such as fresh produce, baked goods, sandwiches etc.
Eggs

- Should be kept at 41 degrees F or lower.
- Cartons should be single-use.
- Keep a thermometer in your cooler.

**Best Practice for Vendors:** Keep a record of when you took the temperature and what the temperature was at that time. **Vendors are the primary person responsible for taking the temperatures.**

**Best Practice for Managers:** Is to occasionally check in with vendors to make sure they are monitoring and recording temperatures.
**READY-TO-EAT FOODS**

**Ready-to-eat foods:** Are foods that do not need any further processing prior to eating. Examples are salad, cut fruits, cut vegetables, baked goods, nuts spices, soup, pasta, deli meats etc.

**Best Practice:** If you are preparing foods ahead of time, must be in commercial kitchen or licensed facility. If your processing on site i.e. cutting, then a 3 bay-set up and handwashing station is required. A 3-bay set up is not needed if you are using disposable cutlery that you are throwing out often.

**Labeling Products**
- Company name and address, name of food product, ingredients (listed by weight in metric and us equivalent in order of high to low) and allergens.

**Handling ready-to-eat foods**
- NO bare-hand-contact with ready-to-eat foods, such as sandwiches, pizza etc.
- Use utensils, napkins or single-use latex free gloves

**Reminder:** A food Service, Food Processor or Mobile Food License is needed to serve ready-to-eat foods!
If a Ready-to-Eat Product Requires Temperature Control

**Best Practice for Vendors:** Keep a record of when you took the temperature and what the temperature was at that time. *Vendors are the primary person responsible for taking the temperatures.*

**Best Practice for Managers:** Is to occasionally check in with vendors to make sure they are monitoring and recording temperatures.
Potable (drinkable) water must be used to wash, rinse and sanitize.

Washing and sanitizing agents should be safe and food-grade.

Use chlorine sanitizer test strips to confirm the correct concentration of sanitizer is prepared. Monitor over time with use.

To wash, rinse and sanitize:

• Remove soil and food debris from item(s) to be cleaned and sanitized.
• Wash item(s) in soapy water.
• Rinse the item(s).
• Immerse items(s) in sanitizer for 1-2 minutes.
• Air dry items and prevent recontamination.
Foods Cooked on Site for Consumption

What do I need?
• Everyone needs a Food Peddlers license (make sure you have a copy on site).

What else is required?
• A Food Service license or a Food Processor license or a Mobile Truck license.
• If you don’t have a food service, food processor or mobile truck license you can still cook on site, but a food peddlers license is still needed and MANY questions, regarding products you are cooking and methods you are using, will be asked by the Department of Health as you fill out your application.
  • Food to be cooked are not allowed to come from your home. You either need to purchase it that day or prove that it is being stored in a licensed facility.

For all of the scenarios above a 3-bay sink and a handwashing station is required. If you are using disposable utensils, that will be thrown out often, a 3-bay sink is not needed.
Temperature of Foods Cooked on Site for Consumption

**Best Practice for Vendors:** Keep a record of when you took the temperature and what the temperature was at that time. **Vendors are the primary person responsible for taking the temperatures.**

**Best Practice for Managers:** Is to occasionally check in with vendors to make sure they are monitoring and recording temperatures.
In 2000, 14 people who sampled produce offered at a Fort Collins, Colorado Farmers Market were made ill by a harmful bacteria, E. coli 0157:H7. *

*The University of Tennessee
The right way!
Over ice, small amount out at a time and use of toothpicks.

The wrong way!
Recommendations for Farmers

• **Uncut produce samples**: Best practice is to serve the samples individually in a single-serving container or by using toothpicks i.e. cherry tomatoes.

• **Cut produce samples***: Must be prepared at farmers’ market either using a 3-bay sink and a handwashing station OR using single-use knives that are disposed of often (every 2-4 hours depending on if it is cold or warm outside).
  • Cut samples require temperature control for safety. Samples should be kept at 41 degrees or lower in a cooler and taken out or cut as needed.

* A Retail Food Peddlers license is needed if you are giving out cut samples of your produce.
Recommendations for all other food-related vendors (sold or provided as free samples)

**Best Practice:** Prepare individual samples in the on-farm residential kitchen or licensed commercial kitchen, prior to arriving at the market. Serve the samples individually in a single-serving container or by using toothpicks.

**Preparing sample at Farmers Market:** Using a 3-bay sink and a handwashing station OR using single-use knives that are disposed of often (every 2-4 hours depending on if it is cold or warm outside).

- Some foods require temperature control for safety at 41 degrees or lower in a cooler and taken out as needed.
- Discard samples that have sat out for 2-4 hours depending on how warm it is outside.
- Individual labels for samples is not necessary, but you need to have ingredient list on display or on label packages identifying allergens.
Best Practice:
Keep all foods off the ground/floor during storage and display. All produce and foods should be kept at least 6 inches off the ground to prevent contamination.
Produce Containers

**Best Practice:** Containers should be easy to clean and sanitize between uses. Plastic crates are best, but single-use cardboard boxes, plastic clamshells or mesh bags is a good alternative to wooden containers.
All loads should be covered or enclosed with a cap or tarp for transporting food products. Overloading could bruise products potentially effecting quality and the food safety of your product.
Transportation

Trucks, vans or other vehicles used to transport products for consumption should be free from:

- Dirt
- Food
- Residue
- Livestock
- Domestic animal debris
- Chemicals
- Fertilizers
- All other potential contaminates
Food Safety Begins on the Farm

Three major factors that can contribute to the risk of produce contamination on the farm.

1. Manure Management
2. Water source and usage
3. Farm working health and hygiene
Questions?

You can also contact us at
urifoodsafety@etal.uri.edu!

Visit the URI Food Safety Education Website
web.uri.edu/foodsafety
References


University of North Carolina Extension

Cornell University Extension

A Microbiological Comparison of Poultry Products Obtained from Farmers' Markets and Supermarkets in Pennsylvania--

UVM Extension
http://articles.extension.org/sites/default/files/Farmers%20Market%20food%20safety_ETC_webinar_April%202013.pdf

http://ocfoodinfo.com/illness/risk

Farm Home Food Manufacture http://webserver.rilin.state.ri.us/Statutes/title21/21-27/21-27-6.1.htm and application