

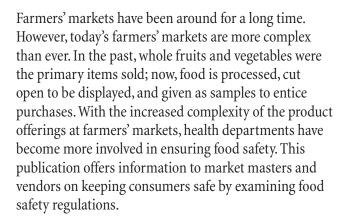
PURDUE EXTENSION

EC-740

Food Safety Regulations for Farmers' Markets

Christa Hofmann and Jennifer Dennis Department of Agricultural Economics Purdue University

A. Scott Gilliam and Shirley Vargas Indiana State Department of Health



Classification of a Farmers' Market

Food safety issues are governed by the retail food establishment requirements known as Indiana State Department of Health (ISDH) Rule Title 410 IAC 7-24, Retail Food Establishment Sanitation Requirements. This document provides a primary statewide foundation for all retail food establishments, including farmers' markets; however, each local county health department may handle the regulations for farmers' markets differently. The local health department will have the necessary information.

The state classifies a farmers' market as a temporary food establishment, which is defined as a retail food establishment operating in conjunction with a single event or celebration for no more than 14 consecutive days, and with the approval of the organizers of the event. The local health department issues permits for farmers' markets in accordance with relevant county or city ordinances.



Permits

Permits can be issued to both the vendor and the farmers' market as a type of regulatory tool to control which vendors have met the requirements of the food code. Think of the permit as a driver's license, where the driving test has to be passed and a fee must be paid before someone becomes a licensed driver. Vendors should not consider food permits as something they automatically receive upon paying the fee. While some local health departments operate this way, technically, the permit should not be approved until the operation has been inspected. Permits may also be suspended or revoked for failure to comply with the food code.

Selling Food Products

Some products sold at farmers' markets can present a risk to consumers, depending on how the product is prepared and sold. Each market master should decide which products can and cannot be sold and should include this information in the bylaws or rules for his or her market. Market masters should think about the following:

- Will the market allow processed foods?
- Will there be food preparation on site?
- Will the market allow food samples to be given away?
- Is the base of operations, where the food is stored or prepared away from the market, permitted and inspected?







"Ready-to-Eat" Versus Food That Needs Further Preparation

Foods that need further preparation are sold fresh from the farm, unprocessed, and not yet cleaned. These products require cleaning and preparation before they are consumed. Examples include sweet corn, peppers, and potatoes.

Ready-to-eat foods like apples and grapes increase risk, and more food safety protection is required. Ready-to-eat foods are foods that will not have another treatment, such as heat, to kill pathogens that may be in or on the food. Examples of these foods are salads, some fruit and vegetables (apples and grapes), baked goods, nuts out of the shell, sandwiches, open cheese, dips, and so on. These products must be closely regulated because they present more risk of contamination.

Other sources of risk include:

- Home-canned foods and other foods that are packaged in an anaerobic environment, such as vacuum packaging, which presents a higher risk for botulism
- A food handler with contaminated hands, which has been identified as a leading cause of foodborne illness

Bare hand contact with ready-to-eat foods is prohibited except in very few defined situations, such as deveining shrimp. Utensils such as tongs, forks, and single-use gloves must be used to prevent food from being in contact with bare hands. The Centers for Disease Control (CDC) and Food and Drug Administration (FDA) strongly recommend three barriers when handling ready-to-eat foods:

- 1. Ensuring that no food handlers are ill
- 2. Promoting effective hand washing by food handlers
- 3. Avoiding bare hand contact with ready-to-eat foods

Packaging and Labeling

Any packaged food sold at a farmers' market that includes more than two ingredients, including both ready-to-eat and processed food, should have a label. The label must provide the following.

- The common name for the food product
- A list of ingredients if there are more than two, given in descending order of predominance by weight
- Quantity specifications, given in weight, volume, or pieces
- The name and complete address of the business

Health claims should be avoided on packaging. Claims such as "heart healthy," "light or low fat," or "sugar free" must be substantiated by the nutritional facts on the label. It is acceptable, however, to claim added or left out ingredients, such as including "no sugar added" on the label.

Risky Foods

Certain types of food allow for the rapid progression and growth of pathogens and are deemed "potentially hazardous foods." Foods classified in this category include dairy products, meat, poultry, game animals, seafood, eggs, sliced melons, raw sprouts, cut tomatoes, tofu, and garlic-in-oil mixtures. These products must be kept at proper temperatures to keep consumers safe. Proper temperatures for these foods or products can be found on the Indiana State Department of Health's Web site http://www.in.gov/isdh/regsvcs/foodprot/.

Meat, poultry, rabbit, wild game, dairy, and egg products should always be transported to and from the market in a refrigerator or freezer and must be from an establishment inspected by the Indiana Board of Animal Health, Indiana State Egg Board, or the USDA.

Processed foods that may pose a high risk of botulism include (but are not limited to) sauces, dressings, fruit butters, pickles, salsa, soup, and dips. The Indiana State Department of Health, the FDA, or Local Health Department must inspect these foods to ensure safe preparation and handling practices. Purdue University offers an annual training class in West Lafayette, IN called "Better Process Control School." The class explains the hazards of producing "risky foods" and methods to manufacture such foods safely. Information is available at http://www.foodsci.purdue.edu/outreach/. A list of Process Control Authorities on the State Department of Health's Web site (above) helps food processors locate assistance.



Processed foods to be sold at a farmers' market should be prepared at an off-site location, such as an inspected certified or commercial kitchen. These facilities can be either independent, inspected church kitchens or other retail or wholesale food establishments. Each vendor should make arrangements with the appropriate personnel to use these facilities. Private kitchens cannot be used for processed foods.

Food that is prepared for immediate consumption at the market must also be prepared using proper precautionary measures. Cutting produce, preparing samples for consumers, preparing sandwiches, and handling baked goods are all considered food handling. Food must be protected during every stage of the preparation and handling process. Food should be kept at proper temperatures to ensure safety. More information about proper temperatures can be found in the bacterial control chart in Appendix A or the State Department of Health's Web site.

Protective Coverings for Vendor Booths

Open foods sold at a farmers' market, such as sliced or cubed cheese, should have some form of overhead protection covering the display area, especially if the food is prepared on-site. Overhead awnings are also suggested and are an additional measure of protection. Although food samples are a good way to increase trial and purchase of a product at the farmers' market, this practice must be performed with extreme caution. Food preparers, consumers' hands, and insects are major sources of food sample contamination. All vendors are required to have clean and sanitized utensils. Hand-washing facilities are also necessary for vendors. Proper thawing of potentially hazardous food is also required.

Hand Washing Facilities

Hand washing is the best way to prevent the spread of disease. Products such as hand sanitizers should not be used as a replacement for hand washing, but may be used as a supplement. Supplemental hand cleaners must be Generally Recognized as Safe (GRAS); otherwise, the product must be washed off after use. Hand washing stations require hot and cold potable running water, some form of hand cleaner (soap), disposable towels,

and a waste container. Vendors must wash their hands for at least 20 seconds. The facility must be accessible to all vendors at all times. There is no set requirement for the number of hand-washing stations required per person; however, the FDA recommends that facilities are within 25 feet, unobstructed, and convenient.

Infected Food Handlers

All vendors who handle food should note that it is absolutely imperative that any person experiencing symptoms of nausea, vomiting, diarrhea, fever, sore throat, or jaundice be excluded from handling any food products, utensils, single service paper goods, or linens. It is equally important that any person diagnosed with salmonellosis, shigellosis, *E. Coli* infection, hepatitis A, or norovirus infection be excluded. If a food handler is living in a household with someone who has been diagnosed with these illnesses, he or she should also be excluded from food handling. Lesions containing pus, such as a boil or infected wound, must be covered and protected with an impermeable cover with a single-use glove worn over the area (Sections 120-127 of the ISDH Rule 410 IAC 7-24).

Hot Food Hot, Cold Food Cold

There are specific guidelines for the cooking temperature and time of each type of raw, potentially hazardous food. Foods cooked on site at a farmers' market should meet all temperature and time requirements, because partial cooking is a grave danger. When held hot, potentially hazardous foods must be maintained at 135°F or above; cold food being held must be maintained at 41°F or below. Crock-pots and warming trays are not an acceptable way to cook foods; however, they are acceptable for holding purposes.

Food storage at a farmers' market is somewhat difficult due to the limited space available. Here are a few tips to help decrease the likelihood that food product contamination will occur.

- Be careful not to store ready-to-eat foods in direct contact with ice.
- Avoid storing raw foods in the same container as ready-to-eat foods.
- Drain ice continuously to avoid pooling water in the cold storage unit.



Leftovers

Leftover foods can be dangerous. Food products that will be stored and sold at the farmers' market should be rapidly cooled and then rapidly reheated. Foods that are held in the "Danger Zone" between 41°F and 135°F for too long must be disposed of due to the ability of bacteria to rapidly multiply between these temperatures. The requirements follow.

- Potentially hazardous foods must be cooled from 135°F to 70°F within two hours. The food temperature should then be decreased from 70°F to 41°F within the next four hours, with a total continuous cooling time of six hours.
- The reheating of potentially hazardous foods must be conducted in a unit that can rapidly reheat the food to at least 165°F within two hours or less.

Utensils

If utensils are used to chop, cut, trim, or otherwise process food in any way, they must be properly washed, rinsed, sanitized, and air dried upon completion or at least every four hours throughout the day. Guidelines recommend that extra sets of utensils be available, in order to avoid cleaning the soiled utensils on-site. The soiled utensils can then be brought back to the base of operations for the correct cleaning and sanitization (Appendix A).

Conclusion

A farmers' market is classified as a temporary food establishment. To regulate food safety, the health department follows ISDH Rule Title 410 IAC 7-24, the Retail Food Establishment Sanitation Requirements. This document provides the primary foundation for farmers' markets; however, each local county health department may enforce aspects of the regulations for farmers' markets differently, based on county or city ordinances. Local health departments are prohibited from prescribing any local sanitary standards beyond the state rule. Local health departments issue permits for the farmers' market as a regulatory tool to control which vendors have met the requirements of the food code.

Farmers' markets are a good outlet to connect consumers with farmers and local food products. However, the more complex the market becomes, the more risk consumers face. Local health departments are working with farmers' markets to ensure the safety of food for consumers.

Contact Information:

Board of Animal Health

Meat and Poultry Program (317) 227-0355

Dairy Program (317) 227-0350

Indiana State Egg Board (765) 494-8510

Indiana State Department of Health -

Food Protection Program (317) 233-7360



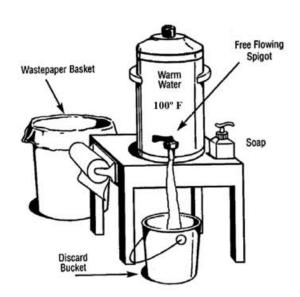
Appendix A

For complete information regarding handwashing and dishwashing requirements see 410 IAC 7-24.

HANDWASHING

At least one convenient handwashing facility must be available for handwashing on site <u>at all times</u>. This facility must consist of, at least, a container with 100° F potable running water (via spigot if sinks won't be utilized), a catch bucket for wastewater, soap, individual single-use paper towels, and a trash container for disposal of paper towels. Employees must wash their hands at all necessary times during food preparation and service as specified in 410 IAC 7-24, such as:

- · Prior to starting food handling activities
- · After using the restroom
- After sneezing, coughing, blowing your nose, eating, drinking, smoking, or touching a part of the body
- · After touching an open sore, boil, or cut
- · After handling money or other soiled items
- After taking out the trash or following any activity during which hands may have become contaminated.



DISHWASHING

Facilities must have provisions available to wash, rinse, and sanitize multi-use utensils, dishware and equipment used for food preparation at the site. Proper chemical sanitizer and the appropriate chemical test kit must be provided and used at each site. All dishes and utensils must be air-dried.

PROPER SET-UP



PROPER SANITIZER CONCENTRATIONS

Chlorine 25-200 ppm* Quaternary Ammonia 200 ppm*

lodine 12.5-25 ppm*

^{*} or as otherwise indicated by the Code of Federal Regulations (CFR) or by the manufacturer of the product.



For complete information on cooking, cooling or reheating, see 410 IAC 7-24

165°F for 15 seconds	Poultry and Foods Containing Poultry; Stuffed Fish, Meat or Pasta; Stuffing containing Fish or Meat; Food containing Game Animals		
165°F for 2 minutes	Microwave Cooking for Raw Animal Foods (covered, rotated, or stirred throughout or midway through the cooking process and held for 2 minutes covered)		
158°F for 1 second 155°F for 15 seconds 150°F for 1 minute or 145°F for 3 minutes	Injected Meats; Comminuted Meats (hamburger or sausage), Fish or game animal; Raw shell Eggs that are NOT prepared for immediate service (pooled or hot-held).		
145°F for 15 seconds	Raw Shell Eggs prepared for immediate service; Meat and Fish not otherwise specified in this chart		
145°F for 4minutes 144°F for 5 minutes 142°F for 8 minutes	Roasts of Beef, Corned Beef, Pork, and Cured Pork (For a complete chart, see Sec. 182 of 410 IAC 7-24)		
	OVEN COOKING of ROASTS		
140°F for 12 minutes	Oven Type	Roast Weight Less than 10 lbs.	Roast Weight More than 10 lbs.
138°F for 18 minutes 136°F for 28 minutes 135°F for 36 minutes 130°F for 112 minutes	Still Dry	Oven Temperature ≥ 350°F	Oven Temperature ≥ 250°F
	Convection	Oven Temperature ≥ 325°F	Oven Temperature ≥ 250°F
	High Humidity	Oven Temperature ≤ 250°F	Oven Temperature ≤ 250°F

COOLING

Cooked potentially hazardous foods shall be cooled:

- (1) within two hours, from 135°F to 70°F; and
- (2) within four hours, from 70°F to 41°F or less*
- (3) The entire cooling process must be completed within six (6) continuous hours.

Food prepared from ingredients at ambient temperature (such as reconstituted foods and canned tuna) shall be cooled:

Within 4 hours to 41°F or less*

* (or 45°F as specified in the Indiana Food Code)

SUGGESTED COOLING METHODS

- Place food in shallow pans
- · Separate foods into smaller portions
- Use rapid cooling equipment

- Stir food in a container placed in an ice water bath
- · Use containers that facilitate heat transfer
- · Add ice as an ingredient

REHEATING

Potentially hazardous food that is cooked, cooled, and reheated for hot-holding shall be reheated so that all parts of the food reach a temperature of at least 165°F for 15 seconds. (If food is reheated in a microwave, all parts of the food must reach a temperature of at least 165°F and be allowed to stand covered for two minutes after reheating.)



For complete information regarding ice usage, hair restraints, hygienic practices, and general practices, see 410 IAC 7-24.

ICE USAGE

FOR CONSUMPTION

- Ice which is to be consumed must come from an approved source.
- Ice must be kept in closed/covered containers and must be dispensed with an approved utensil that is properly stored and used.
- Ice for consumption may not be used for storage of food or beverage products or other foreign articles.

FOR USE AS A REFRIGERANT

- Storage of open food products in contact with ice is prohibited.
- Packaged foods that are subject to the entry of water because of the nature of packaging, wrapping, or container, cannot be stored in contact with water.
- If ice is the principle means of refrigeration, it must be done in such a way so that the ice
 is constantly draining (into a proper area; not onto the ground).
- Commercial-type freeze packs or dry ice may also be used to maintain temperature if mechanical refrigeration cannot be provided or there is a loss of power.

HAIR RESTRAINTS

Proper and effective hair restraints must be provided and worn by all persons handling exposed food, clean equipment, utensils, linens, and unwrapped single-service and single-use articles. Acceptable hair restraints include hairnets, hats, scarves, etc. Beards should also be restrained with a beard snood or other means.

HYGIENIC PRACTICES

- No smoking, eating or drinking is permitted in any food preparation or service areas.
 (Covered employee beverage containers are allowed if they are stored and used properly.)
- · Clothing must be kept clean and not used to wipe hands.

GENERAL PROTECTION

FOOD HANDLING:

 If open food is to be handled, proper utensils (such as tongs, spoons, single-use gloves, deli tissue) must be provided and used. Bare hand contact with ready-to-eat open foods is prohibited. ("Ready-to-eat" means no further washing, cooking or additional preparation steps will take place before it is consumed.)

PROTECTION FROM CONTAMINATION:

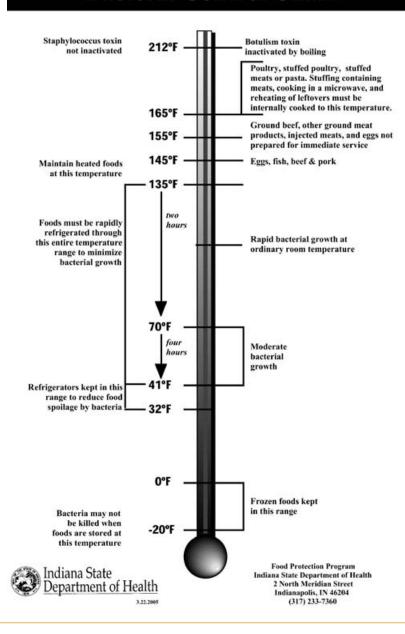
- Food products must be kept shielded and protected from contamination by consumers at all times during storage, preparation, and service.
- Overhead protection must be provided over ALL food and beverage service, preparation, storage, warewashing and handwashing areas to guard against environmental and consumer contamination.

INSECT CONTROL:

- Air curtains, screening, or fans must be provided and used for insect control when applicable.
- Doors to food preparation and storage areas must be solid or screened and shall be selfclosing (and kept closed as much as possible).



Bacteria Control Chart



Visit the Purdue New Ventures Team Web site http://www.agecon.purdue.edu/newventures

for more information on the topics discussed in this publication and for other resources to help you decide whether to start a new agriculture- or food-related business.

New 03/07





You can order or download materials on this and other topics at the *Purdue Extension Education Store*.

www.ces.purdue.edu/new

It is the policy of the Purdue University Cooperative Extension Service, David C. Petritz, Director, that all persons shall have equal opportunity and access to the programs and facilities without regard to race, color, sex, religion, national origin, age, marital status, parental status, sevual orientation, or disability. Purdue University is an Affirmative Action institution.

This material may be available in alternative formats.