



HOME-BASED VENDORS:

Handling & Sanitation

Authors:

Han Chen, Yaohua Feng,
Adley Tong
Department of
Food Science,
Purdue University

Introduction

Food safety is an essential part of a food processing business at a home-based vendor (HBV). Proper food handling and sanitation are critical steps in food preparation to help protect consumers from contracting foodborne illnesses. This article discusses major food-handling and sanitation practices, including personal hygiene, cleaning and sanitation, safe food storage, and cross-contamination prevention.

Requirements for HBVs (IC 16-42-5-29)

- Products are sold by individual vendors at a farmers market or roadside stand.
- Food products are made in the primary residence (home kitchen) of individuals.
- Foods must be non-potentially hazardous food products (e.g., baked goods or syrup).
- Food preparation must follow proper sanitary procedures, including handwashing, sanitation of food containers, and safe food storage.
- Food products are sold directly to end-consumers.
- Foods must be properly labeled on the food container.

Personal Hygiene

Humans can carry pathogens, such as Norovirus, Hepatitis A, and *Shigella*, which can be spread onto foods easily via skin, hair, saliva, and mucus. Pathogens can be spread at several key food preparation and production steps, including packing and packaging. Therefore, to prevent the spread of pathogens, it is crucial for food handlers who work directly with food, food-contact surfaces, and food packaging to maintain personal hygiene.

Guidelines for food handlers are as follows.

1. **Wash hands with warm water and soap frequently.** A sink with hot and cold water, soap, and disposable towels must be available near the preparation or kitchen area. Handwashing is a simple and effective way to avoid cross-contamination and to protect the food-handler and customers from becoming ill. Proper handwashing includes four steps:

- (1) Wet hands with warm water.
- (2) Next, apply soap and scrub hands for 20 seconds, or sing the "happy birthday song" twice. Bacteria on the skin are hard to remove. Washing hands for 20 seconds helps remove more bacteria than washing hands for shorter periods.
- (3) Rinse hands thoroughly with clean water.
- (4) Dry hands with a single-use paper towel. Paper towel usage is an efficient hand-drying method that also reduces possible contamination of surrounding surfaces by excess water droplets.

Food handlers should wash hands **before**:

- Preparing and serving food

Food handlers should wash hands **after**:

- Absence from the working area
- Touching any part of the body (e.g., hair, face, or clothes)
- Using the restroom
- Handling money
- Using a cellphone
- Eating and drinking
- Handling raw foods (e.g., raw produce, raw flour, or raw meat and poultry)
- Touching dirty surfaces, equipment, and utensils (e.g., cellphone or used dishes)
- Carrying garbage
- Touching a pet
- Any time when activities are changed and/or when hands are contaminated

2. **Wear clean clothes and protective clothing in the food preparation area.** Wearing clean clothes and showering often are important in preventing additional contaminants from entering the cooking or preparation area. Wearing protective clothing, including disposable gloves, hairnets, and beard-nets (if necessary), can prevent cross-contamination from hands and hair to foods and food-contact surfaces. Gloves should be changed frequently because they can be a source of contamination. Food handlers should change gloves before preparing new food, after touching dirty surfaces (e.g., dirty dishes, equipment, and utensils), and after using the restroom.

Food handlers are not recommended to wear artificial fingernails, nail polish, and jewelry during food preparation, except for simple rings, such as wedding bands. These items may accidentally fall into the food, and they can harbor harmful bacteria that may be transferred onto food products. If food handlers choose to wear artificial fingernails or nail polish, gloves should be worn in the food preparation area.

3. **Do not work when sick.** Because food handlers work closely with foods, they should work only when they are in good health. Pathogens can be transmitted easily from sick food handlers to foods via hands, feces, vomit, saliva, and mucus. Food handlers should not prepare food or go into food preparation areas if they have a fever, a cough, are sneezing, vomiting, or have diarrhea.
4. **Restrict other activities in the food preparation area.** During food preparation, other activities should be restricted, including meal preparation, kitchen cleaning, smoking, eating, and drinking. Infants, young children, and pets should not enter the food preparation area because dirt, bacteria, and other unknown contaminants can be introduced, and can contaminate food products.



Preventing Cross-Contamination

Cross-contamination refers to the transfer of pathogens from one place to another, including from humans, food, or other objects. It can occur at any time and at any location that can potentially cause foodborne illnesses among consumers. Preventing cross-contamination is essential in preventing foodborne illness.

When **preparing** food products:

1. *Separate*

- Separate cutting boards and utensils for raw foods and ready-to-eat foods. For example, use different utensils when handling fresh strawberries and strawberry jam.

2. *Clean and sanitize*

- Maintain personal hygiene.
- Clean and sanitize all food-contact surfaces before and after use, including cutting boards, containers, utensils, and equipment.

- ### 3. *Fruits and vegetables should be washed under cold running water.*
- Washing produce helps to remove dirt and other particles, but soap and detergent should not be used when washing fruits and vegetables. Using a clean and sanitized brush helps to clean hard-surfaced fruits and vegetables, such as cantaloupe and potatoes. A produce brush can be a source of contamination, so it should be cleaned and sanitized after being used. Bruised or damaged areas of produce should be cut away because harmful bacteria can grow in those areas.

When **storing** food products in the refrigerator, it is vital to prevent the juice from raw animal products from dripping onto other food products. Raw meat, poultry, and seafood should be placed in sealed containers or plastic bags before placing them into the refrigerator. They should also be placed on the lower shelf of the refrigerator, while other food products, such as fresh fruit and vegetables, should be placed on higher shelves of the refrigerator.

Cleaning and Sanitation

Cleaning and sanitation are essential steps to prevent cross-contamination from one surface to another.

Cleaning

Physically remove dirt from surfaces with clean water and detergent.

Sanitation

Treat cleaned surfaces with sanitizers to reduce microorganism growth

There are four core cleaning and sanitation steps:

- Step 1: Physically remove dirt from surfaces with a brush and water.
- Step 2: Apply detergent on surfaces and scrub the surfaces.
- Step 3: Use clean water to rinse the surface to remove dirt and detergent.
- Step 4: Apply the sanitizer on the surfaces and let them air dry. Follow the instructions on the label of the sanitizer to prepare the solution. Check sanitizer requirements, as rinsing may be required before drying. Ensure the sanitizer is appropriate for food-contact surfaces, and always follow the product use instructions.



Food-contact surfaces, including cutting boards, utensils, and equipment, must be cleaned and sanitized after contacting raw foods, and before working with ready-to-eat foods.

For information about sanitizers approved by the Environmental Protection Agency (EPA): <https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants>

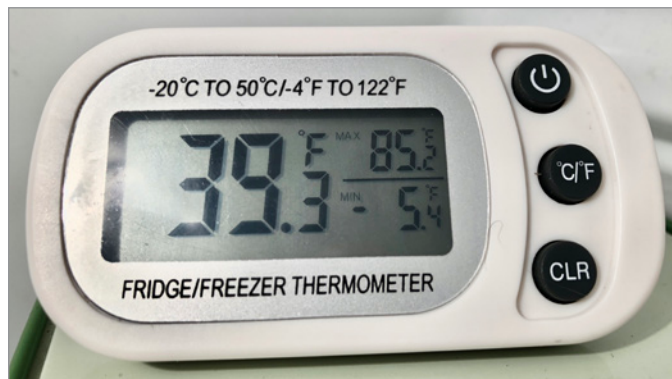
Storage

Shelf-stable food ingredients (e.g., flour and spices) and products (e.g., canned foods) can be stored at room temperature. Below are the guidelines for shelf-stable food storage:

1. Food storage areas should be clean and dry and free of insects and rodents.
2. Food storage areas should be separated from personal storage areas and chemical (e.g., pesticide and cleaning chemicals) storage areas.
3. All food products should be covered and protected from contamination in the environment, such as dirt, droplets, and leakages.
4. Ensure all food products in the storage area are properly labeled with their product name, expiration date, or production date. Record the manufacturers' name and product lot numbers if the food ingredients/products are bought from approved sources, in case of product recalls.
5. It is recommended to store foods at least six inches above the floor.

Temperature and time are two critical factors in ensuring safe food storage.

1. Maintain refrigerator and freezer at or below the safe temperature. Refrigerator and freezer thermometers should be kept in the refrigerator and freezer to assure that both are kept at safe temperatures. Thermometers should be checked and calibrated weekly to ensure their accuracy. The calibration process should follow the manufacturer's instructions.
 - Refrigerator temperatures should be kept at 40 °F or below.
 - Freezer temperatures should be kept at 0°F or below.



According to Indiana State Board of Animal Health guidelines, poultry (up to 1,000 birds annually) and rabbits can be slaughtered and sold at roadside stands, farmers markets, or from the farm directly. All poultry and rabbits sold at farmers markets or roadside stands must be frozen at temperatures at or below 0°F. If sold from the farm, poultry and rabbits must be refrigerated at or below 40°F or frozen at the point of sale and through the delivery process. Shell eggs packed for customers should be stored and transported under 45°F.

2. Perishable food should not be left out at room temperature for over two hours. If the room temperature is higher than 90°F (hot summer weather), perishable food should not be left out for more than one hour.
3. Store large portions of cooked foods in shallow containers instead of large and deep pots. Shallow containers allow the foods to cool rapidly in the refrigerator or freezer to prevent the growth of pathogens.

Key Takeaways

- Maintain good personal hygiene, including frequent hand washing and wearing protective clothing.
- Prevent cross-contamination by separating raw and ready-to-eat foods, and properly clean and sanitize all food-contact surfaces.
- Store shelf-stable food products with labels in a clean environment, and store perishable food in the refrigerator or freezer.
- Use refrigerator and freezer thermometers to maintain refrigerator temperatures at or below 40°F, and freezer temperatures at or below 0°F.

Contacts

For more information about the home-based vendor law, contact the following offices:

1. County Department of Health Information (Indiana)
Website: <https://www.in.gov/isdh/24822.htm>
2. Indiana State Department of Health Food Protection Program
Website: <https://www.in.gov/isdh/20640.htm>
Phone number: 317-234-8569
Email: food@isdh.in.gov

References and Useful Resources

Indiana Home-Based Vendor Law:

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3. Gilliam, A. S. (n.d.). Understanding Indiana House Enrolled Act (HEA) 1309 – Farmers' Market Boot Camp. *Indiana State Department of Health*. Available at: https://www.in.gov/isdh/files/HEA_1309_Guidance_Growing_for_Market_ICDC_Farm_Bureau_2010.pdf
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Basic Food Handling and Sanitation Practices:

1. United States Department of Agriculture. (2013). Basics for Handling Food Safely. Available at: https://www.fsis.usda.gov/wps/wcm/connect/18cece94-747b-44ca-874f-32d69fff1f7d/Basics_for_Safe_Food_Handling.pdf?MOD=AJPERES
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3. Minnesota Department of Health Consumer Fact Sheet. (2007). Preventing Cross-Contamination. Available at: <https://www.health.state.mn.us/people/foodsafety/clean/xcontamination.pdf>
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Thermometer Calibration:

1. Indiana State Department of Health. (n.d.). Thermometer Calibration. Available at: https://www.in.gov/isdh/files/ThermometerCalibration_3_.pdf
2. International Dairy Deli Bakery Association. (2012). Digital Thermometer Calibration. Available at: <https://www.iddba.org/training-materials/pdfs/jg-digitalcalibration.aspx?ext=.pdf>

Appendix

Preventive Measures During COVID-19 Pandemic

SARS-CoV-2, the virus that causes COVID-19, mainly spreads from person to person through respiratory droplets when an infected person coughs, sneezes, or speaks. The virus may be spread by asymptomatic individuals who do not show any COVID-19 symptoms. High-touch surfaces or objects contaminated by the virus may also spread the disease. Researchers are still learning other potential ways for this virus to spread. It is vital to take precautions to protect food workers. Below are some basic preventive measures that should be taken. Please check the CDC, FDA, EPA, and OSHA websites for more information on COVID-19.

1. Follow the proper handwashing steps to wash hands frequently (see "Personal Hygiene" above).
2. Cover mouth and nose with a tissue when coughing and sneezing. Throw the tissue in the trash and wash hands after that. Stop preparing food when sick.
3. Avoid touching ready-to-eat foods with bare hands and wear gloves to prevent cross-contamination (see "Personal Hygiene" above).
4. Frequently clean and disinfect high-touch surfaces or objects such as door handles, doorknobs, light switches, tables, counters, and toilets. Cleaning and sanitizing food contact surfaces, as stated in the "Cleaning and Sanitation" section above, reduce the risk of cross-contamination from surfaces to food. Cleaning and disinfecting high-touch surfaces reduce the risk of virus spread from surfaces to humans.

What is the difference between sanitizing and disinfecting?

Sanitizing: reduces the number of germs on surfaces or objects to a safe level.

Disinfecting: kills the germs on surfaces or objects.

Here are the steps to clean and disinfect high-touch surfaces or objects:

- Wear gloves before cleaning and disinfecting.
 - Clean the high-touch surfaces or objects with soap and water.
 - Rinse the surfaces or objects with water.
 - Apply EPA-registered disinfectant on the surfaces or objects. Always follow the instructions on the label of the disinfectant for safe and effective use.
5. Keep social distances of approximately six feet from others, if possible. This is especially important when there are workers helping with production or when sharing a commercial kitchen with others. If maintaining social distancing in the home kitchen or commercial kitchen is impossible, proper hygiene practices and wearing face-coverings can help reduce the risks.
 6. Wearing a face-covering over mouth and nose may slow the spread of COVID-19. Please check the CDC website for more information on the use of face coverings.

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References

COVID-19 Best Practices:

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