

Model Food Safety Practices for Correctional Facilities



Suggested Citation

Centers for Disease Control and Prevention. *Model Food Safety Practices for Correctional Facilities*. Centers for Disease Control and Prevention; 2024. <https://www.cdc.gov/correctional-health/publications/food-safety.html>

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Executive Summary

A recent analysis from the Centers for Disease Control and Prevention (CDC) identified that incarcerated and detained individuals were six times as likely to have an illness associated with a foodborne outbreak compared to the public.

As of 2022, roughly 1.9 million individuals were incarcerated or detained within federal, state, tribal, local, and territorial facilities in the United States.^{1–4} Each facility is responsible for the health, safety, and well-being of individuals under their charge, including providing food and access to healthcare.

A recent analysis from the Centers for Disease Control and Prevention (CDC) identified that incarcerated and detained individuals were six times as likely to have an illness associated with a foodborne outbreak compared to the public,⁵ adding to findings published by Marlow and colleagues.⁶ Moreover, the outbreaks in correctional settings were nearly six times as large as those in non-correctional settings, resulting in a substantial burden on facility and healthcare resources.⁵ Effects may include disruption to normal operations to support investigations, costs for healthcare and replacement food, potential liability, and decreased morale of staff and incarcerated and detained individuals. Many of the outbreak investigations in correctional settings identified recurring issues, like lack of time and temperature control of food, which speak to a lack of basic food safety operational control.

The [U.S. Food and Drug Administration's \(FDA\) Food Code](#) is a model code that provides state, tribal, local, and territorial governmental bodies with a technical and legal basis for the regulation of restaurants and retail food establishments. It uses scientifically sound safeguards to support food safety at retail and in food service. While the FDA Food Code recommendations are applicable for correctional facilities, they are not specifically tailored to the unique aspects of food safety in correctional environments.

Food operations in correctional facilities vary significantly, but may be different from most restaurants in certain ways:

- ▶ Meals may be prepared in large batches, held for extended periods of time (several hours to accommodate multiple services), or may be re-heated and served on multiple days of service. These activities may create an environment for spore-forming bacteria such as *Clostridium perfringens*, to grow and produce toxins;
- ▶ Resources and equipment in the correctional environment may be different from those available in the restaurant setting for security purposes;
- ▶ Food harvesting, preparation, and service may be carried out by employed food workers as well as incarcerated and detained workers; training of incarcerated food workers varies widely;
- ▶ Correctional food operations are often the only option for nourishment for incarcerated and detained individuals, including those who are more likely to get severely ill from foodborne illness (such as older adults, pregnant women, and individuals with weakened immune systems from medical conditions like diabetes, HIV, or certain cancer treatments);
- ▶ Correctional food operations are required by law to accommodate reasonable meal modifications based on [religious](#) and medical dietary requirements; and
- ▶ Correctional food operations handle distinct security concerns that must be combined with food safety practices within kitchen facilities.

The epidemiological outbreak data, coupled with these unique contextual factors of correctional facilities, highlight the need for food safety resources that are specific to correctional settings to amplify

foundational elements of the FDA Food Code in an approachable and directly applicable framework.

Purpose, development, and intended audience

The purpose of this document is to provide model food safety practices and educational resources based on the FDA Food Code, but specifically adapted for food preparation and service in correctional settings. It covers a subset of food safety topics referenced within the FDA Food Code, highlighting topics that may need adaptation for this setting, or additional safeguards than are listed in the Food Code. This document primarily focuses on practices for facilities that prepare food on-site but also includes content relevant to facilities that receive prepared food (including serving food, transporting food, record keeping, and emergency planning). The focus of this document is on reducing foodborne illness from bacterial and viral pathogens and does not address allergen safety. This document uses language and examples that are practical and accessible to the end-user and are founded on scientific evidence. The document reinforces establishment and maintenance of a positive food safety culture with open communication, processes, and management to foster a comprehensive prevention-oriented food system.⁷⁻⁹ Lastly, this document provides several appendices with templates and resources that can be directly adapted to meet the needs, infrastructure, and practices of individual facilities.

Prior to the drafting process, subject matter experts engaged correctional and public health partners in listening sessions and interviews, and conducted a survey of correctional workers to better understand food safety in correctional facilities and identify prevention needs. CDC subject matter experts developed these *Model Food Safety Practices* using their technical expertise in foodborne illness epidemiology, sanitation, and environmental and occupational health. The document was made in collaboration with food service and nutrition experts from the Federal Bureau of Prisons and reviewed by colleagues at the U.S. Food and Drug Administration and the U.S. Department of Agriculture, Food Safety

and Inspection Service. Once drafted, the model practices were shared with selected subject matter experts in correctional food operations and public health, and drafters hosted a listening session to obtain input from a range of correctional and public health partners.

This document is intended to support correctional administrators and food managers in federal, state, tribal, local, and territorial correctional facilities to improve safe food service operations. While regulatory documents may be referenced within the model practices, **this document is not intended to serve as a legal or regulatory framework.** Food service operators should always review and follow the appropriate jurisdictional food safety laws, jail and prison standards, and any facility-specific standard operating procedures while considering the recommendations provided in this document. Some jurisdictional or facility requirements may already be more stringent than these *Model Practices*.

This document provides two levels of application: standard and advanced. The criteria for both levels are supported by the scientific literature and align with existing federal guidance. These terms are defined as follows:

- ▶ Standard applications are broadly achievable within correctional food service environments. Implementation at the standard level is expected and is generally considered the minimum level of recommended action. Standard applications typically align with the FDA Food Code.
- ▶ Advanced applications promote elevated practice in various areas of correctional food service. Advanced applications typically provide innovative actions or additional safeguards beyond the minimum standards listed in the FDA Food Code. Many of the advanced items are in direct response to factors identified in correctional outbreaks or additional precautions for susceptible populations. Implementation at the advanced level is encouraged.

This version of Model Food Safety Practices for Correctional Facilities is based on information in the 2022 FDA Food Code; please look for updates in the newest version of the FDA Food Code or its Supplement as they become available. These Model Practices reflect the best practices based on a review of the literature and subject matter input as of October 2024. As new information becomes available these practices may be revised.

Core References

While numerous resources were used to support the evidence of this document, the following resources were referenced and reviewed in every section of these *Model Practices*:

- ▶ U.S. Food and Drug Administration, Food Code (2022)¹⁰
- ▶ U.S. Department of Justice, Federal Bureau of Prisons, Food Service Manual (2022)¹¹
- ▶ Food Service Guidelines for Federal Facilities (2017)¹²
- ▶ Performance Based Standards and Expected Practices for Adult Correctional Institutions (ACI), Fifth Ed. (2021), American Correctional Association, in collaboration with the Commission for Accreditation of Corrections¹³
- ▶ Performance Based Standards and Expected Practices for Adult Local Detention Facilities (ALDF), Fifth Ed. (2023), American Correctional Association, in collaboration with the Commission for Accreditation of Corrections¹⁴

Other references and resources are cited within text to provide context for specific sections.

Definition of Terms

Archived meals (also called “sample” or “ghost” trays). Representative samples of served meals, saved for at least 72 hours if kept by refrigeration and 7 days if kept frozen. Archived meals may be tested for toxins and germs during outbreak investigations. Archived meals should be cooked and held exactly as they are served, and representative samples should be rapidly cooled and monitored.

Certified Food Protection Manager (CFPM). An individual who has demonstrated food safety knowledge, skills, and abilities by successfully completing a training course and certification exam from an accredited program following the [Conference for Food Protection Accreditation Standards](#).

Cleaning. Physically removes dirt and organic matter (like food, vomit, or diarrhea) from objects and surfaces using water, soap, or detergents. Cleaning should be done regularly and always comes before disinfection or sanitization.

Close contact. Incarcerated or detained individuals who are assigned to the same living quarters (dorms or cells) or bathroom as someone having diarrhea or vomiting, or recently diagnosed with a communicable disease are considered close contacts. Food workers in close contact with someone diagnosed with Hepatitis A virus, typhoid fever, Shiga toxin-producing *E. coli*, norovirus, and shigellosis should be excluded from food work.

Cook-chill. A process of food preparation in which food is cooked completely, sealed in a reduced oxygen packaging, rapidly cooled (within 90 minutes), stored at 41°F or less, and then reheated just before eating. Facilities preparing food with cook-chill methods may have additional regulatory requirements to document appropriate safety procedures. Only facilities approved for cook-chill operations should use this method of preparation.

Correctional facility. Throughout this document the term “correctional facility” is used to describe all carceral settings generally, including jails, prisons, detention centers, and youth detention settings.

Disinfecting. The killing of viruses and bacteria on surfaces using chemicals. The U.S. Environmental Protection Agency (EPA) registers products to disinfect surfaces. Always read the label and product directions to understand what types of surfaces a disinfectant can be applied to, how long the surface should remain wet, and how much product to use; for health and safety reasons, many disinfectants should not be applied to food contact surfaces. Objects and surfaces should always be cleaned before they are disinfected. [Selected EPA-Registered Disinfectants | US EPA](#)

Exclusion. The temporary removal of a food worker from working in a food service area due to their potential to spread communicable diseases through food. Periods of exclusion depend on symptoms and diagnosis. Individuals who are excluded from food work may not work in any food service area on any task during their period of exclusion. Food workers should only return to food work following symptom resolution and determination that the food worker is no longer capable of spreading diseases through food. In some jurisdictions, approval from regulatory authorities may be required to return to food work.

Food-contact surface. A surface of equipment or utensils that touches food, or where food may drain, drip, or splash. These surfaces have a different frequency of cleaning and sanitizing than non-food contact surfaces.

Food service areas/food production areas. Settings where food is grown, produced, cooked, prepared, or served.

Food worker. Anyone involved in the growth, harvest, preparation, or serving of food, and anyone responsible for sanitation in kitchens or food service areas. This may include employed or contracted individuals, as well as incarcerated and detained individuals, as is appropriate for each facility. Individuals involved in storage and warehouse facilities with minimal direct contact with food, or those who only deliver covered food trays would not be considered food workers. Some facilities contract all food service operations. Specific types of food workers are defined below.

Employed food worker. Any non-incarcerated or detained individual who works for a correctional facility, department of correction, or jurisdictional authority as an employee or contractor involved in the growth, harvesting, preparation, or serving of food, and any contractor or employee responsible for sanitation in kitchens or food service areas.

Food Service Management/Managers (FSM). The official person(s) in charge of all food service operations. They are generally responsible for oversight of food operations, work areas, budget, purchasing, inventory, storage, training, recordkeeping, and management of all food workers, including employed food workers and incarcerated food workers. Separate managers may be in place for kitchen and agricultural operations. The FSM should be certified food protection managers.

Incarcerated food worker. A worker who is presently detained or incarcerated and assigned to work within a food setting (farm, kitchen, dining, or other food production facility). This document will use the term incarcerated food worker to reflect any food worker who is incarcerated or detained. Juvenile justice programs should follow [U.S. Department of Labor Child Labor Rules](#).

Hazard Analysis and Critical Control Point (HACCP). A scientific system for process control that has long been used in food production. It prevents food safety problems by applying controls at identified points in a food production process when hazards can be prevented, controlled, eliminated, or reduced to acceptable levels. See [Retail and Food Service HACCP](#) for more information on HACCP principles for food service.

Mechanically separated meat and poultry. Also called mechanically deboned meat and poultry, includes mechanically separated chicken. Mechanically separated products are paste-like meat and poultry products produced through high-pressure separation of edible meat from bone. Mechanically separated meat and poultry are different from sliced or ground meat and poultry. Products containing mechanically separated meat or poultry must describe the use on the product label ([9 CFR 381.174](#)).

Non-continuous cooking. Preparation in which food cooking is halted before complete (before reaching a safe temperature for consumption) and cooled so that cooking may be completed later. This practice is not recommended for correctional facilities.

Potable water. Water that is safe to drink and prepare food with, as determined by meeting the National Primary Drinking Water regulations ([40 CFR part 141](#)).

Ready-to-eat (RTE) foods. Food that can be eaten without additional preparation steps (washing, thawing, or heating), this includes plant and animal foods cooked to appropriate temperatures, raw fruits and vegetables that are washed, and cooked bakery items. Any commercially prepared item with cooking instructions is not considered ready-to-eat.

Regulatory authority. The federal, state, tribal, local, or territorial entity specifically charged with enforcement of health, food production, and agricultural regulations. Note: regulatory authorities for food production in correctional facilities may differ from those for restaurants or other institutional operations in your jurisdiction; review appropriate statutes and regulations for specific authorities.

Sanitizing. Reducing the number of bacteria, viruses, and fungi on surfaces to safe levels using chemicals, like bleach. Objects and surfaces should always be cleaned before they are sanitized. Surfaces that touch food should be sanitized regularly. Always verify that sanitizers are safe for food contact surfaces.

Satellite/Remote feeding operations. Any location where food is transported and served in a separate area from where it was cooked or prepared and is outside of designated food service areas (including isolation or segregation units, dorms and pods, different stand-alone buildings on-site). Remote feeding sites require the transportation of food and may be particularly vulnerable to temperature control issues. Leftovers from remote feeding should not be used for re-service.

Standard Operating Procedures (SOPs). Written instructions or protocols describing step-by-step processes for routine operations.

Time/Temperature Control for Safety (TCS) food. Formerly called potentially hazardous foods; include foods that are rich in protein, moisture, and are less acidic making them ideal environments for bacteria to live and grow. Examples include raw or cooked meat and poultry products (including gravies made from drippings of cooked meat products); dairy products; raw eggs or cooked egg products (such as quiche and custard); shellfish; cooked grains like rice and pasta; and heat-treated plant origin foods (like cooked beans) or food containing cut melon, cut tomatoes, or leafy greens that are not modified to control microbial growth. These products require careful time and temperature control to reduce the chance of foodborne germs to live and grow. Examples of foods that are non-TCS include dry goods, baked goods, shelf-stable condiments, and air-dried hard-boiled eggs with the shell intact.



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Responsibilities

Summary

Food operations in correctional facilities vary widely in size and complexity. In this document, the authors identified three levels of operators in correctional food service: Food Service Manager (FSM), employed food workers, and incarcerated food workers. Not all facilities will use incarcerated food workers or employed food workers. A tiered approach to food service operations allows for a system of checks and balances of key food safety actions and a clear line of communication for decisions and reporting. This will ensure each level of food worker has a clearly defined role with built-in accountability to support a food safety culture. Each level of responsibility may require different training and technical expertise (see section on [Training](#)).

Implementation

Standard practices

- ▶ Clearly identify roles, responsibilities, and training requirements within a facility's Standard Operating Procedure (SOP).
- ▶ Anyone involved in the growth, harvest, preparation, or service of food, and anyone responsible for sanitation in kitchens or food service areas should be considered a food worker. This may include employed and incarcerated individuals, as is appropriate for each facility. Individuals involved in storage and warehouse facilities with minimal direct contact with food, or those who only deliver covered food trays would not be considered food workers.
- ▶ All categories of food workers should follow appropriate training and food worker health recommendations. (See sections on [Training](#) and [Food Worker Health](#))
- ▶ Food equipment maintenance workers are not considered to be food workers. However, they may require training to ensure compliance with food safety standards (such as use of food-grade lubricants and appropriate cleaning and sanitation of food contact surfaces).
- ▶ A certified food protection manager (usually the FSM or their trained designee) should be present during food service operation (this would be the person in charge of food operations at that time).

Responsibilities listed below are associated with the three potential food worker roles:

- ▶ Food Service Management (Manager) (FSM):
 - FSM is generally responsible for and has oversight of food operations, work areas, budget, purchasing, inventory, storage, training, recordkeeping, and management of all food workers, including employed food workers and incarcerated food workers.
 - FSM may be an employee of the facility or a contractor.
 - FSM is responsible for ensuring all health and hygiene regulations are followed and ensuring all food workers are aware of these reporting requirements.
 - FSM is responsible for ensuring maintenance staff and pesticide applicators follow food safety standards.
 - FSM informs correctional facility administration of all aspects of food service operations per federal, state, tribal, local, or territorial statutes and regulations and facility SOPs, to ensure adequate support for food programs.
 - FSM is responsible for maintaining awareness of food product recalls.
 - FSM works with officials (facility, state, tribal, local, or territorial public health, regulatory, and accreditation officials etc.) who are involved with food service operations to ensure all safety procedures and recommended practices are met to prevent illnesses, injuries, and outbreaks.
 - In the event of an outbreak, the FSM should provide information to and work with public health officials.
- ▶ Employed Food Worker:
 - Employed food workers are contractors or staff who are employed by a correctional facility, department of correction, or jurisdictional authority.
 - Employed food workers may provide training and oversight of incarcerated food workers, including while using knives, tools, and controlled food products (see [Security](#) section), while also performing food service operations work.
 - Employed food workers work with officials (facility, state, tribal, local, or territorial public health, regulatory, and accreditation officials etc.) who are involved with food service operations to ensure all safety procedures and recommended practices are met to prevent illnesses, injuries, and outbreaks.
 - In the event of an outbreak, employed food workers should provide information to and work with public health officials.
- ▶ Incarcerated Food Worker:
 - Includes anyone who is currently incarcerated or detained and works in a food service or food production area. This includes individuals involved in the growing or harvesting of food, sanitation of food service areas, as well as those serving food.
 - Employed food workers and FSM direct and oversee the work of incarcerated food workers.
 - Food safety monitoring steps (such as temperature checks, food inventory, and food serving) may be performed by incarcerated food workers but should be inspected or supervised by employed food workers or the FSM.

Advanced practices

- ▶ Collaboratively review food worker roles and responsibilities annually with reflection on any food safety challenges or disruptions to inform necessary changes.
- ▶ When incarcerated individuals serve as food workers, consider policies and practices to minimize frequent turnover of food workers when possible. Frequent turnover may lead to inconsistent practices and increased burden on facilities for training.
- ▶ Consider having multiple people trained as certified food protection managers available during each food operation shift in case of sick call outs.

Justification

- ▶ A tiered approach to management (where incarcerated individuals are overseen by employed food workers and employed food workers are overseen by FSM) allows for checks and balances at each level, ultimately identifying a single person or group of management officials who are responsible for all food service operations.
- ▶ Ensuring tiered responsibility is available during all food service operations allows for maximum efficiency and accountability.
- ▶ 5-ALDF-4A-04



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Security

Summary

This section addresses security issues specific to food safety and the prevention of occupational injury in correctional food operations. The content of this section was developed for facilities in which incarcerated individuals are involved in food production. Some security recommendations may not be needed in facilities in which incarcerated individuals do not have access to food production areas (kitchens, gardens, factories). Additional security considerations, including direct management of incarcerated individuals, should comply with the recommendation of safety officials at your facility and Standard Operating Procedures (SOPs). Security issues relating to food safety largely focus on the managed control of tools, equipment, and food products of concern to prevent theft and maintain security. Chemical control is addressed in the section on [Special Considerations for Cleaning, Sanitation, and Maintenance](#).

Implementation

Standard practices

Knives and Other Hazardous Items

- ▶ Knives may not be used in all facilities. If they are, all knife points may be rounded or blunted except for boning knives.
- ▶ Organize and store tools in a knife and tool cabinet equipped with a shadow board (to easily identify missing items) and a locking device located in the food service department.
 - A single key should be issued to the knife cabinet in the food service department to allow for individual accountability.
 - All tools should be issued using an identification method for employed and incarcerated food workers and tracked using an equipment log.
- ▶ When in use, all knives should be attached to a metal cable and secured to a workstation in a secure area. Intermittent staff supervision should be provided. Following appropriate cleaning and sanitizing, knives should be returned to the secured cabinet.

- When possible, food preparation requiring the use of knives should be performed in a room with a secured door.
- If a knife is used in an unsecured area, employed food workers should provide direct supervision.
- Metal cabling or other tethering material should be considered and maintained as a multi-use food contact surface.
- ▶ Consider securing metal tools, when in use, with a cable to prevent removal from the food preparation area.
- ▶ Beverage bladders (pouches containing beverage contents) should be destroyed by cutting and then disposed of by employed food workers.
- ▶ Employed food workers should oversee the disposal of metal cans and lids.
- ▶ Deep fat frying should only be performed in equipment specifically designed for this purpose.

Food Product Management

- ▶ Only the Food Service Manager (FSM) or designee can authorize the removal of food from storage areas.
- ▶ When ordering controlled items (such as knives, yeast, nutmeg, cloves, mace, vanilla, and sugar) the FSM should identify on the purchase request that items are controlled to alert warehouse employees (or staff who receive shipments) to provide special handling.
 - A complete list of controlled products should be determined with facility leadership and security.
- ▶ When possible, hold controlled food products (such as yeast, nutmeg, cloves, mace, vanilla, and sugar) in a lockable cabinet.
 - As with tool management, a single key should be issued to the controlled food ingredient cabinet.
 - Yeast and other controlled food products should be managed only by employed food workers. Controlled food products should be used under close supervision until thoroughly incorporated into the item being prepared.
 - Only instant or instant active yeast should be used in food service.
 - Empty yeast bags or containers and uncooked dough should be controlled until rendered inactive or properly disposed of by employed food workers.
- ▶ All inventory, including food products, being delivered from a vendor or an outside warehouse to the secure facility, should be x-rayed or visually inspected before entering the facility. (See [Food Receiving](#) section.)
- ▶ FSM is ultimately responsible for the maintenance of an active inventory of all food products from initial receipt of the products to their use or disposal. (See the [Records Management](#) section for additional details.)

Equipment Maintenance and Vendor Personnel

- ▶ FSM is responsible for ensuring that maintenance staff comply with all food safety standards.
- ▶ Only qualified personnel should perform or supervise maintenance and repairs to food service equipment.
- ▶ All equipment should be maintained according to manufacturer's specifications.

- ▶ Occupational Safety and Health Administration (OSHA) standard for The Control of Hazardous Energy (Lockout/Tagout) ([29 CFR 1910.147](#)) should be followed.
- ▶ All dish machines, revolving tray ovens, and access to power panels should be secured.
- ▶ Review and ensure compliance with confined space requirements for food production activities according to facility jurisdiction. Compliance may require specified training, space identification, protocols etc.
- ▶ All food workers should receive training on the safe operation of any equipment they will use, clean, or operate.
- ▶ If safety features (such as splash/cut guards, locks, and sensors) are present on food production equipment, the FSM or designee should ensure they are used appropriately during operation.

Advanced practices

- ▶ Consider the purchase of equipment with [correctional or security packages](#). Many industrial food service equipment retailers offer correctional packages which include products with additional features such as tamper-proof mechanisms and setting locks. (See section on [Special Considerations for Cleaning, Sanitation, and Maintenance](#).)
- ▶ Consider conducting training and education for all staff and incarcerated persons about the risks of consuming homemade alcohol products including the [signs and symptoms of botulism](#).

Justification

- ▶ [Federal Bureau of Prisons Food Service Manual](#)
- ▶ Common food service occupational injuries include burns, cuts, amputations, etc.¹⁵ Thorough and effective training, including specific training on the safe operation of equipment, is vital to reducing food worker injuries.
- ▶ Reported foodborne disease outbreaks in correctional facilities have been attributed to the unauthorized production of alcohol.^{16–19} Food operations should prevent the unauthorized removal and hoarding of food products, and the misuse of controlled food products and liquid bladders from food service areas to produce alcohol.

Resources

[Conducting a Periodic Inspection for Each Procedure in a Hazardous Energy Control \(Lockout/Tagout\) Program](#)



Photo credit: Getty Images

Food Worker Health

Summary

Food worker health is a paramount priority to support the health and safety of the incarcerated and detained population. A work environment that monitors for communicable illness among food workers and supports a punishment-free environment for reporting potential illnesses can help prevent the spread of germs via food and promote a food safety culture. Correctional kitchens serve food to a wide range of people, including those at increased risk for foodborne illness (such as older adults and people with weakened immune systems). Because of this, correctional food worker health precautions are like those listed for serving food to highly susceptible populations in the FDA Food Code. Food workers who are ill or recently exposed to certain foodborne germs should be excluded from working in food service areas until the appropriate timeframe following exposure or symptom resolution has passed. Non-correctional settings may choose to restrict food workers from contact with food rather than exclude them altogether. However, because correctional food operations serve food to highly susceptible populations and because of the difficulty in monitoring restricted food workers in a food environment, restricting food workers from tasks involving direct contact with food is not considered a sufficient preventative action in the correctional food setting.

Implementation

Standard practices

Health

- ▶ **Ensure all federal, state, tribal, local, and territorial regulations (including FDA Food Code Part 2-2) are met; these are the minimum standards.**
- ▶ Anyone involved in the growth, harvest, preparation, or service of food, and anyone responsible for sanitation in kitchens or food service areas is a food worker and should follow these health and hygiene precautions; this includes both incarcerated and employed food workers.
 - When possible, incarcerated food workers should undergo medical clearance with a healthcare provider before they are assigned to work in food preparation or service. This clearance should ensure that the individual is not only physically fit to do food work but also ensures they have not been

diagnosed with, had a known exposure to, nor thought to be capable of spreading *Salmonella* Typhi, non-typhoidal *Salmonella*, norovirus, *Shigella* species, Shiga toxin-producing *Escherichia coli*, or Hepatitis A virus (HAV) in the last month. See [Appendix 1](#) for an Example Medical Clearance Form.

- Unless an individual is experiencing symptoms of foodborne illness, medical clearance does not require laboratory confirmation.
- ▶ Facilities should have a written policy, procedure, and practice for daily health and hygiene monitoring of all food workers with specific actions to prevent the spread of communicable diseases. **As part of this SOP, all food workers should self-monitor for symptoms and have no threat of punishment, reprisal, loss of privileges, seniority, etc., for reporting illness to the Food Service Manager (FSM) or designee.**
 - It is the FSM's responsibility to ensure food workers are aware of these monitoring and reporting requirements. Consider providing all food workers with a copy of signs and symptoms to look out for and having them provide written acknowledgement of this policy.
 - Review health and hygiene monitoring policies for contract and union employees.
 - See [CDC resources about talking to employees about symptoms and diagnoses](#).
 - FSM should maintain logs documenting ill incarcerated food workers (tracking when they are out because they are sick, when they were excluded from food work, and when they returned to work).
 - ◆ Similar logs may be considered for employed food workers if approved by contracts and unions.
 - ◆ Scheduling documents may be a key source of this information. These documents support outbreak investigations to quickly identify when food workers may have been spreading germs due to illness. (See [Records Management](#) section and example sick worker log in [Appendix 4](#).)
 - ◆ FSM should maintain close communication with the health services to ensure ill incarcerated food workers are seen by healthcare providers and, when required, excluded for appropriate periods of time.
- ▶ When possible, waive any facility-based medical fees for symptomatic incarcerated food workers, to remove barriers to seeking appropriate health services and prevent the spread of further illness. If medical fees are waived, ensure this policy is clearly communicated to incarcerated food workers at the beginning of their food detail.
- ▶ Approval from a regulatory authority (a state, tribal, local, or territorial health department) may be required before a food worker can return to work following certain illnesses in some jurisdictions. If approval is required, the FSM is responsible for ensuring appropriate documentation before food workers resume duties.
- ▶ All food workers should report any of the following signs and symptoms or diagnoses as they may indicate illness with germs that can be spread via food: (see [Appendix 2](#) for Example Symptom Flow Chart for Symptoms and Return to Work Chart for Healthcare Providers in [Appendix 3](#)).
 - People experiencing a sore throat with fever should be excluded from food work until they:
 - ◆ Have received antibiotic therapy for [Streptococcus pyogenes](#) infection for more than 24 hours; or
 - ◆ Have at least one negative throat culture for *Streptococcus pyogenes* infection; or
 - ◆ The person is medically cleared.
 - People experiencing vomiting or diarrhea should be excluded from food work and seek a medical diagnosis from a healthcare provider.

- ◆ If non-typhoidal [Salmonella](#) infection is diagnosed, the food worker should be excluded from food work until:
 - Approval is obtained from a regulatory authority (if required by your jurisdiction), **and**
 - The person is medically cleared, or more than 30 calendar days have passed since the symptoms resolved without the aid of medications (like antidiarrheals).
- ◆ If [Shigella](#) or Shiga toxin-producing [E. coli](#) (STEC) infection is diagnosed, the food worker should be excluded from food work until:
 - Approval is obtained from a regulatory authority (if required by your jurisdiction), **and**
 - The person is medically cleared, or more than 7 calendar days have passed since the symptoms resolved without the aid of medications (like antidiarrheals).
- ◆ If [typhoid fever](#) (*Salmonella Typhi*) is diagnosed, the food worker should be excluded from food work until:
 - Approval is obtained from a regulatory authority which may require negative test results (if required by your jurisdiction), **and**
 - More than 14 calendar days have passed since the symptoms resolved without the aid of medications (like antidiarrheals).
- ◆ If [norovirus](#) is diagnosed, the food worker should be excluded from food work until:
 - Approval is obtained from a regulatory authority (if required by your jurisdiction), **and**
 - The person is medically cleared, or at least 48 hours have passed since symptoms resolved without the aid of medications (like antidiarrheals).
- ◆ If no diagnosis is made, the food worker should be excluded from food work until at least 24 hours have passed since symptoms without the aid of medications (like antidiarrheals).
- People with infected, open, or draining wounds or pus-filled boils should cover their wounds or boils properly.
 - ◆ If the wound or boil is on the hands, wounds should be covered by waterproof bandages and single-use gloves should be worn.
 - ◆ Boils and wounds on the arms should be covered with a waterproof bandage.
 - ◆ Boils or wounds in other locations should be covered with a dry, durable tight-fitting bandage.
 - ◆ If a wound or boil cannot be covered adequately, this individual should be excluded from food work until symptoms resolve.
- People experiencing new jaundice (yellowing of skin or eyes within the last 7 days) should be excluded from food work and seek a medical diagnosis from a healthcare provider.
 - ◆ If the person can provide medical documentation that jaundice was not caused by [hepatitis A virus \(HAV\)](#) or other fecal-oral infections, they may resume work.
 - ◆ If HAV is diagnosed, the food worker should be excluded from food work until:
 - Approval is obtained from a regulatory authority (if required by your jurisdiction), **and**
 - The person is medically cleared, or jaundice has persisted for more than 7 days.

- People who were **exposed** to certain infectious diseases through close contact, but who are not experiencing symptoms should be excluded from food work for expressed periods of time.
- ◆ People **exposed** to HAV (through close contact with an infected person, or eating contaminated food) **without symptoms** should be excluded from food work until:
 - A medical provider has confirmed the employee is immune to HAV infection because of a prior illness from HAV, vaccination against HAV, or IgG administration; or
 - More than 30 calendar days have passed since the last exposure, or since the close contact's jaundice (yellowing of the skin or eyes) resolved.
- ◆ People **exposed** to typhoid fever (through close contact with an infected person, or eating contaminated food or drinking contaminated water) **without symptoms** should be excluded from food work until:
 - More than 14 calendar days have passed since the last exposure, or
 - More than 14 days have passed since close contact is free from symptoms without the use of medications (like antidiarrheals).
- ◆ People **exposed** to STEC (through close contact with an infected person, or eating contaminated food) **without symptoms** should be excluded from food work until:
 - more than 3 calendar days have passed since the last exposure, or
 - more than 3 calendar days have passed since the close contact is free from symptoms without the use of medications (like antidiarrheals).
- ◆ People **exposed** to norovirus (through close contact with an infected person, or eating contaminated food) **without symptoms** should be excluded from food work until:
 - More than 48 hours have passed since the last exposure, or
 - More than 48 hours have passed since the close contact is free from symptoms without the use of medications (like antidiarrheals).
- ◆ People **exposed** to *Shigella* (through close contact with an infected person, or eating contaminated food) **without symptoms** should be excluded from food work until:
 - More than 3 calendar days have passed since the last exposure, or
 - More than 3 calendar days have passed since the close contact is free from symptoms without the use of medications (like antidiarrheals).

Handwashing and Hygiene

- ▶ **Ensure all federal, state, local, tribal, and territorial regulations for handwashing (including FDA Food Code chapter 2-301, 5-202, and 6-301) are met; these are the minimum standards.**
- ▶ Make proper handwashing a priority; motivate workers; remove barriers such as lack of time for handwashing, lack of convenient access to sinks, soap, etc.; provide positive reinforcement when workers are observed making handwashing a priority.
- ▶ Handwashing stations in food service areas and restrooms should always be fully equipped with running water, soap, paper towels or functioning hand dryers, and trash cans.

- Handwashing sinks should have access to warm water.
 - Hand sanitizer is not an effective substitute for proper handwashing in food settings because it does not work well against norovirus.²⁰
 - If theft is likely, develop theft-free systems for liquid hand soap (e.g., install a cage around the dispenser with a lock and key).
 - Identify personnel for each shift to monitor and refill the liquid soap dispenser with appropriate key access.
- ▶ Post signs to encourage proper handwashing in kitchens, food service areas, and near restrooms. Consider using image-based signs, or signs in multiple languages depending on the language needs of facility food workers.
 - ▶ Ensure [proper handwashing](#). Provide information on how and when to wash hands:
 - Before, during, and after handling food
 - After handling raw meat or poultry, eggs, seafood, or raw flour
 - Before putting on new gloves and after removing gloves
 - After coughing, sneezing, or blowing your nose
 - After using the bathroom
 - After touching garbage or chemicals
 - ▶ Jewelry, including rings, bracelets, and watches should not be worn during food preparation and harvesting as these may serve as places for germs to hide. If identification bracelets or wristbands are used, correctional facilities could consider smooth, waterproof wristbands that can be cleaned during handwashing.
 - ▶ Some correctional facilities do not allow facial hair for incarcerated food workers and others require beard nets for facial hair; review hygiene practices for your jurisdiction and facility SOPs.

Advanced practices

Health

- ▶ Consider specifying additional requirements for food worker health and hygiene based on the practices in this document in external contracts with food service vendors and contractors.
- ▶ Examine ways to reduce employed food workers continuing to work while sick; this may include reviewing sick leave policies (to ensure they are flexible and punishment-free), encouraging backup call lists in case of callouts, and providing clear and accessible guidance on why working while sick threatens food safety.
- ▶ Implement a health and hygiene monitoring questionnaire before each work shift to ensure food workers are symptom-free.
- ▶ Consider extending exclusion period for food workers who are experiencing vomiting or diarrhea, but who have not been diagnosed, from 24 to 48 hours or more after symptoms have resolved without the aid of medications (like antidiarrheals). Norovirus is the most common cause of vomiting and diarrhea; the longer period allows for a more conservative range at which people are considered contagious.

Handwashing and Hygiene

- ▶ Use strategies to promote effective handwashing practices during the training of food workers and while monitoring during each work shift.

Justification

- ▶ [Employee Health and Personal Hygiene Handbook \(fda.gov\)](#)²¹
- ▶ [FDA Food Code 2022: Full Document](#)
- ▶ 5-ACI-4-4322
- ▶ 5-ALDF-4A-13

Resources

- ▶ [Talking with sick workers | EHS | CDC](#)
- ▶ [FDA Employee Health Policy Tool](#)
- ▶ [Which Soap is Best? MN Dept. of Health \(state.mn.us\)](#)
- ▶ [AFDO Develop a plan to manage sick workers](#)
- ▶ [Bad Bug Book \(Second Edition\) | FDA](#)



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Training

Summary

Training of all food workers, including incarcerated food workers, is a vital part of food safety practices. It improves awareness, ensures proper implementation of procedures and monitoring, and empowers a food safety culture. Effective training also reduces work-related injuries and days away from work. Training is not a one-time occurrence but should be repeated regularly to maintain knowledge and awareness; refresher training may also be needed in response to inconsistent or improper practice or reports of foodborne illness. Training reinforces a food safety culture in which food workers are allowed to understand not only what to do to protect food safety, but also why, giving them more buy-in.

Implementation

Standard practices:

- ▶ Consider the literacy and language needs of each food worker before each training. Whenever possible, provide training based on these needs.
 - The average American reads at a 7–8th grade reading level. Roughly 1 in 3 incarcerated individuals have what is considered low literacy (Program for the International Assessment of Adult Competencies (PIACC) level of below 2).²² Messages appropriate for this literacy level include short, bulleted wording with basic vocabulary. If you do not know the literacy level of food workers, conduct verbal training. Use a combination of verbal, written, and hands-on training, where appropriate.
- ▶ Training requirements should increase with elevated roles and responsibilities. Four distinct categories of training should be considered: informal (on-the-job) training, formal baseline education (e.g., certificates), continuing education, and in-depth training for management. When possible, consider providing training opportunities during working hours.
 - **All food workers** should receive at a minimum, informal (on-the-job) training in basic hygiene, safety, and record keeping before beginning work in food preparation or service or any time there is a change in SOP or equipment. Training should be conducted by the FSM or their designee.

- ◆ If any machinery or equipment is used, food workers should receive specific training on the safe operation of each piece of equipment.
- ◆ If any chemicals are mixed, food workers should receive training on reading the product label, appropriate use of personal protective equipment (such as gloves, protective eyewear, and respirators, depending on the chemical being used), and mixing and testing of mixed chemicals.
- **Employed food workers** should be required to successfully complete accredited food safety or food handlers training (e.g., ServSafe, ANSI-accredited programs, or training approved by state or local health department). Training should be repeated based on standards for the respective program.
- FSM should complete a certified food protection manager (CFPM) course. Training should be repeated based on accreditation standards.
- Individuals responsible for food equipment maintenance should be trained in the use of food-grade lubricants and appropriate cleaning and sanitation of food contact surfaces.
- ▶ Continuing education for all levels of food workers should be repeated at least one time per year to maintain knowledge and awareness; refresher training may also be needed in response to inconsistent or improper practice.
- ▶ If food preparation and service frequently involve non-designated food workers, consider basic food safety training for all staff.
- ▶ Maintain clear records of all training and regularly review records to identify and address any gaps in coverage.

Advanced practices

- ▶ Consider providing training in multiple languages to increase accessibility for all audiences.
- ▶ Complete evaluations of training to identify if they are effective and meet needs and gaps.
- ▶ Provide hands-on experiential learning opportunities in addition to self-directed reading materials/online/classroom-based trainings for all food workers.
 - Consider using visual tools (e.g., Glo Germ, Germ Juice, UV Germ, GlitterBug, and others) that simulate the presence of germs for teaching proper handwashing techniques.
- ▶ Encourage employed food workers anticipated to be involved in food services for >1 year to complete CFPM training.
- ▶ Provide opportunities for incarcerated food workers to receive professional certifications in food safety or CFPM as part of vocational education.
- ▶ Build a broader food safety culture, to include routine inspections and training collaborations with state, tribal, local, and territorial health departments or persons having food safety expertise and certifications.
- ▶ Consider applying for accreditation or working collaboratively with programs like the National Institute of Corrections or state, tribal, local, and territorial health departments to create customized trainings that expressly address the distinct context of correctional facilities and include training with correctional examples.

Justification

- ▶ Continual learning is vital for core food safety practices and data-driven education.
- ▶ [USDA Guide to Professional Standards for School Nutrition Programs](#)²³
- ▶ ACI 5-4-4321
- ▶ 5-ALDF-4A-12
- ▶ [Federal Bureau of Prisons Food Service Manual](#)
- ▶ [FDA Food Code](#)

Resources

- ▶ [ServSafe](#)
- ▶ [USDA Professional Standards](#)
- ▶ [ANAB–ANSI National Accreditation Board](#)
- ▶ [All Directory Listing \(ansi.org\)](#)
- ▶ [Food Safety Courses and Certificate Programs \(neha.org\)](#)
- ▶ [Lesson 4, Activity 1 Hand Washing Experiment \(cdc.gov\)](#)



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Records Management

Summary

An important tool in food safety operations is the development of Standard Operating Procedures (SOPs) and maintenance of clear records. Following standardized, written procedures ensure that quality, efficiency, and safety criteria are met each time a task is performed. Records allow for oversight and evaluation of safety, compliance, and quality improvement; they also provide evidence that a corrective action was taken. Records may be reviewed as part of planning, inspections, outbreak investigations (to help identify the cause of outbreaks), and operations management.

Implementation

Standard practices

- ▶ Every food operation should maintain reference materials within the food production area, such as:
 - Relevant federal, state, tribal, local, or territorial food safety laws and regulations
 - SOPs for production, storage, and sanitation
 - Standard menus, special menus (allergen, religious, therapeutic) and recipes
 - Most recent inspection results from regulatory authority as well as internal audits
 - Safety Data Sheets for chemicals
 - Emergency management plans
- ▶ Written paper records of critical food safety practices relevant for each facility are a minimum standard and should be held in the food production area and then transferred to a secure and organized site for long-term storage and review.
- ▶ Records should:
 - Be easily accessible, clear, complete, accurate, and legible.
 - Include dates, status or quantity, and name/contact information of the supervisor/approver responsible.

- Be regularly reviewed by the Food Service Manager (FSM) to verify and ensure accuracy.
- Be maintained for at least 2 years or as directed by the regulatory authority.
- ▶ Specific types of records are listed below.

Food Operations

- ▶ Food inventory should be reviewed quarterly at a minimum by FSM or designee. More frequent inventories may be needed. Records may be shared with organizational leadership to evaluate consistency across operations, and place food orders.
 - Inventory should include product description, quantity, source, lot numbers (if available), inspector number (for USDA inspected products), dates received, conditions received, expiration dates (or best by/use by dates), notes for products containing allergens, and name and contact information for the person accountable.
- ▶ If food is prepared off-site, central kitchens, catering, or production companies should be able to provide food operations records including records of compliance with local regulatory authority, copies of Hazard Analysis Critical Control Point documentation (if relevant), evidence of staff training, records of inventory, and transportation temperature compliance, upon request.
- ▶ Starting on January 20, 2026, correctional facilities that handle any foods on the [Food Traceability List](#) will need to maintain a traceability plan as well as receiving records for any such foods they receive from a supplier, retailer, or central kitchen in accordance with the U. S. Food and Drug Administration Food Traceability Rule ([21 CFR Part 1, Subpart S](#)) (see note in [Justification](#)).
- ▶ If time as a public health control is being used, document a time control plan. (See [Serving Food](#) section.)
- ▶ Additional example records for food operations (suggested frequency):
 - Logs for food receiving including notes of package integrity and temperature control issues (per receiving)
 - Logs for food cooking temperature (per food service)
 - Logs of food time and temperature at service (per food service)
 - Logs of food holding temperatures during service or transportation (per food service)
 - Logs for food cooling temperatures (per cook-chill or cool intended for reheat preparation)
 - Meal production logs, including the number of meals served and any deviations from standard menus (per food service)
 - Logs for archived meals (per food service)

Personnel

- ▶ Maintain training records for all food workers to ensure they have the skills and knowledge to handle and serve food, safely. (See [Training](#) section.)
- ▶ New workers should be trained to properly complete logs and follow practices for record management.
- ▶ Food workers should self-monitor for symptoms (fever, diarrhea, vomiting, jaundice, sore throat, infectious wounds, and boils) before starting each work shift. If food workers have symptoms which meet criteria for exclusion, a record of the work exclusion and date of return to work should be noted. This information should be provided to public health officials upon request. (See [Food Worker Health](#) section.)

- ▶ Example personnel records (frequency):
 - Training records including credentials and certifications for food workers (continuous)
 - Logs for food workers in the kitchen and serving line including names or identification numbers, and duties (per service)
 - Sick food worker log (continuous)

Sanitary Facilities and Conditions:

- ▶ All facilities should maintain records documenting:
 - Use of approved water sources and water testing (if applicable)
 - Internal inspection reports of plumbing, sewage disposal, handwashing and toilet facilities, trash removal in the food preparation and service areas
 - Pest management plan, inspection results, and pest control services
 - Water cross-connection control log and inspection results (used to document protections between potable and non-potable water)
- ▶ Additional examples of records for sanitation (frequency):
 - Cleaning and sanitation logs for food-contact and non-food-contact surfaces (daily/weekly)
 - Contamination incident logs, documenting any event that could result in contamination of equipment or food (including vomit, blood, and diarrheal events in public areas and cleanup) (continuous)
 - Logs of chemical concentration testing (continuous with new mixing)

Facility, equipment, and utensil maintenance:

- ▶ All facilities should inspect refrigeration units and freezers and take the temperature of dish machine water daily.
- ▶ Example facility and equipment records (frequency):
 - Logs for equipment maintenance (continuous)
 - Logs for refrigerator temperatures (daily)
 - Logs for freezer temperatures (daily)
 - Logs for blast chilling temperatures (daily)
 - Logs for dish machine temperatures (daily)
 - Tool and equipment control logs (per food service)

Advanced practices

- ▶ Maintain electronic files through a searchable system. Electronic files should be backed up in a secure location or manner to prevent them getting lost.
- ▶ Increase frequency of monitoring critical food safety elements.
 - Monitor temperatures of food products, before, during, and after food transportation and service.
 - Conduct inspections of refrigeration, freezer, and dishwasher water temperatures multiple times a day.

- Conduct monthly inventories of food products with a review of cost and actual vs. planned inventories to ensure that expected inventories are present, and products are appropriately stored without tampering.
- ▶ Record and maintain appropriate temperatures for all Time/Temperature Control for Safety (TCS) foods during the critical points of preparation (thawing, cooking, cooling, holding, and reheating).
- ▶ Review logs with food workers regularly for training and quality improvement.
- ▶ Consider installing digital food safety management systems to automate data with built-in alarms when temperatures or concentrations are out of range. Certified data security features should be included to ensure data logs cannot be manipulated by users.

Justification:

- ▶ 5-ACI-4-4324
- ▶ 5-ACI-4-4325
- ▶ 5-ACI-4-4333
- ▶ 5-ALDF-4A-05
- ▶ 5-ALDF-4A-06
- ▶ 5-ALDF-4A-15
- ▶ [Food Safety Modernization Act \(FSMA\)](#)²⁴
- ▶ The FDA Food Traceability Rule²⁵ states that entities that manufacture, process, pack, or hold foods on the [Food Traceability List \(FTL\)](#) (including, but not limited to, soft cheeses, certain fresh produce, certain fish/shellfish, nut butters, and deli salads), maintain records containing Key Data Elements.
 - The Food Traceability Rule will improve the accuracy and timeliness of traceback of key food products at each point along the supply chain.
 - **Correctional facilities that handle any foods on the Food Traceability List will be required to maintain a traceability plan, as well as specific records relating to any critical tracking events (e.g., harvesting, shipping, receiving, transformation) that they perform.**
 - Correctional facilities will generally meet the Food Traceability Rule's definition of a restaurant when they prepare food for immediate consumption. In this situation, they would not be required to maintain transformation or shipping records for the food that they prepare on-site for immediate consumption. However, **they would be required to maintain receiving records for any foods on the Food Traceability List they receive from a supplier, retailer, or central kitchen.**
 - Correctional facilities involved in the harvest or production of food on the Food Traceability List for sale to other entities may need to maintain records relating to harvesting, cooling (prior to initial packing), initial packing, transformation, or shipping for foods on the Food Traceability List.
 - Correctional facilities that maintain central kitchens which prepare foods to be sent to individual facilities may need to maintain records related to receiving, transformation, and shipping for foods on the Food Traceability List.
 - Entities subject to the Food Traceability Rule must be in compliance with the rule by January 20, 2026.
 - **Except as otherwise stated in the rule, all records required under the Food Traceability Rule must be maintained for 2 years.** Records should be able to be provided to the FDA within 24 hours or another reasonable timeline established by FDA.

Resources

- ▶ [Food Traceability Rule resources | FDA](#)
- ▶ [Food Traceability List | FDA](#)
- ▶ [Frequently Asked Questions: FSMA Food Traceability Rule | FDA](#)
- ▶ [Traceability Plan Example for Restaurants](#)

Special Considerations for Cleaning, Sanitation, and Maintenance

Summary

Basic cleaning, sanitation, and maintenance procedures from the FDA Food Code and other regulatory documents should always be followed; however, additional practices may need to be implemented to prevent foodborne outbreaks and maintain the safety and security of correctional facilities (e.g., additional sanitation, chemical security, tamper-proofing, and security of electrical circuits).

Implementation

Standard practices

- ▶ **Ensure all federal, state, local, tribal, and territorial regulations (including FDA Food Code Parts 4-6 through 4-9) are met; these are the minimum standards.**
- ▶ Familiarize all food workers with agency or facility policies and Standard Operating Procedures (SOPs).
 - This may include training on topics such as: chemical preparation (if applicable), the importance of and differences among cleaning, sanitizing, and/or disinfecting surfaces; types of surfaces (food contact, non-food contact, high hand-touch, and porous/soft); frequency of cleaning, sanitizing, and/or disinfecting.
- ▶ If chemicals are used, training should include how to read a product label, appropriate use of personal protective equipment (such as gloves, protective eyewear, and respirators, depending on the chemical being used), mixing instructions, and instructions in case of spill or exposure.
 - Only use [sanitizers approved by the U.S. Environmental Protection Agency \(EPA\)](#) for use in food handling areas.
 - Always review chemical safety data sheets (SDS) before use and train workers on how to use SDS. The SDS includes important information such as first aid protocols for chemical exposures.
 - Chemicals should be clearly labeled and held in secure areas away from food at temperatures and conditions as listed on the product label.
 - Logs should be maintained to track and document mixing, product expiration, and inventory.
- ▶ Ice machines are food equipment and food contact surfaces of ice machines should be cleaned and sanitized regularly according to the manufacturer's written instructions to prevent the development of slime, mold, or soil residues that may contribute to the buildup of germs. The general steps for cleaning and maintaining ice machines are as follows:
 - Thoroughly clean and sanitize food contact surfaces using sanitizing agent listed by the manufacturer.
 - Restart the machine. Discard the first ice produced.
- ▶ Food equipment, including ice machines and microwaves located in dormitories, should be cleaned and sanitized regularly.

- ▶ Develop and/or enhance equipment maintenance schedules. Equipment in correctional settings may be older or used more frequently than typical kitchen equipment and therefore may need more frequent maintenance.

Contamination Events: (public vomit or diarrheal incident)

- ▶ Develop special procedures to address situations that may involve body fluids or fecal contamination, etc.
 - Keep spare trays and utensils on hand to replenish ones needing immediate disposal due to contamination or destruction.
 - Develop and/or enhance training programs for food workers to learn how to respond and clean and disinfect the area in these situations.
 - When a public area becomes contaminated with body fluids or feces, close the area immediately to reduce the possibility of exposure. For vomit events, close the contaminated area to include a diameter of 25 feet.²⁶
 - Ensure the area is properly cleaned and disinfected to prevent contamination of food and surfaces.
 - Not all disinfectants are effective for norovirus in vomit, diarrhea, blood, or feces. Review [Selected EPA-Registered Disinfectants | US EPA](#) to identify the most appropriate disinfectant and contact time needed.
- ▶ Assume that any vomit or diarrheal incident may be caused by norovirus.
 - Wear appropriate personal protective equipment when cleaning up vomit or diarrhea including disposable gloves, surgical masks, apron/gowns and protective eye wear if spray is likely.
 - Use disinfectant effective against norovirus from [EPA's Registered Antimicrobial Products Effective Against Norovirus \(feline calicivirus\) \[List G\] | US EPA](#)
 - Chlorine bleach solutions are the gold standard for norovirus disinfection for non-porous hard surfaces. Keep the surface wet with bleach solution for 10–20 minutes and then rinse thoroughly with water.²⁷
 - ◆ Use 1:250 dilution for food contact surfaces.
 - ◆ Use 1:50 dilution for other non-porous surfaces.
 - ◆ Use 1:10 dilution for heavily contaminated non-porous surfaces.
 - Contamination of porous or textured surfaces may require different chemicals or approaches. Damaged or highly contaminated trays may require disposal.
 - If using a chemical disinfectant, follow product label instructions.
 - Launder contaminated linens with detergent using the hottest wash cycle and machine dry on high heat.
 - Following cleanup, carefully remove personal protective equipment to avoid self-contamination and wash hands and other potentially contaminated body parts (e.g., arms) thoroughly before resuming other duties.
 - ◆ If worker clothes become contaminated, change into clean clothes, and launder soiled clothes before resuming duties.

Advanced practices

- ▶ Develop SOPs for chemical control and accountability. Ensure less hazardous chemicals are used; if chemicals need to be prepared, ensure this is done under staff supervision and in controlled settings. Review procedures with facility safety department personnel. (See [Security](#) section for additional information.)
- ▶ New major kitchen equipment can be purchased with [correctional or security packages](#) which include additional lockable panels, security screws, lock hasps, secured electrical circuitry panels, etc. These options should be strongly considered when purchasing new equipment.
- ▶ Create maintenance contracts or agreements with equipment repair companies in advance to allow for quick repairs when required.
- ▶ Due to the nature of group living settings, correctional environments typically experience a higher rate of diseases spread from person to person. Increased cleaning of high-touch surfaces, effective handwashing, and health and hygiene monitoring of food workers supports safe food operations. (See the [Food Worker Health](#) section for more information.)
 - High-touch surfaces may include drink dispensing machines, self-serve utensils at salad bars, tables, chairs, doors, door handles, stair rails, light switches, sink and shower fixtures, toilets, keyboards, phones, etc.
 - Review protocols for cleaning and sanitation of high-touch surfaces with infection control or safety personnel.

Justification

- ▶ [FDA Food Code 2022](#)
- ▶ 5-ACI-4-4333

Resources:

- ▶ [NIOSH Workplace Solutions: Safe and Proper Use of Disinfectants to Reduce Viral Surface Contamination in Correctional Facilities \(cdc.gov\)](#)
- ▶ Free Printable Poster for Facilities: [Safe and Proper Use of Disinfectants in Correctional Facilities \(cdc.gov\)](#)
- ▶ [OSHA-NIOSH Infosheet: DHHS \(NIOSH\) 2012126; OSHA 351202 \(cdc.gov\)](#)
- ▶ [V-D-Clean-Up-2021-8x11-1.pdf \(virginia.gov\)](#)
- ▶ [Cleaning up body fluids—Appendix L 2023 \(nrckids.org\)](#)
- ▶ [Routine schedule cleaning, sanitizing and disinfecting—Appendix K \(nrckids.org\)](#)
- ▶ [Selecting cleaning, disinfecting and sanitizing products—Appendix J \(nrckids.org\)](#)
- ▶ [Food Service cleaning schedule—Appendix W \(nrckids.org\)](#)
- ▶ [Safety Tips for Using Foggers and Misters 12 \(hud.gov\)](#)



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Food Characteristics

Summary

Correctional facilities should aim to provide safe and nutritious meals at their facilities. Facilities should use detailed and clear purchasing specifications to ensure any standards and regulations requested of purchased food products are achieved. This can include minimum standards for operations, quality, etc. In some cases, the safety of food products is based on the quality and safety of ingredients. Some products are known to contain high amounts of foodborne germs (such as unpasteurized milk, cheese, and juice products) and have been tied to numerous foodborne outbreaks inside and outside of correctional settings. Unpasteurized milk, dairy, egg, and juice products should not be used. Advanced practice would be to exclude items like raw mechanically separated meat and poultry.

Implementation

Standard practices

Sources

- ▶ **Ensure all federal, state, local, tribal, and territorial regulations (including FDA Food Code Part 3-1 and Subpart 3-201) are met; these are the minimum standards.**
- ▶ All food should be clean, wholesome, free from spoilage, adulteration, and misbranding, and safe for human consumption.
- ▶ Purchase food from approved and reputable food suppliers; food should always include appropriate product labels.
- ▶ Inspect the entire shipment to ensure the quality and appropriate temperature upon receipt of all products. (See [Food Receiving](#) section.)
- ▶ When obtaining food directly from farms—ensure that the operations follow good agricultural practices. Farms should be inspected and possess all applicable permits and licenses before distributing goods. (See [Institutional Operations](#) section.)
- ▶ Vendors should provide inspection reports, nutrition information, and other details regarding product quality/traceability when requested. (See section on [Records Management](#).)

- ▶ Follow jurisdictional statutes and regulations related to [cottage foods](#) (CF).
 - Time/Temperature Control for Safety (TCS) foods from cottage operations (if allowed) should be used with extreme caution. If these must be used:
 - ◆ Use approved food sources,
 - ◆ Consider Food Service Manager (FSM) inspections of CF establishments before purchasing food,
 - ◆ Require that water used at CF establishments be of drinking water quality and ingredients for CF should come from inspected sources, and
 - ◆ CF operators may not have a communicable disease that may be spread by food.
 - If your facility chooses to deviate from this recommendation to support the provision of traditional (Native) foods, we suggest reviewing procedures with your regulatory authority to minimize food safety risk.
- ▶ Correctional facilities may receive and use food from food donation programs or food recovery programs.
 - Review and follow the [Conference for Food Protection committee guidance on the Comprehensive Resource for Food Recovery Programs](#) and other resources, such as [FSIS Guidelines to Assist with the Donation of Eligible Meat and Poultry Products to Non-Profit Organizations](#), to ensure all products used within facilities are of sufficient quality and safety.
 - Review state, tribal, local, or territorial regulations regarding community donations.

Diet and Taste Considerations

- ▶ Follow [National Commission on Correctional Health Care recommendations for Nutritional Wellness](#):²⁸
 - Facilities should provide a healthy diet based on nationally recognized nutrition standards which are based on sex, life-stage, and activity level, such as [The Dietary Guidelines for Americans 2020–2025](#).^{11,14,29}
 - Food should be palatable and should consider the cultural and demographic preferences of the facility's population.
 - **Access to food or provision of certain food types should never be used as discipline.** Use of food as discipline is counter to a positive food safety culture^{7–9} and instead may result in food being stolen or prepared illicitly. Illicitly prepared foods have been tied to several foodborne outbreaks in correctional facilities.^{16–19}
 - Obtain input from incarcerated individuals on menu options.
- ▶ To support ordering and preparation, while meeting the nutritional needs, correctional settings should use a standard menu which is developed in partnership with a Registered Dietitian Nutritionist (RDN) or qualified nutritionist based on regulatory requirements.
 - A RDN or qualified nutritionist should review the menu at least annually or when a significant change is made considering the [Dietary Guidelines for Americans, 2020–2025](#) published by the U.S. Department of Agriculture (USDA) and U.S. Department of Health and Human Services.
 - Juvenile facilities should follow the [USDA School Nutrition Standards](#). Consider nutrition guidance provided by USDA's [National School Lunch Program](#) and [School Breakfast Program](#), while accounting for the total caloric needs provided by the facility throughout the day.

- Any deviations (e.g., substituted ingredients) from the standard menu should be recorded and approved by FSM, and menu should continue to meet nutritional standards whenever possible.

Quality

- ▶ Use minimum quality standards for food products when possible (e.g., Grade A milk products, Consumer Grade A shelled eggs, homogenized pasteurized egg products).
 - [USDA Commercial Item Descriptions \(CIDs\)](#) help describe characteristics of commercial products including detailed descriptions and important information on food safety and quality.
 - Minimum quality standards can be listed on requests for purchase and other purchase specifications.
- ▶ Facilities should not serve or use food products labeled “unfit for human consumption.”
- ▶ Carefully consider use of products known to contain higher levels of foodborne germs:
 - Non-pasteurized (raw) milk, dairy (including cheese and ice cream), egg, and juice products; these are known to contain harmful germs.^{30–36} Do not purchase or use unpasteurized milk, dairy, egg, and juice products for correctional facilities.
 - ♦ Pasteurization heats products to a high enough temperature for enough time to kill harmful bacteria, viruses, and parasites.
 - ♦ Frozen milk products, such as ice cream, frozen custard, etc., should be pasteurized per “Frozen Dessert” standards ([21 CFR 135](#)).
 - ♦ Non-pasteurized (raw) milk and products made from raw milk are known to contain harmful germs including *Campylobacter*, *E. coli*, and *Salmonella*.
 - Interstate sale of unpasteurized milk is prohibited by FDA ([21 CFR 1240.61](#)); additional state laws may apply for the sale and distribution of unpasteurized milk and dairy products within state boundaries. (e.g., [Minnesota Statute 2018, section 32D.20](#))
 - ♦ Unpasteurized juices have been shown to contain germs like *Cryptosporidium*, *E. coli*, *Salmonella*, and *Vibrio cholerae*.
 - If using products from institutional dairies or egg production, ensure all products are pasteurized before use and educate workers on the danger of consuming non-pasteurized products. (See section on [Institutional Operations](#) for more information.)
 - Mechanically separated meat and poultry products (including mechanically separated chicken) have been noted as the source of several foodborne outbreaks in correctional settings.^{37–40} Raw mechanically separated chicken and turkey are known to contain higher levels of germs. More than 80% of raw mechanically separated chicken and more than 50% of raw mechanically separated turkey were positive for *Salmonella* as part of USDA FSIS raw comminuted poultry *Salmonella* verification sampling program in 2014, higher than positive reports for other sampled raw chicken and turkey products.⁴¹ More recent [raw poultry sampling data](#) (through September 2023) are available on the USDA FSIS website and show consistent relative trends over time.
 - ♦ Mechanically separated products are often used as ingredients in highly processed products (like hot dogs) which undergo thorough heat treatment to be considered safe.

- ◆ If your facility uses **raw** mechanically separated meat and poultry products:
 - Raw mechanically separated meat and poultry products are often sold frozen in large blocks, which may make them difficult to thaw completely.
 - Raw mechanically separated meat and poultry products should be fully thawed before use. (Thawing as part of the cooking process is not recommended.)
 - Ensure products are thawed by inserting a food thermometer probe into the center of raw products.
 - Clean and sanitize food thermometers in between each use to minimize cross-contamination.
 - Measure temperatures at numerous points during the cooking process in multiple locations to ensure the full product is cooked to temperature. Food containing raw mechanically separated poultry should reach a minimum temperature of 165°F and food containing raw mechanically separated meat should reach a minimum temperature of 160°F.
 - Minimize opportunities for cross-contamination when using this product:
 - Keep mechanically separated meat and poultry in sealed containers while thawing and prevent any juices from dripping onto other food.
 - Wash hands before and after handling mechanically separated meat or poultry or their containers.
 - Thoroughly clean and sanitize all utensils, cutting boards, sinks, and equipment having contact with raw mechanically separated meat or poultry or their containers.
 - When possible, store and prepare raw mechanically separated meat and poultry in a separate area from ready-to-eat products.
- ▶ Make sure food products obtained from internal operations (gardens, dairies, egg operations, etc.) comply with appropriate regulatory inspections or permitting. (See section on [Institutional Operations](#).)
- ▶ TCS foods are rich in protein and moisture and are less acidic making them ideal environments for bacteria to live and grow. Pay particular attention to time and temperature controls and signs of spoilage (based on smell, taste, and texture) before serving TCS foods.
- ▶ [Consider the use-by/sell-by/expiration dates](#) on perishable food items.
 - Manufacturer's use-by date is a recommendation for when to use the product while its quality is at its best. It is recommended that facilities consider the manufacturer's information as good guidance to follow to maintain the quality. However, use-by dates are not an indicator of the product's safety.
 - Foods not showing signs of spoilage (based on smell, taste, and texture) should be wholesome and may be sold, purchased, donated, and consumed beyond the labeled "Best if Used By" date.
- ▶ FSM is responsible for maintaining awareness of [food product recalls](#). Vendors should inform their customers of items implicated in recalls in a timely manner. Within 24 hours of a recall notification, FSM or their designee should verify whether a recalled item is among their current inventory and, if identified, quickly remove all recalled items from commissaries (when managed by the Food Service Department) and stocks.
 - Remove recalled items from the stock area and clearly mark products with "RECALLED ITEM, DO NOT USE."

- Follow vendor instructions for the return or disposal of recalled products.
- Clean and sanitize surfaces in contact with recalled products.
- Lists of recalled products should also be made available to warehouse receiving to ensure recalled products are refused before entry.

Advanced practices

Sources

- ▶ Develop a relationship with all suppliers and regularly inquire about their sanitation practices, temperature control management, and performance according to international or regulatory standards.
- ▶ Consider having a RDN or qualified nutritionist:
 - Analyze and ensure menus meet the Dietary Components of Public Health Concern for Underconsumption, as listed in the [Dietary Guidelines for Americans, 2020–2025](#), and
 - Analyze and consider the micronutrient (vitamin and minerals) needs as identified in [Dietary Guidelines for Americans, 2020–2025](#).
- ▶ Consider situations when packaged ready-to-eat foods may be safer (e.g., when routine operations are not available and/or trained staff are not available). Selection of products and method of preparation considerations should not override nutritional considerations.
- ▶ When feasible, exclude food prepared in private homes (including [cottage foods](#)) or uninspected food preparation facilities.
 - If mobile kitchen facilities are used for temporary services, ensure they are inspected/permitted by the appropriate regulatory authority.
 - If food preparation facilities (including federally contracted food trucks for emergency services) are not inspected or permitted, have a FSM from the facility inspect before use.

Quality

- ▶ Do not use or purchase raw mechanically separated meat or poultry.
- ▶ FSM should subscribe to notification services for food product recalls:
 - The automatic email alert system provided by USDA/FSIS at: <http://www.fsis.usda.gov/wps/portal/fsis/topics/recalls-and-public-health-alerts/current-recalls-and-alerts>
 - The automatic email alert system provided by FDA at: <http://www.fda.gov/Safety/Recalls/default.htm>

Justification

- ▶ 5-ALDF-4A-07
- ▶ 5-ALDF-4A-08
- ▶ [Nutritional Wellness in Correctional Settings \(2023\)—National Commission on Correctional Health Care \(ncchc.org\)](#)
- ▶ [Nutrition Standards for School Meals | Food and Nutrition Service \(usda.gov\)](#)
- ▶ [Comprehensive Resource for Food Recovery](#)⁴²

- ▶ [Food Service Guidelines for Federal Facilities \(cdc.gov\)](https://www.cdc.gov/foodserviceguidelines/)
- ▶ [Dietary Guidelines for Americans, 2020–2025](https://www.dietaryguidelines.gov/)²⁹
- ▶ [Cottage Foods Regulatory Guidance for Best Practices \(afdo.org\)](https://www.afdo.org/)⁴³
- ▶ [FSIS Guideline to Assist with the Donation of Eligible Meat & Poultry Products to Non-Profit Organizations \(usda.gov\)](https://www.fsis.usda.gov/food-safety-and-inspection-service-guidance/assessing-risk-donating-food)⁴⁴
- ▶ [Responding to Food Recall Procedures for Recalls of USDA Foods | Food and Nutrition Service](https://www.fns.usda.gov/food-recall-procedures)⁴⁵

Resources

- ▶ [Find a Nutrition Expert \(eatright.org\)](https://eatright.org/)



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Food Receiving

Summary

Receiving is the practice of obtaining food from an approved source and implementing procedures to organize and house products while minimizing the potential for food contamination. Correctional facilities have additional challenges of ensuring contraband is not included in the shipments and may need to manage food from alternative sources (e.g., institutional operations, food donation/recovery programs, etc.) to provide continuous and cost-effective food services.

Implementation

Standard practices

- ▶ **Ensure all federal, state, local, tribal, and territorial regulations (including FDA Food Code Subpart 3-202) are met; these are the minimum standards.**
- ▶ Receiving and storage areas for food should be restricted to authorized personnel.
- ▶ Warehouse and storage areas should always be secured. Knives and other potentially dangerous equipment (box cutters, kitchen shears, etc.) should be stored in a secured area separate from food storage.
- ▶ All food items should be x-rayed or visually searched before being moved within the secure perimeter of the facility. (See section on [Security](#).)
- ▶ Food products should be reviewed by a trained and authorized Food Service Manager (FSM), or designee at the facility. Food records, including inventory and temperature logs, should be clearly and carefully maintained. (See [Records Management](#) section.)
 - Set protocols to minimize the time that food spends without proper temperature control. Consider factors such as time spent for food to be transported into the secure perimeter, passing through checkpoints (gates, inspections, etc.), inspections from FSM, etc.
 - When receiving Time/Temperature Control for Safety (TCS) foods, transport containers should be inspected, and the temperature reviewed to ensure food is transported and remains at the proper temperature. If food arrives outside of temperature control, it should be rejected.

- ◆ When possible, complete an inventory review of food items in a temperature-controlled area.
- ◆ When item temperatures cannot be checked using a probe temperature (eggs, milk, etc.) measure the temperature of the transport container or place a probe thermometer tightly between two packages.
- ◆ Refrigerated TCS foods should be at a temperature of 41°F or below when received.
- ◆ Hot TCS foods delivered from outside sources should be at a temperature of 135°F or above when received.
- ◆ Food that is labeled frozen and shipped frozen should be received frozen.
- Ensure TCS foods have no evidence of previous temperature control issues (swelling, freezer burn, water stains on packaging, ice crystals, etc.).
- Inspect food to ensure that cross-contamination (e.g., a mixed pallet of ground beef leaking onto the lettuce) has not occurred.
- All packages should be in good condition, free from pests and tampering. Reject products if the seal is broken or the package is swollen or leaking.
- Product specifications should be verified upon receipt at the warehouse and cross-referenced against purchasing documents to ensure proper contents and quality assurance.
- ▶ Immediately store food, beginning with frozen and refrigerated TCS foods, using a first-in-first-out rotation once the initial safety review has been completed. (See [Food Storage](#) section.)
- ▶ See the Food Receiving Checklist in [Appendix 5](#).

Advanced practices

- ▶ Use a computerized food management system to track the food ordering, cost, and inventory.
- ▶ Implement a method to track and document vendor performance, providing the ability to hold vendors accountable and restrict underperforming vendors.

Justification

- ▶ [FDA Food Code 2022](#)

Food Storage

Summary

Food should be stored in clean, temperature-controlled, and secured areas. The Food Service Manager (FSM) or their designee should control access to food storage areas as per facility Standard Operating Procedures (SOPs).

Implementation

Standard practices

- ▶ **Ensure all federal, state, local, tribal, and territorial regulations (including FDA Food Code Subpart 3-302) are met; these are the minimum standards.**
- ▶ Maintain a SOP, including a daily temperature tracking log for the storage of food products. (See [Records Management](#) section.) Unless otherwise noted in the relevant state, tribal, local, or territorial health regulations, SOP should note that:
 - Shelf-stable foods should be held between 45°F and 80°F.
 - Refrigerated foods should be held at or below 41°F.
 - Frozen foods should be held at or below 0°F.
- ▶ Food should be stored in a clean, dry location and at least 6 inches above the floor. It should not be exposed to splash, dust, drip, or other contamination.
- ▶ If food such as whole raw fruits or vegetables and tofu are stored immersed in ice, the ice should be made from drinking water (i.e., potable water).
- ▶ Packaged food should not be stored in direct contact with ice if the packaging, wrapping, or container is water-permeable (cardboard, paper, etc.).
- ▶ Raw poultry and raw fish that are received immersed in ice in shipping containers may remain in that condition while in storage until preparation so long as appropriate temperature is maintained.
- ▶ Food should not be stored in locker rooms, toilet rooms, dressing rooms, garbage rooms, mechanical rooms, under non-shielded sewer lines, or open stairwells.
- ▶ Food should always be kept in containers that are designed for food contact with durability, cleanability, and safety in mind. (see FDA Food Code.)
- ▶ Food should be dated when it was received and FSM or their designee should review the inventory at a minimum of quarterly to ensure proper stock rotation. Consider color coding for ease of identification. (See [advanced practices](#).)
- ▶ Train all food workers in labeling and date marking requirements and perform routine quality assurance checks to ensure labeling and date marking is accurate and in compliance.
- ▶ Only the FSM or designee should authorize the removal of food from storage areas.
- ▶ When possible, hold controlled food products (such as yeast, nutmeg, cloves, mace, vanilla, and sugar) in a lockable cabinet. (See [Security](#) section.)
- ▶ Track inventory of controlled foods with bin cards. The bin card should include the date and quantity of issue, date and quantity of receipt, balance on hand, and initials of the employee making the entry.

- ▶ Separate ready-to-eat (RTE) foods, raw animal foods (fish, meat, poultry, eggs), and fresh fruits and vegetables during storage.
 - When possible, store each type of raw animal food (beef, fish, egg, poultry, etc.) separately to reduce cross-contamination. If not possible, they should be stored in the reverse cooking order with the raw animal foods requiring the highest minimum cooking temperature (poultry) at the bottom and products with the lowest minimum cooking temperature (beef) at the top.
 - Some foods may need to be stored separately from other foods, due to religious restrictions (e.g., meat and dairy products may need to be stored separately for Kosher meals) or to prevent cross-contamination of products containing allergens.
- ▶ Supplies should be drawn on a first-in, first-out basis. (See [advanced practices](#) below)
- ▶ Refrigerated RTE foods should be date-marked to support *Listeria monocytogenes* control. All refrigerated RTE foods made in-house and commercially processed foods should be discarded after a maximum of 7 days if food is kept at or below 41° F.

Advanced practices

- ▶ For easy compliance with stock rotation, develop a system to mark non-perishable food items with a color identifying the quarter or month received:
 - First Quarter = Red.
 - Second Quarter = Blue.
 - Third Quarter = Grey.
 - Fourth Quarter = Yellow.
- ▶ Ensure enough materials for appropriate color coding.
- ▶ Consider using colors that are appropriate for color-blind individuals (e.g., blue, yellow, grey, and red).

Justification

- ▶ 5-ACI-4-4160
- ▶ 5-ACI-4-4325
- ▶ 5-ACI-5C-14
- ▶ 5-ALDF-4A-16

Resources

- ▶ [Coloring for Colorblindness \(davidmathlogic.com\)](https://davidmathlogic.com/colorblind)
- ▶ [Universal Design: What is it? | Section508.gov](https://www.section508.gov/)
- ▶ [ColorBrewer: Color Advice for Maps \(colorbrewer2.org\)](https://colorbrewer2.org/)

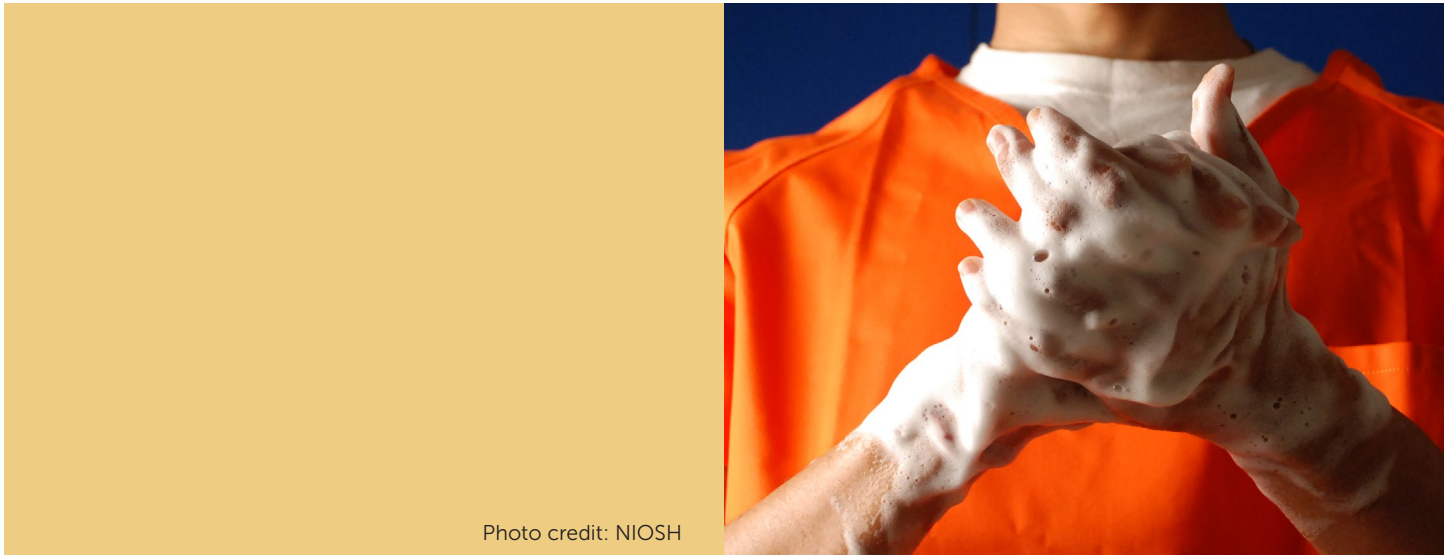


Photo credit: NIOSH

Food Preparation

Summary

Improper thawing, cooking, cooling, and holding of food products (called time and temperature control issues) are the most common causes of foodborne outbreaks in correctional settings.^{5,6} These situations provide opportunities for harmful bacteria to survive, grow, and produce toxins. Each of these steps (thawing, cooking, cooling, and holding) should be accompanied by careful monitoring and documentation of time and temperature components. Each food product should be cooked to the appropriate minimum temperature for safe consumption. Food holding should keep food out of the Danger Zone of 41°F to 135°F where bacterial growth can occur. Food services should ensure proper planning to minimize the production of leftovers.

Implementation

Note: all content relating to holding can be found in the [Serving Food](#) section.

Standard practices

- ▶ **Ensure all federal, state, local, tribal, and territorial regulations (including FDA Food Code Parts 3-4 and 3-5) are met; these are the minimum standards.**
- ▶ Clean and sanitize food thermometers between uses to reduce cross-contamination.

Ready-to-Eat (RTE) and Raw Foods

- ▶ **Eliminate** bare-hand contact with RTE foods by using serving utensils (e.g., tongs, spatulas) and single-use food service gloves, when appropriate.
- ▶ If single-use gloves are worn:
 - Consider providing non-latex glove options for worker safety.⁴⁶
 - Provide food service gloves in multiple sizes.
 - Food workers should wash their hands before putting on new gloves and after removing gloves.
 - Change gloves if the gloves get ripped, torn, or contaminated. Contamination can occur after using the bathroom, smoking, coughing, sneezing, eating and in between preparing raw and cooked foods.

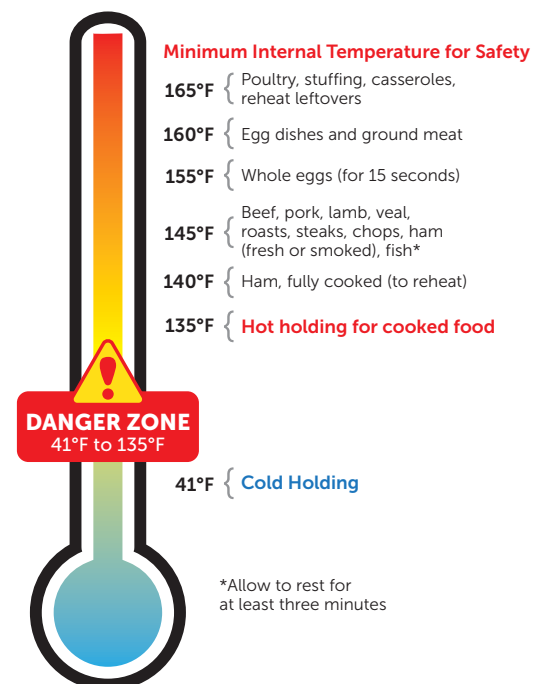
- ▶ Separate RTE foods from raw animal foods (fish, meat, poultry, eggs) during storage, preparation, and washing.
 - When possible, use separate cutting boards for ready-to-eat, raw fruits and vegetables, and raw animal foods.
 - If not possible, ensure boards are appropriately cleaned and sanitized when switching between product types.
- ▶ Unless raw fruit and vegetable product labels specifically note “pre-washed,” “triple washed,” or “ready-to-eat,” fruits and vegetables should be washed before they are peeled, cut, served, or used for cooking.
 - If using a chemical wash product, follow product label instructions.

Thawing

- ▶ The best methods of thawing frozen foods are:
 - Under refrigeration where food is kept at or below 41°F;
 - In a microwave oven (only use if food will be cooked immediately); or
 - Completely submerged under **running** water kept at 70°F or below.
 - ♦ Food thawed under this condition should be continually monitored to ensure (1.) RTE food does not rise above 41°F, and (2.) Raw animal products do not rise above 41°F for more than 4 hours (including preparation and cooking time).
- Conduct temperature checks on thawed raw animal products before they are used as an ingredient to ensure the whole product has thawed. (See additional notes on handling of mechanically separated meat and poultry in the [Food Characteristics](#) section.)
 - ♦ Thawing as part of the cooking process should be done with extreme caution, particularly when using frozen raw meat and poultry. Ensure the entire food product has reached a safe cooking temperature before serving.

Cooking

- ▶ Correctional kitchens **should not use** non-continuous cooking methods.
- ▶ Individuals monitoring food preparation and service should always have access to [calibrated](#) internal probe thermometers to ensure food safety.
- ▶ **Heat all parts of the food product** to the identified minimum temperature to cook the food properly (this may require you to check deeper and thicker parts of the food).
- ▶ Monitor and record final cooking temperatures and serving temperatures for all food products. (See [Records Management](#) section.)
- ▶ Plant foods (fruits and vegetables) that are cooked for hot holding should be cooked to 135°F.



- ▶ Correctional facilities should not serve raw or undercooked animal products (fish, meat, poultry, eggs) due to the potential presence of individuals at higher risk for severe foodborne illness.
 - If your facility chooses to deviate from this recommendation to support the use of traditional (Native) foods or other cultural practices, we suggest reviewing procedures with your regulatory authority to minimize food safety risks.
- ▶ Eggs
 - Do not serve foods made with uncooked eggs (such as Caesar dressing, hollandaise, mayonnaise, or eggnog). Commercial products made with pasteurized eggs may be used.
 - Eggs should be cooked until both the yolk and white are completely firm (155°F for 15 seconds).⁴⁷
 - ♦ The FDA Food Code says that restaurants may cook raw, shelled eggs for immediate service to 145°F if held for 15 seconds. Model food safety practice is to use a slightly more conservative cooking temperature for eggs in correctional facilities due to the potential presence of individuals at higher risk for severe foodborne illness.
 - Egg dishes (frittata and quiche) should be cooked to 160°F if they do not contain meat or poultry.
- ▶ Casseroles or stuffing containing meat or poultry should be cooked to 165°F.
- ▶ Poultry (including ground poultry); wild game animals; stuffed fish, meat, and ratite (emu or ostrich), should be cooked to 165°F.
- ▶ Meat
 - Ground meat (including beef and pork) should be cooked to 160°F.⁴⁸
 - ♦ The FDA Food Code says that restaurants may cook ground or minced meat to 155°F for 17 seconds. Model food safety practice is to use a slightly more conservative cooking temperatures for ground meat due to the potential presence of individuals at higher risk for severe foodborne illness.
 - Ham, fresh or smoked, and fish should be cooked to 145°F and allowed to rest for 3 minutes.
 - Cooked ham should be reheated to 140°F if packaged in a USDA-inspected plant. Otherwise cook to 165°F.
 - ♦ Whole meat roasts including beef, corned beef, lamb, pork, and cured pork should be cooked to the temperature and resting time in the following tables:

Temperature °F	Time in minutes ¹
130	112
131	89
133	56
135	36
136	28
138	18
140	12
142	8
144	5
145	4

Temperature °F	Time in seconds ¹
147	134
149	85
151	54
153	34
155	22
157	14
158	< 1 second

¹Resting time may include post-oven heat rise.

Cooling

- ▶ Cooked, Time/Temperature Control for Safety (TCS) foods should be cooled:
 - within 2 hours from 135°F to 70°F **and**
 - within 6 hours from 135°F to 41°F or less.
 - ◆ The initial quick cooling from 135°F to 70°F is critical to prevent spore-like bacteria like *Clostridium perfringens* and *Bacillus cereus* from germinating. Some bacteria including *B. cereus* and *Staphylococcus aureus* shed toxins, which cannot be eliminated from food even with reheating.
 - ◆ Use a cooling log to track the process and document corrective actions: if the food is unable to be cooled in the first step in time, reheat the food to 165°F and start the cooling process again.
- ▶ TCS foods should be cooled within 4 hours to 41°F or less if made from room temperature ingredients (such as reconstituted canned tuna).
- ▶ The best methods for quickly and safely cooling hot food may depend on the resources of your facility and the food type:
 - Use rapid cooling equipment (blast chillers), when available. Freezers can also be used to facilitate proper cooling.
 - Use containers that support heat transfer (e.g., metal pans).
 - Place food in shallow food pans or separate food into smaller or thinner portions.
 - ◆ Food should be no more than 2 inches deep.
 - ◆ While cooling, pans can be uncovered.
 - ◆ Once cooled, ensure the pans are loosely covered to protect from overhead contamination.
 - Place food container in ice bath and stir to cool or consider using ice wands or paddles where appropriate.
 - Add ice (best for soups, stocks, and gravies).
 - ◆ Ice should be of drinking water quality.
- ▶ See Cooling Hot Food Safely in [Appendix 6](#).

Reheating

- ▶ Never use hot holding equipment (steam tables, heat lamps, etc.) to reheat food; they do not reach a warm enough temperature for a long enough period of time to kill harmful bacteria.
- ▶ Ready-to-eat food that is commercially processed at a facility inspected by an appropriate regulatory authority can be reheated to 135°F unless otherwise indicated on product packaging.
- ▶ Leftovers reheated for hot holding, and any food that is cooked and cooled should be reheated to 165°F for 15 seconds.
 - If reheated using a microwave, food should be allowed to stand covered for 2 minutes.
 - Leftovers should be reheated **only one time**. Discard leftovers that remain after second service.
- ▶ Reheat food quickly. The reheating process should not exceed 2 hours.

- ▶ Monitor and record time and temperature before service.
- ▶ Cook-chill:
 - Cook-chill is a food preparation technique in which the food is cooked completely, sealed in a reduced oxygen packaging, rapidly cooled (within 90 minutes), stored, and then reheated just before eating. Cook-chill foods are typically prepared in a central kitchen with products sent out to points of service to reduce costs and resources needed at the point of service and extend shelf life.
 - Facilities practicing cook-chill operations may have additional regulatory requirements to document appropriate safety procedures. Review federal, state, tribal, local, or territorial regulations.
 - Unless facilities are specially trained and equipped for cook-chill operations, cooked food should not be frozen for later use.
 - If reheating products are supplied by an approved cook-chill operation, cooking should carefully follow manufacturer instructions.

Advanced practices

Ready-to-Eat and Raw Foods:

- ▶ Prepare RTE foods in separate areas than raw meat, fish, and poultry products to limit cross-contamination.
- ▶ If separate areas are not available, clean and sanitize areas before and after the preparation of raw animal products.

Cooking

- ▶ Prohibit the use of leftovers or new products made from leftovers particularly for any products containing TCS foods.

Cooling and Meal Retention

- ▶ Continuously monitor food product temperatures during cooling and take corrective action when food is cooled improperly.
- ▶ Consider installing digital food safety management systems with built-in alarms to notify the operators when temperatures are outside the acceptable range. Certified data security features should be included to ensure data logs cannot be manipulated by users.
- ▶ Consider holding samples of meals (called "archived meals" or "ghost trays") for every meal production for at least 72 hours (if kept by refrigeration), or 7 days (if kept frozen).
 - These trays can be used for environmental testing in case of foodborne outbreak or suspected contamination.
 - Frozen storage is preferred.
 - Clearly mark the date of service and food items on the sample label.
 - Ensure trays are representative and managed exactly as served food. Trays should be rapidly cooled and covered appropriately. Do not leave trays outside of temperature control.
 - Longer holding periods may be considered if storage capacity is available.

Justification

- ▶ Large containers of raw protein, including mechanically separated chicken, have been implicated in several outbreaks in correctional facilities. Investigations revealed insufficient thawing time for the size of the product. Extreme caution should be taken when using this type of product. (See [Food Characteristics](#) section.)
- ▶ Several outbreaks in correctional facilities have been tied to the use of leftovers or leftovers repurposed into new dishes.^{49,50} While leftover food that is properly cooked, cooled, and reheated may be used safely, time and temperature issues during any of those steps can lead to the survival and growth of foodborne bacteria.
- ▶ Recent analyses of correctional outbreaks identified that >20% of correctional outbreaks were caused by *Clostridium perfringens*.⁶ Studies have shown that most *C. perfringens* outbreaks are caused by improper cooling techniques.⁵¹
- ▶ 5-ALDF-4A-17

Resources

- ▶ [Cooling Food Safely—Institute of Child Nutrition \(theicn.org\)](https://theicn.org/cooling-food-safely)



Photo credit: Getty Images

Serving Food

Summary

Foodborne outbreak data identify recurring food preparation practices that contribute to foodborne outbreaks in correctional settings. The most common practices cited in outbreaks include improper holding temperatures, contaminated food or equipment, and poor personal hygiene.²⁷ Correctional facilities serve food in a variety of settings and may, at times, need to rely on non-food workers (such as security officers) to support serving food.

Implementation:

Standard practices

- ▶ **Ensure all federal, state, local, tribal, and territorial regulations (including FDA Food Code Parts 3-3 and 3-5) are met; these are the minimum standards.**

Timing

- ▶ Operationalize food safety management systems (training, policies, and monitoring) to ensure food service is implemented safely. (See section [Food Safety Management Systems](#).)
- ▶ Implement plans for food service operations to ensure food is monitored and/or discarded at appropriate times.

Equipment Check

- ▶ Verify food temperatures on hot and cold service lines (hot holding at 135°F or above, cold holding at or below 41°F) and record temperatures daily for foods on temperature control.
- ▶ Preheat appropriate hot holding or hot transport equipment.

Prevent Contamination from Hands

- ▶ Dedicated handwashing stations should always be available to food workers. Handwashing stations should include running water, soap, paper towels, or functioning hand dryers, and trash cans. Handwashing sinks should have warm water. (See [Food Worker Health](#) section.)

- ▶ Post signs to encourage proper handwashing in kitchens, food service areas, and near restrooms. Consider using image-based signs, or signs in multiple languages depending on the language needs of facility food workers.
- ▶ Food workers should prevent cross-contamination of ready-to-eat (RTE) food with bare-hands by properly using suitable utensils such as deli tissue, spatulas, tongs, single-use food service gloves, or dispensing equipment.
- ▶ Food workers should wear single-use food service gloves when passing out utensils.
- ▶ If gloves are worn:
 - Consider providing non-latex glove options for worker safety.⁴⁶
 - Provide food service gloves in multiple sizes.
 - Food workers should wash their hands before putting on new gloves and after removing gloves.
 - Change gloves if the gloves get ripped, torn, or contaminated. Contamination can occur after using the bathroom, smoking, coughing, sneezing, eating and in between preparing raw and cooked foods.
- ▶ If gloves are not worn:
 - Ensure food workers thoroughly wash their hands before and after handling RTE foods with suitable utensil or other method to prevent bare-hand contact with RTE foods.

Self-serve Stations (salad bar, buffet, etc.)

- ▶ Diners should be instructed to wash their hands before serving themselves food.
- ▶ Food on display should be protected from contamination using packaging, counter, service line, or salad bar food guards (also called sneeze guards); display cases; self-closing hinged lids; or other effective means.
- ▶ Self-service operations for RTE foods should be provided with suitable utensils or effective dispensing methods that protect the food from contamination. Some operations have the utensils hooked to a cable (for anti-theft/security purposes) and this method reduces contamination of utensils. Cables should be treated as a food contact surface.
- ▶ Self-service operations, such as buffets and salad bars, should be monitored by employed food workers to prevent contamination of food.
- ▶ If bagged lunches or other Time/Temperature Control for Safety (TCS) food items are offered on a grab-and-go basis, signs should be posted about what time the food should be thrown out, and the throw-away time should also be labeled on each bag of food items. Food should be thrown away at that time.

Holding

- ▶ Except during preparation, cooking, or cooling,
 - Fully cooked roasts should be held at 130°F or above.
 - All the other food should be held either at 135°F or above or at or below 41°F.
- ▶ Time as a public health control refers to using only time, rather than using both time and temperature in the food monitoring process.

- The use of time as a public health control in correctional facilities is not allowed for raw eggs.
 - Facilities using this control method should maintain written procedures detailing which foods will use time as a public health control and how time will be used as a public health control. This material should be prepared in advance and made available to the regulatory authority upon request.
 - Food should have an initial temperature of 41°F or less when removed from cold holding temperature control, and 135°F or greater when removed from hot holding temperature control.
 - Mark the food to indicate the time at which food should be disposed of (4 hours past the time when it was removed from temperature control).
 - Food in unmarked containers or packages or marked to exceed the 4-hour time limit should be discarded.
- ▶ See Example Hot and Cold Holding Log in [Appendix 7](#).

Food Transportation

- ▶ Satellite/Remote feeding sites (including isolation or segregation units, dorms, pods, and housing units) may be particularly vulnerable to temperature control issues.
 - Kitchen staff should coordinate with security and operations to minimize the holding time between transportation and service.
 - Food that is transported outside the kitchen and food service areas should not be returned for use (i.e., cannot be re-served as leftovers).
- ▶ Food should be protected from contamination and covered during transportation.
- ▶ If a food cart is used to transport food directly to incarcerated and detained persons, food should be **kept on time or temperature control** with proper documentation and monitoring.
 - **Clearly mark the time after which food should be disposed of for any food using time as a public health control.** (See [Records Management](#) section.)
 - Food carts should be cleaned and sanitized before and after use.
 - Separate food carts should be used to store clean and soiled items and labeled as “clean” and “soiled.”

Offsite/Transit Meals

- ▶ Transportation meals are prepared and assembled by a food worker or come prepackaged and sealed from a vendor. Items in transportation meals should be shelf-stable (no refrigeration required) if temperature control cannot be maintained.

Advanced practices

- ▶ Individuals serving covered satellite meal trays should wear single-use food service gloves.
 - When using gloves:
 - ◆ Consider providing non-latex glove options for worker safety.⁴⁶
 - ◆ Provide food service gloves in multiple sizes.
 - ◆ Individuals should wash their hands before putting on new gloves and after removing gloves.

- ◆ Change gloves if the gloves get ripped, torn, or contaminated. Contamination can occur after switching from one food to another, touching other things, using the bathroom, smoking, coughing, sneezing, eating and in between preparing raw and cooked foods.
- ▶ Develop training and monitoring procedures to make sure food service gloves are used appropriately including how to remove gloves without self-contamination.
- ▶ Provide at least one handwashing station at the entrance of each food service area for diners and encourage proper handwashing to prevent contamination of self-service utensils.
- ▶ Discontinue self-service operations during elevated levels of gastrointestinal illness.
- ▶ A written time control plan(s) that ensures compliance with time as a public health control should be maintained and made available for review during inspections. A time control plan should be posted and available to all food workers working where time control is used. The plan(s) should:
 - Include set-up and discard times for each product.
 - List all units and foods (to include preparation counters, cabinets, compartments, and equipment) on time control.
 - Describe or show the flow of TCS foods when last in temperature control to placement in time control and discard.
 - Colored labels can help draw attention to the time when food should be thrown out.

Justification

- ▶ [2022 FDA Food Code](#)
- ▶ 5-ALDF-4A17

Resources

- ▶ [Managing Food Safety: A Manual for the Voluntary Use of HACCP Principles for Operators of Food Service and Retail Establishments | FDA](#)
- ▶ [2018 CDC Vessel Sanitation Program Operations Manual](#), Annex 13.13: Examples of Time Control Plans



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Institutional Operations (Farms, Gardens, etc.)

Summary

The goal of this section is to review food safety practices from farm-to-fork for any onsite correctional farm operation (including the production of eggs, meat, dairy, and produce operations).

Implementation

Standard practices

- ▶ Ensure farm and food processing operations are consistent with applicable federal, state, tribal, local, or territorial laws, regulations, policies, and permit requirements for agricultural production, environmental protection, and resource conservation. If you are unclear about which conditions apply, contact your Departments of Health, Environment, and Agriculture and university extension agents.
 - Additional requirements may apply if food produced in institutional operations (gardens, dairy farms, etc.) is sold or donated to external entities.
- ▶ Model Practices for Food Safety
 - Farm workers are also food workers and should receive food safety training in basic hygiene, safety, and record-keeping in a way that meets literacy and language needs. (See [Training](#) section.)
 - ◆ Incarcerated food workers, including those working on institutional operations, should be medically cleared by the facility medical provider before beginning work. (See section on [Food Worker Health](#).)
 - ◆ Ensure adequate toilet and hygiene facilities are available on site.
 - ◆ Raw produce should be rinsed in sinks or equipment designed for use with food.
 - ◆ Food should be inspected by employed food workers before being introduced into the secure perimeter of the facility.
 - ◆ Worker hygiene and sanitation practices should be implemented during production, harvesting, sorting, packing, and transporting to minimize potential cross-contamination.

- ◆ Ensure prompt delivery of harvested food into the food service area to limit opportunities for temperature control issues and contact with pests.
- ◆ Vessels or containers used to transport food into correctional food service areas should be single-use disposable containers, or reusable containers that are washed and sanitized following each use.
- Certain [basic principles and practices are associated with minimizing contamination with foodborne germs from the field through distribution of fresh fruits and vegetables](#).
 - ◆ Water sources should be tested and approved for agricultural, or livestock use.
 - ◆ Practices using animal manure or municipal biosolid wastes should be managed closely to minimize the potential for microbial contamination of fresh produce.
- Farm workers and those consuming food produced from farms should be protected from chemical contamination (fertilizers, if used, should be applied based on best agricultural and correctional security practices).
 - ◆ Ammonium nitrate fertilizer should not be used unless rendered inert for explosive properties.
 - ◆ Application of pesticides, fungicides, and rodenticides is done only by qualified personnel and should comply with [Federal Insecticide, Fungicide, and Rodenticide Act \(FIFRA\)](#).
- Incarcerated food workers involved in farm operations should be provided additional training on safe animal handling, equipment operation, and working in temperature extremes, as applicable.
- Provide training on hand hygiene following contact with animals, animal products, and soil. Training should emphasize the potential spread of disease between people and animals.
- People who are incarcerated and involved in dairy or egg operations should be provided additional education on the dangers of consuming unpasteurized products.

Advanced practices

- ▶ Develop of a Hazard Analysis for Critical Control Point (HACCP) plan specifically for institutional operations (accompanied by any available certifications).

Justification

- ▶ A few foodborne outbreaks in correctional settings have been traced back to exposure at farming and manufacturing operations.^{52,53} While these operations provide a good opportunity for work, training, vocational education, and reduced cost of produce and other commodities, they present an additional source of risk for potential exposure to foodborne germs.
- ▶ 5-ALDF-4A-14

Resources

General

- ▶ [Produce and Plant Products Guidance Documents and Regulatory Information | FDA](#)
- ▶ [Trainings | Colorado Integrated Food Safety Center of Excellence | Colorado School of Public Health \(cuanschutz.edu\)](#)

- ▶ [School Gardens: Using Gardens to Grow Healthy Habits in Cafeterias, Classrooms and Communities | Food and Nutrition Service \(usda.gov\)](#)
- ▶ [Edible Schoolyard Project](#)
- ▶ [Farm to School Lesson Plans](#)
- ▶ [National Organization for Agriculture in the Classroom](#)
- ▶ [Egg Safety Training Materials—American Egg Board \(incredibleegg.org\)](#)
- ▶ [New Dairy Producer Topics | Ohio Department of Agriculture](#)

Formal HACCP Plans and Industry Guidance:

- ▶ [Produce and Plant Products Guidance Documents and Regulatory Information](#)
- ▶ [FSIS Food Safety Guidance for Egg Products](#)

Worker Safety Resources

- ▶ [Resources for Ag Employers—National Center for Farmworker Health \(ncfh.org\)](#)
- ▶ [Agricultural Health and Safety Course | College of Public Health | University of Nebraska Medical Center \(unmc.edu\)](#)
- ▶ [Educational Materials | Western Center for Agricultural Health and Safety \(ucdavis.edu\)](#)

Working Safely with Animals

- ▶ [NASPHV Animal Contact Compendium](#)
- ▶ [Feedyard 15 Program | College of Public Health | University of Nebraska Medical Center \(unmc.edu\)](#)
- ▶ [Egg and Poultry Workers Safety—Safe At Work California](#)
- ▶ [Worker Training and Safety | Idaho Dairyman's Association \(idahodairymens.org\)](#)



Photo credit: Getty Images

Oversight and Compliance

Summary

Oversight and compliance support the monitoring and verification of food safety practices. Internal verification (through monitoring and spot checks) should be built into facility Standard Operating Procedures (SOPs). External verification may be in the form of regulatory requirements (e.g., state, tribal, local, or territorial jurisdictions), judicial requirements (e.g., under a court order), or agency and facility policies. Additional external inspections may also be needed for accreditation.

Implementation

Standard practices

- ▶ **Ensure all federal, state, local, tribal, and territorial regulations (including FDA Food Code chapter 8) are met; these are the minimum standards.**
- ▶ Familiarize food workers with agency and institutional policies and SOPs.
- ▶ Develop shift/daily/weekly/monthly check sheets to monitor food service operations and internal inspections. (See [Records Management](#) section.)
- ▶ We suggest external inspections are conducted twice per year, but frequency may depend on leadership advice, jurisdictional guidance, type of food preparation, and past food safety performance.
- ▶ Always perform and document corrective actions identified by internal monitoring or external inspections in a timely manner.
- ▶ Develop and/or enhance continuing education programs for both employed and incarcerated food workers to address current food safety trends, Food Code updates, etc. are taught and implemented; this reinforces a continuous learning environment.

Advanced practices

- ▶ Review and develop site-specific SOPs to strengthen the food safety management of the facility—this would include developing additional SOPs to help define how the food service operation is managed.
- ▶ Conduct additional external inspections beyond those required by jurisdiction—this may include someone from another facility (for Federal Bureau of Prison Program Review, Environmental Management Systems (EMS) inspections), state, tribal, local, or territorial health department, state or local inspections or audits, food safety experts, or accreditation experts.
 - If budget allows, the facility could contract with a third-party reviewer to identify positive and negative food safety practices and provide recommendations to strengthen the system.

Justification:

- ▶ [Voluntary National Retail Program Standards 6—Compliance and Enforcement](#)⁵⁴
- ▶ 5-ACI-4-4321
- ▶ 5-ACI-4-4323
- ▶ 5-ACI-4-4324
- ▶ 5-ALDF-4A-11
- ▶ 5-ALDF-4A-15

Emergency Management

Summary

Every facility should have an emergency management plan that addresses food preparation and service during various emergency situations (including lockdowns, loss of utilities, and foodborne outbreaks). Emergency management plans should be housed in food preparation areas and be reviewed with safety officers and food workers during their initial training, and annually.

Implementation

Standard practices

Lockdown Services

- ▶ During lockdowns, individuals other than designated food workers may be involved in food preparation and service.
- ▶ Proper food handling and serving procedures should be in place even during lockdowns to ensure food safety.
- ▶ If traditional food service areas are not in use, food should be pre-plated and covered to prevent contamination.
- ▶ Staff transporting food should wear single-use food service gloves.
- ▶ When using gloves:
 - Consider providing non-latex glove options for worker safety.⁴⁶
 - Provide food service gloves in multiple sizes.
 - Food workers should wash their hands before putting on new gloves and after removing gloves.
 - Change gloves if the gloves get ripped, torn, or contaminated. Contamination can occur after switching from one food to another, touching other things, using the bathroom, smoking, coughing, sneezing, and eating.
- ▶ If food preparation and service frequently involve non-designated food workers, consider basic food safety training for all staff.

Power and Water Outages

- ▶ Each facility should have access to a seven (7) day emergency supply of the following (calculated using maximum facility population and staff):
 - Water for food service (enough for drinking, food preparation, and cleaning of eating utensils, etc.).
 - Additional water reservoirs may be needed for facility operations (toilets, sinks, laundry) and safety (e.g., fire suppression).
 - Non-perishable (including dried or canned) food items that do not require refrigeration or cooking.
- ▶ Each facility should perform quarterly inspections of the emergency food supply to include rotating non-perishable food into current use and should replenish the supply.

- ▶ In preparation for an emergency, each facility should have established contact with its organizational leadership or local emergency management system to help identify additional water and food supplies when internal stocks are low.
- ▶ During a power outage:
 - A closed refrigerator will generally keep food safe for up to 4 hours. Keep the door closed as much as possible. Discard refrigerated perishable food such as meat, poultry, fish, eggs, and leftovers after 4 hours without power.
 - A closed full freezer will generally hold a safe temperature for approximately 48 hours (24 hours if it is half full and the door remains closed). Food may be safely refrozen if it still contains ice crystals or is at 40°F (4°C) or below, however, its quality may suffer.
 - Use these charts as a guide for what food is safe to keep or discard. [Food Safety During Power Outage | FoodSafety.gov](#)

Alternative Food Suppliers

- ▶ Each facility should maintain multiple food supplier contracts in the event of disruption to one or more supplier's capabilities and/or deliveries. This may require coordination with federal, state, tribal, local, or territorial authorities to develop a list of approved contracting agents.
- ▶ Each facility should maintain contracts with existing food preparation resources (restaurants, vendors, caterers, etc.) in the event the facility kitchen cannot be used. Contracts should clearly identify food safety requirements and practices.
- ▶ Each facility should maintain a relationship with local emergency management to help identify disaster-feeding resources for meal support like the American Red Cross, community food banks, and/or feeding programs.

Outbreak Identification and Response

- ▶ Even with all the best food safety procedures in place, a foodborne outbreak may still occur due to factors that are outside the control of the facility. Therefore, it is important to be prepared for foodborne outbreaks.
- ▶ Food Service Managers (FSM) should keep and maintain updated contact information for the individual or department responsible for foodborne outbreaks at the state, tribal, local, or territorial health department.
 - Whenever possible, establish strong communication and collaboration with state, tribal, local, or territorial public health partners. Strong collaboration will ensure that the public health staff are familiar with the security procedures, food preparation, and staff in each correctional facility.
- ▶ Continually monitor food workers for any symptoms of foodborne illness to identify early clusters and remove ill food workers for the appropriate periods. (See [Food Worker Health](#) section.)
- ▶ Report suspected foodborne illnesses to the appropriate health department quickly. If your facility is unsure if an outbreak is occurring, consult with public health. Coordinate, as needed, with public health response activities, including:
 - Collection of food history questionnaires and/or menus,
 - Environmental sampling, testing of any leftover food or archived meal trays, and
 - Collection of stool samples for foodborne germ identification to support outbreak investigation and response efforts.

- Implementing short-term changes (such as longer exclusion periods for food workers, increased cleaning and sanitizing or disinfecting, or discarding implicated foods) to minimize the effect of the outbreak.
- ▶ Following an outbreak, provide refresher training to staff and correctional populations on foodborne illness prevention practices highlighting any issues identified in the outbreak investigation.
- ▶ Review and update outbreak response plans annually.

Advanced practices

- ▶ Encourage ongoing communication between FSM and healthcare staff about potential foodborne illnesses.
- ▶ Ensure there are no gaps in regular health and hygiene monitoring of food workers, even during emergency operations.
- ▶ Outbreak Response: Work with regulatory authority staff including local epidemiologists and environmental health specialists to identify outbreak root causes and contributing factors both to inform overall food safety efforts and provide targeted areas for outbreak prevention.
- ▶ Consider pre-clearing state, tribal, local, or territorial health staff for on-site visits to expedite staff access for inspections and outbreaks.
- ▶ Consider performing multi-agency tabletop exercises to test and improve response plans.



Photo credit: Amy Saupe

Justification

- ▶ The Council to Improve Foodborne Outbreak Response (CIFOR)⁵⁵ was strongly relied upon for all outbreak response-specific elements.

Resources:

- ▶ [CIFOR](#)
- ▶ [Integrated Food Safety Centers of Excellence](#)
- ▶ [Responding to Foodborne Illness Outbreaks \(BOP\)](#)
- ▶ [Publications and References | VSP | CDC](#)
- ▶ [Bad Bug Book \(Second Edition\) | FDA](#)
- ▶ [Designing an Emergency Preparedness Templates—Institute of Child Nutrition \(theicn.org\)](#)
- ▶ [Emergency Response Pocket Guide—Institute of Child Nutrition \(theicn.org\)](#)

Food Safety Management Systems

Summary

According to the [Food Safety Modernization Act](#), all food facilities must have a written preventive control plan, which is one piece of a Food Safety Management System. Food safety management systems should incorporate the principles of Hazard Analysis and Critical Control Point (HACCP); this includes identifying potential microbial, chemical, and physical food safety hazards, prevention steps to keep them out of the food, and corrective actions to take when a food product has deviated from the standard. Activities in previous sections, particularly related to monitoring and record keeping, support a food safety management system. A HACCP plan includes the following seven steps:

- ▶ Conduct a hazard analysis to identify potential hazards which may cause injury or illness if not controlled. (Consider: what foods are the biggest threats to food safety?)
- ▶ Determine the critical control points (CCP) where the hazard can be either eliminated or minimized so that it will not cause injury or illness. (Consider: where can you prevent those threats to food safety?)
- ▶ Establish critical limits that the processes must achieve at the CCP to eliminate or minimize the hazard. (Consider: what is the threshold that you need to make food safe? (e.g., cooking, or cooling temperatures))
- ▶ Establish monitoring procedures to ensure that the CCPs are meeting the critical limits. (Set ways to continually monitor your food preparation to catch those alerts/thresholds.)
- ▶ Establish corrective actions to take if the process does not meet the critical limits in the CCP. (Set SOPs on what to do when you do not meet the planned thresholds.)
- ▶ Establish verification procedures to ensure that the CCPs and critical limits are eliminating or minimizing the hazard(s) of concern. (Verify that major hazards are prevented by your alerts/thresholds.)
- ▶ Establish record-keeping and documentation procedures to illustrate that the identified CCPs are being met. (Maintain detailed and quality records to monitor alerts, thresholds, and corrective actions.)

Implementation

Standard practices

- ▶ Develop a written food safety management system that includes foundational elements (e.g., cleaning/sanitizing processes for different surfaces and pieces of equipment, purchase specifications, approved suppliers, backup suppliers, etc.)
 - The food safety system should be comprised of the policies and processes that are validated to address the hazard; training of food workers on those policies and processes; and a verification system (record-keeping) to ensure that the policies and practices are being met.
 - The system should include identifying potential hazards (major threats to food safety) based on the processes and the food being served; the critical limits that must be met to prevent the hazard; corrective actions to take if the critical limit is not met; and documentation that the critical limit has been met.
 - The system can also contain additional control steps that may not directly affect the safety of the food but do affect the quality.

- ▶ Review the plan and update annually.

Advanced practices

- ▶ Integrate the food safety management system into standard operations utilizing engineering controls, including redundant controls (backups for when one system fails) and making the process less reliant on the food worker (e.g., alarm systems when foods are out of temperature holding range, automated alerts to FSM when incarcerated food workers seek health services for fever, diarrhea, or vomiting, etc.).
- ▶ Develop and implement written sanitation and temperature control programs that target the control of *Listeria monocytogenes* in ready-to-eat products. Include documentation of:
 - Cleaning frequencies for equipment, utensils, and non-food contact surfaces (e.g., walls, floors, ceilings), and
 - Temperature control in refrigerators.

Justification

- ▶ [Food Service Guidelines for Federal Facilities \(cdc.gov\)](https://www.cdc.gov/foodserviceguidelines/)
- ▶ [HACCP Principles and Application Guidelines | FDA](https://www.fda.gov/food/haccp-principles-and-application-guidelines/)⁵⁶

Resources

- ▶ [Retail and Food Service HACCP | FDA](https://www.fda.gov/food/retail-and-food-service-haccp/)
- ▶ [About Hierarchy of Controls | Hierarchy of Controls | CDC](https://www.cdc.gov/food/hierarchy-of-controls/)
- ▶ [Guidance for School Food Authorities: Developing a School Food Safety Program Based on the Process Approach to HACCP Principles | Food and Nutrition Service \(usda.gov\)](https://www.usda.gov/food-nutrition-service/guidance-for-school-food-authorities-developing-a-school-food-safety-program-based-on-the-process-approach-to-haccp-principles/)
- ▶ [Background on the FDA Food Safety Modernization Act \(FSMA\) | FDA](https://www.fda.gov/food/background-on-the-fda-food-safety-modernization-act-fsma/)
- ▶ [Draft Guidance for Industry: Control of Listeria monocytogenes in Ready-To-Eat Foods](https://www.fda.gov/food/draft-guidance-for-industry-control-of-listeria-monocytogenes-in-ready-to-eat-foods/)

References

1. Carson EA, Kluckow R. *Prisoners in 2022—Statistical Table*. Bureau of Justice Statistics; 2023. <https://bjs.ojp.gov/library/publications/prisoners-2022-statistical-tables>
2. Zeng Z. *Jail Inmates in 2022*. Bureau of Justice Statistics; 2023. <https://bjs.ojp.gov/library/publications/jail-inmates-2022-statistical-tables>
3. Minton T. *Jails in Indian Country, 2022*; 2023. <https://bjs.ojp.gov/library/publications/jails-indian-country-2022>
4. Puzzachera C, Hockenberry S, Sladky TJ, Kang W. Juvenile Residential Facility Census Databook. Published online 2022. <https://www.ojjdp.gov/ojstatbb/jrfcdb/>
5. Drexler NA, Saupe A, Dodds S, Ripley D, Brown K. Chow hall challenges: lessons learned from outbreaks, investigations, and inspections of correctional kitchens. Plenary presented at: 2024 Integrated Foodborne Outbreak Response and Management (InFORM); January 24, 2024; Washington, DC.
6. Marlow MA, Luna-Gierke RE, Griffin PM, Vieira AR. Foodborne Disease Outbreaks in Correctional Institutions—United States, 1998–2014. *Am J Public Health*. 2017;107(7):1150–1156. doi:10.2105/AJPH.2017.303816
7. Yiannas F. *Food Safety Culture: Creating a Behavior-Based Food Safety Management System*. Springer Science and Business Media; 2008.
8. Kramer A, Hoover ER, Hedeem N, et al. Development of an empirically derived measure of food safety culture in restaurants. *J Food Prot*. 2023;86(3):100043.
9. *Food Safety Culture Systematic Literature Review. A Report Prepared by Westat, Inc.* U.S. Food and Drug Administration; 2022. Accessed September 12, 2024. <https://www.fda.gov/media/163588/download>
10. *Food Code*. United States Public Health Service Food and Drug Administration; 2022. <https://www.fda.gov/food/fda-food-code/food-code-2022>
11. Food Service Manual. Published online June 8, 2022. https://www.bop.gov/policy/progstat/4700.06_cn.pdf
12. Food Service Guidelines for Federal Facilities. Published online 2017. https://www.cdc.gov/obesity/downloads/guidelines_for_federal_concessions_and_vending_operations.pdf
13. *Performance Based Standards and Expectations of Adult Correctional Institutions*. Fifth. American Correctional Association; 2021.
14. *Performance Based Standards and Expected Practices for Adult Local Detention Facilities*. Fifth. American Correctional Association; 2023.
15. Food Safety Company. Common Types of Injuries in the Food Service Industry. June 9, 2020. Accessed July 19, 2024. <https://www.safetycompany.com/safetyblog/common-types-of-injuries-in-the-food-service-industry/>
16. McCrickard L, Marlow M, Self JL, et al. Notes from the Field: Botulism Outbreak from Drinking Prison-Made Illicit Alcohol in a Federal Correctional Facility—Mississippi, June 2016. *MMWR Morb Mortal Wkly Rep*. 2017;65(52):1491–1492. doi:10.15585/mmwr.mm6552a8
17. Yasmin S, Adams L, Briggs G, et al. Outbreak of Botulism After Consumption of Illicit Prison-Brewed Alcohol in a Maximum Security Prison—Arizona, 2012. *J Correct Health Care Off J Natl Comm Correct Health Care*. 2015;21(4):327–334. doi:10.1177/1078345815604752
18. Rao AK, Walters M, Hall J, et al. Outbreak of Botulism Due to Illicit Prison-Brewed Alcohol: Public Health Response to a Serious and Recurrent Problem. *Clin Infect Dis Off Publ Infect Dis Soc Am*. 2017;66(suppl_1):S85–S91. doi:10.1093/cid/cix936
19. Marlow M, Edwards L, McCrickard L, et al. Mild Botulism From Illicitly Brewed Alcohol in a Large Prison Outbreak in Mississippi. *Front Public Health*. 2021;9:716615. doi:10.3389/fpubh.2021.716615
20. Vogel L. Hand sanitizers may increase norovirus risk. *CMAJ Can Med Assoc J J Assoc Medicales Can*. 2011;183(12):E799–800. doi:10.1503/cmaj.109-3922
21. Nutrition C for FS and A. Retail Food Protection: Employee Health and Personal Hygiene Handbook. FDA. Published online March 7, 2022. Accessed July 24, 2024. <https://www.fda.gov/food/retail-food-industryregulatory-assistance-training/retail-food-protection-employee-health-and-personal-hygiene-handbook>

22. Rampey B, Keiper S, Mohadjer L, et al. *Highlights from the U.S. PIAAC Survey of Incarcerated Adults: Their Skills, Work Experience, Education, and Training*. National Center for Education Statistics; 2016. <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2016040>
23. Guide to Professional Standards for School Nutrition Programs. Published online December 2020. <https://www.fns.usda.gov/tn/guide-professional-standards-school-nutrition-programs>
24. Nutrition C for FS and A. Food Safety Modernization Act (FSMA). FDA. May 2, 2024. Accessed July 24, 2024. <https://www.fda.gov/food/guidance-regulation-food-and-dietary-supplements/food-safety-modernization-act-fsma>
25. Nutrition C for FS and A. FSMA Final Rule on Requirements for Additional Traceability Records for Certain Foods. FDA. Published online June 27, 2024. Accessed July 24, 2024. <https://www.fda.gov/food/food-safety-modernization-act-fsma/fsma-final-rule-requirements-additional-traceability-records-certain-foods>
26. Makison Booth C. Vomiting Larry: a simulated vomiting system for assessing environmental contamination from projectile vomiting related to norovirus infection. *J Infect Prev*. 2014;15(5):176-180. doi:10.1177/1757177414545390
27. Noroviruses Fact Sheet. Published online 2008. <https://www.osha.gov/publications/bytopic/noroviruses>
28. Position Statement: Nutritional Wellness in Correctional Settings. Published online 2023. <https://www.ncchc.org/position-statements/nutritional-wellness-in-correctional-settings-2023/>
29. *Dietary Guidelines for Americans 2020–2025. 9th Edition*. U.S. Department of Agriculture, U.S. Department of Health and Human Services; 2020. <https://www.dietaryguidelines.gov/>
30. Costard S, Espejo L, Groenendaal H, Zagmutt FJ. Outbreak-Related Disease Burden Associated with Consumption of Unpasteurized Cow's Milk and Cheese, United States, 2009–2014. *Emerg Infect Dis*. 2017;23(6):957–964. doi:10.3201/eid2306.151603
31. Sebastianski M, Bridger NA, Featherstone RM, Robinson JL. Disease outbreaks linked to pasteurized and unpasteurized dairy products in Canada and the United States: a systematic review. *Can J Public Health Rev Can Sante Publique*. 2022;113(4):569–578. doi:10.17269/s41997-022-00614-y
32. Whitehead J, Lake B. Recent Trends in Unpasteurized Fluid Milk Outbreaks, Legalization, and Consumption in the United States. *PLoS Curr*. 2018;10:ecurrents.outbreaks.bae5a0fd685616839c9cf857792730d1. doi:10.1371/currents.outbreaks.bae5a0fd685616839c9cf857792730d1
33. Mishu B, Koehler J, Lee LA, et al. Outbreaks of Salmonella enteritidis infections in the United States, 1985–1991. *J Infect Dis*. 1994;169(3):547–552. doi:10.1093/infdis/169.3.547
34. Vojdani JD, Beuchat LR, Tauxe RV. Juice-associated outbreaks of human illness in the United States, 1995 through 2005. *J Food Prot*. 2008;71(2):356–364. doi:10.4315/0362-028x-71.2.356
35. Jain S, Bidol SA, Austin JL, et al. Multistate outbreak of Salmonella Typhimurium and Saintpaul infections associated with unpasteurized orange juice—United States, 2005. *Clin Infect Dis Off Publ Infect Dis Soc Am*. 2009;48(8):1065–1071. doi:10.1086/597397
36. Cody SH, Glynn MK, Farrar JA, et al. An outbreak of Escherichia coli O157:H7 infection from unpasteurized commercial apple juice. *Ann Intern Med*. 1999;130(3):202–209. doi:10.7326/0003-4819-130-3-199902020-00005
37. Hutchinson JA, Wheeler C, Mohle-Boetani JC. Outbreak epidemiologically linked with a composite product of beef, mechanically separated chicken and textured vegetable protein contaminated with multiple serotypes of Salmonella enterica including multidrug-resistant Infantis, California 2016. *Epidemiol Infect*. 2018;146(4):430–436. doi:10.1017/S0950268817002941
38. Opegard SJ, Bethke AR, Davy BA, Johnson AE, Daniel JL, Holmes SE. Notes from the Field: Outbreak of Salmonella Enteritidis at a Correctional Facility Using Mechanically Separated Chicken—Nebraska, 2022. *MMWR Morb Mortal Wkly Rep*. 2022;71(28):908–909. doi:10.15585/mmwr.mm7128a4
39. Taylor AL, Murphree R, Ingram LA, et al. Multidrug-Resistant Salmonella Heidelberg Associated with Mechanically Separated Chicken at a Correctional Facility. *Foodborne Pathog Dis*. 2015;12(12):950–952. doi:10.1089/fpd.2015.2008
40. *Outbreak of Salmonellosis Associated with an Adult Detention Facility—Butler County, March 2023*. Kansas Department of Health and Environment <https://www.kdhe.ks.gov/DocumentCenter/View/36032/Outbreak-of-Salmonella-Associated-with-Butler-County-Adult-Detention-Facility-PDF>

41. *Progress Report on Salmonella and Campylobacter Testing of Raw Meat and Poultry Products, 1998–2014*. U.S. Department of Agriculture, Food Safety and Inspection Service https://www.fsis.usda.gov/sites/default/files/media_file/2021-02/Progress-Report-Salmonella-Campylobacter-CY2014.pdf
42. Comprehensive Resource for Food Recovery Programs. Published online April 2016. <http://www.foodprotect.org/media/guide/comprehensive-resource-for-food-recovery-2016-version.pdf>
43. *Cottage Foods: Regulatory Guidance for Best Practices*. Association of Food and Drug Affiliates; 2012. https://www.afdo.org/wp-content/uploads/2020/11/Cottage_Foods_Regulatory_Guidance_for_Best_Practices_acc_updated_2012.pdf
44. Guideline to Assist with the Donation of Eligible Meat and Poultry Products to Non-Profit Organizations. Published online December 2020. https://www.fsis.usda.gov/sites/default/files/media_file/2021-01/FSIS-Guideline-Food-Donation.pdf
45. Responding to Food Recall Procedures for Recalls of USDA Foods. Published online 2012. <https://www.fns.usda.gov/fs/responding-food-recall-procedures-usda-foods>
46. *Latex Allergy A Prevention Guide*. Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health <https://www.cdc.gov/niosh/docs/98-113/default.html>
47. Nutrition C for FS and A. Key Temperatures for Egg Safety in Food Service Operations and Retail Food Stores. *FDA*. Published online March 11, 2024. Accessed July 28, 2024. <https://www.fda.gov/food/retail-food-industryregulatory-assistance-training/key-temperatures-egg-safety-food-service-operations-and-retail-food-stores>
48. Safe Minimum Internal Temperature Chart | Food Safety and Inspection Service. Accessed July 28, 2024. <http://www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation/food-safety-basics/safe-temperature-chart>
49. Levy M, Johnson CG, Kraa E. Tonsillopharyngitis caused by foodborne group A streptococcus: a prison-based outbreak. *Clin Infect Dis Off Publ Infect Dis Soc Am*. 2003;36(2):175-182. doi:10.1086/345670
50. London AE, Payne JA, Hartl B. Outbreak Caused by *Clostridium perfringens* Infection and Intoxication at a County Correctional Facility. *J Environ Health*. 2017;80(1):8-13.
51. Wittry BC, Holst MM, Anderberg J, Hedeem N. Operational antecedents associated with *Clostridium perfringens* outbreaks in retail food establishments, United States, 2015–2018. *Foodborne Pathog Dis*. 2022;19(3):209-216.
52. Gicquelais RE, Morris JF, Matthews S, et al. Multiple-serotype salmonella outbreaks in two state prisons—Arkansas, August 2012. *MMWR Morb Mortal Wkly Rep*. 2014;63(8):169-173.
53. Centers for Disease Control and Prevention (CDC). Outbreak of Shiga toxin-producing *Escherichia coli* O111 infections associated with a correctional facility dairy—Colorado, 2010. *MMWR Morb Mortal Wkly Rep*. 2012;61(9):149-152.
54. Voluntary National Retail Program Standards 6—Compliance and Enforcement. Published online January 2022. <https://www.fda.gov/media/86929/download>
55. Guidelines for Foodborne Disease Outbreak Response, Third Edition. Published online 2020. <https://cifor.us/downloads/clearinghouse/CIFOR-Guidelines-Complete-third-Ed.-FINAL.pdf>
56. Nutrition C for FS and A. HACCP Principles and Application Guidelines. *FDA*. Published online March 27, 2023. Accessed July 24, 2024. <https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines>

Acknowledgements

The authors gratefully acknowledge the contributions provided by the following external reviewers throughout development as well as independent review: Madhu Anand, Michael Cline, Rachel Jervis, Susan Lance, Sherri McGarry, David Nicholas, Krista Okerholm, Paula Pennell-Huth, Dr. Robert Powitz, Vincent J. Radke, and Barbara Wakeen.

Cover photo provided by Denman Scofield.

Appendices

Appendix 1: Example Pre-work Detail Medical Clearance Form

Incarcerated Food Workers

A food worker is anyone involved in the growth, harvest, preparation, or serving of food, and anyone responsible for cleaning and sanitation in kitchens or food service areas.

Physical requirements: This position likely requires continuous or near continuous time on feet with repetitive movements such as flipping, lifting, or twisting. Position may involve supervised work with equipment which gets very hot (like grills, ovens, or steamers), very cold (freezers), and working with sharp objects (like knives). Some positions may involve time outside or exposure to animals. See job activities below..

Food worker name	Food worker identification number
Facility name	
Job activities (check all that apply):	
<input type="checkbox"/> Cooking	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Cleaning and sanitation	<input type="checkbox"/> Dairy operations
<input type="checkbox"/> Gardening and food harvesting	<input type="checkbox"/> Egg harvesting
<input type="checkbox"/> Warehouse staff	
<input type="checkbox"/> Other (specify)	
To be completed by a licensed healthcare provider	
My signature certifies that I examined the above-named person and found they:	
<input type="checkbox"/> Are physically fit for food work	
<input type="checkbox"/> Have not been diagnosed with, had a known exposure to, or are thought to be capable of transmitting typhoid fever (<i>Salmonella</i> Typhi infection), non-typhoidal <i>Salmonella</i> infection, norovirus, shigellosis (<i>Shigella</i> species infection), Shiga toxin-producing <i>Escherichia coli</i> infection, or hepatitis A in the last month.*	
<input type="checkbox"/> Do not currently have vomiting, diarrhea, jaundice, sore throat with fever, or infected or draining wound or boil.	
Limitations or restrictions to job duties based on medical examination and history: <input type="checkbox"/> None	
Name of healthcare provider	
Signature	Date

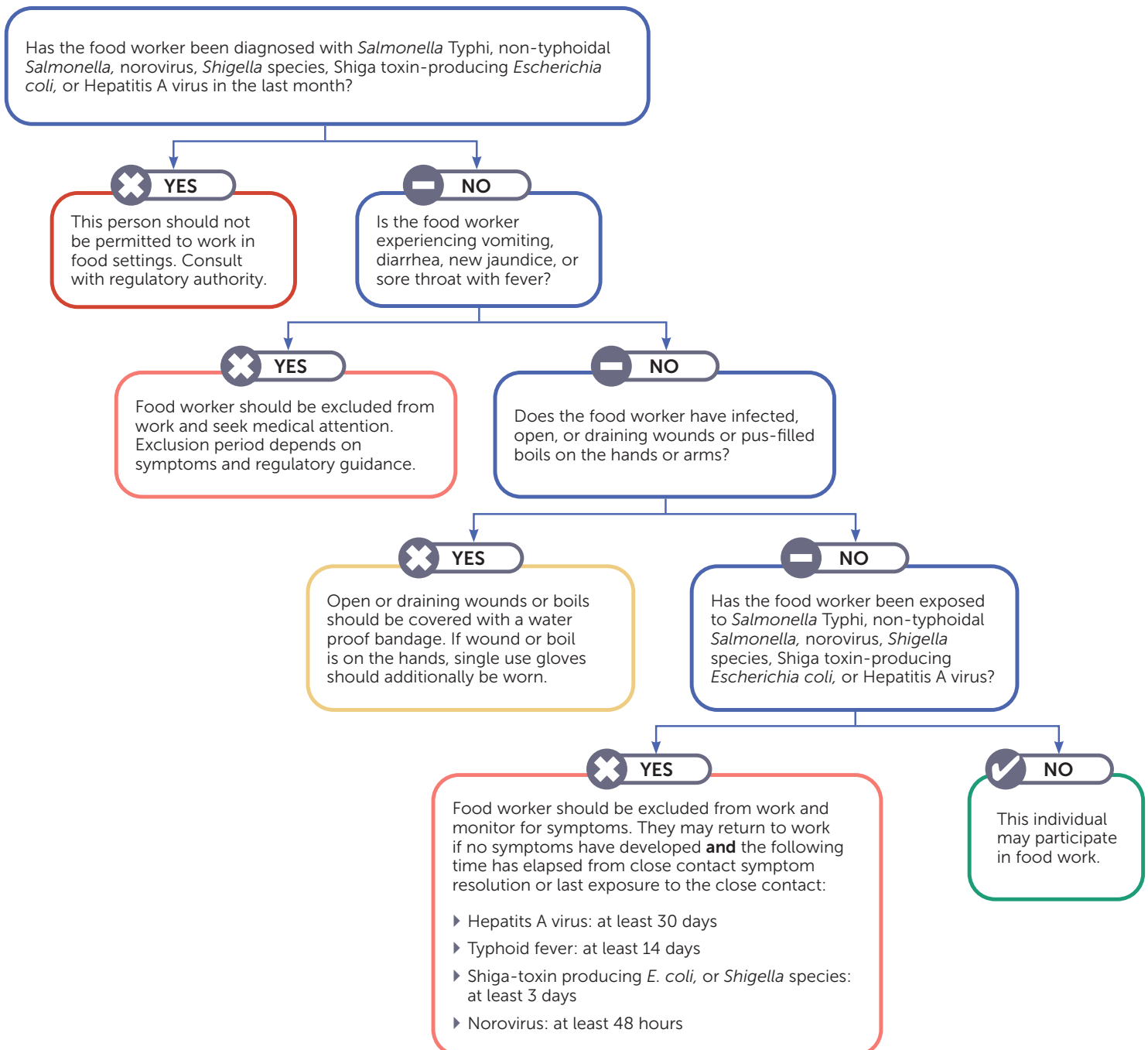
*Approval from a regulatory authority (state, tribal, local, or territorial health department) may be required before a worker can return to food work following certain illnesses in some jurisdictions. Review instructions from your regulatory authority.

Appendix 2: Medical Exclusions Flow Chart

Food Workers in Correctional Settings

For Food Service Managers

- ▶ A food worker is anyone involved in the growth, harvest, preparation, or serving of food, and anyone responsible for cleaning and sanitation in kitchens or food service areas.
- ▶ Food workers should self-monitor daily for fever, sore throat, vomiting, diarrhea, jaundice, and open or draining wounds. Workers should report any of these signs or symptoms to their food service manager without negative repercussions.



Appendix 3: Return to Work Criteria

Food Workers in Correctional Settings

For Correctional Healthcare Providers

- ▶ A food worker is anyone involved in the growth, harvest, preparation, or serving of food, and anyone responsible for cleaning and sanitation in kitchens or food service areas.
- ▶ Certain conditions are required to be reported to the health authorities. Review jurisdictional requirements for disease reporting.
- ▶ Contact information for Health Department: _____

Signs and Symptoms	Pathogens of Concern for Food Work	Diagnostic Tests to Consider	Minimum Conditions for Returning to Food Work*
Fever and pharyngitis (sore throat)	<ul style="list-style-type: none"> • <i>Streptococcus pyogenes</i> 	<ul style="list-style-type: none"> • Throat culture for group A <i>Streptococcus</i> or rapid antigen detection test 	<ul style="list-style-type: none"> • At least 24 hours on appropriate antibiotic therapy for <i>Streptococcus pyogenes</i>, or • Have at least one negative throat culture, or • Are medically cleared (deemed to be non-infectious).
Vomiting or diarrhea	<ul style="list-style-type: none"> • Non-typhoidal <i>Salmonella</i>* • <i>Salmonella</i> Typhi* • <i>Shigella</i> species* • Norovirus* • Shiga toxin producing <i>E. coli</i> * • Other infections spread by fecal-oral routes 	<ul style="list-style-type: none"> • Stool culture or molecular test (PCR) of stool used for <i>Shigella</i> species, <i>Salmonella</i> species, <i>E. coli</i> and other pathogens • Stool PCR for norovirus 	<ul style="list-style-type: none"> • At least 30 days after symptom resolution following non-typhoidal <i>Salmonella</i> diagnosis, or • At least 7 days after symptom resolution following diagnosis of shigellosis or STEC, or • At least 48 hours after symptom resolution following norovirus diagnosis. <p>And</p> <ul style="list-style-type: none"> • Are medically cleared (deemed to be non-infectious) <ul style="list-style-type: none"> • Some jurisdictions may require 2 consecutive stool samples taken 48 hours after finishing antibiotics (if given) and at least 24 hours apart.
New onset jaundice	<ul style="list-style-type: none"> • Hepatitis A virus* • Other infections spread by fecal-oral routes 	<ul style="list-style-type: none"> • Serum antibody test IgM HAV 	<ul style="list-style-type: none"> • Jaundice has persisted for more than 7 days, or • Medical provider can verify jaundice was not caused by hepatitis A virus.

*Approval from a regulatory authority (state, tribal, local, or territorial health department) may be required before a food worker can return to work following certain illnesses in some jurisdictions. Review instructions from your regulatory authority.

Resources:

- ▶ [Bad Bug Book \(Second Edition\) | FDA](#)
- ▶ [Confirming an Etiology in Foodborne Outbreaks | Foodborne outbreaks | CDC](#)

Appendix 4: Example Incarcerated Food Worker Illness Log

A Template for Correctional Facilities

All Food Workers

A food worker is anyone involved in the growth, harvest, preparation, or serving of food, and anyone responsible for cleaning and sanitation in kitchens or food service areas.

All food workers are required to self-monitor for signs and symptoms of illness and report vomiting, diarrhea, sore throat with fever, new jaundice and open or draining wounds to their food service manager immediately.

Report Date	Food worker name or ID	Primary job activities/location	Date of health service visit	Date of exclusion	Date returned to work*

*Approval from your state, tribal, local, or territorial health department may be required before a food worker can return to work following certain reportable illnesses in some jurisdictions. If approval is required, the food service manager is responsible for ensuring appropriate documentation before food workers resuming duties.

Health Department contact information:

Appendix 5: Food Receiving Procedure Checklist

A Guide for Correctional Facilities

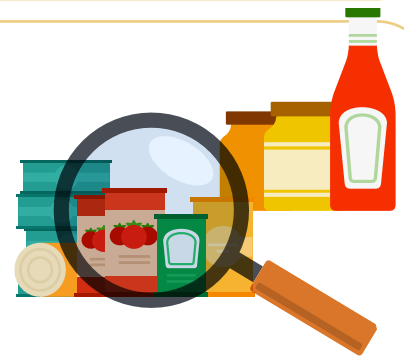


Before bringing foods into a secure facility

- ▶ X-ray or visually search shipment before bringing within a secure perimeter.
- ▶ Food products should be reviewed by a Food Service Manager or designee.
- ▶ Schedule deliveries during operational hours and minimize time food spends outside of temperature control for inspections.

Review products for

- ▶ Broken seals, open or leaking packaging, and evidence of insect or rodent access
- ▶ Contraband
- ▶ Cross-contamination (e.g., raw animal product leaking onto raw produce)
- ▶ Evidence of temperature abuse (swelling, freezer burn, or ice crystals)
- ▶ Signs of spoilage: mold growth, discoloration of produce, meat, and poultry



Check and record temperatures

- ▶ Using a calibrated probe thermometer to check actual product temperatures.
 - Refrigerated food should be 41°F or below
 - Frozen food should be frozen upon arrival
 - Hot foods should be 135°F or above

Verify product specifications

- ▶ Ensure items that arrive are the same as those listed on the purchase order.



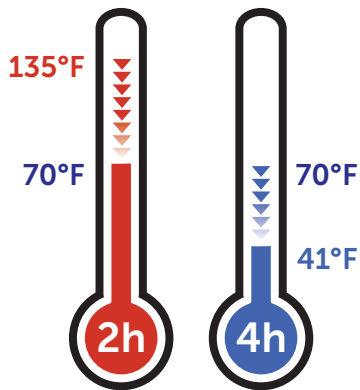
Store

- ▶ Immediately store food, beginning with frozen and refrigerated foods. Organize using a first in, first out rotation.
- ▶ Maintain an accurate inventory of food items.

Any food outside of temperature control, not matching purchase order, or showing signs of abuse, tampering, or spoilage should be rejected.

Appendix 6: Cooling Hot Food Safely

A Guide for Correctional Facilities



Cooked foods must be cooled from 135 °F to 70°F within two (2) hours. If unable to cool to 70°F within two (2) hours, reheat to 165°F and start the cooling process again.

Then, continue cooling from 70°F to 41°F or less within the next four (4) hours.

The entire cooling process should not take more than six (6) hours in total.

Monitor and record temperature throughout the cooling process using a probe thermometer.



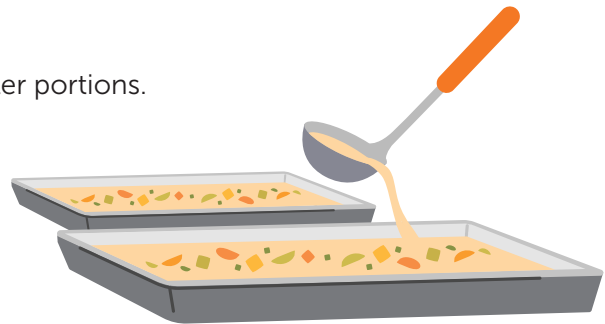
Before Cooling

Place food in shallow pans or separate food into smaller portions.

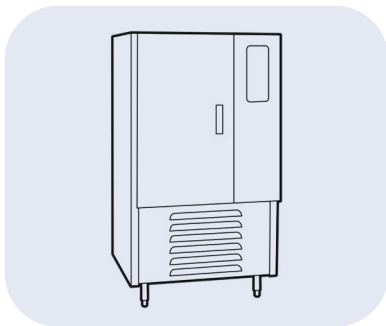
Food should be no more than two (2) inches deep.

Use food in containers that support heat transfer (like metal pans).

During cooling, pans may be uncovered or loosely covered to allow heat to escape.

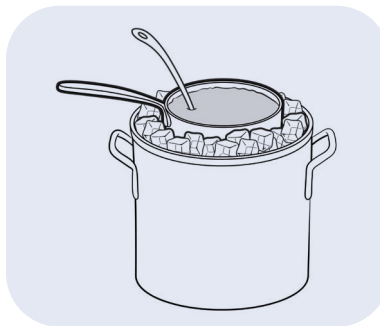


Ways to Cool Hot Food



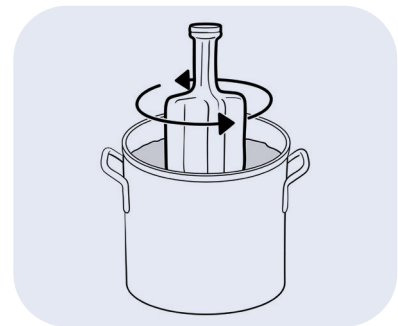
BLAST OR TUMBLE CHILLERS

Use blast chiller if available. Blast or tumble chillers can be used to quickly reduce the temperature of large amounts of food or thick food such as mashed potatoes. May use freezer, but should monitor temperature carefully.



ICE WATER BATHS

Place waterproof containers of hot food in a clean prep sink or large pot filled with ice water. Stir food frequently to cool it faster and more evenly.



ICE PADDLES

Add ice directly to hot food, or use ice paddles; stir to cool. Ice added directly to food should be made from drinking water.

Remember: properly cooled leftover food can only be used for one (1) additional service.

Appendix 7: Example Hot and Cold Holding Log

A Template for Correctional Facilities

Food service date: _____ **Meal:** _____ **Location of service:** _____

- ▶ Never use hot holding equipment (steam tables, heat lamps, etc.) to reheat food; they do not reach a warm enough temperature to achieve a kill step.
- ▶ Preheat hot holding equipment before use.
- ▶ Hot food should be held at or above 130°F for fully cooked roasts, or at or above 135°F for all other hot items. Cold items should be kept at or below 41°F.
- ▶ Check temperatures every hour during service.
- ▶ Treat each batch as a new item on the log.

Food item	Time start of service	1st temperature check	2nd temperature check	3rd temperature check	Checked by (initials)	Corrective action, if taken
	_____ am/pm	_____ am/pm _____ °F	_____ am/pm _____ °F	_____ am/pm _____ °F		
	_____ am/pm	_____ am/pm _____ °F	_____ am/pm _____ °F	_____ am/pm _____ °F		
	_____ am/pm	_____ am/pm _____ °F	_____ am/pm _____ °F	_____ am/pm _____ °F		
	_____ am/pm	_____ am/pm _____ °F	_____ am/pm _____ °F	_____ am/pm _____ °F		
	_____ am/pm	_____ am/pm _____ °F	_____ am/pm _____ °F	_____ am/pm _____ °F		
	_____ am/pm	_____ am/pm _____ °F	_____ am/pm _____ °F	_____ am/pm _____ °F		
	_____ am/pm	_____ am/pm _____ °F	_____ am/pm _____ °F	_____ am/pm _____ °F		



U.S. Centers for Disease Control and Prevention

National Center for Emerging and
Zoonotic Infectious Diseases

Division of Foodborne, Waterborne,
and Environmental Diseases

www.cdc.gov