

# Comprehensive Guidelines for Food Recovery Programs

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Developed by the Food Recovery Committee  
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## About These Guidelines

Over the years, various inquiries received from regulators and others about safe food management and preparation practices in food recovery operations prompted the United States Department of Agriculture (USDA) and Food and Drug Administration (FDA) to enter into a joint project in 1997-1998 to develop guidelines for food recovery programs. The resulting document was presented to the 1998 Conference for Food Protection (CFP) for acceptance by Conference stakeholders (industry, consumers, academia, and federal/state/local food safety regulators). Under the auspices of Council I (its laws and regulations advisory group), the 1998 CFP formed a Food Recovery Committee to work with FDA and USDA to fully develop the food recovery guidelines.

The CFP Food Recovery Committee is composed of members of the retail and food service industry, hunger relief organizations, and federal, State, and local regulatory agencies.

The CFP Food Recovery Committee used the USDA/FDA guideline and documents from America's Second Harvest as a base and this comprehensive guideline is the result of the Committee's efforts to fulfill its charge. Upon acceptance by the 2000 CFP, the guideline was proposed to become an annex to the FDA Food Code.

A short description of the Guidelines can be found in the 2005 FDA Food Code in Annex 2, References, under 3. Supporting Documents, M. *Comprehensive Guidelines for Food Recovery Programs*, .

## Definitions

**Active Managerial Control** means the purposeful incorporation of specific actions or procedures by industry management into the operation of their business to attain control over foodborne illness risk factors.

**Approved Source** means an acceptable supplier to the regulatory authority based on a determination of conformity with principles, practices, and generally recognized standards that protect public health.

**Critical Control Point** means a point or procedure in a specific food system where loss of control may result in an unacceptable health risk.

**Excess Food** means any extra wholesome, edible food, including food that was prepared for service, but not served or sold.

**Field gleaning (gleaning)** means the collection of crops from fields that have already been mechanically harvested or on fields where it is not economically profitable to harvest.

**Food defense** is the collective term used by the Food and Drug Administration (FDA), United States Department of Agriculture (USDA), Department of Homeland Security (DHS), etc, to encompass activities associated with protecting the nation's food supply from deliberate or intentional acts of contamination or tampering. This term encompasses other similar verbiage (i.e., bioterrorism,(BT), counter-terrorism (CT) etc.)

**Food Distribution Organization (FDO)** means the organization that accepts donated food and directly distributes it to needy consumers or, in some cases, distributes donated food to another facility (receiving facility) which will then directly distribute it to the consumer. This FDO and the receiving facility may be one and the same.

**Food Recovery** means the collection of wholesome food for distribution to people in need; sometimes referred to as food rescue.

**HACCP** is an acronym that stands for Hazard Analysis and Critical Control Point, a prevention-based food safety management system. HACCP systems are designed to prevent the occurrence of potential food safety problems. HACCP Plan means a written document that delineates the formal procedures for following the Hazard Analysis Critical Control Point principles developed by the National Advisory Committee on Microbiological Criteria for Foods.

**Hazard** means a biological, chemical, or physical property that may cause an unacceptable consumer health risk.

**Perishable food** - meats, dairy products, produce, and bakery items that are donated

from grocery stores, produce distributors, food distributors, etc.

**Prepared foods** are foods of all descriptions that have been prepared but were never served. This includes cooked items, such as meats, entrees, vegetables, starches, deli trays, and vegetable trays, for example.

### **Potentially Hazardous Food (Time/Temperature Control for Safety (TCS) Food).**

(1) **"Potentially hazardous food (time/temperature control for safety (TCS) food)"** means a FOOD that requires time/temperature control for safety (TCS) to limit pathogenic microorganism growth or toxin formation. Most, but not all perishable food and prepared foods are PHF/TCS food.

(2) **"Potentially hazardous food (time/temperature control for safety (TCS) food)"** includes:

(a) An animal FOOD that is raw or heat-treated; a plant FOOD that is heat-treated or consists of raw seed sprouts, cut melons, or garlic-in-oil mixtures that are not modified in a way that results in mixtures that do not support pathogenic microorganism growth or toxin formation; and

(b) Except as specified in Subparagraph (3)(d) of this definition, a food that because of the interaction of its water activity ( $A_w$ ) and PH values is designated as Product Assessment Required (PA) in Tables A and B from the FDA Food Code and provided at the end of the Food Safety Procedures section.<sup>1</sup>

(3) **"Potentially hazardous food (time/temperature control for safety food)" does not include:**

(a) *An air-cooled hard-boiled EGG with shell intact, or an EGG with shell intact that is not hard-boiled, but has been pasteurized to destroy all viable **salmonellae**;*

(b) *A FOOD in an unopened HERMETICALLY SEALED CONTAINER that is commercially processed to achieve and maintain commercial sterility under conditions of non-refrigerated storage and distribution;*

(c) *A FOOD that because of its PH or  $A_w$  value, or interaction of  $A_w$  and PH values, is designated as a non-PHF/non-TCS FOOD in Table A or B of this definition;*

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<sup>1</sup> As referenced in the 2005 Food Code, Paragraph 1-201.10(B) definition of Potentially Hazardous Food (Time/Temperature Control for Safety Food 2005. U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration. 2005. Available at <http://www.cfsan.fda.gov/~dms/fc05-toc.html>

*(d) A FOOD that is designated as Product Assessment Required (PA) in Table A or B of the Food Code definition and has undergone a Product Assessment showing that the growth or toxin formation of pathogenic microorganisms that are reasonably likely to occur in that FOOD is precluded due to:*

*(i) Intrinsic factors including added or natural characteristics of the FOOD such as preservatives, antimicrobials, humectants, acidulants, or nutrients,*

*(ii) Extrinsic factors including environmental or operational factors that affect the FOOD such as packaging, modified atmosphere such as REDUCED OXYGEN PACKAGING, shelf life and use, or temperature range of storage and use, or*

*(iii) A combination of intrinsic and extrinsic factors; or*

*(e) A FOOD that does not support the growth or toxin formation of pathogenic microorganisms in accordance with one of the Subparagraphs (3)(a) - (3)(d) of this definition even though the FOOD may contain a pathogenic microorganism or chemical or physical contaminant at a level sufficient to cause illness or injury.*

**Receiving facility** means the organization that accepts donated food and directly distributes it to the consumer.

**Reclamation Centers** are centers operated by retail supermarket chains or wholesale distributors which collect product that will not be sold through the company's normal distribution channels. This may include damaged product or discontinued items being claimed for credit from the vendor/manufacturer.

**Salvage**, as a verb, means the act of saving any imperiled property from loss. As a noun, it means the property so saved. Food items may have been subjected to possible damage due to transportation accident, fire, flood, adverse weather, or any other similar cause, which may have rendered the food unsafe or unsuitable for human consumption. As used by food banks, the definition of salvage includes those products processed through reclamation centers. Salvaging involves evaluating the product to determine its fitness for human consumption, reconditioning it if necessary, in order to place the food back into the distribution system.

## **Introduction to Food Recovery**

In recent years, there has been growing concern about hunger, resource conservation, and the environmental and economic costs associated with food waste. This, in turn, has accelerated public and private efforts to make better use of available food supplies by recovering safe and nutritious food that would otherwise be wasted.

A July 1997 study by the U.S. Department of Agriculture estimates that over one-quarter of all food produced in this country is wasted. The study found that about 96 billion pounds were lost at the retail, food service, and consumer levels. If 5 percent of the 96 billion pounds were recovered, that quantity would feed 4 million people each day for a year.

Food recovery programs collect foods from commercial production and distribution channels and redistribute them to people in need. Prepared and processed foods are most often collected from the food service industry. Perishable produce is generally obtained from wholesale and retail sources. There are food recovery efforts carried out by public, private, and nonprofit organizations across the country. The primary goal of food recovery programs is to collect safe and wholesome food donated from commercial sources to meet the nutritional needs of the hungry.

Food recovery is one way to help reduce the problem of hunger in America. Participating in a successful food recovery program has benefits that extend beyond providing food to those who are in need. Participation benefits an establishment's operation, its customers, its employees, and the community. It increases the visibility of a business, and helps build a more cohesive local community.

This document is intended primarily to provide guidance to retail-level food operators that want to participate in food recovery programs and provide safe food to people in need.

## **Food Recovery Activities**

### **USDA Food Recovery Activities**

In September 1997, the U.S. Department of Agriculture (USDA) joined with key non-profit organizations to sponsor the first ever National Summit on Food Recovery and Gleaning, which set a goal of a 33 percent increase in the amount of food recovered nationally by the year 2000. This would provide an additional 500 million pounds of food a year to feeding organizations. The Secretary of Agriculture is Chair of the interagency working group on Food Recovery to Help the Hungry. The purpose of the working group is to fulfill the President's directive to all Federal agencies to donate excess food to the extent practicable.

The USDA is working with a variety of partners to increase the amount of food recovered to help feed the hungry. In 1996, the Department published *A Citizen's Guide to Food Recovery* (revised in 1997) and worked with the National Restaurant Association to publish a food recovery guide for restaurants. The USDA's Cooperative State Research, Education, and Extension Service, in partnership with the Cooperative Extension System, helps agencies and community groups establish local hunger programs, administer food recovery programs, and coordinate gleaning programs.

USDA has sponsored a number of food recovery activities of the AmeriCorps National Service Program, which allows volunteers to trade community service for educational awards. The Department also donates food from its Washington, D.C. headquarters to a local food recovery group, and has entered into partnerships with corporations to promote national food recovery efforts.

## **Ongoing Food Recovery Activities**

In the United States, it is estimated that there are 150,000 private programs helping to feed the hungry. Each program is distinct in terms of its size, organization, management, and clientele. Some programs are run by a small group of volunteers in a small facility. Other programs are larger organizations with paid staff and state-of-the-art facilities. Following are some of the organizations involved in food recovery:

### **America's Second Harvest – The Nation's Food Bank Network**

America's Second Harvest was founded in 1979 and has grown to become the nation's largest domestic hunger-relief organization. America's Second Harvest is a national network of more than 200 regional food banks and food-rescue programs, serving all 50 states and Puerto Rico. This network distributes nearly 2.1 billion pounds (2005) of donated food and grocery products annually to approximately 50,000 local charitable agencies which operate more than 94,000 food programs, including food pantries, soup kitchens, women's shelters, Kids Cafes, Community Kitchens, and other programs that provide food assistance to 26 million hungry Americans.

### **The Chef and Child Foundation**

The Chef and Child Foundation is the charitable arm of the American Culinary Foundation. Established in 1989, the Foundation's three-part mission includes an awareness campaign every October around Childhood Hunger Day, an education program that brings nutrition information to children from preschool to fifth grade, and a training program called *Understanding Prepared Foods* that educates those involved in food rescue about food safety issues.

### **Congressional Hunger Center**

Congressmen Tony Hall and Bill Emerson started the nonprofit Congressional Hunger Center (CHC) in 1993 when Congress voted to end its own Select Committee on Hunger. The mission of the CHC is to find solutions to hunger by developing leaders. Through the national Mickey Leland Hunger Fellows Program, 20 individuals perform a



year of direct community service combined with helping to formulate public policy. Through the Beyond Food Program, the CHC trains AmeriCorps volunteers. The CHC also works with leaders at the international level to improve emergency relief efforts in disaster areas.

### **National Hunger Clearinghouse**

The National Hunger Clearinghouse is a program of World Hunger Year under contract with USDA. Its major emphases are gleaning and food recovery and answering the USDA Food Recovery hotline: 1-800-GLEAN-IT. The toll-free hotline provides information on how to become a volunteer, donate food, or get involved in a local gleaning or food recovery program. The Clearinghouse also provides information on hunger, food, nutrition, and agriculture issues. The database already has over 20,000 organizations listed, from soup kitchens to restaurants.

### **National Restaurant Association**

The National Restaurant Association fulfilled a pledge made at the National Summit on Food Recovery and Gleaning with the publication in 1997 of *Food Donation: A Restaurateur's Guide*. This comprehensive handbook encourages restaurants to recover and donate unused food.

### **Share Our Strength**

The mission of Share Our Strength (SOS) is to work to alleviate and prevent hunger and poverty in the United States and around the world. The organization supports food assistance, treating malnutrition and other consequences of hunger, and promoting economic independence of people in need. Founded in 1984, SOS awards grants to more than 800 organizations annually. To meet its goals, SOS enlists industries and individuals to contribute their talents to its anti-hunger efforts and creates community wealth to promote lasting change.

### **Society of St. Andrew**

The Society of St. Andrew is a nonprofit organization that uses surplus produce to feed people in need. Since 1979, the Society has gleaned 200 million pounds of fresh fruits and vegetables that were distributed to feeding agencies throughout the United States. The produce is given to food banks, soup kitchens, and food pantries free of charge. The Society has offices in Virginia, North Carolina, Texas, and Florida.

### **St. Mary's Food Bank**

In the United States, organized food recovery initiatives first gained recognition in the late 1960s. In 1967, John Van Hegel founded St. Mary's Food Bank in Phoenix, Arizona. As word of its success spread, groups from all over the country visited the Arizona facility for insight and instruction. Today, St. Mary's Food Bank is a member of America's Second Harvest network and is now called St. Mary's/Westside Food Bank Alliance. The food bank now serves the northern half of Arizona and serves over 800 agencies, providing food for families in crisis, the disabled, elderly, and homeless.

## Legal Issues

### The Emerson Good Samaritan Food Donation Act

When citizens volunteer their time and resources to help feed hungry people, they are rightfully concerned that they are putting themselves at legal risk. Fortunately, recent legislation provides uniform national protection to citizens, businesses, and nonprofit organizations that act in good faith to donate, recover, and distribute excess food.

Although all states have enacted Good Samaritan laws, one very important consideration for food donors is the issue of food safety and quality. Potential food donors (e.g., restaurants, caterers, cafeterias, etc.) are more likely to enter into partnership with food recovery programs if there are assurances that program personnel are trained in safe handling and storage of donated foods. Therefore, program guidance and assurances that emergency food programs operate in accordance with recognized food safety standards help encourage businesses to donate food.

The Bill Emerson Good Samaritan Food Donation Act converts Title IV of the National and Community Service Act of 1990, known as the Model Good Samaritan Food Donation Act, into permanent law, within the Child Nutrition Act of 1966. Congress passed the legislation in late September, 1996, and President Clinton signed the bill into law on October 1, 1996. The Act is designed to encourage the donation of food and grocery products to nonprofit organizations such as homeless shelters, soup kitchens, and churches for distribution to individuals in need. The full text of the Act as well as the portions of the National and Community Service Act that it amends are presented in Appendix C in *A Citizen's Guide to Food Recovery*.

The Bill Emerson Good Samaritan Food Donation Act promotes food recovery by limiting the liability of donors to instances of gross negligence or intentional misconduct. The Act further states that, absent gross negligence or intentional misconduct, persons, gleaners, and nonprofit organizations shall not be subject to civil or criminal liability arising from the nature, age, packaging, or condition of wholesome food or fit grocery products received as donations. It also establishes basic nationwide uniform definitions pertaining to donation and distribution of nutritious foods and will help ensure that donated foods meet all quality and labeling standards of Federal, State, and local laws and regulations.

Although the Bill Emerson Good Samaritan Food Donation Act takes precedence over the various State Good Samaritan statutes, it may not entirely replace such statutes. As a Federal statute, the Emerson Act creates a uniform minimum level of protection from liability for donors and gleaners nationwide. However, State Good Samaritan statutes still may provide protection for donors and gleaners above and beyond that guaranteed in the Federal statute. Therefore, local organizations should be familiar with such States' statutes. (See Appendix D in *A Citizen's Guide to Food Recovery* for

a listing of citations for State statutes).

Further details may also be obtained by contacting the office of the attorney general for the appropriate State. In addition, the Emerson Act does not alter or interfere with State or local health regulations or workers' compensation laws. Local organizations in each State should also be familiar with the impact upon food recovery projects of State or local health regulations and workers' compensation laws.

## **Implementing a Food Recovery Program**

There are many ways to contribute to food recovery programs including donating excess prepared foods, donating produce or canned and packaged goods, fund-raising, training volunteer food workers, or providing transportation for food from donor to the food distribution organizations (FDOs).

Major aspects of implementing a food recovery program include: (1) choosing a suitable FDO and (2) donor and FDO agreement on the terms of their relationship.

Advice on finding a partner to receive donated foods is available from a number of reliable sources. Among them, the United States Department of Agriculture (USDA), the lead federal agency for food recovery activities, America's Second Harvest, a national network of community-based, hunger-relief programs; and the National Restaurant Association.

To lay the foundation for a successful partnership and to minimize misunderstandings, the donor and FDO need to plan their joint policies and procedures together. The initial planning meetings should cover at least the following topics:

(1) exchange of basic data such as:

- names of key contacts
- addresses, phone and fax numbers
- anticipated frequency of donations;

(2) the types of foods to be donated, for example:

- raw fruits and vegetables
- cold fruit and vegetable salads
- hot foods of animal origin, including mixed dishes like lasagna
- cold cooked foods of animal origin
- hot or cold cooked vegetables
- gravies, cream-based soups
- hot or cold grain dishes
- canned and packaged goods that are not potentially hazardous in their packaged form

- beverages, and
  - cold or frozen uncooked foods of animal origin, such as raw ground beef;
- (3) the food transport arrangements including:
- who will transport food from donor to FDO's receiving facility
  - the type of vehicle(s) to be used, temperature-holding equipment (e.g., insulated containers, refrigerated unit)
  - back-up or transportation contingency plan in case of vehicle breakdown or emergency
  - distance in miles between the donor and the receiving facility
  - anticipated time in minutes from the donor to receiving facility
  - anticipated frequency of donations, and
  - times/dates for pickup of donations;
- (4) the qualifications of the food manager or person-in-charge in the donor and receiving facilities such as training and experience;
- (5) the training provided to staff on hygienic and safe food preparation, food defense procedures, storage, and transporting practices;
- (6) preferred time, means and frequency of communication;
- (7) how unsatisfactory situations will be addressed; and
- (8) any other considerations raised by either party.

Early in the planning process, both the donor and FDO operators should familiarize themselves and their staff with the Good Samaritan laws that limit liability to gross negligence and intentional misconduct. Food workers need to fully understand that food safety training, consistent practice of hygienic food preparation practices, and regulatory inspection reports showing favorable performance histories, are factors which help to protect the participants from civil and criminal liability in the good faith donation of apparently wholesome food. Good practices help to provide legal protection for the donor *and* help ensure the service of safe food to consumers.

In Appendix B of this document, there is a guide (see **Initial Meeting Form**) to assist the partners in systematically developing an implementation plan for a successful endeavor. There is also a model form (see **Agreement to Participate as Food Recovery Partners** form) for formalizing the agreement between the donor and food distribution organization.

# **Food Safety Procedures**

## **Introduction**

Serving safe food is an essential part of all food recovery activities. In the donor's domain and in the food distribution organization, all steps need to be taken to ensure that the consumers of the recovered food are receiving a safe product. Certain basic principles of food safety must be incorporated into the program and followed by food workers to provide the consumers protection from foodborne illness.

Food that is directed to those in need is entitled to the same protective measures as that accorded food prepared and served to paying consumers. The national food standards at the retail level, as expressed in the FDA Food Code (Food Code), do not differentiate between the protection provided to food consumed by paying consumers and to food consumed by individuals who eat at FDOs.

The Food Code is an excellent reference for minimizing the occurrence of risk factors that contribute to foodborne illness. The standards expressed in the Food Code cover such subjects as: (1) manager or person in charge knowledge requirements; (2) monitoring the health of food workers; (3) food worker training and supervision; (4) protecting food from pathogens and contaminants from hands and other sources which cause foodborne diseases; (5) time and temperature requirements; and (6) equipment design and construction and maintenance.

Procedures outlined in this section are based on well-established food safety principles and are set forth as guidance for planning and conducting a food recovery program. The section is divided into six parts: Food Donation, Food Workers, Food Safety, Equipment, Maintaining Food Safety during Transportation and Emergency Readiness.

## **Food Donation**

### **Types of Foods**

Foods donated in a food recovery program may include excess prepared food or produce, canned food, and shelf-stable packaged goods. Excess food is any extra wholesome, edible food, including food that was prepared for service, but not served or sold. The charitable donation of food may result because a donor finds itself with an excess or because there is a conscious planning to have an excess in the daily or weekly volume of food. Restaurants, grocery stores, office food drives, or community food drives are possible donation sources.

## **Receiving and Storing Food: Evaluating the Condition of the Food**

The person-in-charge who accepts the food on behalf of the FDO should check that the food is from an approved source (i.e., one that meets food safety standards, such as those outlined in this document and the Food Code) and that its condition is sound. Examining foods at the time of receipt can be invaluable in intercepting problems that can lead to food contamination, if undetected. Check for evidence of problems, such as the following, and take appropriate action to keep products from being received in an unsatisfactory condition, consumed, or contaminating other product (see Appendix A of this document for additional guidance):

- (1) Environmental conditions of transport, e.g., the vehicle is not clean, pets in the vehicle, evidence of insects or rodents, temperature controls not in use, ready-to-eat foods stored so they can be contaminated by raw foods, toxic compounds are transported in a way that can contaminate food;
- (2) Cans that are dented in the top or side seams or are leaking or swollen; and
- (3) Insect or rodent infested food - e.g. droppings, gnawings, or nesting material.

Infested foods, foods that are obviously compromised, and foods of questionable safety, should either be discarded or isolated from wholesome foods until their disposition is determined. In either case, the goal is to keep other foods wholesome and safe and physically separated so they remain in that condition.

The protective measures for prepared foods and whole produce are different from the protective measures for canned food, and shelf-stable packaged goods. With whole produce and prepared foods, attention should be focused on the packaging and condition of the food and the storage condition in terms of time and temperature. Cut produce such as melons and prepared foods, including cooked entrees and refrigerated foods, need to be kept at the cold or hot holding temperatures in the Food Code. (See the Food Preparation Practices section of this document). With canned food and shelf-stable packaged goods, attention should be focused on the condition of the food container.

Once accepted, foods should be stored in a manner that protects them from potential contamination such as water drippage, dust, rodents, insects, and other sources of contamination. Canned goods should be organized to prevent damage to the cans and all foods should be organized to allow for proper rotation (i.e., FIFO - First In/First Out).

For information on acceptability of foods based on quality, see the Second Harvest's Salvage Manual, which describes quality criteria for the inspection of foods.

## Food Workers

### Good Hygienic Practices: Basic Essentials

Handwashing is key to preventing the spread of disease. An infected food worker's poor personal hygienic habits, followed by contact with food, can result in illness when the food is eaten. Good sanitation, hand washing, and no bare-hand contact with raw, ready-to-eat (RTE) food help to prevent disease transmission.

Food workers must wash their hands and exposed portions of their arms, including surrogate prosthetic devices for hands and arms using soap and running water, vigorously rubbing the hands together to be sure soap contacts all surfaces of the hands, and rinsing under clean, running warm water. Handwashing needs to occur for at least 20 seconds total, with at least 10 to 15 seconds devoted to vigorous rubbing of the hands and arms or surrogate prosthetic devices for hands and arms. Hands and exposed portions of the arms or surrogate prosthetic devices for hands and arms must be washed: immediately before beginning food preparation; during food preparation, as often as necessary to remove soil and contamination and to prevent cross contamination when changing tasks; after using the toilet room; and after engaging in other activities that contaminate the hands. Additional information on when to wash the hands can be found in the Food Code, Chapter 2, Section 2-301.14.

## Food Safety

### Foodborne Illness

Foodborne illness occurs as a result of exposure of an individual to pathogenic organisms after consuming food that has been contaminated or improperly prepared. CDC estimates more than 76 million cases of foodborne illness, 325,000 hospitalizations and 5,000 deaths occur annually from foodborne illness.<sup>2</sup> Most foodborne illness is caused by viruses (47%) and bacteria (32%) of those where a cause could be identified and 65% of these outbreaks had an infected person handling food.

Food safety experts have identified five foodborne pathogens that are highly infective, easily transmitted and cause very severe illness. The "Big 5" are Norovirus, *Salmonella* Typhi, *Shigella* spp., Enterohemorrhagic or Shiga-toxin producing *E. coli* and Hepatitis A. Other foodborne pathogens such as *Staphylococcus aureus*, other *Salmonella* spp., *Clostridium botulinum*, *Clostridium perfringens*, *Bacillus cereus*, and *treptococcus pyogenes* must also be considered.

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<sup>2</sup> Mead, P.S., Slutsker, L., Dietz, V., McCraig, L.F., Bresee, J.S., Shapiro, C., Griffin, P.M., Tauxe, R.V., 1999. Food-related Illness and Death in the United States. *Emerg. Infect. Dis.* Vol. 5, No. 5, in <http://www.cdc.gov/ncidod/eid/vol5no5/mead.htm>.

Foodborne bacteria (except bacterial spores) multiply in food, provided the appropriate nutrients are present. Viruses and parasites only multiply in human beings or animals. In the case of viruses, any type of food or surface can be the vehicle to transmit the virus.

### **Managing Ill Food Workers and Volunteers**

More than 65% of the foodborne outbreaks in 2002 – 2003 in the United States identified ill food handlers as a contributing factor. The goal of a food distribution organization and its person's in charge of food workers and volunteers should be to prevent the transmission of bacteria and viruses from infected food workers into food. Management, food workers, and volunteers have a responsibility to be aware of the causes of foodborne illness and what their responsibility is to prevent the transmission of bacteria and viruses that cause foodborne illness. The highest level of risk to consumers occurs when food workers and volunteers have specific symptoms (vomiting, diarrhea, jaundice) and they continue to work. Risk of transmission is still present if food workers and volunteers have been diagnosed with certain foodborne illnesses, but have recovered from these symptoms or never developed symptoms and also if food workers or employees / volunteers were recently exposed to specific pathogens.

The transmission of foodborne bacteria and viruses can be prevented only when a combination approach is used:

- Restrict or exclude ill food employees / volunteers from working with food,
- Use of good hand washing procedures whenever necessary, and
- Eliminate bare hand contact with ready-to-eat food.

### **Foodborne Illness Symptoms and Diagnoses:**

Vomiting, diarrhea and jaundice serve as indicators that the individual may have a fecal-oral route disease and is likely excreting high levels of the infectious agent through stool or vomit. In some cases, these symptoms are indications of other non-infectious conditions such as Crohn's Disease, early stages of pregnancy, irritable bowel syndrome or some liver diseases. The food worker or volunteer may continue working if they can show through a medical or other documentation that the symptom is from a noninfectious condition.

### **Reporting**

Management of the food establishment must make sure that all food workers and volunteers understand the importance of reporting certain conditions. A sample form to explain foodborne illness, specific symptoms, a physician's diagnosis to one of the Big 5 is available (SEE Form 1A in Appendix C: Reporting Food Worker or Volunteer



Illness or Symptoms for a sample interview form for use when selecting staff). A food worker, whether a paid staff member or a volunteer, shares a responsibility for preventing foodborne illness and is obligated to report to the person in charge if they are suffering from the listed symptoms or have been diagnosed with or exposed to one of the Big 5 foodborne pathogens. (SEE Form 1B in Appendix C: Reporting Food Worker or Volunteer Illness or Symptoms for a sample Reporting Agreement). For example, if a food worker or volunteer has an infected cut, burn or boil on his/her hands and uses a double barrier, that is, a bandage and waterproof, single use gloves, the food worker or volunteer does not have to report the infected lesion to the person in charge. However, if the food worker or volunteer does not bandage it, reporting is required. If a food worker or volunteer reports an exposure or diagnosis of any Big 5 or symptoms described above, they should stop working directly with exposed foods; clean equipment, utensils, and linens; and unwrapped single-service and single-use articles until management determines whether they may work or not.

In some cases, food workers or volunteers should remain away from the establishment until they are no longer showing symptoms of vomiting, diarrhea, or jaundice for a 24-hour period or provides medical documentation that the food worker is free of an infection from one of the above listed pathogens or that symptoms result from a non-infectious condition. Decision Trees 1 and 2 and Tables 1a, 1b, 2, 3, and 4 of Annex 3 in the 2005 Food Code provides information on when to exclude a food worker and when to restrict (limit) a food worker's duties. (SEE Appendix C: Reporting Food Worker or Volunteer Illness or Symptoms).

Once the person in charge receives a report of diagnosis of one of the Big 5 or jaundice from a food worker or volunteer, this information must be reported to the Regulatory Authority, the health department, for example, either directly or through a headquarters office. At this time, management must determine what to do based on this report. An additional action the person in charge can take along with necessary restrictions and/or exclusions is to refresh all food worker's and volunteer's training about reporting symptoms, diagnosis or exposure to foodborne illnesses, good hand washing techniques and preventing bare hand contact with ready-to-eat food.

Report Symptoms:

1. Vomiting
2. Diarrhea
3. Jaundice
4. Sore throat with fever
5. Exposed cuts or burns with pus

Report "Big 5" Diagnosis:

1. Norovirus
2. *Salmonella* Typhi
3. *Shigella* spp.
4. Enterohemorrhagic or Shiga-toxin producing *Escherichia coli*
5. Hepatitis A

Report Exposure:

1. Consuming a food that caused illness in another consumer due to infection with one of the Big 5
2. Attending an event or working in a setting where there was a known foodborne outbreak
3. Having close contact with a household member who is diagnosed with one of the Big 5

Millions of people contract some type of foodborne illness each year. Most cases are avoidable through the use of safe food preparation practices and proper sanitation procedures.

### **Especially Vulnerable Populations**

Facilities that serve highly susceptible populations such as hospitals, nursing homes, nursery schools, or senior citizen centers must take extra precautions because these individuals react more severely to foodborne pathogens. Typically these facilities will not receive donated foods because of the greater risk to the vulnerable populations that are served. But when children, the elderly and people with certain medical conditions live outside of a facility setting, they may be the recipients of donated food. While healthy people have a certain resistance to foodborne illness and may only experience mild to moderate symptoms, others who are more susceptible to foodborne illness, can have severe symptoms and complications, and may die.

Among those at increased risk for certain foodborne diseases and their severe manifestations are: older adults, pregnant women, young children, those with weakened immune systems (due to conditions such as AIDS, cancer, chemotherapy treatments, diabetes, or taking steroids), persons with reduced gastric acidity, and those with liver disease.

In food recovery receiving facilities that accept excess prepared food for service to especially vulnerable consumers, extra care must be taken by both parties to ensure the use of sound food safety practices during the continuum from preparation through transportation to receiving and service. Additionally, recovery programs should consider certain precautions noted in the Food Code such as use of pasteurized juice and eggs or egg products that apply to highly susceptible populations.

### **Training of food workers or volunteers**

Training of food workers and volunteers in the use of the following control measures will help prevent foodborne illness.

- Cook foods thoroughly, reaching proper cooking temperatures, for the required amount of time to kill pathogens;
- Cool cooked foods rapidly and hold under refrigeration;

- Reheat refrigerated foods properly;
- Keep raw and ready-to-eat foods separated;
- Maintain personal cleanliness during food preparation, including hand washing (See Food Code Chapter 2);
- Notify food workers of the requirements for maintaining good personal hygiene, proper food preparation practices, and the need to report symptoms of vomiting, diarrhea, jaundice, sore throat with fever, infected wounds or pustular boils. And
- Maintain a clean establishment, particularly equipment, utensils, and all other surfaces that come into contact with food, to prevent contamination of foods (See Chapter 4 of the Food Code).

Foodborne illness is mainly caused by bacteria, viruses, or parasites. Many foodborne illnesses are a result of bacteria, which are microorganisms or germs that occur either naturally in foods or are spread as a result of poor practices such as cross contaminating ready-to-eat foods or improper food worker hand contact during food preparation.

### **Controlling Biological Hazards - Bacteria**

Bacteria are present everywhere in soil and air, on the surface of fruits and vegetables, and on and within all animal bodies. Only some bacteria are harmful, but those that cause foodborne illness can result in mild to severe illness, long-term health consequences, or death. *Salmonella*, *Shigella spp.*, *Listeria monocytogenes*, and *E. coli* O157:H7 are some pathogenic bacteria that are transmissible through food.

Bacteria multiply when four factors come together to create the right conditions for growth:

- (1) **Nutrients (Food):** foods that nourish bacterial growth, such as high protein foods, milk and dairy products, meat, fish, poultry, and cooked pasta.
- (2) **Moisture:** moisture in foods that is available for bacterial growth. This can be moisture that is intrinsically present or that is added to the food (e.g., milk, water, or juice).
- (3) **Time:** bacteria need time to reproduce. Some bacteria can double in number approximately every 20 minutes under ideal conditions (room temperature). Remember that for some bacteria, very little growth or no growth is necessary to cause illness or to produce a toxin.

- (4) **Temperature:** 41°F to 135°F is called the ***DANGER ZONE!*** It is within this temperature range that the life and growth of bacteria are supported. Avoid holding foods within this temperature range to prevent bacteria from growing to levels that can cause illness or produce a toxin.

Each of these four factors can be considered a link in a foodborne illness chain. Bacteria that are present everywhere, cannot always be eliminated. NUTRIENTS and MOISTURE are constant links in certain foods. TIME and TEMPERATURE are the weakest links and are controlled by the food worker. Food workers, including paid staff and volunteers, who prepare food should know the ***DANGER ZONE!*** and remember it during the storage, thawing, cooking, cooling, reheating and hot or cold holding for service of foods.

The Food Code's Chapter 3 addresses time - temperature relationships as a major intervention against foodborne illness. Consult this reference for more information on time-temperature requirements for food safety when cooking, cooling, or reheating foods.

### **Controlling Biological Hazards – Viruses and Parasites**

Foodborne illness can also occur when a person eats food contaminated with certain viruses or parasites. It is important to understand that the mere presence of the virus or parasite in the food can cause illness when the food is ingested. Viruses can be added to food by infected workers with poor personal hygiene habits who have fecal material on their hands. Viruses, when in or on a food product, do not grow, but may remain in the contaminated food for a long period of time. Hepatitis A virus and Norovirus are viruses transmissible through food that are frequently transmitted by food workers who do not adequately wash their hands after using the toilet. Chapter 2 and Annex 3 of the Food Code provide guidance for controlling the spread of Hepatitis A virus and Norovirus from food workers. The fecal-oral route of pathogens can be interrupted by good hand washing and not working when ill and by eliminating bare hand contact with ready-to-eat food.

Parasites do not reproduce as bacteria do, nor is there a need for them to multiply in order to cause illness. Parasites require a host that serves as a source of nutrition and a place to live. Humans serve as hosts for parasites. *Cyclospora* is a parasite that can be transmitted to humans from contaminated food or water.

### **Controlling Chemical and Physical Hazards**

Some foods may contain objects from their production environment such as stones that also could cause injury. For example, foods (such as beans) may be contaminated naturally, from the soil in which they are grown or because of harvest, storage, or transportation practices. Other foods that have undergone further processing at times, despite best efforts, subsequently become contaminated with materials that could injure

consumers of the food. Therefore, operators need to be aware of the hazards associated with different foods and handling practices and take prudent precautions to minimize risks to food recipients.

Chemical hazards can also exist at various stages of food production, transportation, storage, and preparation. Chapter 7 of the Food Code outlines provisions that target the control of poisonous or toxic compounds in retail-level food operations.

## **Food Allergens as Food Safety Hazards**

Recent studies\* indicate that over 11 million Americans suffer from one or more food allergies. A food allergy is caused by a naturally occurring protein in a food or a food ingredient, which is referred to as an “allergen.” For unknown reasons, certain individuals produce immunoglobulin E (IgE) antibodies specifically directed to food allergens. When these sensitive individuals ingest sufficient concentrations of foods containing these allergens, the allergenic proteins interact with IgE antibodies and elicit an abnormal immune response. A food allergic response is commonly characterized by hives or other itchy rashes, nausea, abdominal pain, vomiting and/or diarrhea, wheezing, shortness of breath, and swelling of various parts of the body. In severe cases, anaphylactic shock and death may result.

Many foods, with or without identifiable allergens, have been reported to cause food allergies. However, FDA believes there is scientific consensus that the following foods can cause a serious allergic reaction in sensitive individuals; these foods account for 90% or more of all food allergies:

- Milk
- Egg
- Fish (such as bass, flounder, or cod)
- Crustacean shellfish (such as crab, lobster, or shrimp)
- Tree nuts (such as almonds, pecans, or walnuts)
- Wheat
- Peanuts
- Soybeans.

To control the chemical hazard of food allergens, use a rigorous sanitation regime to prevent cross contact between allergenic and non-allergenic ingredients.

Consumers with food allergies rely heavily on information contained on food labels to avoid food allergens. Each year, the FDA receives reports from consumers who have experienced an adverse reaction following exposure to a food allergen. Frequently, these reactions occur either because product labeling does not inform the consumer of the presence of the allergenic ingredient in the food or because of the cross-contact of a food with an allergenic substance not intended as an ingredient of the food during

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\* Reference 2005 FDA Food Code – Annex 4

processing and preparation.

In August 2004, the Food Allergen Labeling and Consumer Protection Act (Public Law 108-282, Title II) was enacted, which defines the term “major food allergen.” The definition of “major food allergen” adopted for use in the Food Code<sup>3</sup> is consistent with the definition in the new law. The following requirements are included in the new law:

- For foods labeled on or after January 1, 2006, food manufacturers must identify in plain language on the label of the food any major food allergen used as an ingredient in the food, including a coloring, flavoring, or incidental additive.
- FDA is to conduct inspections to ensure that food facilities comply with practices to reduce or eliminate cross-contact of a food with any major food allergens that are not intentional ingredients of the food.
- Within 18 months of the date of enactment of the new law (i.e., by February 2, 2006), FDA must submit a report to Congress that analyzes the results of its food inspection findings and addresses a number of specific issues related to the production, labeling, and recall of foods that contain an undeclared major food allergen.
- Within 2 years of the date of enactment of the new law (i.e., by August 2, 2006), FDA must issue a proposed rule, and within 4 years of the date of enactment of the new law (i.e., by August 2, 2008), FDA must issue a final rule to define and permit the use of the term “gluten-free” on food labeling.
- FDA is to work in cooperation with the Conference for Food Protection (CFP) to pursue revision of the Food Code to provide guidelines for preparing allergen-free foods in food establishments.

## Cross Contamination

Precautions must be taken to protect food from contamination and to maintain safe food practices during preparation, transportation, storage, and service. Cross contamination is the transfer of contaminants by way of food-to-food, food-to-surface-to-food, and by employees contacting both raw foods without proper hand washing or use of suitable utensils. For example, cross contamination may occur when raw ready-to-eat vegetables contact a cutting board that had raw chicken on it and was not cleaned and sanitized between uses.

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<sup>3</sup> FDA Food Code paragraph 1-201.10(B) - “**Major food allergen**” means: (a) Milk, EGG, fish (such as bass, flounder, cod, and including crustacean shellfish such as crab, lobster, or shrimp), tree nuts (such as almonds, pecans, or walnuts), wheat, peanuts, and soybeans; or (b) A FOOD ingredient that contains protein derived from one of the major food allergens. “**Major food allergen**” does not include: (a) Any highly refined oil derived from a FOOD specified in Subparagraph (1)(a) of this definition and any ingredient derived from such highly refined oil; or (b) Any ingredient that is exempt under the petition or notification process specified in the Food Allergen Labeling and Consumer Protection Act of 2004 (Public Law 108-282).

Precautions to prevent cross contamination include the following:

- Separate raw foods from ready-to-eat foods;
- Wash, rinse, and sanitize cutting boards and food-contact surfaces at work stations between uses when working with different foods, especially when changing from working with raw foods to ready-to-eat foods; and
- Separating food worker tasks to eliminate simultaneous work with raw and ready-to-eat foods at the same time.

### **Keeping the Food Safe**

All food establishments should strive to integrate food safety practices and active managerial control of critical steps of food preparation into their operations. For example, Hazard Analysis Critical Control Point (HACCP) is a preventive approach to minimizing the risks from food safety hazards and can be used to ensure safer food products for consumers. The Food Code sets forth parameters (such as time-temperature requirements) demonstrated scientifically to control pathogenic hazards. Annex 4 of the 2005 Food Code discusses the process HACCP approach as well as controlling the introduction of chemical and physical hazards. These parameters provide a solid foundation for developing HACCP plans for individual operations.

Two FDA documents have been developed to assist both the operator and regulator of food service and retail establishments:

(1) *Managing Food Safety: A Manual for the Voluntary Use of HACCP Principles for Operators of Food Service and Retail Establishments*

The Operator's Manual:

- provides operator's of such establishments with a step-by-step scheme for designing and voluntarily implementing food safety management systems based on HACCP principles.

and

(2) *Managing Food Safety: A Regulator's Manual for Applying HACCP Principles to Risk-based Retail and Food Service Inspections and Evaluating Voluntary Food Safety Management Systems*

The Regulator's Manual:

- provides regulatory authorities with a step-by-step scheme for conducting risk-based inspections based on HACCP principles to assist in assessing control of foodborne illness risk factors;

- details intervention strategies that can be developed with the operator to reduce the occurrence of foodborne illness risk factors; and
- provides recommendations for evaluating voluntarily implemented food safety management systems, if asked by industry.

All of these resources can assist food recovery programs.

A HACCP system requires the person-in-charge of the food recovery operation to objectively examine the flow of the food, from its receipt to service. This analysis can help the person-in-charge identify the points at which it is critical to impose control in order to keep the food safe. Assistance in applying HACCP principles to food recovery programs is available from regulatory agencies, academia, trade associations, and consultants.

Most operations fall within these three categories:

- (1) Food process with NO COOK step (ready-to-eat food);  
(receive-store-prepare-hold-serve)  
Examples: fresh vegetables or fruits, tuna salad, coleslaw, sliced sandwich meats
- (2) Food preparation for SAME DAY SERVICE;  
(receive-store-prepare-cook-hold-serve)  
Examples: Hamburgers, hot vegetables, cooked eggs, hot entrees for “special-of-the-day”
- (3) Complex Processes (foods prepared in large volume or for next day service);  
(receive-store-prepare-cook-cool-reheat-hot hold-serve)  
Examples: Soups, gravies, sauces, large roasts, chili, taco filling, egg rolls

By tracking the flow of food, critical steps in a specific operation (e.g., cooking and cold holding) and potential cross contamination points can be identified. Once the facility identifies the points in its process where food can become contaminated, and where incoming foods that are assumed to be contaminated (such as raw, animal-derived foods) must be time/temperature controlled, operational procedures and monitoring can be established.

Another facet in this proactive and preventive HACCP-based strategy is to anticipate failures in the food recovery program and to predetermine corrective actions. For example, what will occur if there is a power failure for an extended period of time or the transport vehicle breaks down? Applying HACCP principles would prompt the person-in-charge to consider the period of time involved in the power failure, the effect it may have on product temperatures, and whether a reheat would suffice to render a product safe.



## Food Preparation Practices

**Thawing:** Frozen foods need to be thawed according to the Food Code, which allows 4 ways to thaw:

- (1) under refrigeration of 41°F or less (preferred method);
- (2) submerged under running water 70°F;
- (3) through the cooking process; or
- (4) in a microwave as part of the cooking process.

**Cooking:** The cooking process is a critical step in controlling potential hazards associated with microorganisms. To kill microorganisms, all parts of the food must reach a sufficient internal food temperature and be held at that temperature for the specified time.

There are many time-temperature combinations that can constitute an adequate cook. The minimum cooking times and temperatures given below do not preclude other time-temperature combinations from being used, provided microbial lethality is achieved in the final food product. For example, in cooking a beef roast, the level of pathogen destruction achieved at 112 minutes after it reaches 130°F is the same as if it were cooked for 4 minutes after it reaches 145°F. In this example, either combination is acceptable and both are allowed in the Food Code. It is imperative to scientifically confirm that the chosen time-temperature combination results in a safe food.

For simplicity, the Food Code prescribes specific times and temperatures for certain foods. Those minimum internal food temperatures and times for holding at that temperature are:

- |                              |  |
|------------------------------|--|
| <b>135°F:</b>                | fruits and vegetables cooked for hot holding   |
| <b>145°F for 15 seconds:</b> | raw eggs that are prepared for immediate consumption; solid portions of fish or meat including pork, and commercially raised game animals            |
| <b>155°F for 15 seconds:</b> | hamburger and other comminuted meats, fish, and game animals such as deer, elk, and rabbit; ratites; injected meats; and pooled, unpasteurized eggs. |
| <b>165°F for 15 seconds:</b> | wild game animals; poultry; baluts, stuffed fish, meat, pasta, poultry and ratites; stuffing containing fish, meat, poultry or ratites.              |

Microwave cooking procedures are also outlined in the Food Code and specify that raw animal foods should be:

- rotated or stirred throughout or midway of cooking to distribute heat through the food;
- covered to help retain moisture;
- heated to at least 165°F in all parts of the food; and
- allowed to stand for 2 minutes after cooking to obtain temperature equilibrium.

The cooking equipment and methods must be adjusted to achieve the desired safe cooking temperatures internally in the final product. The person preparing the food needs to know the required cooking time and temperature and what practices, such as oven temperature and placement of the food within the cooking equipment, are necessary to bring the food to the required temperature. A temperature measuring device should always be used to determine the internal food temperature.

**Cooling Methods:** Cooling foods from hot temperatures should be done as rapidly as possible and must not take more than 6 hours for all parts of the food to reach the required refrigeration temperature. The recommended time frames to achieve cooling within this 6 hour window are: 2 hours to cool foods from 135°F to 70°F and within a total of 6 hours to cool from 135°F to 41°F. Several methods of cooling are:

- (1) Placing the food in shallow pans;
- (2) Separating the food into smaller or thinner portions;
- (3) Using rapid cooling equipment;
- (4) Stirring the food in a container placed in an ice water bath;
- (5) Using containers that facilitate heat transfer, e.g. a metal pan allows food to cool faster than a plastic container and
- (6) Adding ice as an ingredient.

**Reheating:** Cooked, cooled foods must be reheated to 165°F for 15 seconds minimum if the food is to be held for hot holding. Remember, all parts of the food being reheated must reach this temperature.

### **Potentially Hazardous Food (Time/Temperature Control for Safety Food)**

According to the 2005 Food Code, potentially hazardous food (PHF/TCS food) is defined in terms of whether or not it requires time/temperature control for safety to limit pathogen growth or toxin formation. The term does not include foods that do not support growth but may contain a pathogenic microorganism or chemical or physical food safety hazard at a level sufficient to cause foodborne illness or injury. The progressive growth of all foodborne pathogens is considered whether slow or rapid.

The definition of PHF/TCS food takes into consideration pH, water activity ( $a_w$ ), pH and  $a_w$  interaction, heat treatment, and packaging for a relatively simple determination of

whether the food requires time/temperature control for safety. If the food is heat-treated to eliminate vegetative cells, it needs to be addressed differently than a raw product with no, or inadequate, heat treatment. In addition, if the food is packaged after heat treatment to destroy vegetative cells and subsequently packaged to prevent re-contamination, higher ranges of pH and/or  $a_w$  can be tolerated because remaining spore-forming bacteria are the only microbial hazards of concern. While foods will need to be cooled slightly to prevent condensation inside the package, they must be protected from contamination in an area with limited access and packaged before temperatures drop below 57°C (135°F). In some foods, it is possible that neither the pH value nor the  $a_w$  value is low enough by itself to control or eliminate pathogen growth; however, the interaction of pH and  $a_w$  may be able to accomplish it. This is an example of a hurdle technology. Hurdle technology involves several inhibitory factors being used together to control or eliminate pathogen growth, when they would otherwise be ineffective if used alone.

In determining if time/temperature control is required, combination products present their own challenge. A combination product is one in which there are two or more distinct food components and an interface between the two components may have a different property than either of the individual components. A determination must be made about whether the food has distinct components such as pie with meringue topping, focaccia bread, meat salads, or fettuccine alfredo with chicken or whether it has a uniform consistency such as gravies, puddings, or sauces. In these products, the pH at the interface is important in determining if the item is a PHF/TCS food.

A well designed inoculation study or other published scientific research should be used to determine whether a food can be held without time/temperature control when:

- process technologies other than heat are applied to destroy foodborne pathogens (e.g., irradiation, high pressure processing, pulsed light, ozonation);
- combination products are prepared; or
- other extrinsic factors (e.g., packaging/atmospheres) or intrinsic factors (e.g., redox potential, salt content, antimicrobials) are used to control or eliminate pathogen growth.

Before using Tables A and B (found at the end of this section and taken from paragraph 1-201.10(B) of the Food Code definition for “potentially hazardous food (time/temperature control for safety food)”) in determining whether a food requires time/temperature control for safety (TCS), answers to the following questions should be considered:

- Is the intent to hold the food without using time or temperature control?
  - If the answer is No, no further action is required. The decision tree later in this Annex is not needed to determine if the item is a PHF/TCS food.
- Is the food raw, or is the food heat-treated?

- Does the food already require time/temperature control for safety by definition in paragraph 1-201.10(B)?
- Does a product history with sound scientific rationale exist indicating a safe history of use?
- Is the food processed and packaged so that it no longer requires TCS such as ultra high temperature (UHT) creamers or shelf-stable canned goods?
- What is the pH and  $a_w$  of the food in question using an independent laboratory and Association of Official Analytical Chemists (AOAC) methods of analysis?

A food designated as meeting product assessment (PA), in either table should be considered PHF until further study proves otherwise. The PA means that based on the food's pH and  $a_w$  and whether it was raw or heat-treated or packaged, it has to be considered PHF until inoculation studies or some other acceptable evidence shows that the food is a PHF/TCS food or not. The Food Code requires a variance request to the regulatory authority with the evidence that the food does not require time/temperature control for safety.

If a facility adjusts the pH of a food using vinegar, lemon juice, or citric acid for purposes other than flavor enhancement, a variance is required under the Food Code. A HACCP plan is required whether the food is a PHF/TCS food or not a PHF/TCS food. A standardized recipe validated by lab testing for pH and  $a_w$  would be an appropriate part of the variance request with annual (or other frequency as specified by the regulatory authority) samples tested to verify compliance with the conditions of the variance.

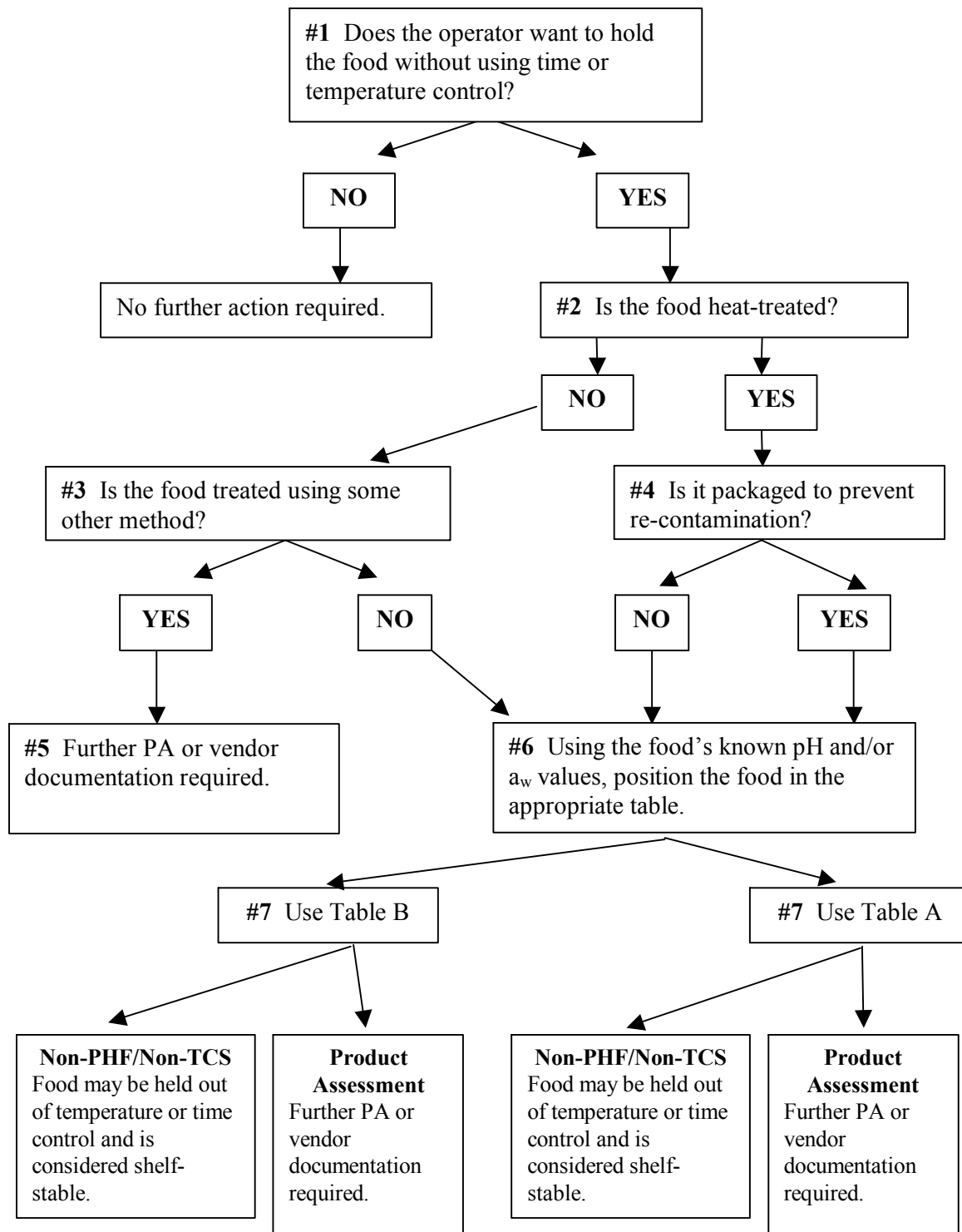
More information can be found in the Institute of Food Technologists (IFT) Report, "Evaluation and Definition of Potentially Hazardous Foods" at <http://www.cfsan.fda.gov/~comm/ift4-toc.html>.

### **Instructions for using the following Decision Tree and Table A and Table B:**

1. Does the operator want to hold the food without using time or temperature control?
  - a. No – Continue holding the food at  $\leq 41^\circ\text{F}$  or  $\geq 135^\circ\text{F}$  for safety and/or quality.
  - b. Yes – Continue using the decision tree to identify which table to use to determine whether time/temperature control for safety (TCS) is required.
2. Is the food heat-treated?
  - a. No – The food is either raw, partially cooked (not cooked to the temperature specified above and in section 3-401.11 of the Food Code) or treated with some other method other than heat. Proceed to step #3.
  - b. Yes – If the food is heat-treated to the required temperature for that food as specified under section 3-401.11 of the Food Code, vegetative cells will be destroyed although spores will survive. Proceed to step #4.
3. Is the food treated using some other method?

- a. No –The food is raw or has only received a partial cook allowing vegetative cells and spores to survive. Proceed to step #6.
- b. Yes – If a method other than heat is used to destroy pathogens such as irradiation, high pressure processing, pulsed light, ultrasound, inductive heating, or ozonation, the effectiveness of the process needs to be validated by inoculation studies or other means. Proceed to step #5.
4. Is it packaged to prevent re-contamination?
  - a. No – Re-contamination of the product can occur after heat treatment because it is not packaged. Proceed to step #6.
  - b. Yes – If the food is packaged immediately after heat treatment to prevent re-contamination, higher ranges of pH and/or  $a_w$  can be tolerated because spore-forming bacteria are the only microbial hazard. Proceed to step #7.
5. Further product assessment or vendor documentation required.
  - a. The vendor of this product may be able to supply documentation that inoculation studies indicate the food can be safely held without time/temperature control for safety.
  - b. Food prepared or processed using new technologies may be held without time/temperature control provided the effectiveness of the use of such technologies is based on a validated inoculation study.
6. Using the food's known pH and/or  $a_w$  values, position the food in the appropriate table.
  - a. Choose the column under "pH values" that contains the pH value of the food in question.
  - b. Choose the row under " $a_w$  values" that contains the  $a_w$  value of the food in question.
  - c. Note where the row and column intersect to identify whether the food is "non-PHF/non-TCS food" and therefore does not require time/temperature control, or whether further product assessment (PA) is required. Other factors such as redox potential, competitive microorganisms, salt content, or processing methods may allow the product to be held without time/temperature control but an inoculation study is required.
7. Use **Table A** for foods that are heat-treated and packaged **OR** use **Table B** for foods that are not heat-treated or heat-treated but not packaged.
8. Determine if the item is non-PHF/non-TCS or needs further product assessment (PA).

## PHF-TCS Decision Tree



<b>Table A. Interaction of pH and <math>a_w</math> for control of spores in food heat-treated to destroy vegetative cells and subsequently packaged</b>			
$a_w$ values	pH values		
	4.6 or less	> 4.6 - 5.6	> 5.6
$\leq 0.92$	non-PHF*/non-TCS FOOD**	non-PHF/non-TCS FOOD	non-PHF/non-TCS FOOD
> 0.92 - .95	non-PHF/non-TCS FOOD	non-PHF/non-TCS FOOD	PA***
> 0.95	non-PHF/non-TCS FOOD	PA	PA

\* PHF means Potentially Hazardous Food \*\* TCS food means Time/Temperature Control for Safety food \*\*\* PA means Product Assessment required

<b>Table B. Interaction of pH and <math>a_w</math> for control of vegetative cells and spores in food not heat-treated or heat-treated but not packaged</b>				
$a_w$ values	pH values			
	< 4.2	4.2 - 4.6	> 4.6 - 5.0	> 5.0
< 0.88	non-PHF*/non-TCS food**	non-PHF/non-TCS food	non-PHF/non-TCS food	non-PHF/ non-TCS food
0.88 – 0.90	non-PHF/non-TCS food	non-PHF/non-TCS food	non-PHF/non-TCS food	PA***
> 0.90 – 0.92	non-PHF/non-TCS food	non-PHF/non-TCS food	PA	PA
> 0.92	non-PHF/non-TCS food	PA	PA	PA

\* PHF means Potentially Hazardous Food \*\* TCS food means Time/Temperature Control for Safety \*\*\* PA means Product Assessment required

## **Equipment**

Various types of equipment are used in food operations - equipment such as ovens, steam kettles, food temperature holding equipment, temperature measuring devices (e.g., thermometers, thermocouples, etc.) sinks, warewashing machines, refrigerators, and freezers. Usually, additional equipment is necessary for transporting food from donor sites to the receiving facilities, e.g., insulated containers or refrigerated units for maintaining hot or cold temperatures of the food in transport.

Of particular importance to food recovery operations are temperature measuring devices, freezers, refrigerators, sinks, warewashing machines, and food temperature holding equipment.

Safe food depends not only on providing proper equipment of adequate capacity, but also on operating and maintaining it properly. Food workers need to be appropriately trained and brought to understand their role in properly cleaning (washing and rinsing) and sanitizing equipment and work stations after use. Vigilance in maintaining a clean work station and facility promotes hygienic work and food environments and limits the potential for cross contamination of food during preparation.

## **Maintaining Food Safety During Transportation**

### **Loading for Transport**

When foods are ready for transport, they must be containerized to prevent the contamination of the food while simultaneously keeping the food at the proper temperature. Care must be taken to protect the food from contaminants such as, insects, dust, water drippage, or other sources of contamination during transport to the receiving facility. Large batches of foods may need to be separated into several smaller, covered containers. Stack containers securely and do not pack temperature controlling units beyond their capacity.

### **Maintaining Food Temperature**

Foods must be kept hot or cold during transport. Foods can be kept at the proper temperature provided the right equipment is available and used properly. It is recommended that cold foods be maintained at 41°F or less and hot foods at 135°F or higher. Consult the regulatory authority in your jurisdiction for examples of acceptable methods and temperature requirements for hot and cold holding of foods during transport.

### **Cleaning of the Vehicle for Transport of Food**

Vehicles used for transporting food for food recovery programs, whether private vehicles or commercial trucks, need to be routinely cleaned. Cleaning of the vehicle has the primary purpose of preventing cross contamination and maintaining a sanitary



food environment. The interior of the vehicle and especially the section of the vehicle where food containers are stored must be kept free of insects, dirt, animals, and any other thing that has the potential to biologically, chemically, or physically contaminate the food.

### **Receiving Food**

Food should be received by a person who is responsible for ensuring that, if the food is not shelf-stable or not immediately served to consumers, it is immediately refrigerated or properly held for later service. It is important to conduct a timely inspection of incoming products and to isolate any suspect foods as discussed earlier. See Appendix A for a guidance chart on accessing the food upon receipt.

### **Record Keeping for Food Safety**

Written documentation helps to provide a tracking system to establish accountability, continuously improve the process, spot potential problems, develop strategies for corrective action, ascertain training needs, and validate successful procedures. Donors and receiving facilities are encouraged to keep certain records voluntarily as a part of their food recovery programs to accomplish these objectives and to maintain a system of checks and balances to document that the food is safely managed. Up-to-date and accurate recordkeeping is an essential part of any control system that ensures consumers are provided food that is safe and unadulterated. Also see Appendix B for sample monitoring forms for record keeping.

### **Emergency Readiness**

Many unforeseen situations can occur in an operation that could compromise food safety and the ability to function in a typical fashion. Natural disasters can cause a disruption for less than a day or as long as several months. Other disruptions, such as water, gas or power outages, may only be a hardship on the operation and not on the whole community. Finally any illnesses or injuries associated with food products maintained by the food donor or FDO may cause a disruption of operations and trigger an investigation and a product hold or recall. No matter the length or scope of the disruption, food safety must be a priority.

An emergency readiness plan is critical to ensure the safety of food provided by food donors or FDOs. An effective emergency readiness plan must meet the unique situation of the specific operation. Prior preparation, employee training and practicing activities will minimize the surprise element. A successful emergency readiness plan will ensure the safe storage, production and service of food. A key part of developing and implementing an emergency readiness plan is assembling a team to develop the plan and an Emergency Response Team (ERT) to oversee and coordinate activities. An ERT should consist of management decision level associates who are available to respond, oversee, decide and institute actions that need to be taken in a timely

manner. Several steps will assure the success of the emergency readiness plan. First, the plan development team should identify the ERT, construct a contact directory with their information and specify the responsibilities of each member in the event of an emergency. To specify these responsibilities, the potential disruptions should be determined and actions identified to deal with the disruptions. Identifying the ERT and specifying the actions for disruptions is the heart of the basic emergency readiness plan. Staff and volunteers should receive training on the plan, drills to practice the emergency actions should be conducted periodically, and the plan should be reviewed and updated on a regular basis. Also see Appendix D for emergency points of contact and a tool to maintain an updated list of contacts.

## **Food Rescue Program Responsibilities**

A food distribution organization, as a food rescue participant, has responsibilities including the following:

- comply with all applicable requirements of the State and/or local regulatory authority. If the jurisdictional regulatory authority does not inspect the program, the program may make a written request for at least an annual inspection;
- examine and accept and store only those foods that have met the criteria as outlined in this document. See Appendix A chart for guidance on the assessment of donated foods on receipt;
- in transporting food, use a visible, active temperature retention system such as a refrigerated vehicle for the safe transport of chilled food to maintain foods at no more than 41°F or, a passive temperature system such as cam carriers to maintain hot foods at 135°F or above;
- effect a comprehensive safe food handling educational and training program for staff and volunteers, including transport drivers. Certification of key staff in safe food preparation is one means to managing the food rescue staff in accordance with current food protection standards;
- provide cooks, staff, and volunteers with regular inservice education as well as supervision by a person with demonstrated knowledge in safe food preparation.
- work out agreements with food recovery partner(s) regarding mutual inspections of each others facilities to assure confidence in the soundness of the partners capacity to operate within the standard ( see Appendix B for sample forms);

- as a quality assurance mechanism, design or procure an evaluation tool to assess the condition of partner(s) facilities (see Appendix B for sample forms), and include, as a minimum: an initial physical plant inspection and at least an annual physical plant review to determine the ability and resources of the partner to receive, store, prepare, serve, or perform other food handling activities in compliance with the regulatory agency requirements.

## **Guidelines for Monitoring Programs**

The purpose of this guideline, including the monitoring of facilities to determine if standards are in compliance, is to protect the health of the consumers being served.

An added benefit is that compliance with this guideline increases the confidence of all stakeholders (donors, regulatory authorities, contributors, consumers and a variety of supporters) that every effort is being made to serve a clean, safe product to hungry people, thereby minimizing the risk of foodborne illness.

The programs may be routinely monitored by the jurisdiction's regulatory agency. In such cases, there would be official inspection protocols and forms in use to record observations, areas of noncompliance and remarks regarding corrections and enforcement.

For non-regulatory monitoring visits by peer reviewers and corporate sanitarians, the terms and procedures should be in writing and agreed to by both sides. The agreement should include statements regarding:

- access to the premises
- qualifications of the monitor/inspector
- procedures for dealing with minor and serious violations observed
- oral and written reports of findings during the monitoring visits
- specifications for corrective actions for violations observed

The forms may also be used for self-inspections.

For non-regulatory monitoring visits, see Appendix B for sample monitoring forms for kitchens, food bank warehouses and food bank salvage operations.

## **Handling Donations of Game Animals**

Large wild game animals include mammals such as deer, reindeer, caribou, elk, moose, antelope and bison. In addition to ranch or farm raised game animals that are slaughtered and processed under state inspection or a USDA voluntary inspection

program, surplus wild game meat is available as a result of herd culling and through programs such as “Hunters for the Hungry”. If handled properly, this can be an important food source for food recovery programs. Nutrient data on game animals can be found on the USDA Agriculture Research Service’s Food Composition Database at: [www.nal.usda.gov/fnic/foodcomp/index.html](http://www.nal.usda.gov/fnic/foodcomp/index.html) where you can search on the species of interest.

Primary concerns regarding otherwise healthy wild animals are pathogens such as *Salmonella* and *Escherichia coli*. These could contaminate the meat if the animal is not slaughtered, dressed, transported, and processed under sanitary conditions; if not held at temperatures to preclude bacterial growth; or cooked to temperatures to destroy pathogens.

Road kills (wild game animals killed by impact with vehicles) are not generally recommended for recovery as the intestines or stomach may rupture, contaminating the meat, and they are often so blood shot that little or none of the carcass is salvageable. **Some jurisdictions may want to add some additional controls and allow their recovery, but they are not addressed in this document. Refer to local and state food regulatory officials for specific requirements in your jurisdiction.**

Wild game animals such as bear or walrus, are also not generally recommended due to the potential for trichinae cysts in the meat.

Receiving facilities should be aware of the necessary food safety procedures for donations of wild game. It is recommended that the following food safety procedures be followed for any donations received.

## **Food Safety Procedures**

### **Harvest:**

- Determine that the animal appears to be healthy, and does not exhibit obvious signs of illness. Comply with any postmortem inspection requirements in the law.
- Eviscerate the animal within an hour of harvest.
- Field dress the animal well, unless facilities are available at the processing plant.
- Cut the carcass into quarters if needed.
- Chill the meat as quickly as possible to refrigeration temperatures

### **Transport:**

- Protect the meat from contamination during transport by cover, and separation from non-food items.
- Maintain the meat refrigeration temperature at 41°F or below.

## Processor:

- Use a state or federally inspected plant or custom exempt plant.
- Ensure the processor has the space, facilities, and equipment to handle wild game meat.
- Receive for sale or service only game animals that are not on the list of Endangered and threatened wildlife plants and animals listed in 50 CFR 17
- If receiving game animals for sale or service, they should be:
  1. commercially raised for food and:
    - a. Under a voluntary inspection program by an animal health agency , or
    - b. Under routine inspection program by a regulatory authority other than the animal health agency;, and
    - c. Raised, slaughtered, and processed according to:
      - i. laws governing meat and poultry; and
      - ii. Determination of need for ante & post mortem exam.
  2. Under voluntary program by USDA relative to exotic animals such as reindeer, elk, bison. Also includes the Rabbit Inspection Program by USDA.
  3. Live caught wild game - if approved by the regulatory authority;
    - a. Under routine inspection program;
    - b. Slaughtered and processed according to:
      - i. laws governing meat and poultry;
      - ii. Determination of need for ante & post mortem exam.
  4. Field dressed wild game - if approved by the Regulatory Authority; under a routine inspection program that ensures the animals have a :
    - a. post-mortem exam by an approved veterinarian or veterinarian designee, or
    - b. are field dressed and transported according to requirements of agency having jurisdiction, and
    - c. Processed in accordance with laws governing meat and poultry.

## Receipt:

- Examine the carcass or quarters for general cleanliness and quality, and determine whether the product can be further processed or needs to be rejected.
- Record the date, source and species of the donated wild game. Retain this information with the product, and in plant records.
- Freeze the carcass or quarters if not immediately processed.
- Store the carcass or quarters physically separate from other food products from approved sources, if using common refrigeration equipment.

**Processing:**

- Completely separate the processing of wild game meat from other meat processing by space and time.
- Disassemble, clean and sanitize equipment and food preparation surfaces prior to and following processing and packaging to preclude any cross-contamination.
- Portion wild game meat only into steaks, roasts, stew meat, or grind.
- If the carcass or quarters are frozen, keep them frozen during processing and packaging. Do not thaw.
- Any fat added to the ground meat must come from a state or federally inspected plant.
- Wild game meat may NOT be cured, smoked, dried or fermented or processed into other products.

**Packaging and Labeling:**

- Individually package and label the finished product.
- Ensure the label clearly and conspicuously states:
  - name of the game animal;
  - name and location address of the processing facility;
  - “Not an Inspected Product” or “Not for Sale;”
  - KEEP FROZEN; and
  - Cook to 165 °F for 15 seconds.

**Storing and Distribution:**

- Maintain product temperatures of 0°F or less.
- Protect from contamination by covering meat and storing separate from raw, ready-to-eat product.

**Cooking and Service:**

- Thaw meat in a refrigerated unit or as part of the cooking process.
- Cook all parts to an internal temperature of 165°F for 15 seconds.
- Hold cooked portions at an internal temperature of 135°F prior to service
- Avoid repeated cooling and reheating. Rather choose to cook and serve for same day service.

## **Planning for Food Defense**

Food safety addresses the ways to limit the presence of both naturally occurring food contaminants and those caused by cross-contamination, and to prevent growth of organisms caused by time/temperature abuse. Food defense, on the other hand, relates to the protection of food from bioterrorism, that is the intentional use of biological, chemical, radiological or physical agents in foods for the purpose of causing harm or death. With the events of September 11<sup>th</sup>, food donors and Food Distribution Organizations (FDOs) are encouraged to review their current procedures and controls in light of the potential for tampering or other malicious, criminal, or terrorist actions and make appropriate improvements.

The Food Safety Procedures section discussed the usefulness of being prepared for emergencies. This section will focus attention on critical production areas that may be particularly sensitive to the risk of food tampering or contamination and will suggest possible preventive or mitigating measures for these areas.

### **Steps to Address Food Defense**

Although a written food defense plan is not required, it might be useful to go through the steps to address food defense and identify controls or procedures to minimize risk in your operation. The first step is to assemble the food defense procedures development team that will assess the operation and identify preventive measures. To be successful, implementing enhanced preventive measures requires the commitment of management and staff, therefore it is recommended that both management and staff participate as members of the team.

As with responding to food safety emergencies, a key part of addressing food defense is implementing an Emergency Response Team (ERT) to oversee and coordinate any food defense activities. An ERT is essential to the success of the needed response. The ERT should be identified by the food defense procedures development team and should consist of top management decision level associates who are available to respond, oversee, decide and institute actions that need to be taken quickly. Secondary level of responders should also be identified to support the first level and provide on-site knowledge and expertise. The ERT team members' scope of responsibility should be defined and clearly stated. There is a suggested Emergency Contact list that might help in identifying the ERT and that should be completed with contact information including for the regulatory and enforcement agencies in your area.

The second step of addressing food defense involves the development team assessing vulnerabilities and determining potential preventive measures for critical areas of your operation, such as receiving food, storing food, preparing and serving food, and

personnel in the operation. Food defense preventive or mitigation measures should include specific actions the organization will take to prevent, detect, and respond to tampering, criminal, or terrorist activity that impacts food safety. The third step would be to assemble the preventive measures and other steps into an organized food defense plan. Bullet points are provided below to help in designing the scope and detail of the preventive or mitigation measures and other components of the plan.

### **Preventive or Mitigation Strategies:**

- Conduct vulnerability assessments of the operation to identify gaps or weak points where contamination could occur
- Receiving
  - research and document the source of food donations
  - Ask the question, “Do your donors practice food defense measures?”
  - use only known and/or appropriately licensed or permitted sources for products
  - set a policy that all delivery trucks on the premises be locked and sealed when not being loaded or unloaded
  - assign an authorized person to verify and receive shipments both during business hours and after business hours
  - establish delivery schedules, question any unexplained, unscheduled deliveries or drivers
  - implement receiving procedures to check for product tampering, contamination, damage or counterfeiting
  - establish policy and procedures to reject food and chemical packages that are not acceptable, cannot be verified against delivery roster, or contain unacceptable changes to shipping documents
  - set policy and procedures to notify the ERT leader immediately if product tampering is suspected in any of the deliveries
- Storing, preparing and serving food
  - Secure access to all food product, food ingredient, and chemical storage areas
  - limit access within the operation to authorized personnel
  - especially limit access to hazardous materials such as sanitizers or chemicals
  - keep a daily inventory of hazardous chemicals and investigate all discrepancies immediately
  - secure (lock, seal, equip with a sensor device) all doors, windows, roof openings, vent openings, and outside refrigeration/storage units at all times
  - inspect security in all storage facilities (including temporary storage vehicles) regularly, and keep a log of the results
  - restrict and control access to central controls for airflow, HVAC, water systems, electricity, and gas within foodservice areas



- periodically check foods for signs of tampering or contamination
- establish policy and procedures to discard food or ingredients that are not properly sealed and labeled
- investigate any missing or extra food products
- monitor any self-service areas for evidence of tampering or other malicious activities
- monitor all food service areas for signs of suspicious activity or unauthorized entry
- Food product hold or recall procedures
  - identify procedure to monitor potential product issues including internal complaints and external food safety recall information disseminated by FSIS, FDA or food companies
  - develop and implement an effective trace back and trace forward process
  - identify the staff responsible to manage the hold and recall response
  - develop and implement a hold and recall process including how product will be labeled and sequestered
  - describe procedure for proper disposition of recalled product
  - identify contact lists specifically for hold and recall procedures including addresses and phone numbers
- Personnel in the operation
  - collect, review and maintain information on volunteers
  - conduct background checks or basic screening of volunteers and staff
  - ask for and verify identification/credentials and have all visitors escorted
  - establish procedures for dealing with an unauthorized person(s) in a restricted section of the operation
  - monitor the health of volunteers and staff
  - restrict personal items in the food receiving, storage or preparation areas
  - maintain a daily staff work assignment schedule
  - Clearly state emergency evacuation procedures, including preventing security breaches during evacuation
- Identify response actions for suspicious activities (tampering, criminal or terrorist)
  - develop strategies for triaging a food defense failure or event
  - immediately investigate all information about suspicious activity
  - identify decision points to describe when to escalate or expand response actions
  - alert local law enforcement about all suspected criminal activity
  - alert local FBI about all suspected tampering or terrorist activity

**Communication:**

- To raise awareness and spark discussion of state and local government agencies and industry representatives, FDA developed a message using the acronym ALERT. Each letter of the ALERT acronym identifies five key points

that industry and businesses can use to decrease the risk of intentional food contamination in their facility. Use the ALERT initiative with its five key points to communicate how to decrease the risk of intentional food contamination in your operation. (See web link to more information in the References Section)

- A = Assure that supplies and ingredients are from safe and secure sources
  - L = look after the security of the products and ingredients in your operation
  - E = employees, what do you know about them and other people coming in and out of your operation
  - R = Reports, could you provide reports about the security of food products under your control
  - T = Threat, what do you do and who do you notify
- Develop and implement a reporting mechanism for complaints or problems with foods
  - Identify management contacts that employees should inform about potential food defense problems
  - Ensure employees and volunteers are aware of the organization's contacts to alert about potential security problems, and where they can be reached
  - Maintain up-to-date 24-hour contact information for local, state, and federal police/fire/rescue/government agencies (see sample form in Reference Section/ Appendix D)
  - Ensure employees and volunteers are aware of internal, fire, and police emergency phone numbers
  - Proactively develop contact and working relationships with local area first responders and government contacts
  - Identify internal media spokesperson
  - Prepare generic press statements and background information for reference

The last three steps in prevention efforts are to train all personnel on food defense procedures, to drill or practice these procedures and to review and revise your procedures or plans on a regular basis. All staff and volunteers should receive periodic reminders of the importance of food defense strategies through training and internal communication. The procedures should be periodically tested, and reviewed and revised to address new food processes and procedures, and facility changes. These three steps can also be included in a written food defense plan. The bullets below give points to consider for these steps.

**Training and practicing on food defense procedures:**

- Provide training to all employees and volunteers at their orientation, provide refresher training and updates on a regular basis

- Train on the ALERT initiative (see Communication above) to provide all staff and volunteers involved in the operation the five key points to raise their awareness of food defense strategies
- Provide periodic reminders of the importance of food defense procedures (for example, scheduling meetings, providing brochures, payroll stuffers for employees, posters or pocket cards at the work site) Pocket cards on the ALERT messages can be ordered from the web link found in the References Section.
- Include information on:
  - observing unusual behavior around the facility, loitering of unknown persons
  - noticing abandoned items in around the facility
  - identifying unusual appearance of product or equipment
  - process to report and escalate concerns to management
  - alerting identified management about any findings (e.g., instituting a system of rewards or recognition, maintaining anonymity of staff or volunteer, building into job performance standards for employees)
- Establish a 'peer monitoring' system for staff to remind each other about proper procedures or to discuss any observations about unusual behaviors, packages, etc.
- Conduct periodic food defense drills or table top exercises to practice and refine process

**Reviewing food defense procedures:**

- On a regular basis review and verify the effectiveness of your food defense procedures
- Perform random food defense 'inspections' or assessments of your operation
- Evaluate the lessons learned from past tampering or other malicious or criminal actions and threats and use the information to revise, update or refine your food defense procedures or plans

This section has covered the importance of being prepared for food defense emergencies. Information was provided to raise your awareness and suggest some critical areas and changes you might want to implement to reduce the risk of tampering or intentional contamination of the foods you receive and distribute to your recipients. Several documents available on the Internet from government agencies are found in the References: Publications and Websites section. These documents can provide additional assistance in addressing food defense.

## **APPENDIX A**

### **Guidance Charts for Assessment of Food on Receipt**

**FOOD SAFETY GUIDANCE**

**For products donated directly by an approved donor as defined in “Food Donor Guidance”**

CHART: ASSESSMENT OF FOOD ON RECEIPT			
Food Products	Packaging	Storage Condition	Non-Acceptable Conditions
Prepared Foods (Entrees, starches, side vegetables, chilled foods, home-meal replacements)	<ul style="list-style-type: none"> <li>• Food-grade packaging in direct contact with food.</li> <li>• Securely closed and separated by food type to avoid cross-contamination.</li> <li>• Labeled and dated.</li> </ul>	Chilled at no more than 41°F or frozen at 0° or less.	<ul style="list-style-type: none"> <li>• Previously reheated foods.</li> <li>• Foods kept in danger zone more than 2 hours.</li> <li>• Food previously served.</li> </ul>
Chilled Perishable Prepackaged Foods (Orange Juice)	<ul style="list-style-type: none"> <li>• Original packaging or food-grade packaging for all repacked product.</li> </ul>	Chilled at no more than 41°F.	<ul style="list-style-type: none"> <li>• Foods kept in danger zone more than 2 hours.</li> <li>• Damaged or compromised packaging resulting in the loss of sanitary barrier protection.</li> <li>• Outside the “use by” date recommended from the manufacturer.</li> </ul>
Meat, Poultry, Fish (Fresh)	<ul style="list-style-type: none"> <li>• Original packaging.</li> <li>• Food-grade packaging in direct contact with food.</li> <li>• Securely closed and separated by food type (e.g. beef, pork, poultry, etc.) to avoid cross-contamination.</li> <li>• Labeled and dated as appropriate.</li> </ul>	Chilled at no more than 41°F.	<ul style="list-style-type: none"> <li>• Foods kept in danger zone more than 2 hours.</li> <li>• Non-food-grade packaging in direct contact with food.</li> </ul>
Meat, Poultry, Fish (Frozen)	<ul style="list-style-type: none"> <li>• Original packaging.</li> <li>• Food-grade packaging in direct contact with food.</li> <li>• Labeled and dated as appropriate.</li> </ul>	Frozen at 0°F or less.	<ul style="list-style-type: none"> <li>• Defrosted product.</li> <li>• Damaged or compromised packaging resulting in discoloration of product.</li> <li>• Severe freezer burn.</li> </ul>
Unprocessed Meats (Donated Wild Game)	<ul style="list-style-type: none"> <li>• Custom exempt or state or federally inspected plant.</li> <li>• Food-grade packaging.</li> <li>• Labeled and dated with name of game, name and location of plant, “Not an Inspected Product,” “Keep Frozen,” “Cook to 165°F.”</li> </ul>	Frozen at 0°F or less.	<ul style="list-style-type: none"> <li>• Source</li> <li>• Labeling</li> <li>• Defrosted product.</li> </ul>
Dairy Products	<ul style="list-style-type: none"> <li>• Original packaging.</li> <li>• Food-grade packaging in direct contact with food.</li> </ul>	Chilled at no more than 41°F.	<ul style="list-style-type: none"> <li>• Damaged or compromised packaging, resulting in the loss of sanitary barrier protection.</li> </ul>

CHART: ASSESSMENT OF FOOD ON RECEIPT			
Food Products	Packaging	Storage Condition	Non-Acceptable Conditions
Raw Shell Eggs (unpasteurized)	<ul style="list-style-type: none"> <li>• Original packaging.</li> <li>• Food-grade packaging in direct contact with food.</li> </ul>	Chilled at no more than 41°F.	<ul style="list-style-type: none"> <li>• Damaged or compromised packaging, resulting in the loss of sanitary barrier protection.</li> <li>• Cracked or broken eggs.</li> </ul>
Fresh Produce (Whole)	<ul style="list-style-type: none"> <li>• Original cartons and bags or food-grade packaging for all repacked product.</li> </ul>	Cool, dry, clean area.	<ul style="list-style-type: none"> <li>• Significant decay.</li> </ul>
Fresh Produce (Chopped)	<ul style="list-style-type: none"> <li>• Food-grade packaging securely closed with each vegetable or fruit packed separately.</li> </ul>	Chilled at 41°F.	<ul style="list-style-type: none"> <li>• Food kept in danger zone more than 2 hours.</li> <li>• Color change or decay.</li> </ul>
Frozen Foods (Entrees, starches, vegetables, fruit juices, baked goods)	<ul style="list-style-type: none"> <li>• Original packaging or food-grade packaging for all repacked product.</li> </ul>	Frozen at 0°F or less.	<ul style="list-style-type: none"> <li>• Defrosted product.</li> <li>• Damaged or compromised packaging, resulting in the loss of sanitary barrier protection.</li> <li>• Severe freezer burn.</li> </ul>
Baked Goods (Fresh or day-old bread, bagels, and other bakery items.)	<ul style="list-style-type: none"> <li>• Food-grade packaging in direct contact with food.</li> <li>• Securely closed.</li> <li>• Bread products separately packaged from other baked foods.</li> </ul>	Cool, dry, clean area.	<ul style="list-style-type: none"> <li>• Stale products.</li> <li>• Mold.</li> <li>• Damaged or compromised packaging, resulting in the loss of sanitary barrier protection.</li> <li>• Not packaged in food-grade packaging.</li> </ul>
Prepackaged Foods- Nonperishable (Canned)	<ul style="list-style-type: none"> <li>• Fully intact <u>original cans</u> with labels that must show at a minimum:               <ol style="list-style-type: none"> <li>1) Product identification</li> <li>2) Ingredients</li> <li>3) Net weight, and</li> <li>4) Distributor</li> <li>5) Food source for each major food allergen such as (milk, egg, fish, crustacean shellfish, tree nuts, wheat, peanuts, soybean)</li> </ol> </li> </ul>	Cool, dry, clean area.	<ul style="list-style-type: none"> <li>• Opened, punctured, bulging, or serious can damage, including evidence of leakage, side-seam dent, top-seam dent, and/or significant rust.</li> <li>• Home-canned products.</li> </ul>
Prepackaged Foods- Nonperishable (Shelf-stable boxed/package foods)	<ul style="list-style-type: none"> <li>• Original packaging, boxes or cases.</li> <li>• Food-grade packaging for all repacked foods.</li> <li>• Labels that must show at a minimum:               <ol style="list-style-type: none"> <li>1) Product identification</li> <li>2) Ingredients</li> <li>3) Net weight, and</li> <li>4) Distributor</li> <li>5) Food source for each major food allergen such as (milk, egg, fish, crustacean shellfish, tree nuts, wheat, peanuts, soybean)</li> </ol> </li> </ul>	Cool, dry, clean area.	<ul style="list-style-type: none"> <li>• Opened, punctured, or damaged packing, resulting in the loss of sanitary barrier protection and/or unfavorable environmental exposure.</li> <li>• Damp or stained packages.</li> </ul>

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## **APPENDIX B**

### **Forms to Simplify Record Keeping**

- Initial Meeting Form
  - Agreement to participate as Food Recovery Partners
  - Record of Shipment and Receipt of Donated Food (blank)
- Record of Shipment and Receipt of Donated Food (completed sample)
  - Kitchen Monitoring Report form
  - Warehouse Inspection form
  - Salvage Operation Inspection form



### **Sample Forms For Simple Record keeping**

Record keeping is an important aspect of operating a recovery program. The model forms in this document are simple, user-friendly aids to facilitate collecting information while making voluntary recordkeeping less burdensome. The forms cover some basic data needs and can be modified by the users to accommodate particular situations.

The **Initial Meeting Form** is a form that is intended to be an aid in laying the foundation for a successful partnership. In the initial meetings, the donor and food distribution organization share information with each other about their mutual expectations and make plans for how their program will work.

The **Agreement to Participate as Food Recovery Partners** form is a model form in which the partners pledge their best efforts for their food recovery project and set forth a definite time period for the partnership.

The data on the **Record of Shipment and Receipt of Donated Food** form bolster accountability and serve to verify that appropriate steps have been taken to safeguard the food. If there are problems, the completed forms can assist in trace-back activities. The donor fills out the upper part of the form and can make comments about the food which are helpful to the FDO in planning its use for the food. The form accompanies the food in transit and is completed by the person who oversees food receiving at the FDO's facility.

A completed sample of the **Record of Shipment and Receipt of Donated Food** form is included to demonstrate the intended use of the form. The data provided are for illustration purposes only.

The **Agency Kitchen Monitoring Report** is an inspection checklist to assess the status of general sanitation, hygienic food handling, food preparation equipment condition, employee health, training of manager and staff and other aspects of the operation which contribute to the production of safe food.

The **Food Bank Warehouse Inspection Form** is an inspection checklist to assess the condition of the physical plant, equipment, pest control, and other aspects of maintaining a protective food storage environment.

The **Food Bank Salvage Operation Inspection Report** is an inspection checklist that is designed to be used in charitable salvage centers to assure that food products which have been subjected to conditions which may have rendered it unsafe or unsuitable for human consumption.

The partners should agree on how they will use the forms to evaluate the effectiveness of their procedures and overall program.

**Initial Meeting Form (Page 1 of 2)**

Date:	Meeting Location:		
Donor:		Representative:	
Address:			
Phone:		FAX:	
Food Distribution Organization:		Representative:	
Address:			
Phone:		FAX:	
Anticipated frequency of donations:		Anticipated Start Date:	

Types of Foods to be donated: Check all that Apply...

- Raw Fruits and Vegetables  Cold Fruits/Vegetable Salads  Beverages
- Canned and packaged goods that are not PHF-TCS
- Cold or frozen uncooked foods of animal origin (such as raw ground meats)
- Hot, cooked foods of animal origin, including mixed dishes like lasagna
- Cold, cooked foods of animal origin, including mixed dishes like lasagna

List mixed dishes likely to be donated:

---

Hot / cold cooked vegetables  Gravies, cream-based soup  Hot / cold grain dish

Other Foods likely to be donated (specify): \_\_\_\_\_

\_\_\_\_\_

---

## Initial Meeting Form (Page 2 of 2)

Transportation to be provided by:

\_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_

Mode of Transportation: \_\_\_\_\_

Method of Temperature Maintenance: \_\_\_\_\_

One-way Distance in miles from donor to receiving facility: \_\_\_\_\_

Estimated transport time in minutes from donor to receiving facility: \_\_\_\_\_

Are pick-ups from other donors on same route (run): \_\_\_\_\_

Contingency transportation plan in case of emergency: \_\_\_\_\_

Food pick-up dates and times from donor: \_\_\_\_\_

Other transportation matters for discussion: \_\_\_\_\_

<b><u>Basic Data for Partners in Food Recovery</u></b>		
Topics to be discussed by the partners. Record pertinent points below. Add other topics as needed.		
Topics	Donor Responses	FDO Responses
<b><u>Training and experience of the food manager or person-in-charge</u></b>		
<b><u>Training provided to staff on hygienic food handling, hand washing, methods of food protection</u></b>		
<b><u>Best time to communicate with each other</u></b>		
<b><u>Preferred method of resolving problems</u></b>		

Topics	Donor Responses	FDO Responses
<b><u>Training and experience of the food manager or person-in-charge</u></b>		
<b><u>Training provided to staff on hygienic food handling, hand washing, methods of food protection</u></b>		
<b><u>Best time to communicate with each other</u></b>		
<b><u>Preferred method of resolving problems</u></b>		

## Agreement to Participate as Food Recovery Partners

We, the undersigned, agree to participate in a joint project to help feed people in need

FROM: \_\_\_\_\_ TO \_\_\_\_\_  
(Date) (Date)

At the end of this time, both parties will review the partnership and renew or terminate the relationship.

### AS PARTNERS, WE PLEDGE TO:

- *Abide by agreements we have made;*
- *Provide management and supervision necessary to oversee staff performance regarding: monitoring and maintaining safe food temperatures; protecting food from contamination by hands, equipment and utensils, sick workers and other sources of hazards;*
- *Promptly communicate unsatisfactory conditions, situations, or performance to the partner; and*
- *Acknowledge each other's satisfactory performance.*

\_\_\_\_\_  
(Signature and date, donor representative)

\_\_\_\_\_  
(Print name of donor representative)

\_\_\_\_\_  
(Signature and date, food distribution organization representative)

\_\_\_\_\_  
Print name of food distribution organization representative)

## Record of Shipment and Receipt of Donated Food

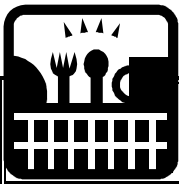
Date:		Transport Driver (Print Name):								
<b>Donor Facility:</b>				Person-in-Charge:						
Address:				Phone:		FAX:				
Food Distribution Organization (FDO):				Person-in-Charge:						
Address:				Phone:		FAX:				
<b>Donors Data:</b> Print name of shipment overseer:				<b>FDO Receiving Facility:</b> Print name of person overseeing receiving						
Food Item	Condition before transport	Comments	Temp. Departure	at	Time of Departure	Condition at receipt	Temp at arrival	at	Time at arrival	Comments

### Record of Shipment and Receipt of Donated Food (Sample)

Date: Nov. 18, 2006		Transport Driver (Print Name): John Doe						
<b>Donor Facility:</b> Mae Belle's Restaurant				Person-in-Charge: Jackie Ready				
Address: 600 Main St. Linham, Maryland 55555				Phone: (555) 555-1234		FAX: (555) 555- 4321		
Food Distribution Organization (FDO): Central Shelter				Person-in-Charge: Bob Williams				
Address: 1230 Top Blvd. Linham, Maryland 55550				Phone: (555) 324-1212		FAX: (555) 324-6543		
<b>Donors Data:</b> Print name of shipment overseer:  Jim Baker				<b>FDO Receiving Facility:</b> Print name of person overseeing receiving  Rae Seaver				
Food Item	Condition before transport	Comments	Temp. at Departure	Time of Departure	Condition at receipt	Temp at arrival	Time at arrival	Comments
2 pans lasagna	OK	Cooked: store at 41°F Heat and serve by 11/27	36°F	10:30am	OK	41°F	11:00am	Refrigerate 11/26
2 doz fresh apples and pears	Some bruising			10:30am	Some bruised – OK to use		11:00 am	Wash, peel, prepare for salad
6 lb Bag of raw rice	OK			10:30am	Weevil infested		11:00 am	Discarded

Complete the form in duplicate. Copy one for donor; Copy two for FDO (Food Distribution Organization)

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# FOOD RECOVERY PROGRAM (KITCHEN)



<b>Food Recovery Kitchen</b>	<b>Kitchen Location</b>	<b>Date</b>	<b>Time In:</b>
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<b>Responsible Recovery Person</b>	<b>Kitchen Manager (Person in Charge)</b>
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### FOODBORNE ILLNESS RISK FACTORS AND PUBLIC HEALTH INTERVENTIONS

Risk Factors are improper practices or procedures identified as the most prevalent contributing factors of foodborne illness and injury.  
Public Health Interventions are control measures to prevent foodborne illness or injury.

Circle designated compliance status (IN, OUT, N/O, N/A) for each numbered item.

Mark "X" in appropriate box COS and / or R IN= In Compliance OUT = not in compliance N/O = not observed N/A = Not applicable COS = corrected on-site during inspection R= Repeat violation

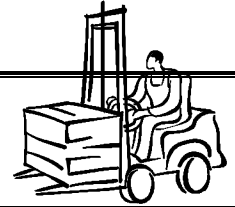
<i>Compliance</i>		<i>Status</i>	<i>cos</i>	<i>R</i>	<i>Compliance</i>		<i>Status</i>	<i>cos</i>	<i>R</i>		
<b>EMPLOYEE HEALTH AND HYGENIC PRACTICES</b>					<b>PROTECTION FROM CONTAMINATION</b>						
1	IN OUT	Employee not working with vomiting, diarrhea, jaundice, sore throat with fever, or exposed cuts or burns with pus			12	IN OUT N/O N/A	Food separated and protected				
2	IN OUT N/O	No discharge from eyes, nose and mouth			13	IN OUT N/O N/A	Food contact surfaces cleaned and sanitized				
3	IN OUT N/O	No eating, tasting, or tobacco use			<b>POTENTIALLY HAZARDOUS FOOD/TIME AND TEMPERATURE</b>						
4	IN OUT	Employee working with clean clothes and exposed body parts			14	IN OUT N/O N/A	Proper cooking time and temperature				
<b>PREVENTING CONTAMINATION BY HANDS</b>					15	IN OUT N/O N/A	Proper cooking time and temperature				
5	IN OUT N/O	Hands clean and properly washed			16	IN OUT N/O N/A	Proper cooling time and temperatures				
6	IN OUT	Hands washing facilities supplied and accessible			17	IN OUT N/O N/A	Proper hot holding temperatures				
7	IN OUT N/O N/A	No bare hand contact with ready-to-eat foods			18	IN OUT N/O N/A	Proper cold holding temperatures				
8	IN OUT N/O	Gloves changed between tasks as required			19	IN OUT N/O N/A	Plant food properly cooked for hot holding				
<b>APPROVED SOURCE</b>					<b>HIGHLY SUSCEPTIBLE POPULATION</b>						
9	IN OUT	Food, water, and ice obtained from approved source			20	IN OUT N/O N/A	Pasteurized foods used, prohibited foods not offered				
10	IN OUT N/O	Food received at proper temperature and documented			<b>CHEMICAL</b>						
11	IN OUT	Food in good condition, safe and unadulterated			21	IN OUT N/O N/A	Toxic substances properly identified, stored, and used				
<b>GOOD RETAIL PRACTICES</b>											
Good Retail Practices are preventable measures to control the addition of pathogens, chemicals, and physical objects											
Mark "X" in box if numbered item is not in compliance. Mark "X" in appropriate box for COS and / or R											
COS = corrected on-site during inspection R=Repeat violation											
<i>Compliance Status</i>				<i>cos</i>	<i>R</i>	<i>Compliance Status</i>				<i>cos</i>	<i>R</i>
<b>FOOD TEMPERATURE CONTROL</b>					<b>UTENSILS AND EQUIPMENT</b>						
22		Proper cooling method used			34		Food and non-food contact surfaces properly designed, maintained and used				
23		Adequate equipment for temperature control during cooling, cold holding, hot holding, during transporting			35		Ware washing facilities, maintained, and used; test strips				
24		Approved thawing method used			36		Non-food contact surfaces clean				
25		Food equipment and food thermometers provided and accurate			<b>PHYSICAL FACILITIES</b>						
<b>FOOD IDENTIFICATION</b>					37		Approved public water system				
26		Food properly labeled, original container			38		Hot and cold water available, adequate pressure				
<b>PREVENTION OF FOOD CONTAMINATION</b>					39		No plumbing cross connections				
27		Insect, rodents and animals not present, no unauthorized persons			40		Sewage and waste water properly disposed				
28		Contamination prevented during food preparation, storage, and display			41		Toilet facilities maintained, supplied and cleaned				
29		Wiping cloths properly used and stored			42		Garbage and refuse properly disposed, facilities maintained				
30		Washing fruits and vegetables			43		Physical facilities maintained and cleaned				
<b>PROPER USE OF UTENSILS</b>					44		Adequate lighting and ventilation				
31		In- use utensils, properly stored			45		Separate storage area for employee clothing and personal belongings				
32		Utensils, equipment, linens properly stored and handled									
33		Single-use, single service articles properly stored and used									







# FOOD RECOVERY PROGRAM (WAREHOUSE)



<b>Food Recovery Warehouse</b>	<b>Warehouse Location</b>	<b>Date:</b>	<b>Time In:</b>
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<b>Responsible Recovery Person</b>	<b>Warehouse Manager (Person in Charge)</b>
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## FOODBORNE ILLNESS RISK FACTORS AND PUBLIC HEALTH INTERVENTIONS

Risk Factors are improper practices or procedures identified as the most prevalent contributing factors of foodborne illness and injury.

Public Health Interventions are control measures to prevent foodborne illness or injury.

Circle designated compliance status (IN, OUT, N/O, N/A) for each numbered item Mark "X" in appropriate box COS and / or R

IN=in compliance OUT=not in compliance N/O= not observed N/A=not applicable COS=corrected on-site during inspection R=repeat violation

<i>Compliance Status</i>			<i>COS</i>	<i>R</i>	<i>Compliance Status</i>			<i>COS</i>	<i>R</i>
<b>EMPLOYEE HEALTH AND HYGIENE</b>					<b>APPROVED SOURCE</b>				
1	IN OUT N/O	Employee not working with vomiting, diarrhea, jaundice, sore throat with fever, or exposed cuts or burns with pus			11	IN OUT N/O N/A	Game from custom exempt or state or federal inspected plant as allowed by local health jurisdiction		
2	IN OUT N/O	No discharge from eyes, nose and mouth			12	IN OUT N/O N/A	Prepared food from preapproved sources		
3	IN OUT N/O	No eating, tasting, or tobacco use			13	IN OUT N/O N/A	Other food, water, and ice obtained from approved source		
<b>PREVENTION CONTAMINATION BY HANDS</b>					14	IN OUT N/O N/A	Food prepared in private home not used or offered		
4	IN OUT N/O	Hands clean and properly washed			15	IN OUT N/O N/A	Food received at proper temperatures and documented		
5	IN OUT	Handwashing facilities supplied and accessible			16	IN OUT N/O N/A	Food received in good condition and unadulterated		
6	IN OUT N/O N/A	No bare hand contact with ready-to-eat foods			17	IN OUT N/O N/A	Canned goods severely dented on seams and bodies, rusted, pitted, leaking or swollen discarded		
7	IN OUT N/O N/A	Gloves changed between uses			18	IN OUT N/O N/A	Insect or rodent infested foods rejected		
<b>PROTECTION FROM CONTAMINATION</b>					19	IN OUT N/O N/A	Packaged foods with inner lining damaged discarded		
8	IN OUT N/O N/A	Raw meats, poultry and fish separated from ready-to-eat foods			<b>CHEMICAL</b>				
9	IN OUT N/O N/A	Food contact surfaces cleaned and sanitized before use and every four hours			20	IN OUT N/O N/A	Food products separated from non food items such as chemicals, cosmetics, soaps, detergents, animal food, batteries, solvents, oils, etc. during transportation and storage		
10	ON OUT N/O N/A	Damaged, spoiled or recalled foods separated			21	IN OUT N/O N/A	Chemicals used to clean, sanitize or otherwise maintain the facility properly identified with labels and used in compliance with applicable regulations		
<b>GOOD RETAIL PRACTICES</b>									
Good Retail Practices are preventative measures to control the addition of pathogens, chemicals, and physical objects into foods									
Mark "X" in box if numbered item is not in compliance Mark "X" in appropriate box for COS and / or R COS=corrected on-site during inspection R=repeat violation									
<i>Compliance Status</i>			<i>COS</i>	<i>R</i>	<i>Compliance Status</i>			<i>COS</i>	<i>R</i>
<b>FOOD TEMPERATURE CONTROL</b>					<b>PROTECTION FROM ENVIRONMENTAL CONTAMINATION</b>				
22	IN OUT N/O N/A	Adequate equipment provided to maintain product temperatures during transportation and storage			26	IN OUT N/O N/A	Contamination prevented during transportation, receipt and storage		
23	IN OUT N/O N/A	Thermometers, time, temperature indicators or recording devices used to assure maintenance of 41°F maximum for cold storage and 0°F minimum for frozen storage			27	IN OUT N/O N/A	Incoming loads inspected prior to unloading for signs of pest activity and cleanliness of vehicle		
24	IN OUT N/O N/A	Accurate temperature measuring devices provided and used to verify food temperatures at receipt			28	IN OUT N/O N/A	Routine monitoring for insect, rodent, and bird activity+		
<b>FOOD IDENTIFICATION</b>					29	IN OUT N/O N/A	Products stored at least 18 inches away from walls and 6' above the floor on shelving or pallets		
25	IN OUT N/O N/A	Bulk food items and packaged food properly labeled with name of product, ingredients, quantity of contents, and name and place of business, manufacturer, packer, or distributor			30	IN OUT N/O N/A	Where traps and bait stations are used, a diagram with location of stations, activity log maintained		



# FOOD RECOVERY PROGRAM (SALVAGE OPERATIONS)

<b>Salvage Operation</b>			<b>Location</b>			<b>Date:</b>		<b>Time In:</b>	
<b>Responsible Recovery Person</b>					<b>Salvage Manager (Person in Charge)</b>				
<b>FOODBORNE ILLNESS RISK FACTORS AND PUBLIC HEALTH INTERVENTIONS</b>									
Risk Factors are improper practices or procedures identified as the most prevalent contributing factors of foodborne illness and injury. Public Health Interventions are control measures to prevent foodborne illness or injury.									
Circle designated compliance status (IN, OUT, N/O, N/A) for each numbered item Mark "X" in appropriate box COS and / or R IN=in compliance OUT=not in compliance N/O= not observed N/A=not applicable COS=corrected on-site during inspection R=repeat violation									
<b>Compliance Status</b>			<b>COS</b>	<b>R</b>	<b>Compliance Status</b>			<b>COS</b>	<b>R</b>
<b>EMPLOYEE HEALTH AND HYGIENE</b>					<b>DISTRESSED FOOD ITEMS</b>				
1	IN OUT N/O	Employee not working with vomiting, diarrhea, jaundice, sore throat with fever, or exposed cuts or burns with pus			10	IN OUT N/O N/A	Only food or containers of food allowed to be reconditioned by regulatory authority accepted.		
2	IN OUT N/O	No discharge from eyes, nose and mouth			11	IN OUT N/O N/A	Canned goods severely dented on rims, seams and body; with pitted rust; or leaking or swollen discarded		
3	IN OUT N/O	No eating, tasting, or tobacco use			12	IN OUT N/O N/A	Containers with cork press caps, screw caps and pull rings subject to sewer backups, floods, or fire fighting chemicals or smoke, rejected		
<b>PREVENTION CONTAMINATION BY HANDS</b>					13	IN OUT N/O N/A	Soiled paper or other porous packaged foods rejected		
4	IN OUT N/O	Hands clean and properly washed			14	IN OUT N/O N/A	Damaged containers exposing food to contamination rejected		
5	IN OUT	Handwashing facilities supplied and accessible			15	IN OUT N/O N/A	Insect or rodent infested foods rejected		
6	IN OUT N/O N/A	No bare hand contact with ready-to-eat foods			16	IN OUT N/O N/A	Foods so packaged that contaminating residues cannot be removed rejected		
7	IN OUT N/O N/A	Gloves changed between uses			17	IN OUT N/O N/A	Food contaminated with pesticides or other chemicals rejected		
<b>CHEMICALS</b>					18	IN OUT N/O N/A	Foods found otherwise unfit for salvage upon examination rejected		
8	IN OUT N/O N/A	Food products separated from non food items such as chemicals, detergents, animal food, solvents, oils, etc. during transportation and storage			19	IN OUT N/O N/A	Potentially hazardous foods out of refrigerated temperature control (41° F) more than 4 hours rejected		
9	ON OUT N/O N/A	Chemicals used to clean, sanitize or otherwise maintain the facility properly identified and used in compliance with applicable regulations			20	IN OUT N/O N/A	Food containers thoroughly cleaned, and sanitized where exposed to flood water or sewage, prior to storage or distribution and relabeled.		
<b>GOOD RETAIL PRACTICES</b>									
Good Retail Practices are preventative measures to control the addition of pathogens, chemicals, and physical objects into foods Mark "X" in box if numbered item is not in compliance Mark "X" in appropriate box for COS and / or R COS=corrected on-site during inspection R=repeat violation									
<b>Compliance Status</b>			<b>COS</b>	<b>R</b>	<b>Compliance Status</b>			<b>COS</b>	<b>R</b>
<b>FOOD TEMPERATURE CONTROL</b>					<b>PROTECTION FROM ENVIRONMENTAL CONTAMINATION</b>				
21	IN OUT N/O N/A	Adequate equipment provided to maintain product temperatures during transportation and storage			25	IN OUT N/O N/A	Additional contamination prevented during transportation, receipt and storage		
22	IN OUT N/O N/A	Thermometers, time, temperature indicators or recording devices used to assure maintenance of 41°F maximum for cold storage and 0°F minimum for frozen storage			26	IN OUT N/O N/A	Incoming loads inspected prior to unloading for signs of pest activity and cleanliness of transporting vehicle		
23	IN OUT N/O N/A	Accurate temperature measuring devices provided and used to verify food temperatures at receipt			27	IN OUT N/O N/A	Salvage operation separated by partition or distance from other food recovery operations		
<b>FOOD IDENTIFICATION</b>					28	IN OUT N/O N/A	Unsorted salvage isolated from sorting and storage		
24	IN OUT N/O N/A	Bulk food items and packaged food properly labeled with name of product, ingredients, quantity of contents, and name and place of business, manufacturer, packer, or distributor			29	IN OUT N/O N/A	Rejected products isolated and disposed of daily		



## APPENDIX C

### Forms for Reporting Food Worker or Volunteer Illness or Symptoms

Forms 1-A through 1-C are designed to assist those responsible for managing volunteers and food workers in order to prevent foodborne disease. Adapted from the 2005 Food Code, the forms specify that the **permit holder is responsible** for requiring volunteers and food workers to report certain symptoms, diagnoses, and past illnesses, as they relate to diseases transmitted through food by infected volunteers or food workers. The **volunteer or food worker is personally responsible** for reporting this information to the person in charge.

FORM  
1-A

### Food Worker and New and Returning Volunteer Interview

Preventing Transmission of Diseases through Food by Infected Food Workers or  
Volunteers with Emphasis on illness due to Norovirus, *Salmonella Typhi*, *Shigella* spp.,  
Enterohemorrhagic (EHEC) or Shiga toxin-producing *Escherichia coli* (STEC), or hepatitis A Virus

*The purpose of this interview is to inform food workers and new or returning volunteers to advise the person in charge of past and current conditions described so that the person in charge can take appropriate steps to preclude the transmission of foodborne illness.*

New or Returning Volunteer name (print) \_\_\_\_\_

Food worker name (print) \_\_\_\_\_

Address \_\_\_\_\_

Telephone Daytime: \_\_\_\_\_ Evening: \_\_\_\_\_

Date \_\_\_\_\_

Are you suffering from any of the following symptoms? (Circle one)

Diarrhea?	YES / NO	If YES, Date of Onset
Vomiting?	YES / NO	_____
Jaundice?	YES / NO	_____
Sore throat with fever?	YES / NO	_____

Or

Infected cut or wound that is open and draining, or lesions containing pus on the hand, wrist, an exposed body part, or other body part and the cut, wound, or lesion not properly covered?

YES / NO

(Examples: *boils and infected wounds, however small*)

**In the Past:**

Have you ever been diagnosed as being ill with typhoid fever (*Salmonella Typhi*) YES / NO

**If you have, what was the date of the diagnosis?** \_\_\_\_\_

If within the past 3 months, did you take antibiotics for *S. Typhi*? YES / NO

If so, how many days did you take the antibiotics? \_\_\_\_\_

If you took antibiotics, did you finish the prescription? YES / NO

**History of Exposure:**

1. Have you been suspected of causing or have you been exposed to a confirmed foodborne disease outbreak recently?  
YES / NO

If YES, date of outbreak: \_\_\_\_\_

a. If YES, what was the cause of the illness and did it meet the following criteria?

Cause: \_\_\_\_\_

i. Norovirus (last exposure within the past 48 hours) Date of illness outbreak \_\_\_\_\_

ii. *E. coli* O157:H7 infection (last exposure within the past 3 days) Date of illness outbreak \_\_\_\_\_

iii. Hepatitis A virus (last exposure within the past 30 days) Date of illness outbreak \_\_\_\_\_

iv. Typhoid fever (last exposure within the past 14 days) Date of illness outbreak \_\_\_\_\_

v. Shigellosis (last exposure within the past 3 days) Date of illness outbreak \_\_\_\_\_

FORM 1-A (continued)

b. If YES, did you:

- i. Consume food implicated in the outbreak? \_\_\_\_\_
- ii. Work in a food establishment that was the source of the outbreak? \_\_\_\_\_
- iii. Consume food at an event that was prepared by person who is ill? \_\_\_\_\_

2. Did you attend an event or work in a setting, recently where there was a confirmed disease outbreak? YES / NO

If so, what was the cause of the confirmed disease outbreak? \_\_\_\_\_

If the cause was one of the following five pathogens, did exposure to the pathogen meet the following criteria?

- a. Norovirus (last exposure within the past 48 hours) YES / NO
- b. *E. coli* O157:H7 (or other EHEC/STEC (last exposure within the past 3 days) YES / NO
- c. *Shigella* spp. (last exposure within the past 3 days) YES / NO
- d. *S. Typhi* (last exposure within the past 14 days) YES / NO
- e. hepatitis A virus (last exposure within the past 30 days) YES / NO

Do you live in the same household as a person diagnosed with Norovirus, Shigellosis, typhoid fever, hepatitis A, or illness due to *E. coli* O157:H7 or other EHEC/STEC?

YES / NO Date of onset of illness \_\_\_\_\_

3. Do you have a household member attending or working in a setting where there is a confirmed disease outbreak of Norovirus, typhoid fever, Shigellosis, EHEC/STEC infection, or hepatitis A?

YES / NO Date of onset of illness \_\_\_\_\_

Name, Address, and Telephone Number of your Health Practitioner or doctor:

Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone – Daytime: \_\_\_\_\_ Evening: \_\_\_\_\_

Signature of New or Returning Volunteer \_\_\_\_\_ Date \_\_\_\_\_

Signature of Food Worker \_\_\_\_\_ Date \_\_\_\_\_

Signature of Permit Holder or Representative \_\_\_\_\_ Date \_\_\_\_\_



**FORM New and Returning Volunteers or Food Workers Reporting Agreement**

**1-B**

Preventing Transmission of Diseases through Food by Infected New or Returning Volunteers or Food Workers with Emphasis on illness due to Norovirus, *Salmonella Typhi*, *Shigella* spp., Enterohemorrhagic (EHEC) or Shiga toxin-producing *Escherichia coli* (STEC), or hepatitis A Virus

*The purpose of this agreement is to inform new and returning volunteers or food workers of their responsibility to notify the person in charge when they experience any of the conditions listed so that the person in charge can take appropriate steps to preclude the transmission of foodborne illness.*

**I AGREE TO REPORT TO THE PERSON IN CHARGE:**

**Any Onset of the Following Symptoms, Either While at Work or Outside of Work, Including the Date of Onset:**

1. Diarrhea
2. Vomiting
3. Jaundice
4. Sore throat with fever
5. Infected cuts or wounds, or lesions containing pus on the hand, wrist, an exposed body part, or other body part and the cuts, wounds, or lesions are not properly covered (*such as boils and infected wounds, however small*)

**Future Medical Diagnosis:**

**Whenever diagnosed as being ill with Norovirus, typhoid fever (*Salmonella Typhi*), shigellosis (*Shigella* spp. infection), *Escherichia coli* O157:H7 or other EHEC/STEC infection, or hepatitis A (hepatitis A virus infection)**

**Future Exposure to Foodborne Pathogens:**

- 1. Exposure to or suspicion of causing any confirmed disease outbreak of Norovirus, typhoid fever, shigellosis, *E. coli* O157:H7 or other EHEC/STEC infection, or hepatitis A.**
- 2. A household member diagnosed with Norovirus, typhoid fever, shigellosis, illness due to EHEC/STEC, or hepatitis A.**
- 3. A household member attending or working in a setting experiencing a confirmed disease outbreak of Norovirus, typhoid fever, shigellosis, *E. coli* O157:H7 or other EHEC/STEC infection, or hepatitis A.**

I have read (or had explained to me) and understand the requirements concerning my responsibilities under the **Food Code** and this agreement to comply with:

1. Reporting requirements specified above involving symptoms, diagnoses, and exposure specified;
2. Work restrictions or exclusions that are imposed upon me; and
3. Good hygienic practices.

I understand that failure to comply with the terms of this agreement could lead to action by the food establishment or the food regulatory authority that may jeopardize my employment and may involve legal action against me.

**New or Returning Volunteer Name (please print)** \_\_\_\_\_

**Signature of New or Returning Volunteer** \_\_\_\_\_

**Date** \_\_\_\_\_

**Food Worker Name (please print)** \_\_\_\_\_

**Signature of Food Worker** \_\_\_\_\_

**Date** \_\_\_\_\_

**Signature of Permit Holder or Representative** \_\_\_\_\_

**Date** \_\_\_\_\_

**FORM**

**Volunteer or Food Worker Medical Referral**

**1-C**

Preventing Transmission of Diseases through Food by Infected Volunteers or Food Workers with Emphasis on Illness due to Norovirus, Typhoid fever (*Salmonella Typhi*), Shigellosis (*Shigella* spp.), *Escherichia coli* O157:H7 or other Enterohemorrhagic (EHEC) or Shiga toxin-producing *Escherichia coli* (STEC), and hepatitis A Virus

The **Food Code** specifies, under *Part 2-2 Employee Health Subpart 2-201 Disease or Medical Condition*, that Conditional Employees and Food Employees (referred to as volunteers and food workers in food recovery programs) obtain medical clearance from a health practitioner licensed to practice medicine, unless the Food Employees have complied with the provisions specified as an alternative to providing medical documentation, whenever the individual:

1. Is chronically suffering from a symptom such as **diarrhea**; *or*
2. Has a **current illness** involving Norovirus, typhoid fever (*Salmonella Typhi*), shigellosis (*Shigella* spp.) *E. coli* O157:H7 infection (or other EHEC/STEC), or hepatitis A virus (hepatitis A), *or*
3. Reports **past illness** involving typhoid fever (**S. Typhi**) within the past three months (while salmonellosis is fairly common in U.S., typhoid fever, caused by infection with **S. Typhi**, is rare).

**Volunteer being referred:** (Name, please print) \_\_\_\_\_

**Food Worker being referred:** (Name, please print) \_\_\_\_\_

4. Is the volunteer or food worker assigned to a food establishment that serves a population that meets the Food Code definition of a **highly susceptible population** such as a day care center with preschool age children, a hospital kitchen with immunocompromised persons, or an assisted living facility or nursing home with older adults?

YES  NO

**Reason for Medical Referral:** The reason for this referral is checked below:

- G Is chronically suffering from vomiting or diarrhea; or (specify) \_\_\_\_\_
- G Diagnosed or suspected Norovirus, typhoid fever, shigellosis, *E. coli* O157:H7 (or other EHEC/STEC) infection, or hepatitis A. (Specify) \_\_\_\_\_
- G Reported past illness from typhoid fever within the past 3 months. (Date of illness) \_\_\_\_\_
- G Other medical condition of concern per the following description: \_\_\_\_\_

**Health Practitioner's Conclusion:** (Circle the appropriate one; refer to reverse side of form)

- G Food employee is free of **Norovirus** infection, typhoid fever (**S. Typhi** infection), *Shigella* spp. infection, *E. coli* O157:H7 (or other **EHEC/STEC** infection), or **hepatitis A** virus infection, and may work as a food employee without restrictions.
- G Food employee is an asymptomatic shedder of *E. coli* O157:H7 (or other **EHEC/STEC**), *Shigella* spp., or Norovirus, and is restricted from working with exposed food; clean equipment, utensils, and linens; and unwrapped single-service and single-use articles in food establishments that do not serve highly susceptible populations.
- G Food employee is not ill but continues as an asymptomatic shedder of *E. coli* O157:H7 (or other **EHEC/STEC**), *Shigella* spp. and should be excluded from food establishments that serve highly susceptible populations such as those who are preschool age, immunocompromised, or older adults and in a facility that provides preschool custodial care, health care, or assisted living.
- G Food employee is an asymptomatic shedder of **hepatitis A** virus and should be excluded from working in a food establishment until medically cleared.
- G Food employee is an asymptomatic shedder of **Norovirus** and should be excluded from working in a food establishment until medically cleared, or for at least 24 hours from the date of the diagnosis.
- G Food employee is suffering from Norovirus, typhoid fever, shigellosis, *E. coli* O157:H7 (or other **EHEC/STEC** infection), or **hepatitis A** and should be excluded from working in a food establishment.

**FORM 1-C (continued)**

**COMMENTS:** (In accordance with Title I of the Americans with Disabilities Act (ADA) and to provide only the information necessary to assist the food establishment operator in preventing foodborne disease transmission, please confine comments to explaining your conclusion and estimating when the employee may be reinstated.)

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**Signature of Health Practitioner** \_\_\_\_\_ **Date** \_\_\_\_\_

## Paraphrased from the FDA Food Code for Health Practitioners Reference

### From Subparagraph 2-201.11(A)(2)

#### Organisms of Concern:

Any foodborne pathogen, with special emphasis on these 5 organisms:

1. **Norovirus**
2. ***S. Typhi***
3. ***Shigella* spp.**
4. ***E. coli* O157:H7 (or other EHEC/STEC)**
5. **Hepatitis A virus**

### From Subparagraph 2-201.11(A)(1)

#### Symptoms:

Have any of the following symptoms:

**Diarrhea**                      **Vomiting**                      **Jaundice**                      **Sore throat with fever**

### From Subparagraph 2-201.11(A)(4)-(5)

#### Conditions of Exposure of Concern:

- (1) Suspected of causing a foodborne outbreak or being exposed to an outbreak caused by 1 of the 5 organisms above, at an event such as a family meal, church supper, or festival because the person:  
Prepared or consumed an implicated food; or  
Consumed food prepared by a person who is infected or ill with the organism that caused the outbreak or who is suspected of being a carrier;
- (2) Lives with, and has knowledge about, a person who is diagnosed with illness caused by 1 of the 5 organisms; or
- (3) Lives with, and has knowledge about, a person who works where there is an outbreak caused by 1 of the 5 organisms.

### From Subparagraph 2-201.12

#### Exclusion and Restriction:

Decisions to exclude or restrict a food employee are made considering the available evidence about the person's role in actual or potential foodborne illness transmission. Evidence includes:

**Symptoms**                      **Diagnosis**                      **Past illnesses**                      **Stool/blood tests**

In facilities serving highly susceptible populations such as day care centers and health care facilities, a person for whom there is evidence of foodborne illness is almost always excluded from the food establishment.

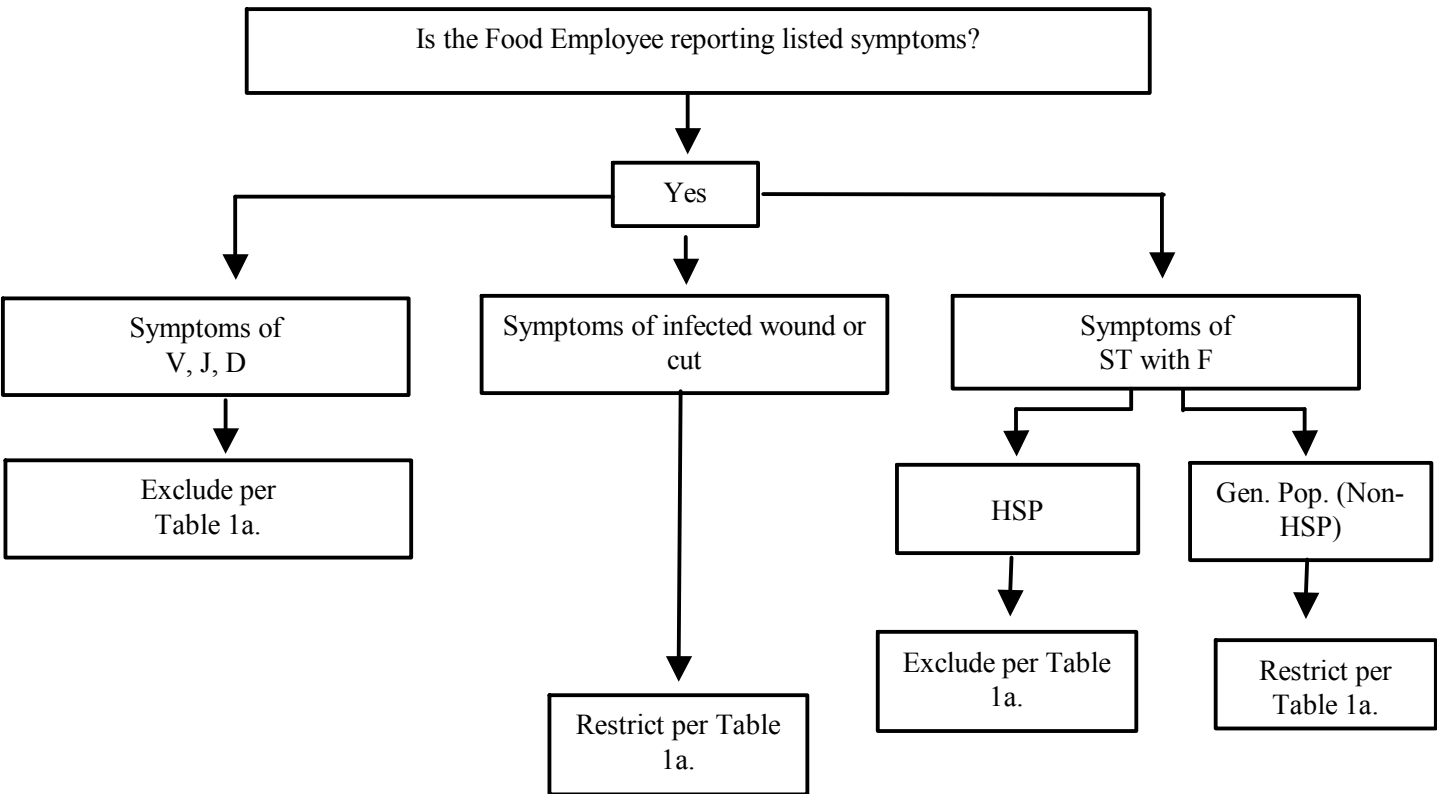
In other establishments such as restaurants and retail food stores, that offer food to typically healthy consumers, a person might only be restricted from certain duties, based on the evidence of foodborne illness.

Exclusion from any food establishment is required when the person is:

- Exhibiting or reporting diarrhea or vomiting;
- Diagnosed with illness caused by *S. Typhi*; or
- Jaundiced within the last 7 days.

For *Shigella* spp. or *Escherichia coli* O157:H7 or other EHEC/STEC infections, the person's stools must be negative for 2 consecutive cultures taken no earlier than 48 hours after antibiotics are discontinued, and at least 24 hours apart or the infected individual must have resolution of symptoms for more than 7 days or at least 7 days have passed since the employee was diagnosed.

**2-201.11 / 2-201.12 Decision Tree 1. When to Exclude or Restrict a Food Employee Who Reports a Symptom and When to Exclude a Food Employee Who Reports a Diagnosis with Symptoms Under the Food Code**




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If reporting a diagnosis with hepatitis A virus, or typhoid fever

Exclude per Table 1b.

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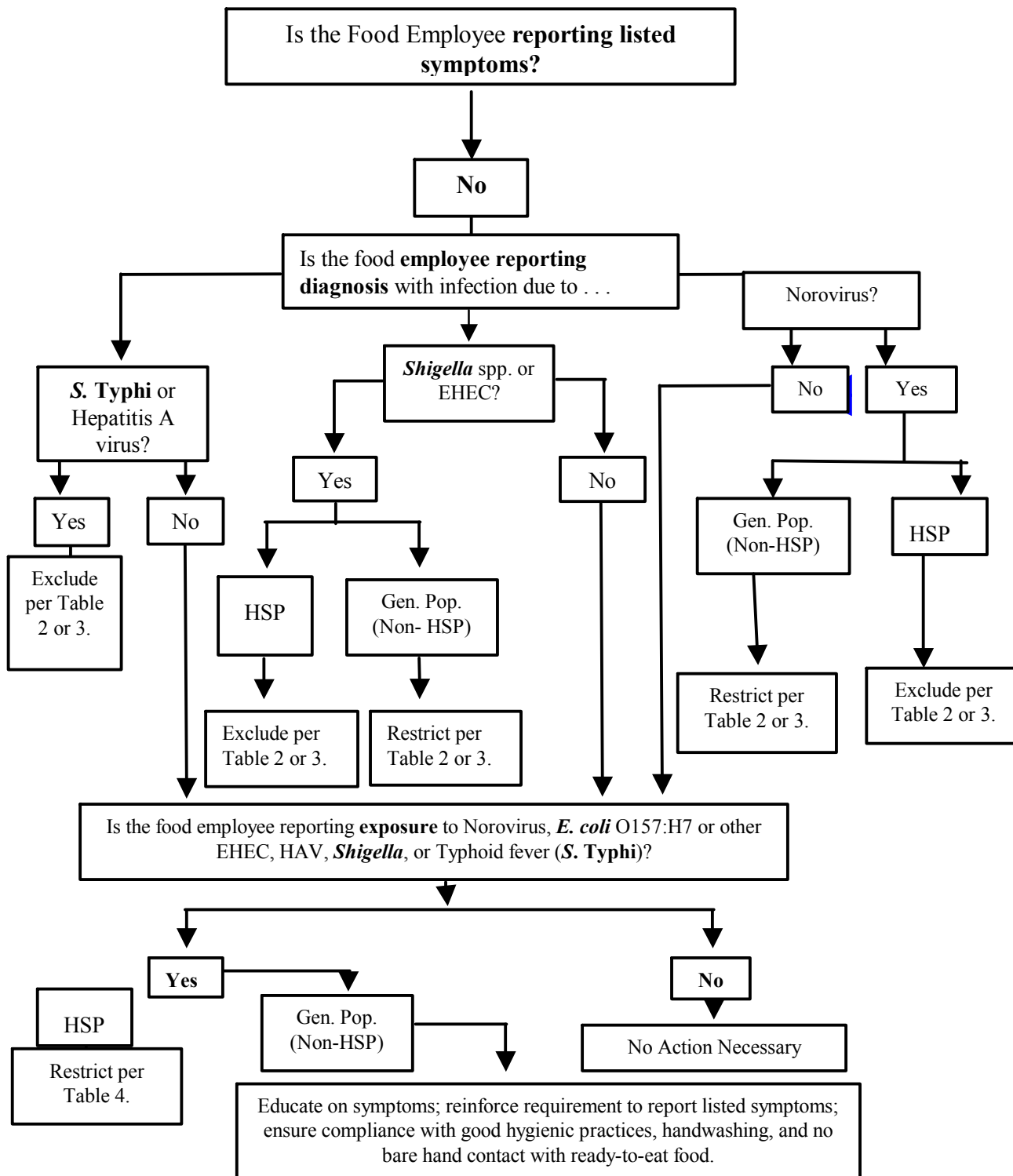
If reporting a diagnosis with Shigellosis, Norovirus, or EHEC/STEC and symptoms of V or D

Exclude per Table 1b.

**Key:**

Listed Symptoms for Reporting: (V) Vomiting; (J) Jaundice; (D) Diarrhea; (ST with F) Sore Throat with Fever; (HSP) Highly Susceptible Population; (Gen. Pop.) General Population

**2-201.11 / 2-201.12 Decision Tree 2. When to Exclude or Restrict a Food Employee Who is Asymptomatic and Reports a Listed Diagnosis and When to Restrict a Food Employee Who Reports a Listed Exposure Under the Food Code**



**Key: (HSP) Highly Susceptible Population; (Gen. Pop.) General Population**

**2-201.12 Table 1a: Summary of Requirements for Symptomatic Food Employees**

<b>Food employees and conditional employees shall report symptoms immediately to the person in charge</b>				
The person in charge shall prohibit a conditional employee that reports a listed symptom from becoming a food employee until meeting the criteria listed in section 2-201.13 of the Food Code, for reinstatement of a symptomatic food employee.				
<b>Symptom</b>	<b>EXCLUSION/ OR RESTRICTION</b>		Removing symptomatic food employees from exclusion or restriction	<b>RA Approval Needed to Return to Work?</b>
	<b>Facilities Serving a HSP</b>	<b>Facilities not serving a HSP</b>		
Vomiting	<b>EXCLUDE</b> 2-201.12(A)(1)	<b>EXCLUDE</b> 2-201.12(A)(1)	When the excluded food employee has been asymptomatic for at least 24 hours or provides medical documentation 2-201.13(A)(1). <i>Exceptions:</i> If diagnosed with Norovirus, <i>Shigella</i> spp., <i>E. coli</i> O157:H7 or other EHEC, HAV, or typhoid fever ( <b>S. Typhi</b> ) (see Tables 1b & 2).	No if not diagnosed
Diarrhea	<b>EXCLUDE</b> 2-201.12(A)(1)	<b>EXCLUDE</b> 2-201.12(A)(1)	When the excluded food employee has been asymptomatic for at least 24 hours or provides medical documentation 2-201.13(A). <i>Exceptions:</i> If Diagnosed with Norovirus, <i>E. coli</i> O157:H7 or other EHEC, HAV, or <b>S. Typhi</b> (see Tables 1b & 2).	No if not diagnosed
Jaundice	<b>EXCLUDE</b> 2-201.12(B)(1) if the onset occurred within the last 7 days	<b>EXCLUDE</b> 2-201.12(B)(1) if the onset occurred within the last 7 days	When approval is obtained from the RA 2-201.13 (B), and: <ul style="list-style-type: none"> <li>• Food employee has been jaundiced for more than 7 calendar days 2-201.13(B)(1), or</li> <li>• Provides medical documentation 2-201.13(B)(3).</li> </ul>	Yes
Sore Throat with Fever	<b>EXCLUDE</b> 2-201.12(G)(1)	<b>RESTRICT</b> 2-201.12(G)(2)	When food employee provides written medical documentation 201.13(G) (1)-(3).	No
Infected wound or pustular boil	<b>RESTRICT</b> 2-201.12(H)	<b>RESTRICT</b> 2-201.12(H)	When the infected wound or boil is properly covered 2-201.13(H)(1)-(3).	No

**Key for Tables 1, 2, 3, and 4:**

**RA = Regulatory Authority**

**EHEC = Enterohemorrhagic, or Shiga toxin-producing *Escherichia coli***

**HAV = Hepatitis A virus**

**HSP = Highly Susceptible Population**

**2-201.12 Table 1b: Summary of Requirements for Diagnosed, Symptomatic Food Employees**

<b>Food employees and conditional employees shall report a listed diagnosis with symptoms immediately to the person in charge</b>			
<b>The person in charge shall notify the RA when a food employee is jaundiced or reports a listed diagnosis</b>			
The person in charge shall prohibit a conditional employee that reports a listed diagnosis with symptoms from becoming a food employee until meeting the criteria listed in section 2-201.13 of the Food Code, for reinstatement of a diagnosed, symptomatic food employee.			
<b>Diagnosis</b>	<b>EXCLUSION Facilities Serving HSP or not Serving HSP</b>	Removing diagnosed, symptomatic food employees from exclusion	<b>RA Approval Needed to Return to Work?</b>
Hepatitis A virus	<b>EXCLUDE</b> if within 14 days of any symptom, or within 7 days of jaundice 2-201.12(B)(2)	When approval is obtained from the RA 2-201.13(B), and: <ul style="list-style-type: none"> <li>The food employee has been jaundiced for more than 7 calendar days 2-201.13(B)(1), or</li> <li>The anicteric food employee has had symptoms or more than 14 days 2-201.13(B)(2), or</li> <li>The food employee provides medical documentation 2-201.13(B)(3) (also see Table 2).</li> </ul>	Yes
Typhoid Fever ( <b>S. Typhi</b> )	<b>EXCLUDE</b> 2-201.12(C)	When approval is obtained from the RA 2-201.13(C)(1), and: <ul style="list-style-type: none"> <li>Food employee provides medical documentation, that states the food employee is free of a <b>S. Typhi</b> infection 2-201.13(C)(2) (also see Table 2).</li> </ul>	Yes
<b>E. coli</b> O157:H7 or other EHEC/ STEC	<b>EXCLUDE</b> Based on vomiting or diarrhea symptoms, under 2-201.12(A)(2)	<ol style="list-style-type: none"> <li><u>Serving Non-HSP facility:</u> 2-201.13(A)(4)(a): May only work on a restricted basis 24 hours after symptoms resolve and remains restricted until meeting the requirements listed below:</li> <li><u>Serving HSP facility:</u> 2-201.13(A)(4)(b): Remains excluded until meeting the requirements listed below: <ul style="list-style-type: none"> <li>Approval is obtained from RA 2-201.13(F), and</li> <li>Medically cleared 2-201.13(F)(1), or</li> <li>More than 7 calendar days have passed since the food employee became asymptomatic 2-201.13(F)(2) (also see Table 2).</li> </ul> </li> </ol>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility

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**2-201.12 Table 1b: Summary of Requirements for Diagnosed, Symptomatic Food Employees (continued)**

<b>Diagnosis</b>	<b>EXCLUSION Facilities Serving HSP or not Serving HSP</b>	<b>Removing diagnosed, symptomatic food employees from exclusion</b>	<b>RA Approval Needed to Return to Work?</b>
Norovirus	<b>EXCLUDE</b> Based on vomiting or diarrhea symptoms, under 2-201.12(A)(2)	<ol style="list-style-type: none"> <li data-bbox="483 344 1140 464">1. <u>Serving non-HSP facility:</u> 2-201.13 (A)(2)(a): May only work on a restricted basis 24 hours after symptoms resolve and remains restricted until meeting the requirements listed below:</li> <li data-bbox="483 470 1140 680">2. <u>Serving HSP facility:</u> 2-201.13(A)(2)(b): Remains excluded until meeting the requirements listed below: <ul style="list-style-type: none"> <li data-bbox="532 533 1123 562">• Approval is obtained from the RA 2-201.13(D), and</li> <li data-bbox="532 569 1123 598">• Medically cleared 2-201.13(D)(1), or</li> <li data-bbox="532 604 1140 680">• More than 48 hours have passed since the food employee became asymptomatic 2-201.13(D)(2) (also see Table 2).</li> </ul> </li> </ol>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility
<i>Shigella</i> spp.	<b>EXCLUDE</b> Based on vomiting or diarrhea symptoms, under 2-201.12(A)(2)	<ol style="list-style-type: none"> <li data-bbox="483 695 1140 814">1. <u>Serving Non-HSP facility:</u> 2-201.13(A)(3)(a): May only work on a restricted basis 24 hours after symptoms resolve, and remains restricted until meeting the requirements listed below:</li> <li data-bbox="483 821 1140 1031">2. <u>Serving HSP facility:</u> 2-201.13(A)(3)(b): Remains excluded until meeting the requirements listed below: <ul style="list-style-type: none"> <li data-bbox="532 884 1123 913">• Approval is obtained from the RA 2-201.13(E), and</li> <li data-bbox="532 919 1123 949">• Medically cleared 2-201.13(E)(1), or</li> <li data-bbox="532 955 1140 1031">• More than 7 calendar days have passed since the food employee became asymptomatic 2-201.13)(E)(2) (also see Table 2).</li> </ul> </li> </ol>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility

**2-201.12 Table 2: Summary of Requirements for Diagnosed Food Employees with Resolved Symptoms**

<b>Food employees and conditional employees shall report a listed diagnosis immediately to the person in charge</b>				
<b>The person in charge shall notify the RA when a food employee reports a listed diagnosis</b>				
The person in charge shall prohibit a conditional employee that reports a listed diagnosis from becoming a food employee until meeting the criteria listed in section 2-201.13 of the Food Code, for reinstatement of a diagnosed food employee.				
<b>Pathogen Diagnosis</b>	<b>Facilities Serving HSP</b>	<b>Facilities Not Serving HSP</b>	<b>Removing Diagnosed Food Employees with Resolved Symptoms from Exclusion or Restriction</b>	<b>RA Approval Required to Return to Work</b>
Typhoid fever ( <b>S. Typhi</b> ) including previous illness with <b>S. Typhi</b> (see 2-201.11 (A)(3))	<b>EXCLUDE</b> 2-201.12(C)	<b>EXCLUDE</b> 2-201.12(C)	When approval is obtained from the RA 2-201.13(C)(1), and: <ul style="list-style-type: none"> <li>Food employee provides medical documentation, that states the food employee is free of a <b>S. Typhi</b> infection 2-201.13(C)(2) (also see Table 1b).</li> </ul>	Yes
<b>Shigella</b> spp.	<b>EXCLUDE</b> 2-201.12(E)(1)	<b>RESTRICT</b> 2-201.12(E)(2)	<ol style="list-style-type: none"> <li><u>Serving Non-HSP facility:</u> 2-201.13(A)(3)(a): May only work on a restricted basis 24 hours after symptoms resolve, and remains restricted until meeting the requirements listed below:</li> <li><u>Serving HSP facility:</u> 2-201.13(A)(3)(b): Remains excluded until meeting the requirements listed below: <ul style="list-style-type: none"> <li>Approval is obtained from the RA 2-201.13(E), and:</li> <li>Medically cleared 2-201.13(E)(1), or</li> <li>More than 7 calendar days have passed since the food employee became asymptomatic 2-201.13(E)(3)(a) (also see Table 1b).</li> </ul> </li> </ol>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility

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**2-201.12 Table 2: Summary of Requirements for Diagnosed Food Employees with Resolved Symptoms (continued)**

Pathogen Diagnosis	Facilities Serving HSP	Facilities Not Serving HSP	Removing Diagnosed Food Employee with Resolved Symptoms from Exclusion or Restriction	RA Approval Required to Return to Work
Norovirus	<b>EXCLUDE</b> 2-201.12(D)(1)	<b>RESTRICT</b> 2-201.12(D)(2)	<ol style="list-style-type: none"> <li>1. <u>Serving Non-HSP facility</u>: 2-201.13(A)(2)(a): May only work on a restricted basis 24 hours after symptoms resolve and remains restricted until meeting the requirements listed below:</li> <li>2. <u>Serving HSP facility</u>: 2-201.13(A)(2)(b): Remains excluded until meeting the requirements listed below: <ul style="list-style-type: none"> <li>• Approval is obtained from the RA 2-201.13(D), and:</li> <li>• Medically cleared 2-201.13(D)(1), or</li> <li>• More than 48 hours have passed since the food employee became asymptomatic 2-201.13(D)(2) (also see Table 1b).</li> </ul> </li> </ol>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility
<i>E. coli</i> O157:H7 or other EHEC/ STEC	<b>EXCLUDE</b> 2-201.12(F)(1)	<b>RESTRICT</b> 2-201.12(F)(2)	<ol style="list-style-type: none"> <li>1. <u>Serving Non-HSP facility</u>: 2-201.13(A)(4)(a): May only work on a restricted basis 24 hours after symptoms resolve and remains restricted until meeting the requirements listed below:</li> <li>2. <u>Serving HSP facility</u>: 2-201.13(A)(4)(b): Remains excluded until meeting the requirements listed below: <ul style="list-style-type: none"> <li>• Approval is obtained from the RA 2-201.13(F), and:</li> <li>• Medically cleared 2-201.13(F)(1), or</li> <li>• More than 7 calendar days have passed since the food employee became asymptomatic 2-201.13(F)(2).</li> </ul> </li> </ol>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility
Hepatitis A virus	<b>EXCLUDE</b> if within 14 days of any symptom, or within 7 days of jaundice 2-201.12(B)(2)	<b>EXCLUDE</b> if within 14 days of any sumptom, or within 7 days of jaundice 2-201.12(B)(2)	When approval is obtained from the RA 2-201.13(B), and: <ul style="list-style-type: none"> <li>• The food employee has been jaundiced for more than 7 calendar days 2-201.13(B)(1), or</li> <li>• The anicteric food employee has had symptoms for more than 14 days 2-201.13(B)(2), or</li> <li>• The food employee provides medical documentation 2-201.13(B)(3) (see also Table 1b).</li> </ul>	Yes

**2-201.12 Table 3: Summary of Requirements for Diagnosed Food Employees Who Never Develop Gastrointestinal Symptoms**

<b>Food employees and conditional employees shall report a listed diagnosis immediately to the person in charge</b>				
<b>The person in charge shall notify the RA when a food employee reports a listed diagnosis</b>				
The person in charge shall prohibit a conditional employee that reports a listed diagnosis from becoming a food employee until meeting the criteria listed in section 2-201.13 of the Food Code, for reinstatement of a diagnosed food employee				
<b>Pathogen Diagnosis</b>	<b>Facilities Serving HSP</b>	<b>Facilities Not Serving HSP</b>	<b>Removing Diagnosed Food Employees Who Never Develop Gastrointestinal Symptoms from Exclusion or Restriction</b>	<b>RA Approval Required to Return to Work</b>
Typhoid Fever ( <b>S. Typhi</b> ) including previous illness with <b>S. Typhi</b> (see 2-201.11 (A)(3))	<b>EXCLUDE</b> 2-201.12(C)	<b>EXCLUDE</b> 2-201.12(C)	When approval is obtained from the RA 2-201.13(C)(1), and:  Food employee provides medical documentation, specifying that the food employee is free of a <b>S. Typhi</b> infection 2-201.13(C)(2).	Yes
<b>Shigella</b> spp.	<b>EXCLUDE</b> 2-201.12(E)(1)	<b>RESTRICT</b> 2-201.12(E)(2)	Remains excluded or restricted until approval is obtained from the RA, and: <ul style="list-style-type: none"> <li>• Medically cleared 2-201.13(E)(1), or</li> <li>• More than 7 calendar days have passed since the food employee was last diagnosed 2-201.13(E)(3).</li> </ul>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility
Norovirus	<b>EXCLUDE</b> 2-201.12(D)(1)	<b>RESTRICT</b> 2-201.12(D)(2)	Remains excluded or restricted until approval is obtained from the RA 2-201.13(D), and <ul style="list-style-type: none"> <li>• Medically cleared 2-201.13(D)(1), or</li> <li>• More than 48 hours have passed since the food employee was diagnosed 2-201.13(D)(3).</li> </ul>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility

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**2-201.12 Table 3: Summary of Requirements for Diagnosed Food Employees Who Never Develop Gastrointestinal Symptoms (continued)**

<b>Pathogen Diagnosis</b>	<b>Facilities Serving HSP</b>	<b>Facilities Not Serving HSP</b>	<b>Removing Diagnosed Food Employees Who Never Develop Gastrointestinal Symptoms from Exclusion or Restriction</b>	<b>RA Approval Required to Return to Work</b>
<i>E. coli</i> O157:H7 or other EHEC/ STEC	<b>EXCLUDE</b> 2-201.12(F)(1)	<b>RESTRICT</b> 2-201.12(F)(2)	Remains excluded or restricted until approval is obtained from the RA 2-201.13(F), and: <ul style="list-style-type: none"> <li>• Medically cleared 2-201.13(F)(1), or</li> <li>• More than 7 calendar days have passed since the food employee was diagnosed 2-201.13(F)(3).</li> </ul>	Yes to return to HSP or to return unrestricted; Not required to work on a restricted basis in a non-HSP facility
Hepatitis A virus	<b>EXCLUDE</b> 2-201.12(B)(3)	<b>EXCLUDE</b> 2-201.12(B)(3)	When approval is obtained from the RA 2-201.13(B), and <ul style="list-style-type: none"> <li>• The anicteric food employee has had symptoms for more than 14 days 2-201.13(B)(2), or</li> <li>• The food employee provides medical documentation 2-201.13(B)(3).</li> </ul>	Yes

**Key for Tables 1, 2, 3, and 4:**

**RA = Regulatory Authority**

**EHEC = Enterohemorrhagic, or Shiga toxin-producing *Escherichia coli***

**HAV = Hepatitis A virus**

**HSP = Highly Susceptible Population**

**2-201.12 Table 4: History of Exposure, and Absent Symptoms or Diagnosis**

<b>Food employees and conditional employees shall report a listed exposure to the person in charge</b>				
<b>The person in charge shall prohibit a conditional employee who reports a listed exposure from becoming a food employee in a facility serving a HSP until meeting the criteria listed in section 2-201.13 of the Food Code, for reinstatement of an exposed food employee</b>				
The person in charge shall reinforce and ensure compliance with good hygienic practices, symptom reporting requirements, proper handwashing and no BHC with RTE foods for all food employees that report a listed exposure				
<b>Pathogen Diagnosis</b>	<b>Facilities Serving HSP</b>	<b>Facilities Not Serving HSP</b>	<b>When Can the Restricted Food Employee Return to Work?</b>	<b>RA Approval needed</b>
Typhoid Fever ( <b>S. Typhi</b> )	<b>RESTRICT</b> 2-201.12(I)	Educate food employee on symptoms to watch for and ensure compliance with GHP, handwashing and no BHC with RTE foods.	2-201.13(I)(3) When 14 calendar days have passed since the last exposure, or more than 14 days has passed since the food employee's household contact became asymptomatic.	No
<i>Shigella</i> spp.	<b>RESTRICT</b> 2-201.12(I)	Educate food employee on symptoms to watch for and ensure compliance with GHP, handwashing and no BHC with RTE foods.	2-201.13(I)(2) When more than 3 calendar days have passed since the last exposure, or more than 3 days have passed since the food employee's household contact became asymptomatic.	No
Norovirus	<b>RESTRICT</b> 2-201.12(I)	Educate food employee on symptoms to watch for and ensure compliance with GHP, handwashing and no bare hand contact with RTE foods.	2-201.13(I)(1) When more than 48 hours have passed since the last exposure, or more than 48 hours has passed since the food employee's household contact became asymptomatic.	No
<i>E. coli</i> O157:H7 or other EHEC/STEC	<b>RESTRICT</b> 2-201.12(I)	Educate food employee on symptoms to watch for and ensure compliance with GHP, handwashing and no bare hand contact with RTE foods.	2-201.13(I)(2) When more than 3 calendar days have passed since the last exposure, or more than 3 calendar days has passed since the food employee's household contact became asymptomatic.	No
Hepatitis A virus	<b>RESTRICT</b> 2-201.12(I)	Educate food employee on symptoms to watch for and ensure compliance with GHP, handwashing and no bare hand contact with RTE foods.	2-201.13(I)(4) When any of the following conditions is met: * The food 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 food employee's household contact became jaundiced; or * The food employee does not use an alternative procedure that allows BHC with RTE food until at least 30 days after the potential exposure, and the employee receives additional training.	No

**Key for Table 4:** GHP = Good Hygienic Practices; RTE = Ready-to-Eat foods; BHC = Bare Hand Contact

## **APPENDIX D**

### **Emergency Point of Contact:**

If a food donor or FDO suspects that any of his/her products have been subject to tampering or criminal or terrorist action, he/she should notify the FSIS for meat, poultry or egg products or FDA for all other food products. First, the FSIS or FDA District Office should be notified, see web links below for phone numbers. If the concern or event becomes elevated, FSIS or FDA should be contacted at the 24-hour emergency numbers listed below. Other Federal, State and local regulators may also need to be notified in the event of an issue. These contacts and numbers should be identified prior to an event and numbers should be verified regularly.

## **Emergency Points of Contact:**

### **FSIS District Office**

\* FDA District Office telephone numbers are listed at

[http://www.fsis.usda.gov/Contact\\_Us/Office\\_Locations\\_& Phone\\_Numbers/index.asp](http://www.fsis.usda.gov/Contact_Us/Office_Locations_& Phone_Numbers/index.asp)

Contact person

Phone number

### **FDA District Office**

\* FDA District Office telephone numbers are listed at <http://www.cfsan.fda.gov/~dms/district.html>

Contact person

Phone number

### **U.S. Department of Agriculture**

Phone number: USDA 24-hour contact number for the Office of Food Defense and Emergency Response – 866-395-9701

### **U.S. Food and Drug Administration**

Phone number: FDA 24-hour Emergency Hotline – 888-723-3366

### **FBI**

Contact person

Phone number

### **Local Police Department**

Contact person

Phone number

### **State Police Department**

Contact person

Phone number

### **Board of Health**

Contact person

Phone number

### **HazMat Team**

Contact person

Phone number

### **State Office of Emergency Management**

Contact person

Phone number

### **Others**

Organization

Contact person

Phone number



## REFERENCES

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2. Cooperative Extension, *Food Safety Information Sheet No. 5, Shelf Storage.*
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5. Purdue University Cooperative Extension Service, University of Wisconsin-Extension Cooperative Extension, *Food Safety Information Sheet No. 6, Food Repackaging.*
6. President s Memorandum for the Head of Executive Departments and Agencies, 1996.
7. U.S. Department of Agriculture, *A Citizen s Guide To Food Recovery*, revised 1997.
8. U. S. Department of Agriculture, Economic Research Service, *Estimating and Addressing America s Food Losses*, 1997.
9. U.S. Department of Health and Human Services, U.S. Public Health Service, Food and Drug Administration, *Food Code*, 1999.
10. Volusia County Public Health Unit (Florida) Information Sheet, *Things You Must Know to Prevent Foodborne Disease*, 1994.

### WEB SITES

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|--|---|
| 1. Congressional Hunger Center<br><a href="http://www.logos.ghn.org.chc.index.html">www.logos.ghn.org.chc.index.html</a> | 5. Share Our Strength<br><a href="http://www.strength.org/home.html">www.strength.org/home.html</a> |
| 2. Food and Drug Administration<br><a href="http://www.cfsan.fda.gov">www.cfsan.fda.gov</a>                              | 6. St. Mary's Food Bank<br><a href="http://www.smfb.org">www.smfb.org</a>                           |
| 3. America's Second Harvest<br><a href="http://www.secondharvest.org">www.secondharvest.org</a>                          | 7. The Chef and the Child Foundation<br><a href="http://www.acfchefs">www.acfchefs</a>              |

### Food Defense Resources

Numerous food defense resources exist but one guidance document specifically refers to operations such as food banks and food recovery programs and is recommended for careful review and study. The document referred to is "Guidance for Industry, Retail Food Stores and Food Service Establishments, Food Security Preventive Measures Guidance" available in hard copy from CFSAN (1-888-SAFE-FOOD) and available on the internet at <http://www.cfsan.fda.gov/~dms/secqui11.html>.

In addition the 2005 Food Code lists numerous references from FDA, CDC, and the USDA in Annex 2 under Food Defense Guidance from Farm to Table. These guidances identify the types of preventive measures that food processors and establishments can take to minimize risks to food from tampering, criminal or terrorist actions. A summary of these references is as follows:

## **Food and Drug Administration Resources:**

ALERT Initiative – ALERT identifies five key points that industry and businesses can use to decrease the risk of intentional food contamination at their facility:

<http://www.cfsan.fda.gov/~dms/alert.html>

Food Producers, Processors, and Transporters: Food Security Preventive Measures Guidance at <http://www.cfsan.fda.gov/~dms/secguid6.html>.

Dairy Farms, Bulk Milk Transporters, Bulk Milk Transfer Stations and Fluid Milk Processors Food Security Preventive Measures Guidance at <http://www.cfsan.fda.gov/~secguid8.html>.

Importers and Filers: Food Security Preventive Measures Guidance at [http://www.cfsan.fda.gov/~secguid7](http://www.cfsan.fda.gov/~secguid7.html).html.

Bioterrorism Act of 2002 at <http://www.fda.gov/oc/bioterrorism/bioact.html>.

Food and Drug Administration guidance for consumers “Food Tampering: An Extra Ounce of Caution” at <http://www.cfsan.fda.gov/~dms/fstamper.html>

Online training developed by FDA and USDA ‘Protecting the Food Supply from Intentional Adulteration: An Introductory Training Session to Raise Awareness at [www.fda.gov/ora/training/orau/FoodSecurity/startpage.html](http://www.fda.gov/ora/training/orau/FoodSecurity/startpage.html)

## **USDA Food Safety and Inspection Service (FSIS) Resources:**

Food Safety and Inspection Service (FSIS) Security Guidelines for Food Processors at <http://www.fsis.usda.gov/oa/topics/securityguide.htm>.

FSIS Guidelines “Keep America’s Food Safe” at [http://www.fsis.usda.gov/Food Security & Emergency Preparedness/Keep Americas Food Safe/index.asp](http://www.fsis.usda.gov/Food%20Security%20&%20Emergency%20Preparedness/Keep%20Americas%20Food%20Safe/index.asp).

FSIS Safety and Security Guidelines for the Transportation and Distribution of Meat, Poultry and Egg Products at <http://www.fsis.usda.gov/oa/topics/transportguide.htm>.

## **USDA Food and Nutrition Service Resources.**

Some of these resources are specific to schools but contain information that would apply to any food service or warehouse operation including:

*A Biosecurity Checklist for School Foodservice Programs – Developing a Biosecurity Management Plan* at <http://schoolmeals.nal.usda.gov/Safety/biosecurity.pdf>

Biosecurity Video for schools at <http://130.74.84.77/launcher.php?file=%2Fomo%2Fcmp%2Fbio.wmv>

*Responding to a Food Recall* at <http://www.nfsmi.org/Information/recallmanual.pdf>

*Emergency Readiness Plan: A Guide to Forms for School Foodservice Operations* at <http://www.nfsmi.org/Information/e-readiness.html>

**Other Resources:**

Guidance on responding to food emergencies is available from the Centers for Disease Control and Prevention (CDC) Emergency Preparedness and Response Information at <http://www.bt.cdc.gov/> and at <http://www.cdc.gov/nceh/emergency.htm>

U.S. Postal Service guidance on handling mail and packages at [www.usps.com/news/2001/press/mailsecurity/postcard.htm](http://www.usps.com/news/2001/press/mailsecurity/postcard.htm)

Many of these sites contain links to other sites for additional information on food security issues.

In addition industry publications are available on the following websites:

National Restaurant Association at <http://www.restaurant.org> and at <http://www.nraef.org/foodsecurity/>  
Food Marketing Institute at [http://www.fmi.org/foodsafety/bio security .htm](http://www.fmi.org/foodsafety/bio_security.htm).

Food and Agriculture ISAC at <http://www.fmi.org/isac>.

Food Products Association – Center for Food Security and Emergency Preparedness at <http://www.fpa-food.org/content/security/program.asp>