



# Major Food Allergen Framework

Conference for Food Protection - 2023 Biennium  
Council II: Allergen Committee

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## Introduction

**PURPOSE** This document is to serve as a voluntary operational framework for FOOD ALLERGY<sup>1</sup> prevention and control of the MAJOR FOOD ALLERGENS<sup>2</sup> (as defined below) using existing research and other evidence-based materials for FOOD ESTABLISHMENTS<sup>3</sup> and OTHER COMMUNITY FOOD SOURCES<sup>4</sup>. Readers should be aware, however, that people may have other allergies beyond the major food allergens, and food establishments may employ the same practices outlined in this document to assist CONSUMERS<sup>5</sup> with allergies, FOOD INTOLERANCE/SENSITIVITY<sup>6</sup> beyond those listed herein. Readers should be aware that consumers may have other food allergies, intolerances, or sensitivities (such as celiac disease, Crohn's disease, IBS/IBD, and others) which, although not technically allergies, are triggered by ingestion of particular foods.

**SCOPE** This document covers food allergy training of FOOD HANDLERS<sup>7</sup>; food handling policies and practices; consumer notification tools for food allergens; a food allergy reaction and emergency response guide; and equal consideration for other community food sources.

**BACKGROUND** A food allergy happens when a person's immune system overreacts to a food protein. Approximately thirty million people in the U.S. have food allergies, leading to 200,000 emergency department visits per year. FOOD ALLERGIC REACTIONS<sup>8</sup> vary in severity, from mildly itchy skin and lip swelling to severe, life-threatening symptoms (ANAPHYLAXIS<sup>9</sup>) and death. In the United States, 51% of adults and 42% of children with food allergies have experienced a severe reaction.

The **Major Food Allergens** that cause over 90% of all allergic reactions in people are these types of food:

- Milk
- Eggs
- 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
- Sesame<sup>10</sup>

This guide includes example procedures, considerations, and resources that a food establishment can use to respond when someone notifies the food establishment **about** a food allergy or reports an allergic reaction. It also provides a framework for providing consumers accurate information about food ingredients so they can make informed decisions when ordering.

Although comprehensive, this guide might not provide everything that needs to be considered for a food allergy reaction and emergency response plan. It might also contain materials that are not relevant to every food establishment, so please consider internal procedures or standard operating procedures when using this material.

<sup>1</sup> "Food allergy" means the reaction of the body's immune system to certain proteins in food. Reactions can vary in severity from mild symptoms involving hives and lip swelling to severe, life-threatening symptoms, called anaphylaxis, which may involve shock and fatal respiratory problems.

<sup>2</sup> "Major Food Allergen" mean the allergens in foods that cause over 90% of allergic reactions: 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, and sesame.

<sup>3</sup> "Food establishment" means an operation that (a) stores, prepares, packages, serves, vends food directly to the consumer, or otherwise provides food for human consumption such as a restaurant; satellite or catered feeding location; catering operation if the operation provides food directly to a consumer or to a conveyance used to transport people; market; vending location; institution; or food bank; and (b) relinquishes possession of food to a consumer directly, or indirectly through a delivery service such as home delivery of grocery orders or restaurant takeout orders, or delivery service that is provided by common carriers.

<sup>4</sup> "Other community food sources" means food sources that are made available to the public on a need basis, e.g., food bank, food shelf, food pantry.

<sup>5</sup> "Consumer" means a person who is a member of the public, takes possession of food, is not functioning in the capacity of an operator of a food establishment or food processing plant, and does not offer the food for resale

<sup>6</sup> An adverse reaction to a substance in food that does not involve the immune system, e.g., the inability to process or breakdown a certain food such as the milk sugar lactose which can lead to discomfort or have ill effects.

<sup>7</sup> "Food handler" means a person who handles food utensils or who prepares, processes, or serves food or beverages for people other than members of their immediate household.

<sup>8</sup> "Food allergic reaction" means an adverse health effect arising from a specific immune response that occurs reproducibly on exposure to a given food. The immune response can be severe and life-threatening.

<sup>9</sup> "Anaphylaxis" means a life-threatening allergic reaction due to over-release of certain chemicals in the body resulting in shock when a person with an allergy is exposed to an allergen. Allergies to food, insect stings, medications, and latex, are most frequently associated with this type of severe response, and may include skin symptoms or swollen lips, difficulty breathing, reduced blood pressure, and gastrointestinal symptoms.

<sup>10</sup> Sesame has been added to the list of Major Food Allergens via the FASTER Act of 2021, effective January 1, 2023.

## A. Training

**PURPOSE** This is a framework to educate food handlers about (1) the Major Food Allergens – 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, and sesame; and (2) other allergy and intolerance issues they may encounter.

*Duties in food establishment (intensity of training increases with responsibility)*

### 1. PIC - Person in Charge (PIC)<sup>11</sup>

*Training should include*

- a) Definitions for food allergy, food intolerance/sensitivity, and CROSS-CONTACT<sup>12</sup>.
- b) List of the symptoms of a food allergic reaction, including anaphylaxis.
- c) List of the Major Food Allergens in FDA's Food Code.
- d) Dangers of food allergens and how to prevent cross-contact.
- e) Using proper cleaning methods, such as wash, rinse, and sanitize, to prevent cross-contact.
- f) How and when to communicate with consumers and staff about food allergens.
- g) Special considerations related to food allergens for workstations and SELF-SERVICE<sup>13</sup> areas.
- h) How to handle food allergy requests.
- i) How to deal with food allergy emergencies.
- j) Proper food preparation for guests with food allergies.
- k) How to read a food LABEL<sup>14</sup> and understand the importance of food labels.
- l) Personal hygiene practices to prevent cross-contact.
- m) How to receive and store foods that contain Major Food Allergens to prevent cross-contact.

### 2. Front of house; wait staff, hostess/host, to-go personnel

*Training should include*

- a) Definitions for food allergy, food intolerance/sensitivity, and cross-contact.
- b) List of the symptoms of a food allergic reaction, including anaphylaxis.
- c) List of the Major Food Allergens in FDA's Food Code.
- d) How to handle food allergy requests.
- e) How to deal with food allergy emergencies.

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<sup>11</sup> "Person in Charge (PIC)" means the person present at a food establishment who is responsible for the operation at the time of inspection.

<sup>12</sup> "Cross-contact" means the unintentional transfer of an allergen from a food or food-contact surface containing an allergen to a food or food-contact surface that does not contain the allergen.

<sup>13</sup> "Self-service" means areas where a food handler is not present to serve a consumer and the consumer is responsible for serving themselves. Examples: buffets, salad bars, sushi bars, or display cases.

<sup>14</sup> "Label" means a display of written, printed, or graphic matter upon the immediate container of any article; and any word, statement, or other information that appears on the outside container or wrapper of the retail package.

### 3. Back of house; Food handler (as defined in FDA's Food Code)

Training should include

- a) List of the Major Food Allergens in FDA's Food Code.
- b) Dangers of food allergens and how to prevent cross-contact.
- c) Cleaning and personal hygiene practices to prevent cross-contact.
- d) In-depth knowledge of MENU<sup>15</sup> items and preparation as it relates to assigned duties.
- e) Proper food preparation for consumers with food allergies.
- f) How to read a food label and understand the importance of food labels.

### 4. Understanding Labels

- a) Manufacturers of PACKAGED FOOD<sup>16</sup> products that contain a Major Food Allergen are required by law to list that allergen on the product label – including if they are, or are a component of, a flavor, color, incidental additive, or spice (i.e., sesame paste).
- b) There are several ways the allergen can be listed, so CONSUMERS<sup>17</sup> must read product labels carefully.
  - i. The allergen may be listed in a 'Contains' statement.
  - ii. If the product does not have a 'Contains' statement, consumers should review the entire ingredient list.
  - iii. A 'may contain' or 'produced in a facility' marking is a voluntary, separate allergen advisory statement when there is a chance that a food allergen could be present. Anything labeled in this manner should be considered to have an allergen present.
- c) Common allergens can have other names. For example, caseinates (in all forms), and whey (in all forms) are all milk proteins.
- d) Although the same allergen can be present in multiple ingredients, its "food source name" (for example, milk), or common or usual name, must appear in the ingredient list just once to comply with LABELING<sup>18</sup> requirements.

**SUPPLY CHAIN CONSIDERATIONS** Manufacturers change their ingredients and production methods continually and without warning; it is especially important to read the ingredient label, and ingredient statement, for the presence of major food allergens with each shipment. Contact the manufacturer in advance if you have questions about food allergens that may be in a product.

- e) Major food allergen labeling information can be found within:
  - FDA's "21 CFR 101", <https://www.ecfr.gov/current/title-21/chapter-I/subchapter-B/part-101>
  - USDA's "Allergens – Voluntary Labeling Statements," <https://www.fsis.usda.gov/guidelines/2013-0010>
  - USDA's "FSIS Compliance Guidelines: Allergens and Ingredients of Public Health Concern: Identification, Prevention and Control, and Declaration through Labeling," <https://www.fsis.usda.gov/sites/default/files/import/Allergens-Ingredients.pdf>

<sup>15</sup> "Menu" means all written and verbal lists of foods prepared and offered in a food establishment.

<sup>16</sup> "Packaged" means bottled, canned, cartoned, bagged, or wrapped, whether packaged in a food establishment or a food processing plant. "Packaged" does not include wrapped or placed in a carry-out container to protect the food during service or delivery to the consumer, by a food handler, upon consumer request.

<sup>17</sup> "Consumer" means a person who is a member of the public, takes possession of food, is not functioning in the capacity of an operator of a food establishment or food processing plant, and does not offer the food for resale.

<sup>18</sup> "Labeling" means all labels and other written, printed, or graphic matter upon any article or any of its containers or wrappers or accompanying such article.

## B. Food-Handling Policies & Practices to Help Consumers with Food Allergies

**PURPOSE** Example policies and practices are provided here that will reduce the risk of a consumer being exposed to a food allergen.

With food allergens, it is **very important** to avoid having **even small amounts** of an ingredient to which a consumer is allergic come into contact with their food, utensils, tableware, and packaging. The unintentional transfer of an allergen from a food or food-contact surface containing an allergen to a food or food-contact surface that does not contain the allergen is called **cross-contact**. Sometimes it is obvious when an allergy-causing ingredient has gotten into a food through cross-contact because the ingredient can be easily seen, but other times it is not obvious, and great care should be taken to avoid these situations.

Following these guidelines, which apply to **all food handlers** who come into contact with food, beverages, and any food preparation surface, can help consumers with allergies avoid potentially life-threatening allergic reactions.

*Train relevant staff in the following procedures*

### 1. Food & Ingredient Storage

- a) **Label** and segregate unpackaged foods containing one or more of the Major Food Allergens away from each other, and store separately from other foods and ingredients. \*Make sure to read ingredient labels to check for the presence of allergens before labeling and segregating.
- b) Spills of any of the Major Food Allergens should be cleaned up immediately, following the usual cleaning procedures used in the food establishment. If any Major Food Allergen accidentally comes into contact with other food ingredients that do not contain that allergen, these ingredients should be excluded from use.

### 2. Self-Service Items

- a) For food items that were made on site, **label** the food items, or place **signs** next to the food items, that clearly identify the presence of one or more of the Major Food Allergens, or keep ingredient lists on site that identify the presence of one or more of the Major Food Allergens.
- b) Labels and signage should be in both English and Spanish, and/or other languages appropriate to either the establishment, or the geographic area.

### 3. Taking a Food Order

- a) When a consumer informs staff they have a food allergy, intolerance, or sensitivity, immediately **notify** the Person in Charge (PIC) or designated person (manager, chef, or key employees).
- b) Help the consumer **identify** menu items that contain ingredients to which they are allergic and offer suggestions for alternative menu items.
- c) If no alternative menu options are available, politely **inform** the consumer.
- d) If it is possible to **modify** a menu item so that it does not include ingredients the consumer must avoid, inform the consumer, and ask if the modification would suit their needs.
- e) **Verify** with the food handler that the proposed menu item modification is possible, feasible, and can be done safely for the consumer.
- f) Make a **note** on the consumer's order that they have a food allergy/intolerance/sensitivity and which ingredients they must avoid so that other food handlers are aware.

#### 4. Preparing a Food Order

- a) Thoroughly clean all areas and equipment that will be used for preparing the allergic consumer's meal, even if those areas had already been cleaned for normal use.
- b) Wash hands thoroughly before preparing the allergic consumer's meal. In some situations it may be necessary to change apron/chef coat, if previously soiled with potential allergens.
- c) Use dedicated equipment or physically separate products to prevent cross-contact.
  - i. Use color-coded or specially marked supplies, uniforms, equipment, and utensils designated for preparing allergen-free meals.
  - ii. Avoid using the same cooking medium (e.g., oil or water) and surface (e.g., grill, prep table) when handling ingredients with and without allergens.
- d) Use ingredients that do not contain the allergen(s) to which the consumer is allergic. Check ingredient labels for packaged foods.
- e) Prepare food in a manner that eliminates cross-contact. All preparation, including garnishes, should be done by only one food handler who is dedicated to ensuring the meal is allergen-free, and who is not preparing other consumers' meals at the same time.
  - i. **If a mistake is made**, and an ingredient to which the consumer is allergic is accidentally included in the meal, it is **not sufficient** to simply remove the offending ingredient, because cross-contact will have occurred. In case this happens, **re-make** the consumer's meal.
  - ii. Wash your hands with soap and water before continuing preparation to avoid potential, or additional, cross-contact.
- f) Cover the meal with a clean lid to prevent cross-contact and mark the meal as "allergy" so other staff are aware.
- g) Notify the PIC, or designated food handler once the allergen-free meal is prepared and ready for service.
- h) Wash, rinse, and store special equipment for allergen-free meals to be ready for next use.
- i) Wash your hands with soap and water before touching anything else if you have handled a food allergen.

#### 5. Delivering a Food Order

- a) Verify with the food handler who prepared the meal that it does not contain the allergen specified by the consumer.
- b) Ensure no cross-contact with other meals occurs during transport of the meal to the consumer.
- c) Use a separate meal tray to deliver the meal.
- d) VERIFY with the consumer that the meal meets their needs.
- e) Discard the meal and offer to re-make it for the consumer if the meal contains ingredients to which the consumer is allergic. **Notify** the PIC. **Review** procedures and **retrain** the food handler(s) who prepared and handled the meal on these procedures **before** allowing them to re-make the consumer's meal.

## C. Tools to Notify Consumers about Major Food Allergens

**PURPOSE** The purpose of this guidance is to provide examples of how to give consumers accurate information about food ingredients that are, or that contain, Major Food Allergens so they can make informed decisions when ordering. Giving incorrect or incomplete information can put consumers at risk for allergic reactions.

Consumers with food allergies depend on accurate allergen information when deciding what to eat. It is most effective to tell the consumer both verbally and in writing (e.g., on labels and menus) about the presence of food allergens and the risks of cross-contact.

### 1. Food Allergens in Menu Items & Self-Served Food<sup>19</sup> Items

- Review your menu and source ingredients.
- Use a table (see “Figure 1: Example Food Allergen Matrix” below), listing each menu item and noting the presence of major food allergens including all ingredients such as egg washes, sauces, garnishes, etc. Remember, a food might have more than one allergen.
- Print “Figure 2. Allergen Matrix – Major Food Allergens Present in Menu Items” (following page) and use it for staff and consumers.
- Assign a person in charge to regularly, at least once a year, review the food allergen table and update it as needed to verify the ingredients have not changed. Review and update when ingredients, suppliers or processes have changed, and/or a new item has been added to the menu. Consider off-menu items, seasonal and specialty items.
- Have accessible the full list of ingredients for menu items for consumers with allergies or intolerances beyond the top nine. Consumers may be allergic to ingredients beyond the Major Food Allergens, like gluten. Understanding the full list of ingredients may help you better assist these consumers.

### 2. Create a Food Allergen Matrix (based upon your current menu items)

Figure 1. Example Food Allergen Matrix

Food Items *		Major Food Allergens								
		Egg	Fish	Milk	Peanut	Sesame	Shellfish	Soybean	Tree Nut	Wheat
Breads or Breaded	Bage ls	X		X			m			X
	Gluten Free biscuit	X		X				m	m	
	Sourdough bread									X
	Croutons	X		m		m			m	X
	Onion rings	X		X						X
	Chicken nuggets	X						m		X
Mac and cheese		X		X						X
Cheese	American			X						
	Provolone			X						
	Cheddar			X						
Peanut oil in fryer					X			X		
Lettuce Salad	no Dressing									
	with Dressing	X		X				X		

\*X\* Contains this allergen.

\*m\* May contain this allergen or is processed in a facility with this allergen.

\* Include off-menu items, seasonal and specialty items.

<sup>19</sup> “Self-served food” means Restaurant-type food that is available at a salad bar, hot food bar, buffet line, cafeteria line, or similar self-service facility, and is served by the consumers themselves. Self-service food also includes self-service beverages, such as drinks dispensed from a soda fountain and coffee available on a self-service basis

Figure 2. Allergen Matrix<sup>20</sup>

Major Food Allergens Present in Menu Items

Food Items *	Major Food Allergens									Other Components			
	Egg	Fish	Milk	Peanut	Sesame	Shellfish	Soybean	Tree Nut	Wheat				

"X" Contains this allergen.

"m" May contain this allergen or is processed in a facility with this allergen.

\* Include off-menu items, seasonal and specialty items.

Created on:	Reviewed on:	Next review:
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<sup>20</sup> A table such as this could be customized for gluten-free and other food intolerances and sensitivities by utilizing the "Other Components" column.



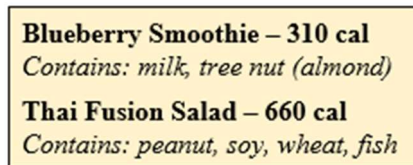
### 3. Menus & Signage

Design and update existing menus (including those for online ordering, catering, specials, and take-out) to ensure names and descriptions of **all** food items include Major Food Allergens present in each food. For example:

- Have signage to notify consumers and food handlers an allergen menu exists.
- Next to each menu item, include text to specify allergens (e.g., *Contains egg, milk*).
- Use images (or “icons”) of food allergens next to menu items where they are present. Include a key so consumers know what the icons represent. Links to websites with pre-made icons are included below.

**Figure 3. Examples of notifications**

Example 1: In-menu allergen notification.



Example 2: Allergen icons.



### 4. Talk with Consumers

- Encourage staff to **ask consumers** about any food allergies they might have.
- Provide a list** of menu items and their ingredients for food handlers and consumers as a reference.
- Appoint at least one trained food handler per shift** to respond to consumer requests and questions about food allergens.

### 5. Other Ways to Inform Consumers

- Static clings** on display cases provide Major Food Allergen information in consumer view. **Tags or tents** next to food items also work well.
- Counter cards, table-talkers, or signs** at the point-of-sale or pick-up to inform consumers.
- Consider **placing a sign in a prominent location**, when contact with a Major Food Allergen is possible or unavoidable (e.g., French fries prepared in the same fryer as breaded [wheat-containing] items).
- Websites** where you can find graphics and other icons for food allergens include:
  - International Association for Food Protection (IAFP) Food Allergen Icons  
<https://www.foodprotection.org/resources/food-allergen-icons/>
  - StateFoodSafety Allergen Icons  
[https://drive.google.com/drive/folders/1z\\_le5yxvWq5vFLnWnR7FeIXZDQePhygl?usp=sharing](https://drive.google.com/drive/folders/1z_le5yxvWq5vFLnWnR7FeIXZDQePhygl?usp=sharing)
  - Erudus Food Allergy Icons  
<https://erudus.com/standardised-food-allergy-icons/>

## D. Food Allergy Reaction & Emergency Response Guide

**PURPOSE** This section is to serve as a resource for food establishments when writing a food allergy reaction and emergency response plan. This guide includes example procedures, considerations, and resources that a food establishment can use to respond when someone reports an allergic reaction.

Although this section was written specifically for food allergies, some parts are applicable to reactions caused by other exposures, such as bee stings. Example informational posters are included for you to use within your food establishment.

### 1. What an allergic reaction may look like

Allergies are complex and allergic reactions can vary from person to person.

Allergic reactions can present in many ways. Food allergic reactions vary in severity, from mildly itchy skin and lip swelling to severe, life-threatening symptoms (anaphylaxis) and death. Some signs and symptoms only affect one part of the body (for example, hives around the mouth). Some signs and symptoms mean that multiple areas of the body are affected (for example, dizziness).

Even within the same person, reactions can differ from food-to-food and day-to-day. For example, a person might experience itching around the mouth after eating an almond, but they could have difficulty breathing and require emergency care after eating a peanut. Even reactions to the same food on different eating occasions can cause different symptoms in the same person.

Different people, including children, experience different symptoms too. For example, not everyone experiences nausea or diarrhea during a reaction. Likewise, it is possible to have a severe life-threatening reaction (anaphylaxis) without any skin symptoms, such as a rash or hives.

### 2. Allergic reactions in children and adolescents

Children can experience serious food allergic reactions, with an alarming number of fatal anaphylactic reactions occurring during adolescence. Milk, egg, wheat, and soy allergies are more common in childhood than adulthood.

Children can have difficulty communicating what they are experiencing during a reaction. Some children put their hands in their mouths or scratch at their tongues. Their voices may change (for example, becoming hoarse or squeaky), and they might slur their words.

### 3. If someone reports an allergic reaction

These are **examples** of potential actions to take when a person reports an allergic reaction. Procedures may differ depending on the severity of the reaction. Food establishments should evaluate their need for internal procedures or additional steps, based on corporate policies or other circumstances.

\* When in doubt, call 911 \*

- a) Clearly direct one person to dial 911 and report an allergic reaction.
- b) Follow the directions of emergency services personnel and the food establishment's food allergy emergency response plan.

## 4. Epinephrine auto-injectors

### a) What is an auto-injector?

EPINEPHRINE AUTO-INJECTORS<sup>21</sup> are medical devices for injecting a measured dose of epinephrine directly into a person experiencing an allergic reaction. The devices are designed to be given through clothing. Multiple brands of auto-injectors are available in the United States, and other countries, and may look slightly different. In the U.S., you cannot buy an epinephrine auto-injector unless you have a prescription from a health care provider. Food establishments will not be able to stock an auto-injector for general use.

Epinephrine auto-injectors have specific directions for use printed directly on the device. **Always follow the instructions printed on the auto-injector.** Always call emergency services when an auto-injector needs to be administered, as a relapse is possible.

### b) Here are some example images of what an epinephrine auto-injector might look like; not all auto-injectors will look like these.

Figure 4. Examples of Epinephrine auto-injectors (EAI)



<sup>21</sup> A device for injecting oneself with a single, preloaded dose of a drug. The device typically consists of a spring-loaded syringe activated when the device is pushed firmly against the body.

## 5. Additional considerations for the food establishment

The following questions and scenarios may be used to develop a detailed food allergy reaction and emergency response plan and/or can be used as a practice drill. Not all questions and scenarios will apply to a food establishment and some food establishments might have additional questions to consider.

- a) What ingredient information will be provided to a consumer if they ask? Will this information be written or verbal?
  - i. If a person experiences a reaction, their first question will be if the allergen was present in any of the food(s) they ate.
- b) The exact numbers to dial to reach emergency services should be clearly posted by all telephones.
  - i. Is there an additional number to dial or extra step to get an outside line?
- c) Each person should be aware of any role they play during an emergency. You may consider who will:
  - i. Be the primary person in charge and ensure each person is performing their duties.
  - ii. Call emergency services and relay information.
  - iii. Direct and meet emergency medical services? Are there clear instructions available on how to find the food establishment?
  - iv. Interact with and physically assist the consumer, if necessary.
  - v. Keep the area around the person experiencing the reaction clear.
- d) Will the food establishment keep any allergy-specific supplies (for example, antihistamines or itch creams) on hand? If yes, when will they be used?

**REMINDER** Epinephrine is the only medication that can treat a severe allergic reaction and must be prescribed by a health care provider.

- e) Will staff have permission to search a person's belongings for an epinephrine auto-injector if they are unable to assist?
- f) Can staff administer epinephrine auto-injectors? If yes, which people have permission?
- g) Is there an automated external defibrillator ("AED") available? If yes, are staff trained to use it?
- h) What are the procedures if the person experiencing a reaction does not want to call an ambulance? If the person leaves before the ambulance arrives, who will pay for any charges incurred?
- i) Is there a debriefing and/or reporting requirement after the incident? If yes, include those steps in the allergic reaction response plan.
- j) Modify the response plan, as necessary, to better prepare for future incidents.

## 6. Examples of Posters (that can be placed within your food establishment to support food allergy preparedness and emergencies)

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## E. Equal Consideration for Other Community Food Sources

Other community food sources provide healthy, nutritious food to those in need. For individuals with food allergies, it can be difficult to find safe foods. People with food allergies may need additional support and it is important to consider the food sources' ability to do the following:

- Have at least one well-trained person that is available to speak with those who have allergy concerns. It is important to identify foods that do not contain *at least* the Major Food Allergens so appropriate suggestions can be made.
- Allow consumers the opportunity to review original food packaging so they can read the labels. Know the importance of reading every label, every time, as ingredients can change without warning.
- Make sure staff understand the dangers of cross-contact and how to avoid it. Find out what procedures are in place to avoid cross-contact in the storage and/or preparation of food, if it is being prepared on site, so it can be shared readily.
- If food is cooked and/or served on the premises, be sure workers know how to recognize the signs and symptoms of anaphylaxis and what the protocols are for a food-allergic emergency.

**When offering foods/meals to large groups, encourage preparation of meals that are free of the Major Food Allergens.**

- If foods or meals with food allergens are served, provide materials (e.g., signage, labels, tags, tents) in prominent and visible locations to inform consumers.
- While most sections of this document are applicable to both food service venues as well as other community food sources, special attention should be paid to the understanding of how allergens are listed on food labels and the availability of food label information.

### Food Sources During an Emergency and Disaster Preparedness

Whether an earthquake, hurricane or wildfire, natural disasters, in addition to man-made ones, can happen at any time, often with little notice. Establish procedures for accessing allergen-friendly foods during an emergency. A crisis is never a time to experiment with a new food or product.






Figure 5. Food Allergy Reactions

# Food Allergy Reactions

## Nine Major Food Allergens

-  Milk
-  Eggs
-  Fish
-  Shellfish
-  Tree nuts
-  Peanuts
-  Wheat
-  Soybeans
-  Sesame

## Symptoms of a Severe Allergic Reaction

- |   |  |   |   |
|---|--|---|---|
| <br><b>LUNG</b><br>Short of breath, wheezing, repetitive cough | <br><b>HEART</b><br>Pale, blue, faint, weak pulse, dizzy | <br><b>THROAT</b><br>Tight, hoarse, trouble breathing/swallowing                 | <br><b>MOUTH</b><br>Significant swelling of the tongue and/or lips |
| <br><b>SKIN</b><br>Many hives over body, widespread redness    | <br><b>GUT</b><br>Repetitive vomiting, severe diarrhea   | <br><b>OTHER</b><br>Feeling something bad is about to happen, anxiety, confusion | <b>OR A COMBINATION</b> of symptoms from different body areas.  |

FOR MILD SYMPTOMS FROM MORE THAN ONE SYSTEM AREA, GIVE EPINEPHRINE.

## If someone is having a SEVERE ALLERGIC REACTION...



### INJECT EPINEPHRINE IMMEDIATELY

Follow the instructions on the device.



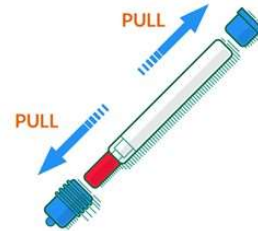
### CALL 911

Tell them the individual is having an allergic reaction.

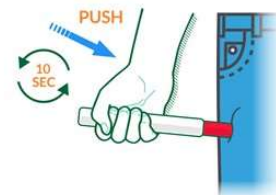


**LAY** them down. If breathing is difficult or they are vomiting, let them sit up or lie on their side.

STEP 1. Prepare the epinephrine auto injector for injection by following the instructions on the device.



STEP 2. Administer the injection by firmly push the needle into the leg until a click is heard or felt. Hold the device there.



Written allergic reaction response plan is can be found here: \_\_\_\_\_

Adapted from Michigan Department of Agriculture and Rural Development, Michigan Restaurant Association, <https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/food-allergy-anaphylaxis-emergency-care-plan>, and <https://www.fda.gov/food/food-labeling-nutrition/food-allergies>



Figure 6. Symptoms of an Allergic Reaction

# Symptoms of an Allergic Reaction



**Skin**

Hives • Swelling • Itching • Tingling • Warmth • Redness/flushing



**Mouth & Throat**

Tightness • Itching or swelling • Trouble swallowing • Stuffy or runny nose • Hoarse voice • Sneezing



**Lungs**

Wheezing • Coughing • Difficulty breathing • Chest pain • Tightness



**Heart**

Weak pulse • Rapid heartbeat • Pale • Blue color • Fainting • Light-headed • Dizziness • Loss of consciousness • Shock



**Gut**

Nausea • Diarrhea • Stomach cramps • Vomiting • Indigestion



**Brain**

Anxiety • Feeling of impending doom • Headache • Confusion • Blurred vision • Seizures

Figure 7. A Child's Description of an Allergic Reaction

# A Child's Description of an Allergic Reaction

“Something’s not right” • “Something bad is happening” • “I’m worried” • “My head hurts” • “I feel dizzy” • “I feel sleepy” • Child is clingy

“This food is too spicy.”  
“My mouth is hot/burning/tingling/itching”  
“My tongue feels funny/heavy”  
“It (my tongue) feels like there is a hair on it”  
“There’s something stuck in my throat”  
“It hurts when I swallow”

“My chest feels tight”

“My skin feels itchy/prickly”

“I feel sick.”  
“My tummy hurts.”  
“I’m going to throw up.”  
“I have to go to the bathroom now!”



Figure 8. Food Allergy Aware - Six that save lives

## FOOD ALLERGY AWARE

# SIX THAT SAVE LIVES

# 1

### The Symptoms

Signs of a serious food allergy reaction – known as anaphylaxis – are 2 or more of the following after eating a suspect food:

- Hives, itching and/or skin redness
- Swelling of the tongue, lips or throat
- Breathing difficulty, wheezing or coughing
- Stomach cramps or vomiting or diarrhea
- Feeling faint / drop in blood pressure (If only this 1 symptom, it is still anaphylaxis.)



# 4

### Go to the Hospital

A person who had an emergency epinephrine shot must be taken to hospital for observation. During transport, IF symptoms have not improved within 10 to 15 minutes, a second auto-injection should be given.

# 3

### Time is of the Essence

In studies of those who have died of anaphylaxis, they did not receive an epinephrine injection, or they got it too late, after a reaction had progressed. In anaphylaxis, prompt use of the shot is always essential.

# 5

### Reclining is Best

During the ambulance ride, the person having the serious reaction should be lying down, with the legs raised (this improves blood flow). NIAID guidelines recommend the patient receive oxygen and IV fluid.

# 2

**In Anaphylaxis:  
Use the auto-injector right away. Call 911 and report a food allergy emergency.**

Epinephrine shots are given via the auto-injector to the outer thigh muscle. This is considered a very safe drug. Antihistamines are acceptable as secondary medication only. They won't halt anaphylaxis. Allergists say: err on the side of using the auto-injector.



# 6

### Don't Go it Alone

No person should be expected to be fully responsible for self-administration of an epinephrine auto-injector. Assistance during anaphylaxis is crucial.

*From [allergyliving.com](http://allergyliving.com). Based on guidelines from NIAID and the Canadian Society of Allergy and Clinical Immunology.*

## Definitions

Anaphylaxis	A life-threatening allergic reaction due to over-release of certain chemicals in the body resulting in shock when a person with an allergy is exposed to an allergen. Allergies to food, insect stings, medications, and latex, are most frequently associated with this type of severe response, and may include skin symptoms or swollen lips, difficulty breathing, reduced blood pressure, and gastrointestinal symptoms.
Consumer	A person who is a member of the public, takes possession of food, is not functioning in the capacity of an operator of a food establishment or food processing plant, and does not offer the food for resale.
Cross-contact	The unintentional transfer of an allergen from a food or food-contact surface to a food or food-contact surface that does not contain the allergen.
Epinephrine auto-injector	A device for injecting oneself with a single, preloaded dose of a drug. The device typically consists of a spring-loaded syringe activated when the device is pushed firmly against the body.
Food allergic reaction	An adverse health effect arising from a specific immune response that occurs reproducibly on exposure to a given food. The immune response can be severe and life-threatening.
Food allergy	The reaction of the body's immune system to certain proteins in food. Reactions can vary in severity from mild symptoms involving hives and lip swelling to severe, life-threatening symptoms, called anaphylaxis, which may involve shock and fatal respiratory problems.
Food establishment	An operation that (a) stores, prepares, packages, serves, vends food directly to the consumer, or otherwise provides food for human consumption such as a restaurant; satellite or catered feeding location; catering operation if the operation provides food directly to a consumer or to a conveyance used to transport people; market; vending location; institution; or food bank; and (b) relinquishes possession of food to a consumer directly, or indirectly through a delivery service such as home delivery of grocery orders or restaurant takeout orders, or delivery service that is provided by common carriers.
Food handler	A person who handles food utensils or who prepares, processes, or serves food or beverages for people other than members of his or her immediate household.
Food intolerance/sensitivity	An adverse reaction to a substance in food that does not involve the immune system, e.g., the inability to process or breakdown a certain food such as the milk sugar lactose which can lead to discomfort or have ill effects.
Label	A display of written, printed, or graphic matter upon the immediate container of any article; and any word, statement, or other information that appears on the outside container or wrapper of the retail package.
Labeling	All labels and other written, printed, or graphic matter upon any article or any of its containers or wrappers or accompanying such article.
Major Food Allergen	The allergens in foods that cause over 90% of allergic reactions: 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, sesame, and soybeans.
Menu	All written and verbal lists of foods prepared and offered to consumers.
Other community food sources	Food sources that are made available to the public on a need basis, e.g., food bank, food shelf, food pantry.
Packaged food	"Packaged" means bottled, canned, cartoned, bagged, or wrapped, whether packaged in a food establishment or a food processing plant. (2) "Packaged" does not include wrapped or placed in a carry-out container to protect the food during service or delivery to the consumer, by a food handler, upon consumer request.
Person in Charge (PIC)	The person present at a food establishment who is responsible for the operation at the time of inspection.
Self-served food	Restaurant-type food that is available at a salad bar, hot food bar, buffet line, cafeteria line, or similar self-service facility, and is served by the consumers themselves. Self-service food also includes self-service beverages, such as drinks dispensed from a soda fountain and coffee available on a self-service basis.
Self-service	Areas where a food handler is not present to serve a consumer and the consumer is responsible for serving themselves, such as at a buffet, salad bar, sushi bar, or display case.

## References

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FARE: Facts and Statistics

<https://www.foodallergy.org/resources/facts-and-statistics>

UC Davis: Food allergies in children: Pediatric guidelines, diagnosis and more (ucdavis.edu)

<https://health.ucdavis.edu/blog/good-food/food-allergies-in-children-pediatric-guidelines-diagnosis-and-more/2021/07>

Serbes 2022: Serbes et al. Clinical features of anaphylaxis in children. Allergy Asthma Proc.

FARE/Child: How a Child Might Describe a Reaction | Food Allergy Research & Education

<https://www.foodallergy.org/resources/how-child-might-describe-reaction>

SNHD: HACCP-Based SOPs (southernnevadahealthdistrict.org)

<https://www.southernnevadahealthdistrict.org/download/FERL-Resources/SOP-ALLERGY-TRAINING-AND-RESPONSE-20190102.pdf>

Significant portions of this guidance were informed by materials developed by the Southern Nevada Health District.

<https://www.southernnevadahealthdistrict.org/permits-and-regulations/food-establishment-resource-library/food-allergy-awareness-materials/>

FARE: Navigating Food Assistance Programs with Food Allergies

<https://www.foodallergy.org/resources/food-banks-and-soup-kitchens>

FDA: Have Food Allergies? Read the Label

<https://www.fda.gov/consumers/consumer-updates/have-food-allergies-read-label>

### Thank you, 2021-2023 Council II Allergen Committee Members

#### **Voting Members (Name, Position within Committee, CFP Constituency, Employer, Location)**

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