

CT Children's CLASP Guideline

Food Allergy

INTRODUCTION

According to the Food Allergy Research and Education network (FARE), 1 in every 13 children in the United States under age 18 have food allergies. Overall, food allergies affect nearly 15 million people in the United States, but the greatest increase has been seen in non-Hispanic black children.

COMMON FOOD ALLERGENS: A child could be allergic to any food, but these nine common allergens account for 90% of all reactions in children: milk, eggs, peanuts, soy, wheat, tree nuts (such as walnuts and cashews), fish, shellfish, and sesame.

FOOD ALLERGY REACTIONS: Food allergy reactions can vary from person to person. Some can be very mild and only involve one part of the body, like hives on the skin. Others can be more severe and involve more than one part of the body. Reactions can happen within a few minutes or up to a few hours after contact with the food. Food allergy reactions can affect the following areas of the body:

- **Skin:** itchy red bumps (hives); eczema; redness and swelling of the face or extremities; itching and swelling of the lips, tongue, or mouth (skin reactions are the most common type of reaction)
- **GI Symptoms:** abdominal pain, nausea, vomiting, diarrhea, FPIES*
- **Respiratory tract:** runny or stuffy nose, sneezing, coughing, wheezing, shortness of breath, tightness of throat, hoarse voice.
- **Cardiovascular system:** lightheadedness, fainting

ANAPHYLAXIS: A serious, sudden, and potentially life-threatening allergic reaction with widespread effects on the body.

- **Diagnostic Criteria for Anaphylaxis (*must meet ONE of the following three criteria*):**
 1. Acute onset (seconds to minutes) of skin and/or mucosal involvement (e.g. generalized hives, pruritus or flushing, swollen lips/tongue/uvula), AND respiratory compromise (e.g. dyspnea, wheeze/bronchospasm, stridor, hypoxemia) OR reduced blood pressure or associated symptoms of end-organ dysfunction (e.g. hypotonia, syncope, incontinence)
 2. TWO OR MORE OF THE FOLLOWING that occur rapidly after exposure to a LIKELY allergen for that patient (seconds to minutes):
 - a) Skin-mucosal involvement (e.g. generalized hives, pruritus or flushing, swollen lips/tongue/uvula)
 - b) Respiratory compromise (e.g. dyspnea, wheeze/bronchospasm, stridor, hypoxemia)
 - c) Reduced blood pressure or associated symptoms (e.g. hypotonia, syncope, incontinence)
 - d) Persistent gastrointestinal symptoms (e.g. crampy abdominal pain, vomiting, diarrhea)
 - e) Additional signs of anaphylaxis that may be seen in infants: regurgitation or spitting up, flushing, hoarseness or dysphonia, loose stools, sudden onset of lethargy, irritability, crying, extreme fussiness.
 3. Reduced blood pressure after exposure to a KNOWN allergen for that patient (seconds to minutes):
 - a) Infants and children – Low systolic blood pressure (age-specific) or greater than 30% decrease in systolic blood pressure from baseline
 - b) Adults – Systolic BP of less than 90 mmHg or greater than 30% decrease from that person's baseline
- For additional information, see [Appendix A: AAAAI – Anaphylaxis, see policy statement](#)

* **FOOD PROTEIN-INDUCED ENTERCOLITIS SYNDROME (FPIES):** A gastrointestinal food hypersensitivity that manifests as delayed-onset profuse, repetitive vomiting often with diarrhea, leading to dehydration, lethargy, and potentially shock in the acute setting, or weight loss and failure to thrive in a chronic form. This disease primarily affects infants but can affect older children. For additional info, see [Appendix B: FPIES](#)

INITIAL EVALUATION AND MANAGEMENT

- Targeted History and Physical Exam
- Assess what triggers the allergic symptoms
- Educate on food avoidance to the suspected food that caused the reaction
- For a history of anaphylaxis or a definite allergic reaction, provide Epinephrine prescription (see table below) and administration education ([Appendix C: Anaphylaxis EpiPen](#)); if Epinephrine was prescribed in and Emergency room or elsewhere, reinforce device education

Recommended dosing by weight for epinephrine injection		
7.5-15 kg	15-30 kg*	>30 kg
0.1 mg EAI (Auvi-Q) if available	0.15 mg EAI	0.3 mg EAI
0.15 mg EAI (if Auvi-Q unavailable)	*Consider switching to 0.3 mg at 25 kg to prevent underdosing	
Available formularies: Auvi-Q dosing 0.1 mg/0.15 mg/0.3 mg ; EpiPen Jr 0.15 mg; EpiPen 0.3 mg		
Per: Anaphylaxis: A 2023 practice parameter update		

- We do not recommend generalized or untargeted food panel blood testing as there is risk of frequent false positive results, especially in children with atopic dermatitis (could consider component testing to foods in question if available)
- Provide patient with an allergy plan: [Allergy and Anaphylaxis Emergency Plan](#)

WHEN TO REFER

Referral to Allergy Clinic NOT needed for children who:

- Oral Allergy Syndrome - patients with seasonal allergies who experience ONLY oral itching +/- perioral rash/hives with consumption of fresh fruits and vegetables
- Have no known food causing the reaction
- Have allergic symptoms (hives/rash) that are not associated with food intake

ROUTINE REFERRAL (2-6 months; See Initial Management recommendations above in interim)

- Child who has experienced allergic symptoms (history of anaphylaxis, urticaria, angioedema, pruritis, wheezing, and/or gastrointestinal response) associated with food ingestion
- Child who has limited their diet based on suspected multiple food allergies
- Child with a previously diagnosed food allergy who needs follow-up
- Recent suspected reaction to a common food allergen (e.g. milk, egg, peanut, tree nuts, sesame seed, fish, shellfish, wheat, and soy)

EMERGENT REFERRAL (Please send child to CT Children's Emergency Department)

- Child is having acute symptoms of anaphylaxis
- Child is having acute symptoms of FPIES

HOW TO REFER

Please click here to access the [Provider Handout: Allergy Offices for Pediatric Patients](#). This is also available on Food Allergy CLASP Page

Information to be included with the referral may vary by office, but may include the following:

- Notes from the relevant initial and follow up visits
- Include copies of recent lab work if done

APPENDICES:

	TITLE	LINK
A	AAAAI - Anaphylaxis	https://www.aaaai.org/conditions-and-treatments/library/allergy-library/anaphylaxis
B	FPIES	http://www.fpies.org/images/PDF/FPIES_Overview_HealthPro_2.pdf
C	Anaphylaxis EpiPen	https://www.epipen.com/en/what-is-anaphylaxis/anaphylaxis-symptoms