

Mass General Brigham  
Mass General for Children

## Update on Food Allergy Management in Schools

Michael Pistiner MD, MMSc  
Mass General Brigham for Children,  
Harvard Medical School,  
Boston, MA  
mpistiner@mgh.harvard.edu

HARVARD MEDICAL SCHOOL  
TEACHING HOSPITAL

1

## School Food Allergy Management in 2026



### What's new?

- Management of Food Allergy in School: American Academy of Pediatrics Clinical Report (Fall 2025)
- 2025-2030 Dietary Guidelines for Americans (Jan 2026)
- Recent availability of MA 2022/2023 Epinephrine Administration Data

2

## Food Allergy Management in Schools: 2026 Update

### What's relatively new?

- Food Allergy and Management in School (FAMS) Recommendations
- Newly FDA approved intranasal epinephrine and omalizumab
- Updates to FDA labelling

3

Mass General Brigham  
Mass General for Children

## Speaker Disclosure Information

I have the following financial relationships with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services discussed in this training:

Research Support from: USDA/National Peanut Board, USDA/Egg Nutrition Center and Kaleo  
 Consultant for: AAFA National  
 Program Support: DBV Technologies  
 Advisory Board: Novartis, Bryn, kaleo, Anjo, Food Graph  
 Co-Founder and Content Creator: Allergy Home and Allergy Certified Training

I will give a balanced presentation using the best available evidence to support my conclusions and recommendations.

I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.

4

## Pediatric Food Allergy: What's Our Role?

- Provide medical management
  - Diagnosis, management and treatment
- Provide education and anticipatory guidance
  - Practical food allergy management strategies



5

## Our Responsibilities Extend to the School Setting

- Much of our patient's days are spent in the care of early childcare centers and schools
- We play a vital role (direct or indirect) in food allergy education in school



6

**We Play a Key Role in Assisting Schools in the Care of OUR Patients**

- Write Allergy and Anaphylaxis Emergency Plans
- Prescribe epinephrine
- Work with our patient's school to establish reasonable individual health plan
  - Consider 504 when school unable to implement adequate policy



7

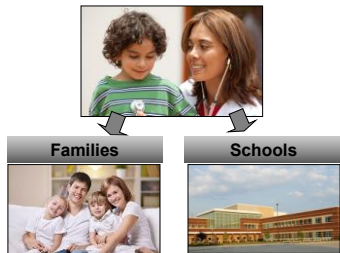
**Many Play a Direct Role in School Health**

- Help guide and establish food allergy policy
- Prescribe stock epinephrine and write standing orders
- Assist in school community education
- Help bridge the gap between families of students with and without food allergies

\*Especially important in schools without school nurses

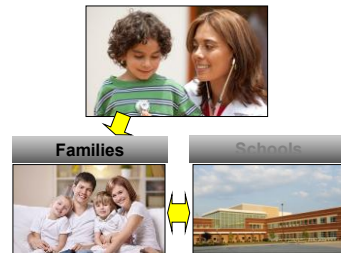
8

**Food Allergy School Education**



9

**Food Allergy School Education**



10

**Pillars of Food Allergy Management**



These must be applied at all times and in all settings

11

**Consolidate Your Efforts**

- Re-enforce and teach universal food allergy management strategies
  - This will emphasize the very same strategies that need to be implemented in School
  - Practical and evidence based when possible
    - Maintain safety and quality of life
    - Minimize negative impact on others
- Correct misperceptions and unreasonable expectations



12

**Practical Food Allergy Management Strategies**

**Prevention**

**A.C.T. to Prevent Accidental Exposures**

- A**VOID
- C**OMMUNICATE
- T**EACH

**Emergency Preparedness**

**Be prepared to R.E.Act**  
Recognize Anaphylaxis

- Epinephrine
- Activate Emergency Response

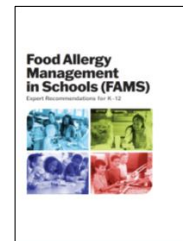
**These must be applied at all times and in all settings**

13



Sicherer SH, O'Leary S, Pastner M, Wang J. Management of Food Allergy in Schools: Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168.

14



2024 Food Allergy Management in Schools Expert Recommendations (FAMS)

14

**Management of Food Allergy in School: The American Academy of Pediatrics Clinical Report**



- Food Allergy in Schools: Clinical Context**
- AAP Clinical Report Update (Replaces 2010 Report)
    - Food allergy affects up to 10% of children
    - Anaphylaxis occurs in approximately 1 in 15 schools per year
    - Reactions may be severe and life-threatening
  - Implications for Schools
    - Risk exists for both known and undiagnosed students
    - Schools require comprehensive approaches to:
      - Reduce risk of allergen exposure
      - Ensure timely recognition and treatment of reactions
- [Sicherer SH, O'Leary S, Pastner M, Wang J. Management of Food Allergy in Schools: Clinical Report. Pediatrics. 2025 Dec 1;156\(6\):e2025073168.](#)

15

**Management of Food Allergy in School: The American Academy of Pediatrics Clinical Report**



- What's new since 2010 clinical report?**
- New national guidelines and laws have strengthened how schools manage food allergies
    - The CDC, AAP, and other expert groups have issued updated recommendations, including support for stock epinephrine in schools
  - This updated report brings together the latest guidance and research to help pediatricians advise families, schools, and policymakers on best practices

[Sicherer SH, O'Leary S, Pastner M, Wang J. Management of Food Allergy in Schools: Clinical Report. Pediatrics. 2025 Dec 1;156\(6\):e2025073168.](#)

16

**Management of Food Allergy in School: The American Academy of Pediatrics Clinical Report**



- Principles of School Food Allergy Management**
- Risk Reduction**
    - Strategies to minimize allergen exposure
    - Age-appropriate supervision and safe practices
  - Recognition and Treatment**
    - Prompt identification of signs and symptoms of allergic reactions and anaphylaxis
    - Immediate administration of epinephrine as first-line therapy
    - Activation of emergency medical services (EMS)

[Sicherer SH, O'Leary S, Pastner M, Wang J. Management of Food Allergy in Schools: Clinical Report. Pediatrics. 2025 Dec 1;156\(6\):e2025073168.](#)

17

**Management of Food Allergy in School: The American Academy of Pediatrics Clinical Report**



- Role of the Pediatrician/Primary Care Clinician**
- Clinical Responsibilities**
    - Diagnose and document potentially life-threatening food allergy
    - Prescribe epinephrine:
      - For individual patients
      - Support availability of stock (unassigned) epinephrine
  - Education**
    - Provide education to:
      - Children and families (prevention, recognition, management)
      - School personnel (recognition and treatment of reactions)
  - Collaborate in development of individualized health care plans /emergency plans

[Sicherer SH, O'Leary S, Pastner M, Wang J. Management of Food Allergy in Schools: Clinical Report. Pediatrics. 2025 Dec 1;156\(6\):e2025073168.](#)

18

### Management of Food Allergy in School: Clinical Report School Notification and Written Plans



- Primary care or Allergy plays a key role in communication
  - Documentation of a food allergy diagnosis and authorizing treatment
  - Discussions with family about diagnosis, treatment and management
    - Developmentally appropriate management skills
    - Epinephrine availability
    - Assistance with creating school plans when needed

Sicherer SH, O'Leary S, Pflieger M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. 19

19

### Management of Food Allergy in School: Clinical Report Documentation of Food Allergy



- An accurate diagnosis of food allergy is necessary prior to development of a student specific management plan
- Primary care may collaborate with allergy to optimize diagnosis and management
  - Clinical history is key (food trigger, signs, symptoms, timing)
  - Consider selective/specific testing and collaboration with board certified allergist who can perform skin testing and oral food challenge if indicated

Sicherer SH, O'Leary S, Pflieger M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. 20

20

### Management of Food Allergy in School: Clinical Report Allergy and Anaphylaxis Emergency Plan



- Universal individualized written allergy and anaphylaxis emergency plan (available in English and Spanish) has been developed by the AAP
  - Can be embedded into the electronic health record
  - Copies of the plan to
    - parent/caregiver,
    - school health,
    - student, if appropriate.
- The written plan provides individualized guidance and treatment authorization

Sicherer SH, O'Leary S, Pflieger M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. 21

21

### Management of Food Allergy in School: Clinical Report Allergy and Anaphylaxis Emergency Plan



- The individualized emergency plan can inform a school-wide Emergency Action Plan:
  - identifying exact locations of individual and stock epinephrine devices
  - local emergency medical services contacts
  - current parent/guardian contact information
  - specific interventions necessary to meet state and district rules and laws

Sicherer SH, O'Leary S, Pflieger M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. 22

22

### Allergy and Anaphylaxis Emergency Plan

• AAP Universal Plan

**Medicines/Doses**  
Epinephrine (if more than one epinephrine is selected, then any one can be used):

<b>Intranasal:</b>	<b>Intranasal:</b>
<input type="checkbox"/> 0.10 mg (7.5 kg to less than 13 kg)*	<input type="checkbox"/> 1 mg (4 years or older and 15 kg to less than 30 kg)
<input type="checkbox"/> 0.15 mg (13 kg to less than 25 kg)	<input type="checkbox"/> 2 mg (30 kg or more)
<input type="checkbox"/> 0.30 mg (25 kg or more)	

\*Use 0.15 mg, if 0.10 mg is not available

Antihistamine (non-sedating preferred), by mouth (type and dose)  
Other (for example, inhaler/bronchodilator if child has asthma)

• Includes intranasal

• Includes an option for antihistamine

23

23

### Allergy and Anaphylaxis Emergency Plan

4. Give other medicine, if prescribed. Do not use other medicine in place of epinephrine.

- Antihistamine
- Inhaler/bronchodilator

**Monitor child**  
What to do  
Stay with child and:  
• Watch child closely.  
• Give antihistamine (if prescribed).  
• Call parents and CHILD's doctor.  
• If more than 1 symptom or symptoms of severe allergy/anaphylaxis develop, use epinephrine. (See "For Severe Allergy and Anaphylaxis.")

• Includes an option for antihistamine

24

24

## Allergy and Anaphylaxis Emergency Plan

- AAP Universal Plan
- Includes intranasal
- Includes an option for antihistamine

25

## Management of Food Allergy in School: Clinical Report Individualized Health Care Plans

- A written allergy and anaphylaxis emergency plan may provide the basis for the student's IHP
  - The student-specific written allergy and anaphylaxis emergency plan may be sufficient for documentation of allergy and authorization of treatment
- Individualized Health Care Plan (IHP)
  - Nursing document created by school nurse/school health
  - Includes a management plan with preventive procedures for day-to-day school management
  - Developed by the school nurse in collaboration with the student, parents, primary care clinician, and other school personnel

[Sicherer SH, O'Leary S, Plisner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156\(6\):e2025073168.](#)

26

## Management of Food Allergy in School: Clinical Report Individualized Health Care Plans

- The IHP can be revised by the school nurse on the basis of age and developmental stage
- Schools may establish a core team responsible for food allergy management to ensure that:
  - Reasonable and nondiscriminatory avoidance plans are in place
  - An emergency treatment plan is reviewed and practiced periodically
  - Staff are designated and trained to recognize and treat anaphylaxis (Both individual student and school wide)

[Sicherer SH, O'Leary S, Plisner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156\(6\):e2025073168.](#)

27

## Management of Food Allergy in School: Clinical Report 504 Plans

- Section 504 of the Rehabilitation Act of 1973**
- Guarantees students with food allergy access to education in the least restrictive environment
  - 504 Plans apply to any school that receives federal funding
    - A written management plan of accommodations for the individual student, allowing the student to participate safely and equally alongside peers during all normal facets of the school day
    - All public and many private schools
    - Provides legal recourse when unable to come to terms on educational plans based on health care needs through usual channels

[Sicherer SH, O'Leary S, Plisner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156\(6\):e2025073168.](#)

28

## Management of Food Allergy in School: Clinical Report Laws Regarding Management and Stock Epinephrine

- State laws/regulations vary widely**
- Range from specific (e.g. self carry) to comprehensive (e.g. policy)
  - Opportunities for advocacy for common sense legislation

[Sicherer SH, O'Leary S, Plisner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156\(6\):e2025073168.](#)

29

## Management of Food Allergy in School: Clinical Report Stock Epinephrine

- Stock/Unassigned/Undesignated Epinephrine**
- Epinephrine devices not prescribed to specific individuals
  - Used for:
    - Undiagnosed anaphylaxis cases
    - Known allergies without personal devices or needing extra doses
  - In schools with stock epi, ~49% of reactions treated with unassigned devices
  - 2013 School Access to Emergency Epinephrine Act incentivizes state laws for stock epi in K-12

[Sicherer SH, O'Leary S, Plisner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156\(6\):e2025073168.](#)

30



### State to State Variation

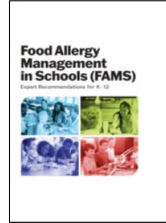
State	Nurse Staffing (Ratio, FTE, Coverage)	Epinephrine Policy (Stock + Administration)	Guidelines (Latest)
Massachusetts	~1,400–1,000; often 1.0 FTE per school; typically 1–2 schools per nurse; FT common but not universal	Stock allowed (not required); trained non-nurses may administer to <b>known only</b>	Yes – 2016 state guidance
Connecticut	~1,700–1,200; mixed FTE; often shared across 2+ schools	<b>Stock required</b> ; trained non-nurses may administer	Yes – 2020 statewide guideline
Maine	~1,800–1,500+; part-time/regional; 2–4+ schools per nurse	Stock allowed; trained staff may administer	Yes – NASN-aligned (2023)
New Hampshire	~1,800–1,200; shared nurses; 2–3 schools per nurse	Stock allowed; delegated staff may administer	No single statewide guideline
Rhode Island	~1,500–900 (urban better); mix of FT/shared; 1–3 schools per nurse	Stock allowed; trained staff may administer	State law + local policies
Vermont	~1,800–1,500+; regional/shared; 2–4 schools per nurse	Stock allowed; delegated staff may administer	State law + local policies

NASN benchmark: 1,750 (general), 1,225 (chronic conditions)

31



### Food Allergy Management in Schools (FAMS): Expert Recommendations 2024



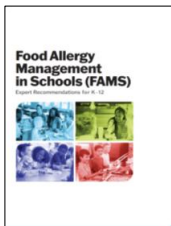
- National-level guideline created by FARE in collaboration with the CDC, AAP, multiple professional organizations.
- Focused on providing up-to-date best practices and training recommendations.
- Complements the existing CDC Voluntary Guidelines for Managing Food Allergies In Schools and Early Care and Education Programs

[2024 Food Allergy Management in Schools Expert Recommendations \(FAMS\)](#)

32



### Food Allergy Management in Schools (FAMS): Expert Recommendations 2024



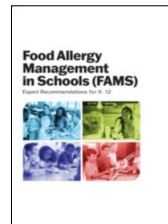
- The FAMS advisory council developed recommendations with the following goals:
  - Reduce accidental exposure to food allergens among students with known food allergies
  - Improve recognition and treatment of food allergic reactions (known and unknown)
  - Ensure that students with food allergies can participate fully and safely in all school

[2024 Food Allergy Management in Schools Expert Recommendations \(FAMS\)](#)

33



### Food Allergy Management in Schools (FAMS): Expert Recommendations 2024



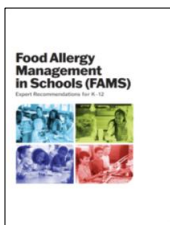
- The FAMS advisory council developed 34 recommendations (Divided in 4 Focus Areas):
  - Personnel Training and Education
  - Preventing Allergen Exposure
  - Preparing for Emergencies
  - Communication and Collaboration

[2024 Food Allergy Management in Schools Expert Recommendations \(FAMS\)](#)

34



### Food Allergy Management in Schools (FAMS): Expert Recommendations 2024



- Because these recommendations may not be appropriate or feasible for every school, districts should first determine what must be implemented based on federal and state law and local policies, and implement those recommendations
- Recommendations are voluntary and schools may consider them in determining what actions may be appropriate for an individual student
- Recommendations are intended for school administrators and district leaders
  - Also relevant for use by caregivers of students with food allergies, teachers, school nurses, and other school and district staff

[2024 Food Allergy Management in Schools Expert Recommendations \(FAMS\)](#)

35



### AAP Clinical Report & FAMS Recommendations

Domain	AAP Clinical Report (2025)	FAMS Recommendations (2024)
Personnel Training & Education	Standardized training for all staff; focus on anaphylaxis recognition and epinephrine use	Structured training modules and checklists; practical staff training
Preventing Allergen Exposure	Individualized risk reduction; discourages blanket bans; age-appropriate strategies	Operational guidance on cafeteria, cleaning, food handling policies
Preparing for Emergencies	Immediate epinephrine first-line; supports stock epi; plans for known and first-time events	Detailed emergency protocols; promotes stock epi; drills and workflows
Communication & Collaboration	Coordination among pediatricians, families, schools; establishing a diagnosis; formal care plans (ECP)/HIP/504	Tools for school communication, team coordination, family engagement
Overall Objective & Audience	Evidence-based clinical guidance to pediatricians, school health teams, policymakers	Practical implementation toolkit for schools, nurses, families

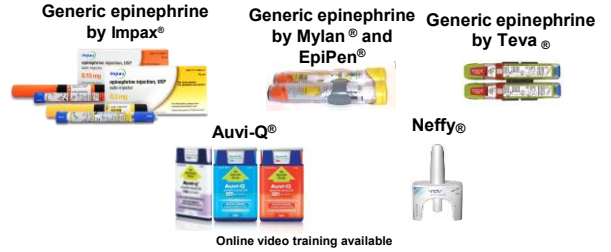
36

## Food Allergy Updates that Impact School Management

Topic	Key Points	Implications for Schools
AAP & FAMS Guidance	FDA Clinical (AAP 2025) & practical toolkit (FAMS 2024)	Use as reference for care plans, emergency readiness, and training
Intranasal Epinephrine	FDA-approved nasal delivery; alternative to auto-injectors	Update stock epi policies, staff training, storage, and accessibility
Stock Epinephrine Laws	Expanding state mandates/authorization	Update policies, train staff, maintain stock
Omalizumab	Anti-IgE biologic; raises reaction threshold	Document in ECP/HCP; does not replace epinephrine or readiness
Oral Immunotherapy (OIT)	Desensitization therapy increasing tolerance	Include OIT status in care plans; maintain epinephrine access
FDA Food Labeling (2025)	Updated allergen disclosure rules	Review cafeteria food, label checking, and staff communication
2025–2030 Dietary Guidelines (DGA)	Federal nutrition guidance	Align nutrition standards with allergen accommodations
Anaphylaxis Definition & Toolkit (Dribin)	New consensus definition and practical toolkit for recognition and management	Incorporate updated criteria and toolkit into school protocols
Joint Taskforce Anaphylaxis Practice Parameters	Recommend epinephrine use does not always require calling 911	School policies and regulations still require 911 activation after epinephrine use

37

## Available Epinephrine Delivery Systems



38

## Epinephrine Nasal Spray

**NEFFY (nefes) epinephrine nasal spray (single-use)**  
 For Use in the Nose Only

**1A Remove neffy from packaging (see Figure 1A).**  
 Hold over the neffy until you are ready to use it. Do not use the neffy until you are ready to use it. Do not use the neffy until you are ready to use it.

**1B Hold device as shown (see Figure 1B).**  
 Hold the device with your thumb on the bottom and your index finger on the side. Do not touch the nozzle. Do not touch the nozzle.

**1C Insert the nozzle into a nostril until your fingers touch your nose (see Figure 1C).**  
 Do not touch the nozzle. Do not touch the nozzle.

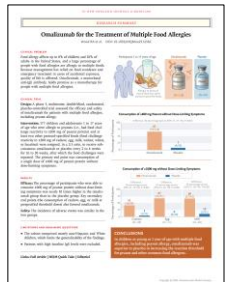
**1D Press plunger up firmly until it stops at the top (see Figure 1D).**  
 Do not touch the nozzle. Do not touch the nozzle.

**Important Information:**  
 Use only in the nose. Avoid spraying in the eyes or mouth.  
 Do not use if you are pregnant or breastfeeding.  
 Each neffy unit is for single use only.  
 Do not use if you are pregnant or breastfeeding.  
 Do not use if you are pregnant or breastfeeding.

39

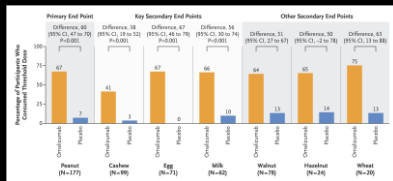
## Omalizumab for Food Allergy

- In this trial involving 180 persons with food allergies, omalizumab was effective in increasing the reaction threshold for peanut and other common food allergens
- In persons as young as 1 year of age with multiple food allergies, omalizumab treatment for 16 weeks was superior to placebo in increasing the reaction threshold for peanut and other common food allergens

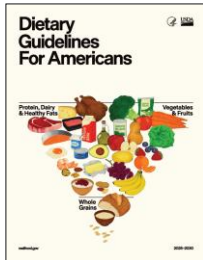


40

Successful Consumption of Prespecified Threshold Dose at Week 16.



### Dietary Guidelines for Americans: 2025-2030



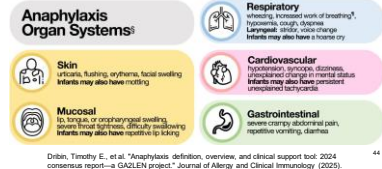
DGA 2025-2030 Overview	Potential Impact on Students with Food Allergies
Federal nutrition guidance by USDA & HHS	Must balance nutrition goals with allergen-safe options
Emphasizes dairy, fruits, vegetables, whole grains, and nutrient-dense foods	Menu planning for dairy-free, nut-free, or other allergy-specific diets
Recommends reduced added sugars, sodium, saturated fats, and processed foods	Many allergen free foods may be considered processed
Encourages inclusive nutrition planning in schools	Staff training on label checking, substitutions, and cross-contact prevention
Guides school meal and snack standards	Impact on school nutrition services still to be determined (budgets, allergen free alternatives, etc.)

43

### Anaphylaxis definition, overview, and clinical support tool: 2024 consensus report

#### Anaphylaxis Definition:

"A serious allergic (hypersensitivity) reaction that can progress rapidly and may cause death. It may involve the skin/mucosa (includes lip/tongue), respiratory (lungs, breathing), cardiovascular (heart, blood pressure), and/or gastrointestinal (stomach/gut) systems. Life-threatening anaphylaxis is characterized by respiratory and/or cardiovascular involvement and may occur without skin/mucosa involvement" -Consensus Definition (Dribin et. al. 2025)



44

### Anaphylaxis definition, overview, and clinical support tool: 2024 consensus report

**Anaphylaxis is likely when any one of the following three criteria are fulfilled**

- No Known\* Allergen Exposure**  
Sudden onset of an illness (minutes to several hours) with **Skin/Mucosal** involvement AND either:  
• Respiratory involvement  
• Cardiovascular involvement
- Likely or Known\* Allergen Exposure**  
Sudden onset of two or more of the following:  
• Skin/Mucosal involvement  
• Respiratory involvement  
• Cardiovascular involvement  
• Severe Gastrointestinal involvement †
- Known\* Allergen Exposure**  
Sudden onset of either:  
• Respiratory involvement after exposure to a non-inhaled allergen  
• Cardiovascular involvement

**Symptoms:**

- Skin:** urticaria, flushing, erythema, facial swelling. Infants may also have hives/ry.
- Mucosal:** lip, tongue, or oropharyngeal swelling, severe throat tightness, difficulty swallowing. Infants may also have repetitive lip-licking.
- Respiratory:** wheezing, increased work of breathing\*, hypoxemia, cough, stridor. Laryngeal edema, voice change. Infants may also have a hoarse cry.
- Cardiovascular:** hypotension, syncope, dizziness, unexplained change in mental status. Infants may also have persistent unexplained tachycardia.
- Gastrointestinal:** severe crampy abdominal pain, repetitive vomiting, diarrhea.

45

### Anaphylaxis 2023 practice parameter update: Consideration for Home/ Community Management

- Patients/caregivers engaged in shared decision making
- Immediate access to at least 2 epinephrine devices
- Immediate access to others who can provide help
- Clear understanding of the symptoms that warrant the immediate use of epinephrine
- Familiarity with the epinephrine device administration technique
- Clear understanding of the benefits of early epinephrine treatment in anaphylaxis
- Good adherence to previous treatment recommendations



Golden, David B.K. et al. Anaphylaxis: A 2023 practice parameter update. *Annals of Allergy, Asthma & Immunology*, Volume 132, Issue 2, 124 - 176

46

### Mandated Reporting of Epinephrine Administration in MA Schools

"Anaphylactic Events and the Administration of Epinephrine in Schools in Massachusetts"

- MA Public and Private Schools
- Annually collected since 2003
- Initial data used for advocacy regarding availability of stock/undesigned epinephrine
- Most recent, available: July 1, 2022- June 30, 2023



47

### Characteristics of Individuals Who Experienced an Anaphylactic Event (Public and Private Schools)

History of any known allergies	#	%
Did not have an allergy history	63 [5.5]	18.9 [19.2]
Had an allergy history	265 [230]	79.6 [80.4]
Unknown	5 [1]	1.5 [0.3]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100.0]</b>
Existence of an allergy action plan	#	%
Did not have an allergy action plan	91 [94]	27.3 [32.9]
Had an allergy action plan	190 [165]	57.1 [57.7]
Unknown	8 [2]	2.4 [0.7]
Not applicable (there was no history of allergy)	40 [25]	12 [8.7]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100.0]</b>

MA DPH School Health Service; P023-22 Epinephrine Data Report; Released Aug 2024

48

### Characteristics of Individuals Who Experienced an Anaphylactic Event (Public and Private Schools)



History of anaphylaxis	#	%
No history of anaphylaxis	119 [113]	35.7 [39.5]
Had a history of anaphylaxis	151 [128]	45.3 [44.8]
Unknown	63 [45]	18.9 [15.7]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100.0]</b>
Previous epinephrine use	#	%
No prior epinephrine use	133 [135]	39.9 [47.2]
Prior epinephrine use	116 [97]	34.8 [33.9]
Unknown	82 [54]	24.6 [18.9]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100.0]</b>
Previous epinephrine prescription	#	%
No prior epinephrine prescription	71 [66]	21.3 [23.1]
Prior epinephrine prescription	237 [203]	71.2 [71.0]
Unknown	19 [17]	5.7 [5.9]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100.0]</b>

MA DPH School Health Service, FY 23+22 Epinephrine

49

### Characteristics of Individuals Who Experienced an Anaphylactic Event (Public and Private Schools)



Type of person treated for anaphylaxis	# of Individuals 22/23 [21/22]	% Total Admin
Staff	40 [23]	12 [8]
Student	292 [259]	88 [91]
Visitor	0 [3]	0 [1]
Don't know	1 [1]	0.3 [0.3]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100]</b>



MA DPH School Health Service, FY23+22 Epinephrine Data Report

50

### Characteristics of Individuals Who Experienced an Anaphylactic Event (Public and Private Schools)



Age	22/23 [21/22]	#	22/23 [21/22]%
<<5	19 [15]	5.7 [5.2]	
6	12 [9]	3.6 [3.1]	
7	15 [14]	4.5 [4.9]	
8	17 [15]	5.1 [5.2]	
9	12 [16]	3.6 [5.6]	
10	19 [12]	5.7 [4.2]	
11	20 [21]	6 [7.3]	
12	20 [9]	6 [3.1]	
13	24 [30]	7.2 [10.5]	
14	37 [25]	11.1 [8.7]	
15	25 [33]	7.5 [11.5]	
16	25 [36]	7.5 [12.6]	
17	25 [19]	7.5 [6.6]	
>=18	51 [30]	15.3 [10.5]	
?	12 [2]	3.6 [0.7]	
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100]</b>	

MA DPH School Health Service, FY23+22 Epinephrine Data Report

51

### Characteristics of Individuals Who Experienced an Anaphylactic Event (Public and Private Schools)



Race/Ethnicity <sup>1,2</sup>	22/23 [21/22]	#	% Total Admin
African American/Black non-Hispanic/Latinx	36 [30]	11 [10.5]	
Asian non-Hispanic/non-Latinx	28 [37]	8.4 [12.9]	
American Indian/Alaskan Native non-Hispanic/non-Latinx	1	0.3	
Hispanic/Latinx	65 [38]	19.5 [13.3]	
White non-Hispanic/non-Latinx	151 [136]	45.3 [47.6]	
Multi-race non-Hispanic/non-Latinx	12 [6]	3.6 [2.1]	
Unknown non-Hispanic/non-Latinx	36 [34]	10.8 [11.9]	
Another race non-Hispanic/non-Latinx <sup>3</sup>	4 [5]	1.2 [1.7]	
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100.0]</b>	

1. Race/Ethnicity was determined by the school nurse using school records or other available information. Note, we've modified the categories that school nurses chose from "Spanish/Hispanic/Latino" was modified to "Hispanic/Latinx" and "Black or African American" to "African American/Black" to align with current data standards.  
 2. Race/Ethnicity categories are mutually exclusive, so each person who was administered epinephrine is classified in only one of the rows in this table. If someone is listed as Hispanic/Latinx they are not included in any of the race categories.  
 3. "Another race" includes those whose race was listed as "Other" and may include American Indian/Alaska Native or Native Hawaiian/Other Pacific Islander.

MA DPH School Health Service, FY23+22 Epinephrine Data Report

52

### Characteristics of Individuals Who Experienced an Anaphylactic Event (Public and Private Schools)



Sex	#	%
Female	173 [158]	52 [55.2]
Male	159 [126]	48 [44.1]
Unknown	1 [2]	0.3 [0.7]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100]</b>

Enrollment by Sex (2024-25)	
Sex	State
Female	444,147
Male	470,190
Total	915,932

MA DPH School Health Service, FY 23+22 Epinephrine Data Report

53

### Characteristics of Individuals Who Experienced an Anaphylactic Event (Public and Private Schools)



History of asthma	#	%
No history of asthma	197 [175]	59.2 [61.2]
Had a history of asthma	108 [85]	32.4 [29.7]
Unknown	23 [24]	6.9 [8.4]
Did not select an answer	5 [2]	1.5 [0.7]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100]</b>



MA DPH School Health Service, FY 23+22 Epinephrine Data Report

54

### Characteristics of Anaphylactic Events



Trigger	# of Individuals	% of Total Admin
Food	235 [188]	70.6 [65.7]
Insect sting	13 [16]	3.9 [5.6]
Latex	3 [1]	0.9 [0.3]
Medication	3 [3]	0.9 [1.0]
Other	1 [8]	0.3 [2.8]
Unknown	78 [68]	23.4 [23.8]
Did not select an answer	0 [2]	0 [0.7]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100]</b>



MA DPH School Health Service, FY23+22 Epinephrine Data Report

55

55

### Characteristics of Anaphylactic Events

Mode of contact with food allergen	# of Indiv	% of total admin
Ingested	206 [159]	61.9 [55.6]
Inhaled	5 [8]	1.5 [2.8]
Touched	4 [9]	1.2 [3.1]
Don't know	8 [3]	2.4 [1.0]
Other	5 [2]	1.5 [0.7]
Not applicable (food was not the trigger)	98 [96]	29.4 [33.6]
Did not select an answer	7 [9]	2.1 [3.1]
<b>TOTAL</b>	<b>333[286]</b>	<b>100 [100.0]</b>



MA DPH School Health Service, FY 23+ 22 Epinephrine Data Report

56

### Characteristics of Anaphylactic Events



Location where symptoms developed	# 23/24 [22/23]	% of total admin
Bus	4 [5]	1.2 [1.7]
Cafeteria	76 [62]	22.8 [21.7]
Classroom	158 [128]	47.4 [44.8]
Gymnasium	7 [9]	2.1 [3.1]
Health office	19 [25]	5.7 [8.7]
Playground or sports field	12 [26]	3.6 [9.1]
Other	48 [29]	14.4 [10.1]
Did not select an answer	9 [2]	2.7 [0.7]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100[100.0]</b>



MA DPH School Health Service, FY23+22 Epinephrine Data Report

57

57

### Characteristics of Anaphylactic Events



Location where epinephrine was administered	# of Indiv	% of total admin
Cafeteria	0 [2]	0 [0.7]
Classroom	4 [4]	1.2 [1.4]
Hallway	0 [1]	0 [0.3]
Health office	294 [267]	88.3 [93.4]
Other	23 [9]	6.9 [3.1]
Did not select an answer	12 [3]	3.6 [1.0]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100]</b>



MA DPH School Health Service, FY22 Epinephrine Data Report, Released Aug 2024

58

58

### Characteristics of Anaphylactic Events

Location where epinephrine was stored	# of Indiv	% of Total Admin
Health office	290 [257]	87.1 [89.9]
Carried by person given epinephrine	59 [48]	17.7 [16.8]
Main office or administrative office	1 [6]	0.3 [2.1]
Classroom	8 [5]	2.4 [1.7]
Other	12[14]	3.6 [4.9]
Did not select an answer	5 [3]	1.5 [1.0]
<b>TOTAL</b>	<b>375 [333]</b>	<b>†</b>



MA DPH School Health Service, FY23 + 22 Epinephrine Data Report

59

59

### Characteristics of Anaphylactic Events



Type of person that administered the epinephrine	# of Indiv	% of Total Admin
Parent	1[1]	0.3 [0.3]
Principal/Assistant Principal	3 [2]	0.9 [0.7]
Registered nurse	284 [254]	85.3 [88.8]
Student	0 [1]	0.0 [0.3]
Teacher	2 [1]	0.6 [0.3]
Other	7 [10]	2.1 [3.5]
Did not select an answer	36 [17]	10.8 [5.9]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100]</b>
<b>Self-administration</b>		
Epinephrine was self-administered	28 [14]	8.4 [4.9]
Epinephrine was not self-administered	299 [269]	89.8 [94.1]
Did not select an answer	6 [3]	1.8 [1.0]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100[100]</b>



MA DPH School Health Service, FY 23 + 22 Epinephrine

60

60

### Characteristics of Anaphylactic Events

Time elapsed between onset of symptoms and communication of symptoms	# of Indiv	% of Total Admin
Less than or equal to 5 minutes	182 [145]	54.7 [50.7]
6 - 10 minutes	65 [81]	19.5 [28.3]
11 - 15 minutes	15 [23]	4.5 [8.0]
16 - 30 minutes	12 [14]	3.6 [4.9]
31 - 60 minutes	8 [6]	2.4 [2.1]
Greater than 60 minutes	9 [3]	2.7 [1.0]
Unknown	31 [10]	9.3 [3.5]
Did not select an answer	11 [4]	3.3 [1.4]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100]</b>



MA DPH School Health Service; FY23+22 Epinephrine Data Report

61

61

### Characteristics of Anaphylactic Events

Time elapsed between communication of symptoms and administration of epinephrine	# of Indiv	% of Total Admin
Less than or equal to 5 minutes	165 [134]	49.5 [46.9]
6 - 10 minutes	87 [77]	26.1 [26.9]
11 - 15 minutes	30 [22]	9.0 [7.7]
16 - 30 minutes	26 [29]	7.8 [10.1]
31 - 60 minutes	11 [14]	3.3 [4.9]
Greater than 60 minutes	1 [2]	0.3 [0.7]
Unknown	2 [4]	0.36 [1.4]
Did not select an answer	11 [4]	3.3 [1.4]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100]</b>



MA DPH School Health Service; FY23+22 Epinephrine Data Report

62

62

### Characteristics of Anaphylactic Events

Presence of a biphasic reaction	#	%
A biphasic reaction occurred	20 [18]	6.0 [6.3]
No biphasic reaction occurred	146 [117]	43.8 [40.9]
Unknown	154 [145]	46.2 [50.7]
Did not select an answer	13 [6]	3.9 [2.1]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100]</b>
<b>Second dose of epinephrine</b>		
A second epinephrine dose was required	27 [25]	6.0 [8.7]
A second epinephrine dose was not required	170 [146]	43.8 [51.0]
Unknown	125 [109]	46.2 [38.1]
Did not select an answer	11 [6]	3.9 [2.1]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100]</b>

Percentages may not sum to 100% due to rounding. "Did not select an answer" indicates that the respondent stopped the question or failed to complete the questionnaire, and as a result, nothing can be inferred from the answer. "Unknown" is a response option and indicates that the respondent answered the question by selecting "unknown" or "Don't know."

MA DPH School Health Service; FY 23+22 Epinephrine Data Report;

63

63

### Characteristics of Anaphylactic Events



Emergency room transfer	#	%
Individual was transferred to the ER	304 [267]	91.3 [93.4]
Individual was not transferred to the ER	22 [12]	6.6 [4.2]
Unknown	2 [3]	0.6 [1.0]
Did not select an answer	5 [4]	1.5 [1.4]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100]</b>

MA DPH School Health Service; FY23+22 Epinephrine Data Report;

64

64

### Characteristics of Anaphylactic Events



Location where symptoms developed	#	% of total admin
Bus	4 [5]	1.2 [1.7]
Cafeteria	76 [62]	22.8 [21.7]
Classroom	158 [128]	47.4 [44.8]
Gymnasium	7 [9]	2.1 [3.1]
Health office	19 [25]	5.7 [8.7]
Playground or sports field	12 [26]	3.6 [9.1]
Other	48 [29]	14.4 [10.1]
Did not select an answer	9 [2]	2.7 [0.7]
<b>TOTAL</b>	<b>333 [286]</b>	<b>100 [100.0]</b>

MA DPH School Health Service; FY23+22 Epinephrine Data Report

65

65

Thank you!

MA DPH School Health Service; FY 23+22 Epinephrine Data Report

66

66



Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. 67

67

## Management of Food Allergy in School: Clinical Report Stock Epinephrine



### Benefits & Challenges

- **Benefits:**
  - Expands access for those unable to afford or lacking prescribed devices
  - Enhances safety for all students and childcare attendees
- **Challenges:**
  - Costs, funding, and training requirements
  - Monitoring and replacing expired/used devices
  - Addressing legal and liability concerns
  - Storage: must be accessible, secure, and unlocked if laws permit

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. 68

68

## Management of Food Allergy in School: Clinical Report Stock Epinephrine



### Roles, Training & Legal Considerations

- Stock epi prescriptions must be written by licensed clinicians; prescribing varies by state
- School personnel beyond nurses can be trained to administer epi
- Training content and requirements differ by state
- Liability protections exist in many states for schools, nurses, and prescribers
  - Lack of legal safeguards may hinder stock epi implementation

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. 69

69

## Management of Food Allergy in School: Clinical Report Stock Epinephrine



### Expanding Access

- "Entity laws" allow stock epi in other venues (colleges, camps, public places)
- Collaboration between pediatricians and schools is crucial to:
  - Write prescriptions
  - Train staff
  - Support policies and funding
- Stock epi is essential for prompt treatment of unexpected anaphylaxis and improves overall child safety

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. 70

70

## Management of Food Allergy in School: Clinical Report Risk Reduction Strategies



### Core Principles

- Avoidance of allergen ingestion is the cornerstone of management
- Even small amounts can trigger severe reactions
- Primary route: oral ingestion
- Key prevention strategies:
  - Read ingredient labels carefully
  - Avoid cross-contact during food preparation
  - Do not share cups, utensils, or cookware
- Precautionary labels ("may contain") may pose risk

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. 71

71

## Management of Food Allergy in School: Clinical Report Risk Reduction Strategies



### Exposure Risks and Prevention in Schools

- **Lower risk exposures:**
  - Skin contact or inhalation (generally less severe)
  - Exceptions:
    - Aerosolized allergens (e.g., cooking/steaming food)
    - School cooking activities
- Hidden allergens may be in:
  - Art/science supplies (e.g., play dough, paint, animal feed)
- **Hygiene & cleaning:**
  - Wash hands with soap and water (not sanitizer alone)
  - Clean surfaces with standard household products
- Avoid food sharing & eating on school buses

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. 72

72

## Management of Food Allergy in School: Clinical Report Risk Reduction Strategies



### School Policies and Special Considerations

- Special events (e.g., birthdays) = higher risk
  - Use non-food treats or pre-approved safe foods
- Allergen restriction policies:
  - “Allergy-friendly” seating may help
  - School-wide bans are not fully effective
  - May cause social and practical challenges
- Extra precautions for:
  - Young children
  - Students with developmental challenges

Sicherer SH, O'Leary S, Pislner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. <sup>73</sup>

73

## Management of Food Allergy in School: Clinical Report Staff Training



### Staff Training is Essential

- According to the CDC(FAMS) guidelines, all staff at a school with a student with food allergy should be trained to recognize anaphylaxis and to initiate the school emergency protocol
- Schools to implement food allergy training for staff (on prevention, recognition, and treatment)
  - Label reading & cross-contact prevention
  - Emergency recognition & response
  - Clear communication with all staff (including substitutes)
- Benefits of staff training
  - Increased confidence
  - Better response to emergencies
  - Fewer allergic reactions
  - Improved access to epinephrine

Sicherer SH, O'Leary S, Pislner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. <sup>74</sup>

74

## Management of Food Allergy in School: Clinical Report School Emergency Management



### Training Implementation

- Training varies by state/district
- Often led by school nurse
- Key components:
  - Annual training
  - Assess staff confidence & competence
  - Include CPR & First Aid

Sicherer SH, O'Leary S, Pislner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. <sup>75</sup>

75

## Management of Food Allergy in School: Clinical Report School Emergency Management



### School-Wide Preparedness

- Known
  - Families to provide student specific Allergy and Anaphylaxis Emergency Plan
- Unknown
  - Not all families report allergies
  - Schools must be prepared for unknown cases
- Implement site-wide allergy protocols
- Benefits of staff training:
  - Increased confidence
  - Better response to emergencies
  - Fewer allergic reactions
  - Improved access to epinephrine

Sicherer SH, O'Leary S, Pislner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. <sup>76</sup>

76

## Management of Food Allergy in School: Clinical Report School Emergency Management



### Key points important in anaphylaxis training include:

- Anaphylaxis may occur without cutaneous findings (e.g., no urticaria)
- Maintain high suspicion with multisystem involvement
- Epinephrine = first-line therapy
  - Prompt administration is critical
- Adjunctive therapies:
  - H1 antihistamines → symptom relief only
  - Inhaled bronchodilators → for bronchospasm only
  - Do NOT delay epinephrine for adjuncts

Sicherer SH, O'Leary S, Pislner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. <sup>77</sup>

77

## Management of Food Allergy in School: Clinical Report School Emergency Management



### Key points important in anaphylaxis training include:

- Ensure competency with epinephrine devices
  - Utilize trainers and simulation when possible
- Storage & monitoring:
  - Temperature-sensitive; monitor expiration
  - Expired devices may retain partial potency if no alternative
- Safety profile:
  - No absolute contraindications in suspected anaphylaxis
  - Expected adverse effects: transient tachycardia, tremor, pallor/flushing
- Reinforce: Low risk of harm vs. high risk of undertreatment

Sicherer SH, O'Leary S, Pislner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156(6):e2025073168. <sup>78</sup>

78

## Management of Food Allergy in School: Clinical Report School Emergency Management



### Staff Preparedness & Individualized Planning

- Staff assigned to a student should:
  - Review the student's life-threatening allergies
  - Understand the emergency action plan
  - Know if the student self-carries an epinephrine device
- Clinician guidance for schools/parents:
  - Tailor precautions for the individual student
  - Coordinate supervision and emergency readiness
  - Ensure clear communication between staff, parents, and healthcare providers

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec. 1;156(6):e2025073168. 79

79

## Management of Food Allergy in School: Clinical Report School Emergency Management



### Post-Event Management

- Conduct debriefing:
  - Identify improvements
  - Address training gaps
- Document the event per district policy
- Track outcomes (e.g., number of reactions)
- Communicate with primary care provider

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec. 1;156(6):e2025073168. 80

80

## Management of Food Allergy in School: Clinical Report School Emergency Management



### Recognition & Timing of Epinephrine

- Administer epinephrine when anaphylaxis is suspected, not for mild symptoms or asymptomatic allergen exposure
- Align with school/childcare emergency plan
- Special circumstances warrant earlier administration:
  - Uncertainty if anaphylaxis is occurring
  - Student with known allergy has impaired consciousness
  - Written plan recommends epinephrine with mild/no symptoms

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec. 1;156(6):e2025073168. 81

81

## Management of Food Allergy in School: Clinical Report School Emergency Management

### Anaphylaxis is likely if any of the following 3 situations are observed:

- Acute onset (minutes to several hours from exposure) of symptoms with involvement of the skin and/or mucosal tissue (eg, generalized hives, pruritus or flushing, swollen lips/tongue/uvula) and signs or symptoms of either respiratory compromise (eg, dyspnea, wheeze/bronchospasm, stridor, reduced peak expiratory flow, hypoxemia) and/or reduced blood pressure or associated symptoms of end-organ dysfunction (eg, hypotonia, syncope, incontinence); or
- Two or more of the following occur rapidly after exposure to a likely allergen for that patient: involvement of the skin/mucosal tissue; respiratory compromise; reduced blood pressure or associated symptoms; or persistent gastrointestinal tract symptoms (eg, crampy abdominal pain, vomiting);
- Decreased blood pressure after exposure to a known allergen for that patient (within minutes to several hours).



Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec. 1;156(6):e2025073168. 82

82

## Management of Food Allergy in School: Clinical Report School Emergency Management



### Patient Positioning During Severe Anaphylaxis

- Adults:
  - Severe anaphylaxis → supine position preferred
  - Prevents "empty-ventricle syndrome" from blood pooling in legs
- Children:
  - Often have respiratory compromise
  - Recovery position (on side) may be preferable
  - Especially if vomiting or unable to tolerate supine
- Key point: Positioning should be adapted to age and symptoms

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec. 1;156(6):e2025073168. 83

83

## Management of Food Allergy in School: Clinical Report School Emergency Management



### Maturation & Self-Management Overview

- As students mature, self-carry and self-administration of epinephrine devices can be discussed
- Prompt access to additional epinephrine must be ensured
- Adult oversight remains essential for emergencies

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec. 1;156(6):e2025073168. 84

84

## Management of Food Allergy in School: Clinical Report School Emergency Management



### Expected Competencies by Age

- Ages 9–11:
  - Recognize anaphylaxis symptoms
  - Demonstrate device use with trainer
- Ages 12–14:
  - Self-carry and self-administer epinephrine devices
- Clinicians and schools should support safe transition to independence

Sicherer SH, O'Leary S, Pastner M, Wang J. Management of Food Allergy in Schools. *Clinical Report, Pediatrics*. 2025 Dec. 1;156(6):e2025073168. <sup>85</sup>

85

## Management of Food Allergy in School: Clinical Report School Emergency Management



### Assessing Readiness for Self-Management

- Assessment by pediatric healthcare provider with family and school input
- Consider:
  - Student factors: maturity, competence
  - School factors: size, availability of trained staff
- Self-carry may precede self-administration
- Periodic re-assessment is recommended

Sicherer SH, O'Leary S, Pastner M, Wang J. Management of Food Allergy in Schools. *Clinical Report, Pediatrics*. 2025 Dec. 1;156(6):e2025073168. <sup>86</sup>

86

## Management of Food Allergy in School: Clinical Report School Emergency Management



### Oversight & Safety Considerations

- Adolescents may not consistently carry epinephrine devices
  - Encourage training and consistent availability
- Trained school staff must always have epinephrine accessible
  - Staff remain ultimately responsible for administration
  - Students may be too symptomatic or distressed to self-administer

Sicherer SH, O'Leary S, Pastner M, Wang J. Management of Food Allergy in Schools. *Clinical Report, Pediatrics*. 2025 Dec. 1;156(6):e2025073168. <sup>87</sup>

87

## Management of Food Allergy in School: Clinical Report School Emergency Management



### Location of Allergic Reactions in Schools

- Most reactions occur in the classroom (~79%)
- Other locations:
  - Lunchroom (~12%)
  - Recess (outdoor settings)
  - Field trips
- Clinical implication:
  - Reactions can occur in any school setting
  - Ensure epinephrine devices and trained personnel are available at all times
  - Applies to all school-sponsored activities

Sicherer SH, O'Leary S, Pastner M, Wang J. Management of Food Allergy in Schools. *Clinical Report, Pediatrics*. 2025 Dec. 1;156(6):e2025073168. <sup>88</sup>

88

## Management of Food Allergy in School: Clinical Report School Emergency Management



### Food Protein-Induced Enterocolitis Syndrome (FPIES)

- Non-IgE-mediated food allergy
- Key features:
  - Delayed onset (~2 hours post ingestion)
  - Severe vomiting
  - Possible lethargy and hypotension
- Management differs from anaphylaxis:
  - Epinephrine is not indicated
  - May require IV hydration and emergency care
- Clinical implication:
  - Requires transfer to emergency department
  - Include management details in Emergency Action Plan

Sicherer SH, O'Leary S, Pastner M, Wang J. Management of Food Allergy in Schools. *Clinical Report, Pediatrics*. 2025 Dec. 1;156(6):e2025073168. <sup>89</sup>

89

## Management of Food Allergy in School: Clinical Report Social and Emotional Concerns



- Children with food allergy may experience:
  - negative impact on quality of life
  - anxiety and teasing
  - harassment or bullying
- Students and teachers have been identified as perpetrators of food allergy-related harassment or bullying
  - Students should be encouraged to report bullying, and anti-bullying programs can be implemented
- General education about food allergy for students and staff may promote peer support

Sicherer SH, O'Leary S, Pastner M, Wang J. Management of Food Allergy in Schools. *Clinical Report, Pediatrics*. 2025 Dec. 1;156(6):e2025073168. <sup>90</sup>

90

## Management of Food Allergy in School: Clinical Report Special Considerations for Early Education, Child Care, and Camp Settings



### Young Children

- Toddlers and young children require enhanced supervision
- Limited understanding of food allergies
- May take or accept unsafe food from others
- Frequent hand-to-mouth behavior increases exposure risk

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec. 1;156(6):e2025073168. <sup>91</sup>

91

## Management of Food Allergy in School: Clinical Report Special Considerations for Early Education, Child Care, and Camp Settings



### Exposure Risk & Prevention

- Ages 2–5: frequent hand/object-to-mouth contact
- Key mitigation strategies:
  - Handwashing before and after meals/snacks
  - Structured mealtimes with supervision
  - Prevent food sharing and food dispersion
  - Clean designated eating areas after meals

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec. 1;156(6):e2025073168. <sup>92</sup>

92

## Management of Food Allergy in School: Clinical Report Special Considerations for Early Education, Child Care, and Camp Settings



### Challenges in Recognition in Young Children

- Infants/toddlers may not verbalize symptoms
- Reactions may be recognized later in progression
- Requires heightened staff awareness and vigilance
- Recognizing Symptoms in Young Children:
  - Hands in mouth, tongue scratching
  - Voice changes, slurred speech
- Verbal descriptions may include:
  - “Spicy,” “hot,” “burning,” “tingling,” “itchy”
  - “Funny mouth,” “something stuck” in throat
- Staff training should emphasize age-specific symptom presentation

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec. 1;156(6):e2025073168. <sup>93</sup>

93

## Management of Food Allergy in School: Clinical Report Special Considerations for Early Education, Child Care, and Camp Settings



### Food Allergy Management in Camps

- Many children with food allergies attend summer camps/programs
- Reported gaps in preparedness:
  - ~24% of camps report anaphylaxis requiring epinephrine
  - <50% have individualized emergency plans
  - ~60% of campers do not provide epinephrine devices
- Clinical implications:
  - Encourage families to provide:
    - Epinephrine devices
    - Written emergency action plans
    - Other medications (e.g., asthma)
  - Reinforce importance of camp staff preparedness

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec. 1;156(6):e2025073168. <sup>94</sup>

94

## Management of Food Allergy in School: Clinical Report Special Considerations for Adolescents



### Adolescents

- Higher risk of fatal food-induced anaphylaxis
- Contributing factors:
  - Risk-taking behaviors (e.g., not reading labels, not asking about ingredients)
  - Increased exposure to cross-contact
  - Delayed recognition and treatment
- Targeted education for this age group is critical

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec. 1;156(6):e2025073168. <sup>95</sup>

95

## Management of Food Allergy in School: Clinical Report Special Considerations for Adolescents

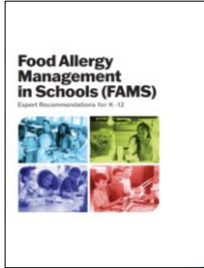


### Education Priorities for Adolescents

- Safe food practices:
  - Read labels, avoid food sharing
  - Ask about ingredients when eating out
  - Be aware of cross-contact and hidden allergens
  - Caution with intimate contact after allergen exposure
- Self-management:
  - Recognize symptoms early
  - Prompt use of epinephrine devices
  - Notify others immediately during a reaction

Sicherer SH, O'Leary S, Plafner M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec. 1;156(6):e2025073168. <sup>96</sup>

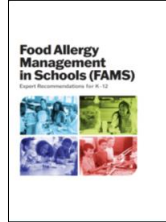
96



2024 Food Allergy Management in Schools Expert Recommendations (FAMS)

97

### Food Allergy Management in Schools (FAMS): Personnel Training and Education



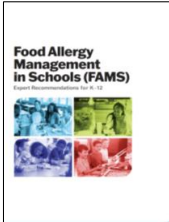
What Information Should Schools Include in Food Allergy Training?

- 1.1. Train all staff on the prevalence and burden of food allergy, common food allergens, food allergen exposure prevention, and food allergy reaction recognition and management.
- 1.2. Train all school nutrition professionals and cafeteria monitors on food allergen exposure prevention.
- 1.3. Train district- and building-level administrative staff, school business officials, and school leadership on the legal requirements for food allergy management in schools.
- 1.4. Provide volunteers with written education on food allergy reaction prevention, recognition, and management.
- 1.5. Ensure school-contracted workers have received adequate food allergy training.

2024 Food Allergy Management in Schools Expert Recommendations (FAMS)

98

### Food Allergy Management in Schools (FAMS): Personnel Training and Education



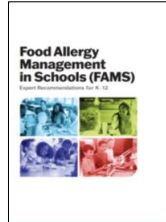
How Should Schools Implement Food Allergy Training?

- 1.6. Conduct audience-appropriate food allergy training at least once per year for all staff.
- 1.7. Ensure training programs are evidence-based and tailored to the audience.
- 1.8. Designate staff members to ensure completion and documentation of food allergy training for all staff.

2024 Food Allergy Management in Schools Expert Recommendations (FAMS)

99

### Food Allergy Management in Schools (FAMS): Preventing Allergen Exposure



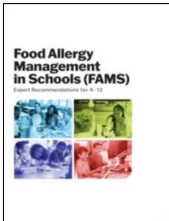
How Should Schools Identify and Document Food Allergies?

- 2.1. Establish standardized procedures for identifying known food allergies in students.
- 2.2. Standardize documentation and communication of all known food allergies.

2024 Food Allergy Management in Schools Expert Recommendations (FAMS)

100

### Food Allergy Management in Schools (FAMS): Preventing Allergen Exposure



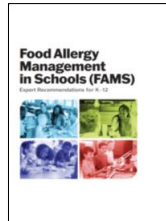
How Should School Nutrition Programs Manage Food Allergies?

- 2.3. Maintain medical statements from state-licensed health care professionals to document appropriate meal modifications for students with food allergies.
- 2.4. Ensure that students with food allergies, as determined by a state-licensed health care professional, have full and equal access to foods offered by the school nutrition program.
- 2.5. Publish weekly or monthly school menus.
- 2.6. Maintain a current food label library.
- 2.7. Designate staff members to assist children with food allergies who may not be able to safely avoid allergens on their own.
- 2.8. Set up procedures to separately receive, store, prepare, cook, transport, hold, serve, and reheat allergy-safe foods and meals.

2024 Food Allergy Management in Schools Expert Recommendations (FAMS)

101

### Food Allergy Management in Schools (FAMS): Preventing Allergen Exposure



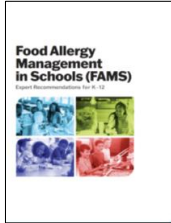
How Can Schools Prevent Food Allergen Exposure?

- 2.9. When possible, discourage eating in classrooms; if eating in classrooms is necessary, designate an area for eating that is separate from learning spaces, especially for younger children.
- 2.10. Wash hands before and after preparing, serving, or eating meals or snacks to avoid food allergen cross-contact.
- 2.11. Clean surfaces before and after meals or snacks to avoid food allergen cross-contact.
- 2.12. During meal and snack times, ensure students have adequate space to sit and eat.

2024 Food Allergy Management in Schools Expert Recommendations (FAMS)

102

### Food Allergy Management in Schools (FAMS): Preventing Allergen Exposure

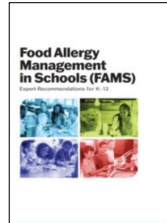


- 2.13. Discourage sharing of food items among students.
- 2.14. Encourage the use of non-food student incentives/rewards and classroom celebrations.
- 2.15. Ensure students with food allergies can fully participate by evaluating school materials, activities, and projects for potential food allergens and adjusting accordingly.
- 2.16. Apply protocols and procedures for preventing food allergen reactions to school-sponsored events and activities, including bus rides, field trips, clubs, sports, and extracurricular activities.
- 2.17. Ensure food allergy protocols and procedures do not exclude students with food allergies.

[2024 Food Allergy Management in Schools Expert Recommendations \(FAMS\)](#) 103

103

### Food Allergy Management in Schools (FAMS): Preparing for Emergencies

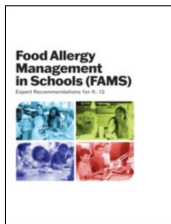


- What Protocols and Procedures Are Needed to Prepare for Food Allergy Reactions?
- 3.1. Maintain Allergy and Anaphylaxis Emergency Plans (AAEPs) and medication authorization forms as part of individualized Healthcare Plans (IHPs) and/or 504 plans for students with known food allergies.
  - 3.2. Implement protocols and procedures for staff response to a suspected allergic or anaphylactic reaction in people without known food allergies or without AAEPs.
- What Are the Best Practices for Epinephrine in Schools?
- 3.3. Maintain a constant supply of unassigned epinephrine.
  - 3.4. Allow students who are approved by their caregivers and health care providers to self-carry and/or self-administer epinephrine.
  - 3.5. Store unassigned and assigned epinephrine in secure areas that are unlocked and easily accessible by staff.

[2024 Food Allergy Management in Schools Expert Recommendations \(FAMS\)](#) 104

104

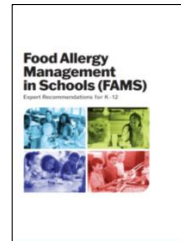
### Food Allergy Management in Schools (FAMS): Communication and Collaboration



- What is the Best Approach to a Comprehensive Food Allergy Management Program?
- 4.1. Implement and document a food allergy management approach that considers the individual needs of students with food allergies.
  - 4.2. Ensure consistent communication and enforcement of food allergy management policies and procedures.
  - 4.3. Ensure all staff are aware of their individual roles in food allergy management.
  - 4.4. Align food allergy management plans with the needs of the school community.

[2024 Food Allergy Management in Schools Expert Recommendations \(FAMS\)](#)

105



[2024 Food Allergy Management in Schools Expert Recommendations \(FAMS\)](#)

106



[Sichew SH, O'Leary S, Frazier M, Wang J. Management of Food Allergy in Schools. Clinical Report. Pediatrics. 2025 Dec 1;156\(6\):e2025073198.](#)

108