

Creating Communities of Support for Students With Food Allergies



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Food Allergies

- Increasingly common
- Can be life threatening
- Parents rely on the school community
- Deaths still occur

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With Food Allergies Come Uncertainty

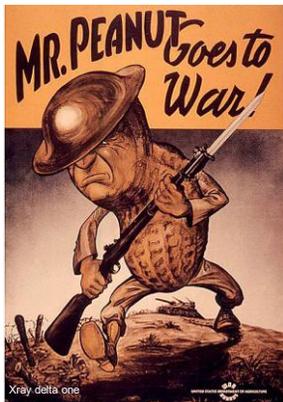


Without the facts, uncertainty can lead to **fear**

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4



Fear & Anger

divide communities

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Goals of This Talk



1. To help you partner with others to replace the uncertainty of food allergy with **facts** and **empowerment**
2. To help you provide awareness within your school communities that can protect students with food allergies and help decrease divisiveness
3. To help you motivate and inspire your schools to create communities of support

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Heavy Lifting by Parents



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Our School Communities



Staff and Administration



Students



Parents

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Critical Roles of School Nurses



- **Coordinator** (work with physicians, parents, school staff, students)
- **Advocate** (ensure that student's health and self esteem are protected)
- **Responder** (recognize and treat anaphylaxis)
- **Educator** (teach school communities about food allergy management)

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Negative Attitudes Travel Fast



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Enlighten Communities with Food Allergy Awareness



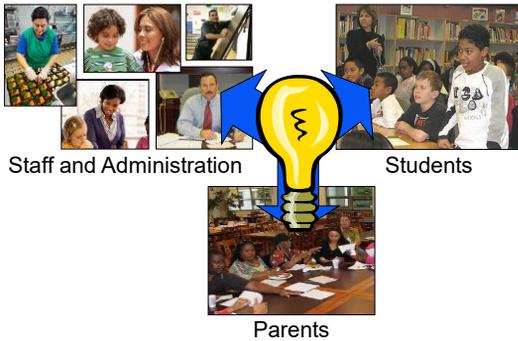
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Targeted School Education

- Evidence based when available
- Best practice standards
- Recommendations must take variations in school resources and developmental capabilities of students into account
- Practical
- Relevant to their role in the school community

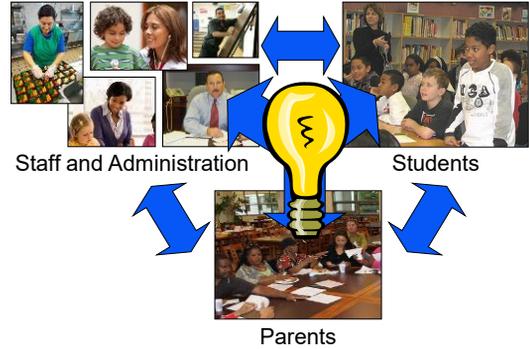
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School Communities



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School Communities



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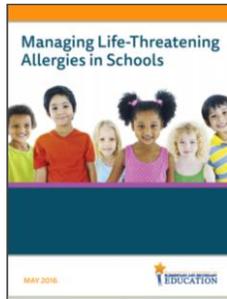
Use Trusted Resources



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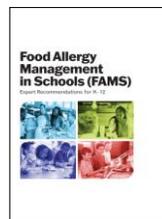
The MA Guidelines:

- Guide schools in the management of food allergies
- Contributions from experts experienced in school health and the management of food allergies and anaphylaxis
- Excellent foundation to implement school policies
- Allows for variation in implementation
- Last update 2016



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

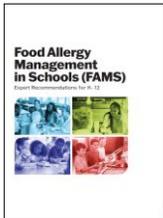


- National-level guideline created by FARE in collaboration with the CDC, AAP, multiple professional organizations.
- Focused on providing up-to-date best practices and training recommendations.
- Complements the existing CDC Voluntary Guidelines for Managing Food Allergies In Schools and Early Care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

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

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

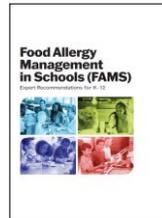


- The FAMS advisory council developed recommendations with the following goals:
 - Reduce accidental exposure to food allergens among students with known food allergies
 - Improve recognition and treatment of food allergic reactions (known and unknown)
 - Ensure that students with food allergies can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

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

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

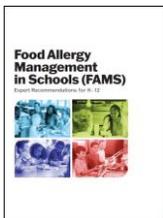


- The FAMS advisory council developed 34 recommendations (Divided in 4 Focus Areas):
 - Personnel Training and Education
 - Preventing Allergen Exposure
 - Preparing for Emergencies
 - Communication and Collaboration

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

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

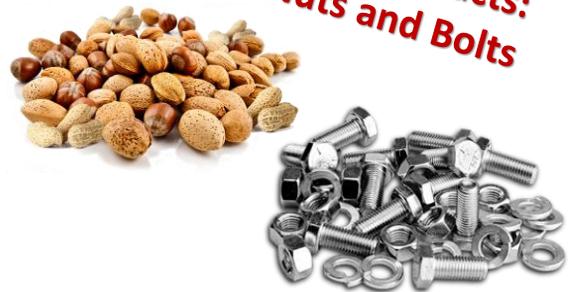


- Because these recommendations may not be appropriate or feasible for every school, districts should first determine what must be implemented based on federal and state law and local policies, and implement those recommendations
- Recommendations are voluntary and schools may consider them in determining 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 \(FAMS\)](#)

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Food Allergy Facts: The Nuts and Bolts



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Most Common Allergens



*people can be allergic to practically any food

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Symptoms of Allergic Reactions

SKIN	RESPIRATORY	GASTROINTESTINAL	CARDIOVASCULAR	NEUROLOGICAL
hives, swelling, itching, warmth, redness	coughing, wheezing, shortness of breath, chest pain or tightness, throat tightness, trouble swallowing, hoarse voice, nasal congestion or hay fever-like symptoms, (sneezing or runny or itchy nose, red, itchy or watery eyes)	nausea, stomach pain or cramps, vomiting, diarrhea	dizziness/ lightheadedness, pale/blue colour, weak pulse, fainting, shock, loss of consciousness	anxiety, feeling of "impending doom" (feeling that something really bad is about to happen), headache
				OTHER ^{2,3} uterine cramps

Pistiner, Lebovidge, et al. Living Confidently With Food Allergy. Anaphylaxis Canada, 2013.

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Timing



Majority occur within minutes up to a few hours

(McIntyre, CL et al., 2005, DATA HEALTH BRIEF)
(Munoz-Furlong et al. Nutrition Guide To Food Allergies. FAAN, 2005)
(Sampson, HA. Hospital Practice, 2000)
(Food Allergy Practice Parameter. Annals of Allergy, Asthma & Immunology, 2006)

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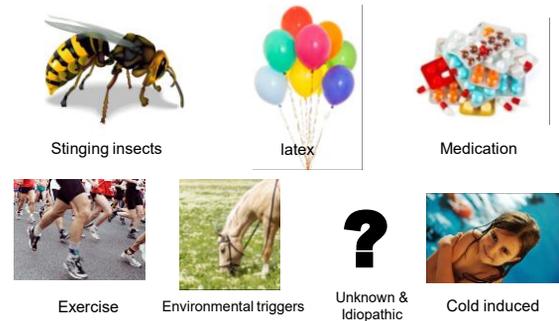
Anaphylaxis

- Severe life-threatening allergic reaction
 - Some have no skin symptoms
 - Can start with mild symptoms
- Epinephrine
 - 1st line treatment for anaphylaxis
 - Works quickly

(McIntyre, CL et al., 2005, DATA HEALTH BRIEF)
(Munoz-Furlong et al. Nutrition Guide To Food Allergies. FAAN, 2005)
(Sampson, HA. Hospital Practice, 2000)
(Food Allergy Practice Parameter. Annals of Allergy, Asthma & Immunology, 2006)

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Other Causes of Anaphylaxis



(CDC, Voluntary Guidelines for Managing Food Allergies in Schools, 2013)



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Deaths unfortunately do occur in schools

Risk Factors

Peanut or Tree nut Allergies	Adolescence or Young Adulthood	Asthma
Prior Anaphylaxis	Relying on Antihistamines	Delay or No Administration of Epinephrine

(Bock JACI 2001;107:191)
(Bock JACI 2007;119:4:1016-18)
(Sampson et al. JACI 2006;117:391-7)
(CDC, Voluntary Guidelines for Managing Food Allergies, 2013)



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Emotional and Social Impact



- Fear of adverse events and death
- Fear of ridicule
- Social isolation
- Limitations in activities

(Bollinger et al. Ann Allergy Asthma Immunol. 2006;96(3):415-21)
(Marklund et al. Health and Quality of Life Outcomes 2006, 4:48)
(Avery et al. Pediatr Allergy Immunol 2003; 14:378-382).

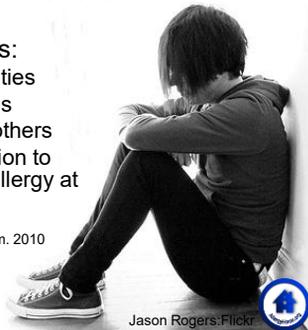


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Emotional and Social Concerns of Teens with Food Allergy

- Most Concerning Troubles/Limitations:
 - Limited social activities
 - Limited food choices
 - Being a burden to others
 - Not enough education to others about food allergy at school

Resnick et. al., Ann Allergy Asthma Imm. 2010



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Food Allergies and Bullying



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Food Allergy Management: A Challenging Balance



Allergic reactions can be prevented and dealt with *reasonably* while maintaining quality of life

(NIAID 5.1.10.1)

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Allergic reactions can be prevented and dealt with *reasonably* while maintaining quality of life

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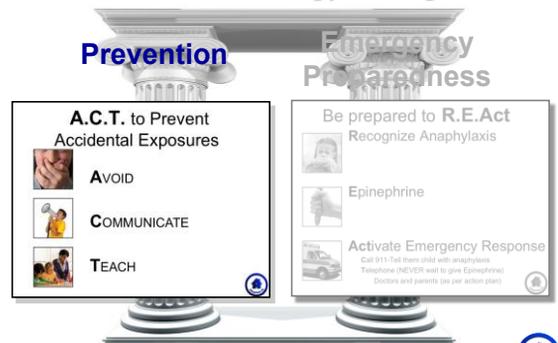
Pillars of Food Allergy Management



These must be applied at all times and in all settings

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Pillars of Food Allergy Management



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A.C.T. to Prevent Accidental Exposures



AVOID



COMMUNICATE



TEACH



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A.C.T. to prevent Avoid Food Allergen

Ways to come in contact with allergen



Through the mouth



Breathing in



Touching the skin



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Oral Ingestion of Food Allergen



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How much does it take?



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Strict Avoidance



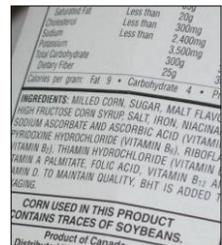
* There are some exceptions made on a case by case basis under the guidance of the child's healthcare provider.



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Reading Labels Key

- Each label on food should be read every time
 - Ingredients in products can switch without warning
- All caregivers should understand labeling laws and their limitations



(US FDA Guidelines for Industry: <http://www.fda.gov/oc/default.htm>)



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Food Allergen Labeling and Consumer Protection Act:

The 9 Major Food Allergens



- Milk, eggs, peanuts, tree nuts, sesame, wheat, soy, fish, and crustacean shellfish
- 90 percent of all food allergies in the United States
- Must be listed in clear, **understandable** language on food labels for all domestic and imported packaged foods
- Any of these major 9 allergens must be stated if found in flavorings, colorings or other additives

(US FDA Guidelines for Industry: <http://www.fda.gov>)



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Food Allergen Labeling and Consumer Protection Act:

Exceptions



- Foods that do not need clear labeling
 - Any food not regulated by the FDA
 - Includes most meats, poultry, certain egg products, and most alcoholic beverages
 - Any other foods not in the major 9, such as:
 - Seeds other than sesame
 - Molluscan shellfish (oysters, clams, mussels, scallops, and others)
 - Gluten (except for wheat)
 - Barley, rye, or oats (hidden in malt, dextrins, flavors, and others)
- Foods not in the major 9 may be hidden in flavorings, colorings or other additives

(US FDA Guidelines for Industry: <http://www.fda.gov>)



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FDA Labeling Updates

- FDA Published "Guidance for Industry: Q&A Regarding Food Allergens" January 2025
- All packaged food regulated by FDA must clearly label top 9 (sesame added Jan 2023)
- Tree nuts: Almond, brazil nut, cashew, filbert/hazelnut, macadamia/bush nut, pecan, pine nut, pistachio, walnut (coconut no longer included)
- Milk and egg now to declare specific source (e.g. goat, sheep,...) (e.g. quail, duck,...)



<https://www.fda.gov/food/nutrition-food-labeling-and-critical-foods/food-allergies>

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Major 9 Allergens Can be Listed in 1 of 2 Ways



- 1) Following Name of the Ingredient
- 2) Next to a Contains Statement

Ingredients:

Sugar, Peanuts (Roasted), Corn Syrup, Palm Kernel and Coconut Oil (Partially Hydrogenated), Nonfat Milk, High Fructose Corn Syrup, Cocoa, Less Than 1%: Glycerin, Dextrose, Whey (From Milk), Salt, Artificial & Natural Flavors, Soy Lecithin, Soybean Oil, Carrageenan, TBHQ and Citric Acid, TBHQ and Citric Acid (to Preserve Freshness), Lactic Acid Esters

OR

INGREDIENTS: ENRICHED FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMIN MONONITRATE (VITAMIN B1), RIBOFLAVIN (VITAMIN B2), FOLIC ACID), SUGAR, VEGETABLE OIL, PARTIALLY HYDROGENATED PALM KERNEL AND/OR COTTONSEED OIL, SOYBEAN AND PALM OIL, COCOA, CARAMEL COLOR, CONTAINS TWO PERCENT OR LESS OF COCOA PROCESSED WITH ALKALI, INVERT SUGAR, WHEY, LEAVENING (BAKING SODA, MONOCALCIUM PHOSPHATE, GUAR GUM), SALT, SOY LECITHIN, NATURAL AND ARTIFICIAL FLAVOR, OIL OF PEPPERMINT.

CONTAINS WHEAT, MILK AND SOY INGREDIENTS.



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Products with Advisory Labeling for Allergen of Concern

- Statements (Numerous formats: No regulation)
 - "may contain"
 - "processed in a facility that ..."
 - "manufactured on shared equipment with..."
 - etc
- 7% of food products with advisory labeling for peanut had detectable amounts
- Label terms did **not** correlate with allergen levels contaminating products

*Recommendations vary on allergen, physician and family considerations

INGREDIENTS: TUNA, SPRING WATER, PRODUCED IN A FACILITY THAT PROCESSES BEEF, WHEAT AND SOY.



Hefley et al. JAOCS 2007

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Hidden Ingredients

- Not an obvious component of food
- Often unknown by consumer... **but** the presence of the ingredient is known by the person preparing the food



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Hidden Ingredients: Milk



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Hidden Ingredients: Peanut/Tree Nut



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Hidden Food Sources: Egg



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Hidden Ingredients: Soy



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Hidden Food Sources: Wheat



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Hidden Food Sources: Fish and Shellfish



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Food Allergies in Non-Edible Items



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Inhalation of Food Allergen

- Reactions of inhalation with **active cooking**
- Caution with powders, flours, small particles of food, etc.



(Simonte, et al., JACI 1999)
(Roberts Allergy, 2002)

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Can Skin Contact With Food Allergens Cause Anaphylaxis?

- 0.2ml of peanut butter under gauze for 1 minute
 - **None** of the 30 children had a **systemic** reaction (Simonte, JACI 2003, V.112, N.1, 180-2)
- 1 gram of peanut butter applied to skin for **15 minutes**
 - **None** of 52 subjects had **systemic** reactions (Wainstein, Pediatric Allergy Immunology 2007; 18:231-9)
- **Take Home Point:** Isolated skin contact on intact skin did **not** cause severe or systemic reactions



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How Cross-Contact Can Happen



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More Ways for Cross-Contact to Occur



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Saliva and Pets Can Also be Sources for Cross-Contact



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Proper Cleaning Can Prevent Cross-Contact

Establish cleaning protocol to avoid cross-contact!



What Works: Soap and water, commercial hand wipes

What Doesn't: Hand Sanitizers

(JACI 2004-Perry et al)



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Proper Cleaning Can Prevent Cross-Contact

Establish a cleaning protocol to avoid cross-contact!



What Works: Soap and water, commercial cleaners, commercial wipes

(JACI 2004-Perry et al)



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Each age group will have different issues with cross-contact

Be aware of the developmental level and capabilities of the child:
Different issues with different age groups



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A.C.T. to Prevent Accidental Exposures



AVOID



COMMUNICATE



TEACH



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A.C.T. to Prevent COMMUNICATE: Staff and Volunteers

- Know which students under their care have a food allergy and discuss with the school nurse.
- Alert other necessary staff (subs, coaches, volunteers included)
- Remember to protect privacy and prior to sharing health information, discuss with school nurse/and or principal to confirm parental consent



(CDC, Voluntary Guidelines for Managing Food Allergies. 2013)



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A.C.T. to Prevent COMMUNICATE: Staff and Volunteers

- For staff who are directly responsible for the care of the student
 - Review, understand, and have a copy of the emergency care plan accessible



(CDC, Voluntary Guidelines for Managing Food Allergies. 2013)



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A.C.T. to Prevent
COMMUNICATE:
Staff and Volunteers

- Have a means to contact the nurse, and emergency services
- Emergency identification jewelry is recommended.



(CDC, Voluntary Guidelines for Managing Food Allergies, 2013)



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A.C.T. to Prevent
COMMUNICATE:
Parents and Students



- Notify parents of events where food is served
- Inform all parents and students about rules, practices, and bullying policies regarding food allergies (relevant to your role)
 - at the beginning of the school year or when there are any changes

(CDC, Voluntary Guidelines for Managing Food Allergies, 2013)



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A.C.T. to Prevent
COMMUNICATE:
Students

- Encourage a supportive environment and avoid using language and activities that may isolate children with food allergies
- Make it clear that bullying or teasing are never OK

(CDC, Voluntary Guidelines for Managing Food Allergies, 2013)

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A.C.T. to Prevent Accidental
Exposures



AVOID



COMMUNICATE



TEACH



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A.C.I to prevent
Teach



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A.C.T. to Prevent
Teach Staff



What Information Should Schools Include in Food Allergy Training?

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

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

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A.C.T. to Prevent Teach Staff



How Should Schools Implement Food Allergy Training?

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

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



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Point #1
the Unknown can be Scary

Children can come up with their own answers

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Point #1
the Unknown can be Scary

Children can come up with their own answers

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Point #2
 Children **Believe** Grown-ups

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Point #3
 With Food Allergies Can Come
Uncertainty

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We Must Be Aware of the Powerful Messages That We Give Children

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Safety Rules



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Food Allergy Safety Rules



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A.C.T. to Prevent Teach Students



- Staff to lead by example and model supportive and allergy aware behaviors and attitudes
- Teachers to consider including as part of lesson plans and orientations
 - Teaching Points
 - signs and symptoms of anaphylaxis
 - Bullying is never OK
 - Get help. Get a grown-up
 - Management strategies
 - Support your peers

(CDC, Voluntary Guidelines for Managing Food Allergies. 2013)



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A.C.T. to Prevent Teach Parents



- School nurses, teachers and administration to provide food allergy awareness to **all** parents
 - Food allergy school and class room policies and relevant food allergy management strategies
 - Importance of constant management
 - Importance of understanding and support
- Consider use of announcements, letters, email blasts, list serves, websites, PTA meetings and other events (NSBA. Safe at School and Ready to Learn 2011)



(CDC, Voluntary Guidelines for Managing Food Allergies. 2013)



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A.C.T. to Prevent Teach Parents



- School nurses or designee to work with the families **with** food allergies
 - enlist help of healthcare provider and resources
- Act as a liaison
 - facilitate positive parent-teacher and parent- parent interactions)

(CDC, Voluntary Guidelines for Managing Food Allergies. 2013)



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Pillars of Food Allergy Management

Prevention Emergency Preparedness

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



Epinephrine



Activate Emergency Response
Call 911-Tell them child with anaphylaxis
Telephone (NEVER wait to give Epinephrine)
Doctors and parents (as per action plan)



These must be applied at all times and in all settings



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Be prepared to R.E.Act



Recognize Anaphylaxis



Epinephrine



Activate Emergency Response

Call 911-Tell them child with anaphylaxis
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Be Prepared to R.E.Act



Recognize Anaphylaxis



Epinephrine



Activate Emergency Response

Call 911-Tell them child with anaphylaxis
Telephone (NEVER wait to give Epinephrine)
Doctors and parents (as per action plan)



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Be Prepared to R.E.Act:

Who should know about allergic reactions?

- Anyone who interacts with students, staff or visitors
- Staff should know their role in the school's emergency protocol (emergency care plan).
- Some staff may be trained under the direction of the school nurse or doctor to recognize and treat anaphylaxis in those with a known allergy, when a school nurse or doctor is not available.

(CDC, Voluntary Guidelines for Managing Food Allergies. 2013)



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Be prepared to R.E.Act

Recognize Anaphylaxis

SKIN	RESPIRATORY	GASTROINTESTINAL	CARDIOVASCULAR	NEUROLOGICAL
hives, swelling, itching, warmth, redness	coughing, wheezing, shortness of breath, chest pain or tightness, throat tightness, trouble swallowing, hoarse voice, nasal congestion or hay fever-like symptoms, (sneezing or runny or itchy nose; red, itchy or watery eyes)	nausea, stomach pain or cramps, vomiting, diarrhea	dizziness/ lightheadedness, pale/blue colour, weak pulse, fainting, shock, loss of consciousness	anxiety, feeling of "impending doom" (feeling that something really bad is about to happen), headache
				OTHER ^{2,3} uterine cramps

Pistiner, Lebovidge, et. al. Living Confidently With Food Allergy, Anaphylaxis Canada, 2013.

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Be prepared to R.E.Act Recognize Anaphylaxis: Use the ECP

- Critically important and practical document
- Understandable for **non licensed staff**
- Accessible for those responsible for the care of the child
- Strongly encourage submission to school/daycare

<https://publications.aap.org/pediatriccare/resources/17512/AAP-Allergy-and-Anaphylaxis-Emergency-Plan>

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<p>For Severe Allergy and Anaphylaxis What to look for</p> <p>If child has ANY of these severe symptoms after eating the food or having a sting, give epinephrine.</p> <ul style="list-style-type: none"> • Shortness of breath, wheezing, or coughing • Skin color is pale or has a bluish color • Weak pulse • Fainting or dizziness • Tight or hoarse throat • Trouble breathing or swallowing • Swelling of lips or tongue that bother breathing • Vomiting or diarrhea (if severe or combined with other symptoms) • Many hives or redness over body • Feeling of "doom," confusion, altered consciousness, or agitation <p><input type="checkbox"/> SPECIAL SITUATION: If this box is checked, child has an extremely severe allergy to an insect sting or the following food(s). Even if child has MILD symptoms after a sting or eating these foods, give epinephrine.</p>	<p>Give epinephrine! What to do</p> <ol style="list-style-type: none"> 1. Inject epinephrine right away! Note time when epinephrine was given. 2. Call 911. 3. Stay with child and: <ul style="list-style-type: none"> • Ask for ambulance with epinephrine. • Tell rescue squad when epinephrine was given. • Call parents and child's doctor. • Give a second dose of epinephrine, if symptoms get worse, continue, or do not get better in 5 minutes. • Keep child lying on back. If the child vomits or has trouble breathing, keep child lying on his or her side. 4. Give other medicine, if prescribed. Do not use other medicine in place of epinephrine. <ul style="list-style-type: none"> • Antihistamine • Inhaler/bronchodilator
<p>For Mild Allergic Reaction What to look for</p> <p>If child has had any mild symptoms, monitor child.</p> <p>Symptoms may include:</p> <ul style="list-style-type: none"> • Itchy nose, sneezing, itchy mouth • A few hives • Mild stomach nausea or discomfort 	<p>Monitor child What to do</p> <p>Stay with child and:</p> <ul style="list-style-type: none"> • Watch child closely. • Give antihistamine (if prescribed). • Call parents and child's doctor. • If symptoms of severe allergy/anaphylaxis develop, use epinephrine. (See "For Severe Allergy and Anaphylaxis.")

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For Severe Allergy and Anaphylaxis
What to look for

If child has ANY of these severe symptoms after eating the food or having a sting, **give epinephrine.**

- Shortness of breath, wheezing, or coughing
- Skin color is pale or has a bluish color
- Weak pulse
- Fainting or dizziness
- Tight or hoarse throat
- Trouble breathing or swallowing
- Swelling of lips or tongue that bother breathing
- Vomiting or diarrhea (if severe or combined with other symptoms)
- Many hives or redness over body
- Feeling of "doom," confusion, altered consciousness, or agitation

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What to look for

If child has ANY of these severe symptoms after eating the food or having a sting, **give epinephrine.**

- Shortness of breath, wheezing, or coughing
- Skin color is pale or has a bluish color
- Weak pulse
- Fainting or dizziness
- Tight or hoarse throat
- Trouble breathing or swallowing
- Swelling of lips or tongue that bother breathing
- Vomiting or diarrhea (if severe or combined with other symptoms)
- Many hives or redness over body
- Feeling of "doom," confusion, altered consciousness, or agitation

99

For Severe Allergy and Anaphylaxis
What to look for

If child has ANY of these severe symptoms after eating the food or having a sting, **give epinephrine.**

- Shortness of breath, wheezing, or coughing
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- Fainting or dizziness
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- Many hives or redness over body
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101

For Severe Allergy and Anaphylaxis
What to look for

If child has ANY of these severe symptoms after eating the food or having a sting, **give epinephrine.**

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- Fainting or dizziness
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- Vomiting or diarrhea (if severe or combined with other symptoms)
- Many hives or redness over body
- Feeling of "doom," confusion, altered consciousness, or agitation

102

For Severe Allergy and Anaphylaxis
What to look for

If child has ANY of these severe symptoms after eating the food or having a sting, **give epinephrine**.

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- Swelling of lips or tongue that bother breathing
- Vomiting or diarrhea (if severe or combined with other symptoms)
- Many hives or redness over body
- Feeling of "doom," confusion, altered consciousness, or agitation

103

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104

For Severe Allergy and Anaphylaxis
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- Swelling of lips or tongue that bother breathing
- Vomiting or diarrhea (if severe or combined with other symptoms)
- Many hives or redness over body
- Feeling of "doom," confusion, altered consciousness, or agitation



105

For Severe Allergy and Anaphylaxis
What to look for

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106

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What to look for

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107

For Severe Allergy and Anaphylaxis
What to look for

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- Skin color is pale or has a bluish color
- Weak pulse
- Fainting or dizziness
- Tight or hoarse throat
- Trouble breathing or swallowing
- Swelling of lips or tongue that bother breathing
- Vomiting or diarrhea (if severe or combined with other symptoms)
- Many hives or redness over body
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108

For Severe Allergy and Anaphylaxis
What to look for

If child has ANY of these severe symptoms after eating the food or having a sting, **give epinephrine**.

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- Tight or hoarse throat
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109

For Severe Allergy and Anaphylaxis
What to look for

If child has ANY of these severe symptoms after eating the food or having a sting, **give epinephrine**.

- Shortness of breath, wheezing, or coughing
- Skin color is pale or has a bluish color
- Weak pulse
- Fainting or dizziness
- Tight or hoarse throat
- Trouble breathing or swallowing
- Swelling of lips or tongue that bother breathing
- Vomiting or diarrhea (if severe or combined with other symptoms)
- Many hives or redness over body
- Feeling of "doom," confusion, altered consciousness, or agitation



110

<p>For Severe Allergy and Anaphylaxis What to look for</p> <p>If child has ANY of these severe symptoms after eating the food or having a sting, give epinephrine.</p> <ul style="list-style-type: none"> • Shortness of breath, wheezing, or coughing • Skin color is pale or has a bluish color • Weak pulse • Fainting or dizziness • Tight or hoarse throat • Trouble breathing or swallowing • Swelling of lips or tongue that bother breathing • Vomiting or diarrhea (if severe or combined with other symptoms) • Many hives or redness over body • Feeling of "doom," confusion, altered consciousness, or agitation <p>SPECIAL SITUATION: If this box is checked, child has an extremely severe allergy to an insect sting or the following food(s): _____. Even if child has MILD symptoms after a sting or eating these foods, give epinephrine.</p>	<p>Give epinephrine! What to do</p> <ol style="list-style-type: none"> 1. Inject epinephrine right away! Note time when epinephrine was given. 2. Call 911. <ul style="list-style-type: none"> • Ask for ambulance with epinephrine. • Tell rescue squad when epinephrine was given. 3. Stay with child and: <ul style="list-style-type: none"> • Call parents and child's doctor. • Give a second dose of epinephrine, if symptoms get worse, continue, or do not get better in 5 minutes. • Keep child lying on back. If the child vomits or has trouble breathing, keep child lying on his or her side. 4. Give other medicine, if prescribed. Do not use other medicine in place of epinephrine. <ul style="list-style-type: none"> • Antihistamine • Inhaler/bronchodilator
<p>For Mild Allergic Reaction What to look for</p> <p>If child has had any mild symptoms, monitor child.</p> <p>Symptoms may include:</p> <ul style="list-style-type: none"> • Itchy nose, sneezing, itchy mouth • A few hives • Mild stomach nausea or discomfort 	<p>Monitor child What to do</p> <p>Stay with child and:</p> <ul style="list-style-type: none"> • Watch child closely. • Give antihistamine (if prescribed). • Call parents and child's doctor. <p>• If symptoms of severe allergy/anaphylaxis develop, use epinephrine. (See "For Severe Allergy and Anaphylaxis.")</p>

111

For Mild Allergic Reaction
What to look for

If child has had any mild symptoms, **monitor child**.

Symptoms may include:

- Itchy nose, sneezing, itchy mouth
- A few hives
- Mild stomach nausea or discomfort

112

For Mild Allergic Reaction
What to look for

If child has had any mild symptoms, **monitor child**.

Symptoms may include:

- Itchy nose, sneezing, itchy mouth
- A few hives
- Mild stomach nausea or discomfort

113

For Mild Allergic Reaction
What to look for

If child has had any mild symptoms, **monitor child**.

Symptoms may include:

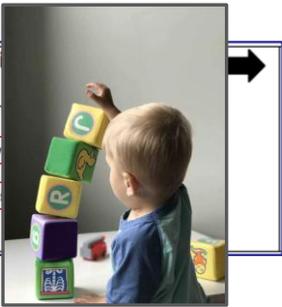
- Itchy nose, sneezing, itchy mouth
- A few hives
- Mild stomach nausea or discomfort

114

Be prepared to R.E.Act
Recognize Anaphylaxis

For Mild Allergic Reaction
What to look for
 If child has had any mild symptoms
 Symptoms may include:

- Itchy nose, sneezing, itchy
- A few hives
- Mild stomach nausea or diarrhea



"I can't get the taste out!"

115

116

Anaphylaxis and Water Damage?



The longer anaphylaxis remains untreated, the more end organ effects occur, and treatment becomes increasingly difficult

117

Be Prepared to R.E.Act



Recognize Anaphylaxis



Epinephrine



Activate Emergency Response

Call 911-Tell them child with anaphylaxis
 Telephone (NEVER wait to give Epinephrine)
 Doctors and parents (as per action plan)



118

Be prepared to R.E.Act
Treatment of Anaphylaxis:
Epinephrine

<p>• AAP Universal Plan</p> <p>• Includes intranasal</p> <p>• Includes an option for antihistamine</p> <p>https://publications.aap.org/pediatriccare/resources/17512/AAP-Allergy-and-Anaphylaxis-Emergency-Plan</p>	
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119

Be Prepared to R.E.Act
Treatment of Anaphylaxis:
Epinephrine

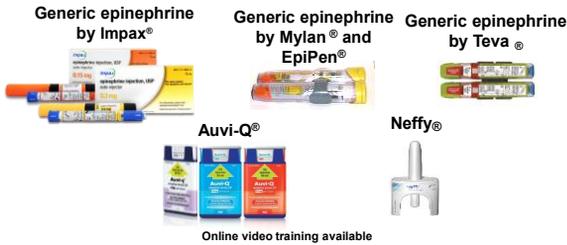
- Responder to contact the school nurse immediately
- For those **with a known** allergy and epinephrine, a trained non-licensed staff member can administer epinephrine in the event that a nurse is unavailable (discuss your state's regulations with your school nurse and/or principal).
- For those **without known** allergies, non-licensed responders cannot administer epinephrine in the event that a school nurse is not immediately available. Must immediately contact school nurse and 911.
- Epinephrine is the first line treatment for anaphylaxis. It works quickly but is short acting. Further evaluation and management in the emergency department is essential.
- **Antihistamines are not first line treatment of anaphylaxis and do not stop or prevent it.**
- Non-licensed responders may not be able to give antihistamines in some states and schools.

(CDC. Voluntary Guidelines for Managing Food Allergies. 2013) (Simons et al. JACI 1998; 101:1-33-37) (Sampson et al. JACI 2006;117:391-7)



120

Be prepared to **R.E.Act**
Treatment of Anaphylaxis:
Epinephrine



121

Epinephrine Nasal Spray

INSTRUCTIONS FOR USE	How to use the nasal spray device	Get emergency medical help if needed
<p>NEFFY™ and Neof epinephrine nasal spray (0.1mg/0.5mL)</p> <p>For Use in the Home Only</p> <p>Keep the instructions for use or have to use with the right way. Because you may need to use a nasal spray device also understand the use of the device.</p> <p>Use a mouthpiece or other device if you have any condition that may affect your ability to use the nasal spray device.</p> <p>Always carry 2 nasal spray devices with you. You may need a second dose of nasal spray.</p> <p>Your nasal spray device:</p> <p>Neof™</p> <p>Neffy™</p> <p>Plunger</p> <p>Important Information:</p> <p>Use only in the home. Avoid spraying in the face or mouth.</p> <p>Do not use or spray (do not spray) the device.</p> <p>Each spray only in one nostril.</p> <p>Each nasal spray device has only 1 dose of medicine and is for single use only.</p> <p>It is recommended that right-handed users should be the one to use and will be used using the device as it is the right.</p> <p>Check your nasal spray device to be sure the expiration date has passed. Get emergency medical help for further treatment of the allergic emergency (anaphylaxis), if needed, after using nasal spray.</p>	<p>1A: Remove nasal spray from packaging (see Figure 1A). Pull over the packaging to remove the nasal spray device.</p> <p>1B: Hold device as shown (see Figure 1B). Hold the device with your thumb on the bottom of the plunger and a finger on either side of the device. Do not pull or push on the plunger. Do not use or spray until ready. Each device has only 1 spray.</p> <p>1C: Insert the nozzle into a nostril until your fingers touch your nose (see Figure 1C). Keep the nozzle straight into the nose pocket (your nostril).</p> <p>1D: Press plunger up firmly until it stops and spray (spray) into the nose. If you feel any pain or see the nose is green, if you feel drops out of the nose you may need to get a second dose of nasal spray after checking for symptoms.</p> <p>1E: Do not touch the nozzle to the bottom wall or outer wall of the nose.</p>	<p>Get emergency medical help for further treatment of the allergic emergency (anaphylaxis). If needed, after using nasal spray. Do not use or spray until ready. Each device has only 1 spray.</p> <p>Check the symptoms after the first dose of nasal spray. If symptoms get worse or continue, give a second dose of nasal spray in the other nostril (see 1E) immediately and call 911.</p> <p>After treatment, repeat dose if needed</p> <p>Check the symptoms after the first dose of nasal spray. If symptoms get worse or continue, give a second dose of nasal spray in the other nostril (see 1E) immediately and call 911.</p> <p>Use only in the home. Avoid spraying in the face or mouth.</p> <p>Do not use or spray (do not spray) the device.</p> <p>Each spray only in one nostril.</p> <p>Each nasal spray device has only 1 dose of medicine and is for single use only.</p> <p>It is recommended that right-handed users should be the one to use and will be used using the device as it is the right.</p> <p>Check your nasal spray device to be sure the expiration date has passed. Get emergency medical help for further treatment of the allergic emergency (anaphylaxis), if needed, after using nasal spray.</p> <p>Additional Information:</p> <p>For more information about Neffy, call 800-447-NEFFY (237-466-3223) or visit www.ars-pharma.com for the most current labeling and promotional device.</p> <p>ARS Pharmaceuticals (Canada), Inc. 1000 Commercial Street, Suite 100 Northridge, CA 91329 ©2015 ARS Pharmaceuticals, Inc. All rights reserved. Do not use or spray until ready.</p>

https://www.ars-pharma.com/wp-content/uploads/pdf/Instructions_For_Use.pdf

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Where and How to Store Epinephrine

- Store epinephrine in a well-defined, secure, and accessible location
- Avoid Extreme temperatures
 - Keep at 15-30°C (59-86°F)
 - Do not store in car



123

Common Side Effects from Epinephrine

- Paleness (100%)
- Shaky (80%)
- Anxiety (70%)
- Fast heart rate (50%)
- Headache (20%)
- Nausea (20%)

(Ginnery, JACI 103: 171-175, 2002)

124

Recommend Having Two Doses of Epinephrine Available

10-20% of Children need a second dose of epinephrine for food-related anaphylaxis



(Rutters et al., Pediatrics. 2010 Apr;125(4):e711-8)

125

Watch out for pockets, buttons, seams!



126

Be Prepared for a Fearful Child



127

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

129

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/undesignated epinephrine
- Most recent, available: July 1, 2021- June 30, 2022; posted Aug 2024



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Be Prepared to R.E.ACT ACTivate Emergency Response



- Contact the nurse if available and 911 (or local Emergency Medical Services)
 - Caller should state that child having anaphylaxis and request licensed responders that can administer epinephrine
 - The child must be taken to the Emergency Department via Ambulance (child may need additional care and can experience a late phase reaction)
- After epinephrine is administered (if appropriate) and after 911 called, contact emergency contacts as per emergency allergy action/care plan
- If possible keep the child or adult from rising to an upright position

(CDC, Voluntary Guidelines for Managing Food Allergies, 2013)
(Sampson et al. JACI 2006;117:391-7)
(Pumphrey. JACI. 2003;112:451-2)



128

After a Reaction

- Complete all appropriate documentation as per school policy and state and local regulations
- Review your team’s emergency response with your school nurse/and or administration
- Provide support to the child and their family upon return to school after experiencing an allergic reaction

(CDC, Voluntary Guidelines for Managing Food Allergies, 2013)



130

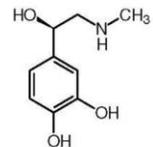
MYTH vs. Fact

FOOD ALLERGY MYTH



“GIVE ANTIHISTAMINE FIRST”

Food Allergy Fact



Epinephrine is the treatment of choice for anaphylaxis

132

MYTH vs. Fact

FOOD ALLERGY MYTH



“YOU NEED TO CALL AN AMBULANCE BECAUSE EPINEPHRINE IS DANGEROUS”

Food Allergy Fact

Calling an ambulance is important because it was a bad enough reaction to need epinephrine and more treatment may be necessary



133

Myth vs. Fact

Food Allergy Myth



“The needle is huge”

Food Allergy Fact



The needle is shorter than the diameter of a dime

134

Food Allergy Management in Specific School Settings



135

Take Home Points



136

A.C.T. to Prevent Accidental Exposures



AVOID



COMMUNICATE



TEACH



137

Be Prepared to R.E.Act



Recognize Anaphylaxis



Epinephrine



Activate Emergency Response

Call 911-Tell them child with anaphylaxis Telephone (NEVER wait to give Epinephrine) Doctors and parents (as per action plan)



138



139



140

Educated Communities Help Food Allergy Awareness Take Off



141



142

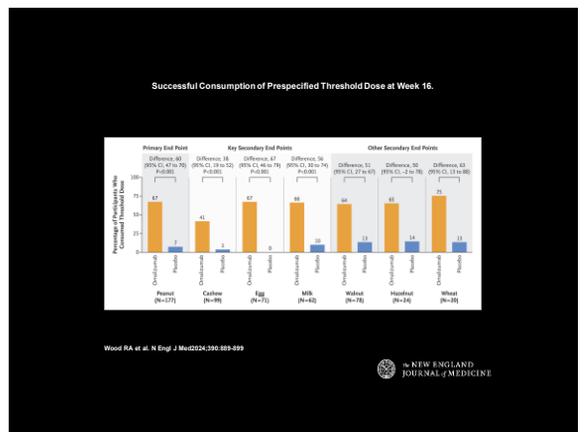
OMALIZUMAB FOR FOOD ALLERGY

- 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



Wood RA et al. N Engl J Med 2024;390:889-899

143



Wood RA et al. N Engl J Med 2024;390:889-899

144

MGHfC Food Allergy Buddies Program



 Mass General Brigham
for Children

145

Program Mission



Build Community

Support Quality of Life

Reinforce Self-esteem / Safety

146

Program Components: **Community**



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Program Components: **Multidisciplinary Team**



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Program Components: **Mentorship**



149

Program Components: **Curriculum**



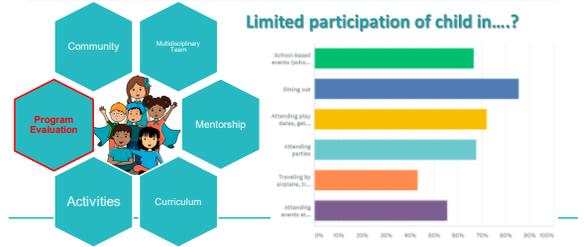
150

Program Components: **Activities**



151

Program Components: **Program Evaluation**



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Recruiting K-12th for 2025/26



<https://www.massgeneral.org/children/food-allergies/food-allergy-community>

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