



Food Allergy Management & Education

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FAME

**There is no cure for food allergies.
Strict avoidance is the only way to prevent life-threatening
food allergy reactions (LTFA).**

This manual has four objectives. After reviewing this material you will be able to:

1. **Describe life-threatening food allergy reactions**, including common causes.
2. List three steps you can take to increase the safety of the school environment by **avoiding food allergens**.
3. Know how to **recognize and respond** to an allergic reaction that could progress to an anaphylactic reaction.
4. Develop policies and procedures to **maintain a safe school environment** for children with LTFA.

This manual is intended as a reference and information source only. The information in this manual is not a substitute for professional care, and must not be used for self-diagnosis or treatment. BJC HealthCare assumes no liability for the information contained in this reference or for its use.

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Section I. Introduction

INTRODUCTION

Food allergy is a growing safety and public health concern in the United States. Schools are faced with particular challenges due to the increasing number of students with one (or more) food allergies. According to reports on food allergies and reactions, an estimated 4 to 6% of US children are at risk for life-threatening reactions from food allergy.^{1,2} Currently, there is no cure for food allergy; strict avoidance of the food allergen(s) is the only means to prevent life-threatening food allergy (LTFA) reactions. Deaths in schools from food allergy can often be attributed to failing to recognize symptoms and failing to respond promptly or effectively to a reaction. Implementation of LTFA policy, procedures, guidelines and plans that focus on food allergy education, awareness, avoidance and emergency treatment of allergic reactions are critical to student safety.

Every food allergy reaction has the possibility of developing into a life-threatening and potentially fatal anaphylactic reaction. This can occur within minutes of exposure to the allergen. (Sampson, HA, "Food Allergy," from Biology Toward Therapy, Hospital Practice, 2000: May.)

The goals of the St. Louis Children's Hospital Food Allergy Management & Education (FAME) Program are: (1) to provide schools with the components of a comprehensive school-based food allergy program (2) to promote best practice through resources and materials furnished to area schools (3) keeping children with food allergies safe within a nurturing academic environment.

The development of this manual has been funded by a generous donor who has personal experience with a child entering school who has severe life-threatening food allergies. This individual approached St. Louis Children's Hospital (SLCH) Foundation with the specific request that a signature school-based food allergy program be developed.

The SLCH Child Health Advocacy and Outreach department has a long history of established relationships with school nurses and administrators through community-based programs such as the Healthy Kids Express Asthma program. Since food allergies share such a high correlation with asthma, the SLCH Foundation decided that this project could benefit children in the community.

1. Branum AM, Lukacs SL. Food allergy among U.S. children: trends in prevalence and hospitalizations. NCHS Data Brief. 2008 Oct(10):1-8.

2. Liu AH, Jaramillo R, Sicherer SH, Wood RA, Bock SA, Burks AW, Massing M, Cohn RD, Zeldin DC. National prevalence and risk factors for food allergy and relationship to asthma: results from the National Health and Nutrition Examination Survey 2005-2006. *J Allergy Clin Immunol* 2010 Oct;126(4):798-8

The initial step in the development of the “signature” program was a review of the literature recommendations for the components of an effective food allergy school program. This was followed by visits to area schools to complete a needs assessment and to determine what lessons were learned for program development. This process brought to light a clear demand among schools for this type of program.

The school visits uncovered inconsistencies from district to district—and from school to school within districts—regarding the management of LTFA in children. School administrators want to “do the right thing” for their students by providing a safe, nurturing learning environment. School nurses, students, parents/guardians, families and the broader school community expressed a need for both internal and external support in managing LTFA in their students.

As a final step, an Advisory Board was convened, composed of community leaders, experts and concerned parents/guardians. This manual lays out the components of the “signature” program, which is the result of their hard work, dedication and passion for improving the lives of children with LTFA.

Note: Every effort has been made to correctly credit the original sources; if any have been left out please contact Food Allergy Management and Education Program Coordinator at 314-286-0947 or send an email to FAME@bjc.org for corrections.

Section II. Overview of Food Allergies and Anaphylaxis

OVERVIEW OF FOOD ALLERGIES AND ANAPHYLAXIS

What is Food Allergy?

People with allergies have an immune system response that targets otherwise harmless elements of their diet or environment. During an allergic reaction to food, the immune system recognizes a specific food protein as a target. This initiates a chain of negative events, including the release of histamine and other chemicals. Histamine triggers inflammatory reactions in the skin (itching, hives, rash), the respiratory system (cough, difficulty breathing, wheezing), the gastrointestinal tract (vomiting, diarrhea, abdominal pain), and the cardiovascular system (decreased blood pressure, heartbeat irregularities, shock).

The signs and symptoms of a food allergy reaction are specific to each individual. Exposure to milk, for example, may cause hives in one person and anaphylaxis in another. When the symptoms are widespread and systemic (general body), the reaction is termed *anaphylaxis*.

What is Oral Allergy Syndrome (OAS)

Oral Allergy Syndrome (OAS), also known as pollen-food syndrome, occurs mostly in people with hay fever. OAS is caused by cross-reacting allergens found in both pollen and raw fruits, vegetables or some tree nuts. Potential symptoms may include itching, tingling sensation in the mouth, swelling of lips/tongue and throat or skin rash and swelling.

Allergy to certain raw fruit, vegetables and tree nuts is commonly associated with these allergens:

Birch pollen: apple, almond, carrot, celery, cherry, hazelnut, kiwi, peach, pear, plum

Grass pollen: celery, melon, orange, peach, tomato

Ragweed pollen: banana, cucumber, melon, sunflower seed, zucchini

Individuals with OAS can usually eat these same fruits or vegetables in cooked form because the proteins are broken down during the heating process. Therefore, the body no longer recognizes the food protein as harmful, and symptoms do not occur. For example, someone is unable to eat an apple, but can eat applesauce. If you have had severe symptoms including trouble breathing, when eating these foods, you may be at risk for an anaphylactic reaction. Consult with your healthcare provider for more information and to determine whether you should carry an epinephrine auto-injector to treat potential severe reactions.



What is Eosinophilic Esophagitis (EoE)

Eosinophilic esophagitis also known as EE or EoE, is an allergic inflammatory disease in which a type of white blood cell, the eosinophil, causes injury and inflammation to the esophagus. Individuals with EE or EoE have a large number of eosinophils present in the esophagus which may result from a food allergy reaction, acid reflux or airborne allergens. Symptoms may vary by age and individual differences. In infants and toddlers, eosinophilic esophagitis can cause irritability, problems with feeding, and poor weight gain. In older children, it may cause reflux, regurgitation, vomiting and/or stomach pain. Other potential symptoms may include chest pain, trouble swallowing foods (feeling like a food is “stuck” in the throat), and finding themselves drinking a lot of fluids to finish a meal or unable to finish a meal because they feel full midway through. Proper diagnosis of eosinophilic esophagitis should be confirmed by an allergist and gastroenterologist, who will then determine treatment. apfed.org/drupal/drupal/what_is_eoe

What is Food Protein-Induced Eosinophilic Esophagitis (FPIES)

Food Protein-Induced Enterocolitis Syndrome (FPIES) is an uncommon, non-IgE-mediated gastrointestinal food allergy disorder that predominantly affects infants and young children. Children with FPIES may experience chronic vomiting, bloody diarrhea, weight loss, lethargy and dehydration, usually in association with consumption of cow’s milk and soy, and to a lesser degree, some cereal grains such as rice and oats, and even chicken, turkey and fish. Diagnosis of FPIES can be a challenge. If you suspect that your child has FPIES, consult an allergist, who will take into account clinical history and symptoms. iaffpe.org

What is Meat Allergy (Alpha-Gal)?

Studies have found that a very small percentage of children with milk allergy are also allergic to beef. An allergist can determine if beef should be removed from a child’s diet that has a milk allergy. A meat allergy can develop any time in life. If a meat allergy is diagnosed for one type of meat, it is likely to also be allergic to other meats, as well as to poultry, such as chicken, turkey and duck. A bite from the Lone Star tick can cause people to develop an allergy to red meat, including beef and pork. The Lone Star tick has been implicated in initiating the red meat allergy in the US and this tick is found predominantly in the Southeast from Texas, to Iowa, into New England. This specific allergy is related to a

carbohydrate called alpha-gal and is best diagnosed with a blood test. Although reactions to foods typically occur immediately, in the instance of allergic reactions to alpha-gal, symptoms often take several hours to develop. Owing to the significant delay between eating red meat and the appearance of an allergic reaction, it can be a challenge to connect the culprit foods to symptoms. Therefore, an expert evaluation from an allergist familiar with the condition is recommended.

Management and Treatment

Once a meat allergy is diagnosed, the best treatment is to avoid the meat (trigger). Carefully check ingredient labels of food products, and learn whether what you need to avoid is known by other names.

Epinephrine is the first-line treatment for meat allergy anaphylaxis, which results when exposure to the meat allergen triggers a flood of chemicals that can send your body into shock.

What is Cold Induced Anaphylaxis/Cold Urticaria?

Cold urticaria (ur-tih-KAR-e-uh) is a skin reaction to cold. Skin that has been in contact with cold develops reddish, itchy welts (hives). Diagnosis is typically obtained by a medical provider performing a cold test. During the cold test, a piece of ice is held against the forearm, typically for 3–4 minutes. A positive result is a specific looking mark of raised red hives. The severity of cold urticaria symptoms varies widely. Some people have minor reactions to cold, while others have severe reactions. Cold triggers the release of histamine and other chemicals into the bloodstream. These chemicals cause redness, itching and sometimes a whole-body (systemic) reaction. Cold urticaria symptoms begin soon after the skin is exposed to a sudden drop in air temperature or to cold water. The worst reactions generally occur with full skin exposure, such as swimming in cold water. The risk of anaphylaxis with full body water exposure (swimming) emphasizes the importance of education and the availability of epinephrine auto-injectors. About 30 percent of children with this condition will experience an episodes of anaphylaxis.

Signs and symptoms may include:

- Temporary reddish, itchy welts (hives) on the area of skin that was exposed to cold
- A worsening of the reaction as the skin warms
- Swelling of hands when holding cold objects
- Swelling of lips and throat when consuming cold food or drink
- Swelling of the tongue and throat, which can make it difficult to breathe
- A whole-body response (anaphylaxis)



Management: avoidance of cold, especially swimming in cold water, prescribed epinephrine auto-injectors, wearing of a MedicAlert bracelet and daily administration of an antihistamine maybe useful. Like LTFA the best treatment for this allergy is avoidance of exposure to cold temperatures.

What is Celiac Disease

Celiac disease is an autoimmune disease—not a food allergy. This condition damages the lining of the small intestine (the villi). The villi help absorb nutrients from the food that is eaten. When individuals with celiac disease eat foods that contain gluten, their immune system reacts by damaging the villi. Damaged villi do not effectively absorb basic nutrients. Celiac disease is a chronic disorder, there is no cure. The only treatment is the lifelong adherence to a gluten-free diet. When gluten is removed from the diet, the small intestine will start to heal and overall health improves. Gluten is found in wheat, barley, rye and possibly oats. Proper diagnosis of celiac disease should be made by a physician.

celiac.org

What is Anaphylaxis?

Anaphylaxis (pronounced *ana-fil-axis*) means a sudden, severe allergic reaction that involves various areas of the body simultaneously or causes difficulty breathing and swelling of the throat. In extreme cases, it can cause death. This type of reaction is sometimes called a systemic, or general body, reaction or allergic shock.

Potential signs and symptoms include:

Mouth: Itchy, swelling of tongue and/or lips

Throat: Itchy, tightness/closure, hoarseness, trouble breathing/swallowing

Skin: Itchy, hives, redness, swelling, red watery eyes

Gut: Nausea, vomiting, cramps, diarrhea

Lung: Short of breath, wheeze, repetitive cough

Heart: Pale or blue skin color, dizzy/faint, weak pulse

Neurological: Sense of “impending doom,” irritability, change in alertness, mood change, confusion

Other: Itchy, red, watery eyes

The most dangerous signs and symptoms include breathing difficulties and a drop in blood pressure or shock, which are potentially fatal.

No two reactions are alike—even in a single individual.

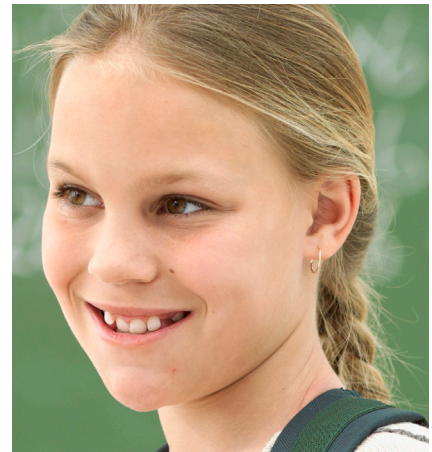
Some children have been observed to exhibit less specific behaviors, such as screaming or crying. Very young children may put their hands in their mouth or pull at their tongues. Some children will describe trigger foods as “spicy” or “burning” their mouth or lips. Others may feel that food is “stuck” in their throat or that their tongue or throat feel “thick.” Finally, some children may only describe a “funny” feeling or may simply feel sick.

“The time and onset of symptoms, the sequence in which symptoms develop, and severity of symptoms frequently vary among individuals and may even vary in the same individual during repeated episodes or in response to different foods.”

Dr. Hugh Sampson—Pediatrics Journal—Anaphylaxis & Emergency Treatment, 2003.

Anaphylaxis can occur immediately (within minutes) following allergen exposure or up to two hours later. In about one-third or more of anaphylactic reactions, the initial symptoms are followed by a delayed wave of symptoms that can occur within 5 to 15 minutes or four or more hours later in what is called a *biphasic reaction*.

Epinephrine is commonly used to counteract the effects of the allergic response, and steroids can decrease the degree of immune reaction. In a biphasic reaction, the initial symptoms may respond to epinephrine; however, the delayed biphasic response may not respond at all to epinephrine and may not be prevented by steroids.



It is imperative that following the administration of epinephrine, the student be transported by emergency medical services to the nearest hospital emergency department for further treatment, and observed for at least 4 hours due to potential of a biphasic reaction or multiphasic reaction even if the symptoms have resolved.

Who Is at Risk?

Anyone is at risk for anaphylaxis, even those without a previous allergic reaction or without a previous anaphylactic reaction. Individuals with known allergies to peanuts, tree nuts, seafood, fish, milk, eggs, soy, wheat, insect bites, bee stings, natural rubber latex and/or medications may be particularly susceptible to anaphylaxis. However, an individual can be allergic to, and develop anaphylaxis from, any food.

Common Causes of Anaphylaxis

- **Food** is the most common cause of anaphylaxis, with 8 foods (peanuts, tree nuts, fish, shellfish, milk, eggs, wheat and soy) accounting for 90% of all reactions.³ However, an individual may be allergic to, and develop anaphylaxis from any food.^{4,5,6} Other causes of anaphylaxis include insect sting venom, medication, latex and even exercise.
- **Insect sting venom.** An allergic reaction occurs when the immune system overreacts to the venom from the insect. Venom from yellow jackets, honeybees, paper wasps, hornets and fire ants can cause severe and even deadly reactions in some people.

3. Decker WW, Campbell RL, Manivannan V, Luke A, St Sauver JL, Weaver A, Bellolio MF, Bergstrahl EJ, Stead LG, Li JT. The etiology and incidence of anaphylaxis in Rochester, Minnesota: a report from the Rochester Epidemiology Project. *J Allergy Clin Immunol* 2008 Dec;122(6):1161-5.

4. Sampson H. Food allergy. *J Allergy Clin Immunol* 2003; 111(2):540-547.

5. Sicherer SH, Muñoz-Furlong A, Murphy R, Wood RA, Sampson HA. Symposium: Pediatric Food Allergy. *Pediatrics* 2003; 111(6):1591-1594.

6. U.S. Food and Drug Administration. [Food Allergies: What You Need To Know](#). Silver Spring, MD: U.S. Department of Health and Human Services

- **Medication.** Almost any medication can cause anaphylaxis. Common medications include aspirin, anesthetics, antibiotics (penicillin), anti-seizure and pain relievers like ibuprofen.
- **Latex.** Latex allergy is commonly triggered by exposure to protein in rubber tree sap or latex. Latex is typically found in disposable rubber gloves, adhesive bandages, syringes, adhesive tapes, balloons, as well as rubber bands, erasers, certain toys, tennis balls and many other products. Certain fruits and vegetables, such as bananas, chestnuts, kiwi, avocado and tomato can cause allergic symptoms in some latex-sensitive individuals. This allergy is most common among healthcare workers and people who have undergone multiple surgeries. latexallergyresources.org
- **Exercise.** Although rare, exercise can cause anaphylaxis. It may not occur after every exercise session and in some cases, only occurs after eating certain foods or taking medications before exercise such as non-steroidal anti-inflammatory drugs (NSAID's) or aspirin.

Given the potential for a very serious allergic reaction (anaphylactic reaction), proper diagnosis by a health care provider/allergist is recommended to determine if someone has allergies to food, insect venom, medication or latex.

When Can It Happen?

An allergic reaction can happen within seconds after the trigger is consumed, or after a delay of a few hours. A reaction can occur not only from ingestion of the allergen, but also from skin contact (tactile) or from inhalation (inhaled airborne trigger) of the allergen. The sensitivity of each individual with a food allergy may fluctuate over time. Not every exposure will necessarily result in anaphylaxis, though the potential always exists. Recent evidence suggests that food preparation may also play a role. Raw egg appears to be more allergenic than cooked egg, and roasted peanuts may be more allergenic than boiled or fried.

How Does It Impact the School?

Every school/district should expect at some point to have students with one or more food allergies. Schools must be prepared to deal with food allergies and the potential for anaphylaxis.

Accidental ingestion of the offending allergen occurs most often at school. A recent study from the journal *Archives of Pediatrics and Adolescent Medicine* states that 1 in 5 children with food allergies will have a reaction while in school.

The student with an undiagnosed food allergy may experience his/her first food allergy reaction at school. Up to 25 percent of students with life-threatening allergies experience their first anaphylaxis in school.*

When a health care provider assesses that a child's food allergy may result in anaphylaxis, the child's condition may be deemed to meet the definition of "disability," providing coverage under the Federal Americans with Disability Act (ADA), Section 504 of the Rehabilitation Act of 1973, and potentially under the Individuals with Disabilities Education Act (IDEA) if the allergy management affects the student's ability to make educational progress.

The safest and healthiest learning environment for students with life-threatening food allergies occurs when schools partner with parents/guardians, tap into their knowledge and experience and develop a comprehensive management plan. With this approach, schools can help parents/guardians and their children make the very necessary transition of moving from the safety of their home environment into the expanding world of a school.

When done well, this is one of the greatest lessons a child can learn: that he or she can be safe in a world outside of his or her own home. Schools can prove to be a valuable resource to children with food allergies and their families by helping children feel accepted within the school community.

*Reference: MA Department of Public Health Data Health Brief, 2010
Data health briefs can be found on MA DPH School Health Services website

Section III. School Food Allergy Exposure Prevention

SCHOOL FOOD ALLERGY EXPOSURE PREVENTION

Purpose

The goal of Food Allergy Exposure Prevention (FAEP) is to provide a safe environment for children who have life-threatening food allergies while minimizing the impact on the educational and nutritional experience of other students.

Intake

For each child with a food allergy enrolled in school, the nurse or designee will take the following steps:

- A. The school nurse or designee will be notified regarding students with food allergy, preferably before enrollment. New students will be queried as part of the health history questionnaire regarding the presence of food allergies. Current students who become diagnosed with food allergy while enrolled will immediately notify the nurse of their allergy and an action plan will be developed.
- B. The school nurse or designee will contact parents/guardians of allergic students to request (i) a detailed Emergency Care Plan (ECP)/Food Allergy Action Plan (FAAP) from each student's clinician and (ii) other required documentation, including (if not part of the Action Plan):
 - licensed health care provider orders with instructions for foods to avoid and foods to substitute
 - licensed health care provider orders for medication self-administration if age appropriate and per school policy
 - symptoms to anticipate
 - medication orders
 - emergency procedures to follow if an exposure and/or reaction occurs
 - a recent photo of the student; requires parent permission to share/post
 - Physician Medical Statement for students requiring special meals; include foods to avoid and foods to substitute (see sample medical statement forms on stlouischildrens.org/fame/all-forms)
- C. The school nurse or designee will contact parents/guardians of students with allergies to set up allergy intake meetings with school staff and each parent/guardian. The intake meeting may be performed by phone, if necessary. The meeting should be completed prior to the start of each school year, in order to provide parents/guardians and school staff adequate time to make necessary arrangements. During the allergy intake

meeting, parents/guardians will meet with appropriate school staff (including, where applicable, an administrator, a school nurse, teachers, transportation director and/or food service manager) to:

- complete required paperwork
- discuss action plan/necessary accommodations
- provide medication, i.e. epinephrine

D. During (or after) each intake meeting, the school nurse or designee will complete, as appropriate, a Emergency Care Plan (ECP)/Food Allergy Action Plan (FAAP) and/or an Individualized Health Plan (IHP), and will contact the 504 coordinator to determine if a 504 Plan is indicated.

Medication Handling and Storage

- A. The school nurse or designee will distribute parent/guardian-provided medications (including antihistamines and epinephrine auto-injectors) to those individuals specified in the ECP/FAAP.
- B. The school nurse or designee will maintain a schedule for tracking medication status and expiration dates.
- C. School-provided epinephrine auto-injectors will be placed in an easily accessible location in each nurse's office, cafeteria or any other appropriate location, and will be maintained by the school nurse.
- D. The school nurse or designee will delegate the administration of emergency medications to properly trained school staff members supervising the child with a food allergy.

Documentation

An essential part of exposure prevention is documenting all the steps that were taken during the intake process to ensure a safer school environment. The saying goes "if it is not documented, it did not happen."

- A. The school should maintain on file for each child the following:
- ECP/FAAP
 - Licensed health care provider orders and instructions
 - Nursing encounters and all allergic events
 - Medical Statement for students requiring special meals and/or accommodations (USDA requirement) (See sample forms on stlouischildrens.org/fame/all-forms)

B. The school should also maintain records on:

- Medication expiration dates and location
- School faculty and staff training including attendee names, dates and topics
- System for retaining actual food labels for at least 24 hours after food is served



Faculty and Staff Responsibilities

A. **All school staff** with significant contact with the student will receive a copy of the student's individualized Emergency Care Plan (ECP)/Food Allergy Action Plan (FAAP) and are to familiarize themselves with action plan components.

B. **All school staff** receive education and training from the school nurse at least annually and as needed:

- food allergy and anaphylaxis information
- food label reading
- proper hand washing
- avoidance of cross-contact
- effective environmental cleaning (i.e., table and desk washing)
- provision of allergen-free tables
- clear marking of foods with potential allergens
- medication location, storage, usage and expiration date
- emergency procedures
- peer support and psychosocial needs
- proper reporting and documentation

C. **All school staff** who have contact with children with food allergies will take part in anaphylaxis drills at least annually and as needed.

D. **All school staff** will be made aware of the potential for students who have life-threatening food allergies becoming targets for harassment, intimidation and bullying. School nurses should talk with students on a regular basis about potential and/or actual bullying from school classmates.

- E. **The school maintenance/custodial department** will identify all potential non-food allergens including these items: cleaning supplies, paints, work materials or other substances in the school and remove. Only non-allergenic items will be used. Cleaning protocols should include but not be limited to frequency of cleaning and type of cleaning solutions.
- F. **Substitute teachers** will receive instruction regarding each student's ECP/FAAP from the school nurse or other designated staff. Substitute teachers will receive training on food allergies and use of epinephrine auto-injectors at least annually and as needed.
- G. **Debriefing: If a reaction occurs at school**, the school nurse or designee will review what went well, what were challenges, along with input from staff, parents and students. Once debriefing has been completed, determine if procedures need to be updated based on debriefing assessment.

Additional School Responsibilities

A. School Culture: Schools will provide education in the school community as appropriate. This may include:

- letters/newsletters to parents/guardians
- food allergy workshops during professional development
- parent/guardian presentations/discussion
- student presentations/discussion

B. Schools will educate all students regarding:

- the critical nature of food allergies
- hand washing before and after eating
- the importance of not trading/sharing food or drinks
- food allergy prevalence, symptoms and reaction prevention
- taking more responsibility for their food allergies as they grow older and are developmentally ready to accept responsibility
- Determining if the student may carry their epinephrine auto-injector. Refer to Authorization for Students to Self-Carry in the Forms Section on stlouischildrens.org/fame/all-forms.

SCHOOL NUTRITION REQUIREMENTS

- A. Comply with federal laws, state laws and guidelines for food allergic students.
- B. Have a process in place for identifying students with food allergies. Create Point-of-Sale (POS) food allergen alert message indicating the student has a food allergy.
- C. Prior to meals, designated staff will clean tables and chairs for use by students with life-threatening food allergies (LTFA) with your district-approved cleaning solutions. Use separate cleaning cloths or appropriate disposable wipes effective in removing allergen traces.
- D. School nutrition staff will procure labels of all foods offered in the cafeteria and compile a manual and/or computerized database of all foods and ingredients.
- E. School nutrition staff will review all labels for potential allergens including labels that have advisory statements such as “may contain...” or “made/manufactured on equipment” or “in a facility that processes...” with special attention to (i) new products, (ii) products from new suppliers and (iii) will annually do a complete review of all labels.
- F. When feasible, school nutrition staff will select manufacturers and products based on their ability to provide foods that (i) are thoroughly labeled and (ii) limit content of the eight major foods that cause 90% of the allergic reactions.
- G. School Nutrition Director or Dietitian in collaboration with the school nurse will provide instruction to all school nutrition staff on signs and symptoms of life-threatening allergic reaction, reading food labels for allergen identification, cross contact, safe food handling and food item labeling requirements at least annually. Training will also include USDA regulations for Accommodating Children with Special Dietary Needs. fns.usda.gov/cnd/guidance/special_dietary_needs.pdf
- H. School Nutrition personnel will make pre-determined substitutions or modifications for meals served to students with food allergies.
- I. School Nutrition personnel will notify the school nurse and/or teacher of any menu changes that potentially impact students with food allergies. Parent/guardian of the student with LTFA will be notified of menu changes.

SPECIAL SITUATIONS

- A. **Field Trips/School-Sponsored Activities/Athletics/After-Care Programs:** All potential food contact situations should be considered and an appropriate meal/snack arranged for each child as necessary. Field trips should be chosen so that students will not be excluded due to risk of allergen exposure. The parents/guardians, school nurse, school nutrition staff and the activity supervisor should discuss needed accommodations.

The school nutrition manager should be notified in advance, at least two weeks, of all field trips requiring sack lunches to be provided by the school nutrition department. Notification should include a list of students with LTFA and other special dietary needs.

The school nurse should be notified of all field trips in advance and determine location of nearest Emergency Medical Services (EMS). The school nurse will review each student's Emergency Care Plan (ECP)/Food Allergy Activity Plan (FAAP) with the activity supervisor and will provide training in storage/administration of epinephrine auto-injector.

The activity supervisor will ensure that each student's ECP/FAAP, all emergency medications and a trained staff member accompany each student during activities. School-sponsored after-school activities should be consistent with the school's policy and procedure regarding food allergy management. See Field trip form on stlouischildrens.org/fame/all-forms.



- B. **Food in the Curriculum:** School staff will consider the use of alternatives to potential food allergens in educational tools, crafts and incentives. Non-food items should be considered for use as incentives or rewards.

Attention should also be given to items to which students may have contact sensitivity, even without consumption (i.e., pet supplies). All food, food elements and pet supplies incorporated as curricular material will have clear ingredient labels available for review by parents/guardians of students with life-threatening food allergies (LTFA) prior to use.

Children will be provided time for proper hand washing before and after eating and/or using food products. The grading or evaluation of students shall not depend on their ability to manipulate or consume items to which they have an allergy.

- C. **School-Sponsored Snacks and Events:** The school will collaborate with the parents/guardians of students with LTFA to select food and snacks that all students can safely consume. Any food distributed will include clear ingredient labels and will be available for review by parents/guardians of students with LTFA prior to distribution. Children will be provided time for proper hand washing before and after eating and/or using food products.
- D. **Parent/Guardian-Sponsored Classroom Events:** Room parent should collaborate with the classroom teacher to ensure that all children are equally accommodated in all classroom celebrations. Parents/guardians of students with LTFA should be informed in advance of any school events where food will be served. Any food distributed will include clear ingredient labels and will be available for review by parents/ guardians of students with LTFA prior to distribution. Children will be provided time for proper hand washing before and after eating and/or using food products.
- E. **School Transportation:** Food, snacks or treats should not be distributed, handled or eaten on buses. Other considerations for the transportation of a child with LTFA include communication system in place (i.e., cell phones, walkie-talkies or radios), student placement on the bus, the availability/location of an epinephrine auto-injector, and an individual properly trained in the recognition of an allergic reaction and how to administer the epinephrine auto-injector.
- F. **School Athletics/Coaches:** Coaches should be provided with specific information pertaining to all students with life-threatening allergies. The school nurse or designee should provide coaches each child's Emergency Action Plan (EAP), Individual Health Care Plan (IHCP) and/or 504 Plan and give an explanation.
- Identify who is responsible for bringing student specific and stock (if available) epinephrine auto-injectors that are readily accessible as well as ECPs to every practice and game. Athletic staff members and coaches, must be trained to recognize symptoms of an allergic reaction and understand how the players might communicate them. Know how to respond to a severe allergic reaction (anaphylaxis), and trained on how to use the epinephrine auto-injector.
 - Make certain that an emergency communication device (i.e. walkie-talkie, intercom, cell phone, etc.) is always available. The student-athlete must be permitted to wear medical alert identification and it should not be removed for activities or considered jewelry. Tape medical alert identification to the body (wherever it is usually worn), but parts of it should remain visible for medical personnel to view in case of an emergency. Remind parents/guardians regularly that if they provide a postgame snack, it must conform to school and district food allergy policies and be safe for all of her players.

SPECIAL CONSIDERATIONS FOR TWEENS/TEENS

Teens with food allergies have unique needs due to the characteristics of a typical day for a middle or high school student. Consider these factors below when writing a food allergy plan for teens with LTFA:

- Students are exposed to new situations:
 - Moving to different classrooms, larger buildings and campuses requires updated avoidance strategies, epinephrine availability and designated assistance.
 - Students may have access to vending machines. Select vending products that are thoroughly labeled.
 - Classroom risks present new avoidance issues, such as chemistry/biology labs or home economics/cooking class.
- Students may travel off-site during:
 - Open lunch periods in which they eat at local eateries.
 - School-sponsored travel to other towns, states or countries for competitions and events.
- Students are more independent:
 - May exhibit risk taking behaviors such as eating unsafe food.
 - May be allowed to carry and self-administer emergency medicines, but should not be fully responsible for giving epinephrine. This is because a severe reaction could incapacitate them. The school nurse or designee trained to give epinephrine should be available during school and all school-sponsored functions to help give epinephrine in an emergency.
- Parents/Guardians:
 - As the student becomes more independent, they continue to need their parent/guardian and school to collaborate on their care/accommodations.
 - Inform parent/guardian of who the trained designee is and give opportunity to meet.



SCHOOL FOOD ALLERGY EXPOSURE PREVENTION CHECKLIST

- Food allergy documented
- School nurse-parent/guardian-teacher-staff meeting
- Individualized Health Plan (IHP), Emergency Care Plan (ECP)/Food Allergy Action Plan (FAAP) and/or 504 complete
 - Distributed to appropriate staff
- Licensed health care provider orders and instructions obtained
- Epinephrine unlocked and accessible
- Expiration dates documented
- School-provided epinephrine
- School faculty and staff training complete
- School food service requirements are met including Physician Statement for Special Meals (USDA requirement)
- School staff role specific training completed
- Potential special situations considered and included in action plan
- School culture addressed
 - Food allergy awareness
 - Zero tolerance of teasing or bullying
 - Positive social and emotional needs of students

Section IV. Managing Life-Threatening Allergic Reaction in the School Setting

- LTFA Clinical Assessment Tools

MANAGING LIFE-THREATENING ALLERGIC REACTIONS IN THE SCHOOL SETTING

General Guidelines

- A. The recommendation is that every school with a child at risk for anaphylaxis have a full-time registered professional nurse on staff, responsible for the development of the Individual Healthcare Plan (IHP) or Emergency Care Plan (ECP)/Food Allergy Action Plan (FAAP).
- B. The ECP/FAAP or IHP must be completed on an annual basis at a minimum (different food allergies for one child may require different plans for that child). The plan is to be completed in conjunction with the licensed health care provider, parents/guardian and a team consisting of all staff members who have contact with the child. A specific classroom plan will also be included in the plan.
- C. The school should alert the local Emergency Medical Service (EMS) providers that a student with a life-threatening food allergy (LTFA) is enrolled and request that they carry rescue medication during all emergency responses to the school. *Note: Not all EMS personnel carry epinephrine or may not be authorized to administer epinephrine.*
- D. An Emergency Shelter-in-Place plan should be developed and reviewed yearly. (See Section VI)
- E. Emergency care information should be maintained in the substitute personnel plan for the teacher as well as the nurse's substitute personnel plan.
- F. Staff working directly with a student with known life-threatening allergies should receive education and training on that individual student's information at least annually and as needed. This training includes, but is not limited to, special class teachers (such as art, music and PE). This training should be documented.
- G. On an annual basis, staff should be trained in recognizing signs of an allergic reaction and administering emergency medication. This training should be documented.
- H. Drills should be practiced at least annually and as needed.



I. Every school should include in its emergency response plan a written plan outlining emergency procedures for managing life-threatening allergic reactions, including students with undiagnosed LTFA.

J. Emergency response plans should be written for the following occasions:

- Travel to and from school
- During the school day
- Before- and after-school programs
- Field trips

K. Emergency medications should be stored in a reasonably accessible location:

- Medication should be kept in a secure but unlocked area
- Staff should be aware of the storage locations and of any back-up supply
- Students may be allowed to carry their own emergency medication when appropriate
 - School nurse or designee should check expiration date
 - Include in IHP and/or 504 Plan
 - Notify staff that student self-carries
 - See self-carry form in the FAME Tool-kit on stlouischildrens.org/fame/all-forms.

OUTLINE FOR RESPONDING TO LIFE-THREATENING FOOD ALLERGY REACTION (LTFA)

Plan to quickly recognize, respond and appropriately provide treatment and management of an allergic reaction.

- For an allergic reaction, contact the school nurse or school nurse designee immediately AND refer to the child's Emergency Care Plan (ECP)/ Food Allergy Action Plan (FAAP) if immediately available.

If anaphylaxis does occur or the ECP/FAAP direction states, the person with the child shall:

- Inject epinephrine immediately.
- Call 911.
 - Notify the local emergency medical services that a life-threatening allergic reaction is occurring.
 - Anyone who has been administered epinephrine must be transported to EU to be observed for another reaction and/or additional treatment.
- Remain with the student and stay calm—have second dose readily available.
- Place the student in a reclining position, raise lower extremities and do not move the student.
- Direct emergency medical responders to the student.
- Contact parents/guardians/emergency contacts.
- Attend to student's classmates.
- Activate the emergency response team.
- Notify school administration.
- Notify student's primary care provider and/or allergy specialist.
- Accompany student to the emergency care facility.
- Manage crowd control, if applicable.
- Assist student's re-entry into school.
- Complete the necessary follow-up paperwork and follow-up with the family.

After a life-threatening allergic reaction occurs, the following actions will be taken:

I. Immediately following:

- Obtain as much accurate information as possible about the allergic reaction.
- Identify those who were involved in the medical intervention and those who witnessed the event.
- If an allergic reaction is thought to be from a food provided by the school nutrition service, request assistance of the School Nutrition Director to ascertain what potential food item was served/consumed. Review food labels from the School Nutrition Director and staff.
- Complete Report of Epinephrine Administration Form on stlouischildrens.org/fame/all-forms.

II. Shortly after the event:

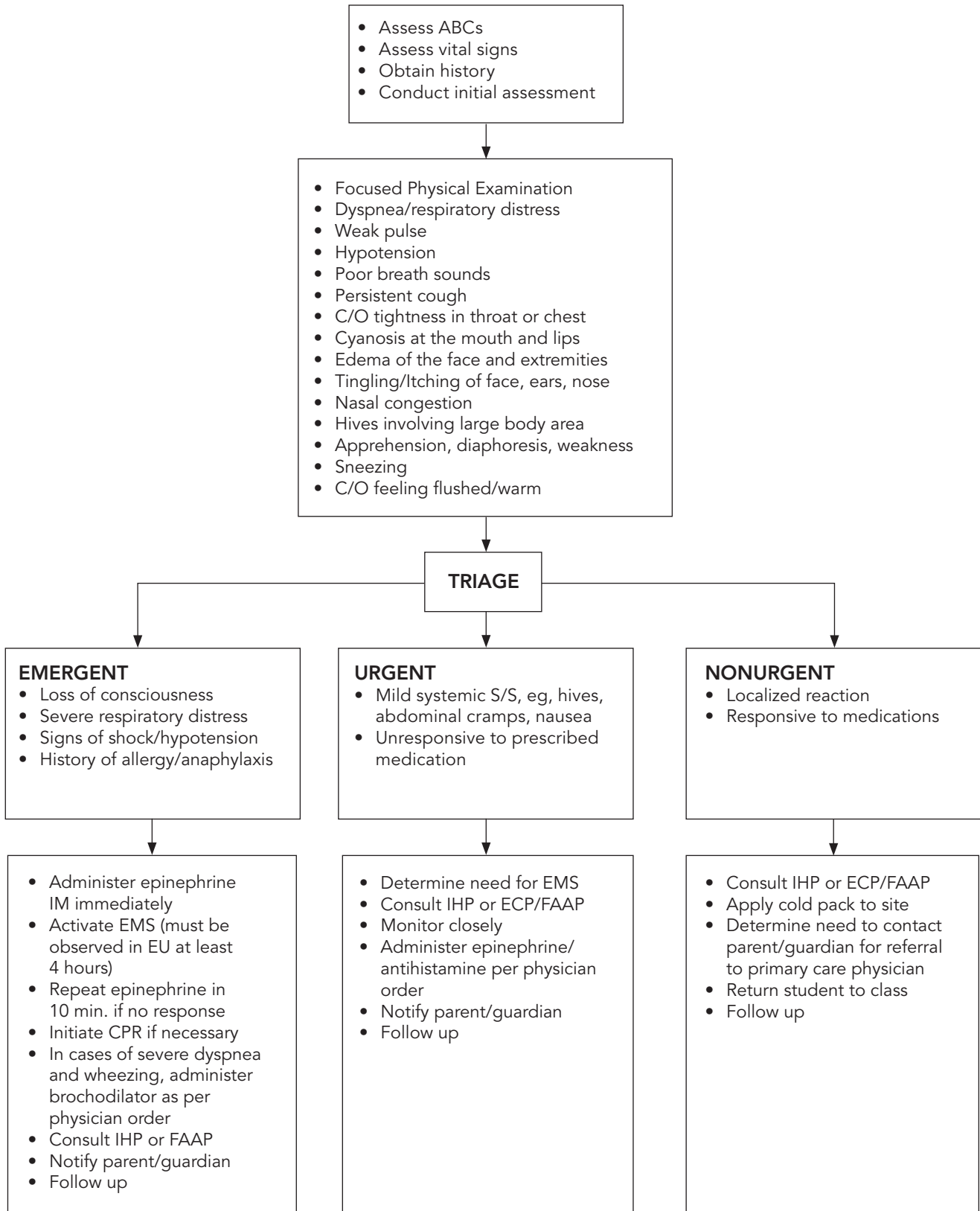
- Agree on a plan to disseminate factual information and review knowledge about food allergies (age-appropriate) to schoolmates who witnessed or were involved in the allergic reaction, after both the parents/guardians and the student consent.
- Communicate to the broader school community (families, students and staff) that a LTFA occurred along with information about the outcome and how the school's plan was implemented. Taking the opportunity to educate and re-educate the school community.
- Review the Emergency Care Plan (ECP)/Food Allergy Action Plan (FAAP) described in the Individual Health Plan (IHP). If a student does not have an IHP and/or Emergency Care Plan (ECP)/Food Allergy Action Plan (FAAP), initiate one.
- Amend the student's ECP/FAAP and/or the school's emergency response plan to address any changes that need to be made.
- The student and parents/guardians shall meet with the nurse/staff who were involved in the allergic reaction and be reassured about the student's safety, what happened and what changes will be made to prevent another reaction.
- Collaboration with the student's medical provider would be indicated to address any medication changes.

UNDIAGNOSED LTFA

- The school should have a policy and protocol for the management of anaphylaxis in individuals with unknown allergies.
- Schools should be equipped with a reserve supply of epinephrine to accommodate the increasing prevalence of severe reactions in students with unknown allergic conditions. *Epinephrine administration reports from Massachusetts indicate that 1 in 4 students who experience anaphylaxis were not previously diagnosed with a life-threatening allergy (MA Department of Public Health Data Health Brief, 2010).*
- If a student who is undiagnosed has an anaphylactic reaction, collaboration with the student's medical provider would be indicated to address the need for a medical LTFA workup/diagnosis, (ECP)/Food Allergy Action Plan (FAAP) and prescription for epinephrine auto-injector.
- School nurse or designee should begin the process of Food Allergy Exposure Prevention starting on page 16.

NOTE: It is important to be aware of what the local emergency medical services can provide, as some ambulance services may not carry or be permitted to administer epinephrine. It is recommended to call the local EMS to inform them of the number of children attending school with LTFAs and to recommend that they carry a supply of epinephrine.

ANAPHYLAXIS/ALLERGIC REACTION



Adapted from The School Nurse Task Force of the Illinois Emergency Medical Services for Children

Tools for Assessing Students

PEDIATRIC VITAL SIGNS BY AGE

AGE	RR	HR	BP
Neonate (birth-30 days)	30-60	100-180	50-90
Infant (1-12 months)	24-50	100-160	60-100
Toddler (1-3 years)	24-40	90-150	80-105
Preschooler (3-5 years)	20-30	80-140	95-105
School-aged (5-12 years)	18-30	65-120	95-120
Adolescent (12 years and older)	12-20	60-100	100-128

**RR=respiratory rate; HR=heart rate;
BP=systolic blood pressure (mm Hg);**

INDICATORS OF HYPOPERFUSION

SIGN	COMMENT
Tachycardia	early sign
Increased breathing rate	
Decreasing level of consciousness	
Central pallor or cyanosis with cool skin	
Weak, thready or absent peripheral pulses	
Delayed capillary refill time	
Bradycardia	late sign
Hypotension	late sign

AVPU SCALE

RESPONSE	ASSOCIATED FINDINGS
A Alert ^a	The student is awake and able to speak or interact spontaneously
V Verbal (responds to verbal stimulus)	A verbal stimulus elicits some response; for example, the student's eyes may open when you call loudly, or agitation may lessen in response to a command
P Painful (responds to painful stimulus)	The student responds to a painful stimulus by moaning, crying or withdrawing from pain
U Unresponsive	The student shows no response to verbal or painful stimuli

^a Keep in mind that an alert student who appears to be mildly confused, restless or irritable may be exhibiting an altered level of consciousness. If necessary, ask others who are familiar with the student whether current behavior is characteristic.

PEDIATRIC GLASGOW COMA SCALE

	1 YR OR OLDER	YOUNGER THAN 1 YR	SCORE	
Eye Opening	Spontaneous	Spontaneous	4	
	To verbal command	To shout	3	
	To pain	To pain	2	
	No response	No response	1	
Best Motor Response	Obeys commands	Spontaneous	6	
	Localizes pain	Localizes pain	5	
	Flexion–withdrawal	Flexion–withdrawal	4	
	Flexion–abnormal (decorticate rigidity ^a)	Flexion–abnormal (decorticate rigidity)	3	
	Extension (decerebrate rigidity ^b)	Extension (decerebrate rigidity)	2	
	No response	No response	1	
	OLDER THAN 5 YR	2–5 YR	YOUNGER THAN 2 YR	SCORE
Best Verbal Response	Oriented	Appropriate words/phrases	Smiles/coos appropriately	5
	Disoriented/confused	Inappropriate words	Cries, inconsolable	4
	Inappropriate words	Persistent cries/screams	Persistent inappropriate cries/screams	3
	Incomprehensible sounds	Grunts	Grunts, agitated, restless	2
	No response	No response	No response	1

^a Flexion of elbows, wrists and fingers with extension of legs and ankles, usually indicating ischemia or damage to cerebral hemispheres.

^b Extension of arms and legs with rigidity, usually indicating diffuse cerebral injury, ischemia or damage to brainstem structures. See the Glasgow Coma Scale, Adult in Appendix B for diagrams of these postures.

INTERPRETING THE PGCS SCORE

KEY POINT

For an accurate assessment of a student's condition, always interpret Pediatric Glasgow Coma Scale scores in conjunction with other clinical findings.

To determine the PGCS score, add the numbers from each component. The possible total ranges from 3 to 15 points.

- A score lower than 9 indicates severe impairment
- A score of 9 to 12 indicates moderate impairment
- A score of 13 to 15 indicates minor impairment or normal function

Note, however, that a student with a score of 13 to 15 may still have neurologic abnormalities that can progress to a life-threatening condition. Always interpret PGCS scores in conjunction with other neurologic assessment parameters as well as your overall clinical impression of the student's condition.

ORIENTATION

KEY POINT

Be sure to ask age-appropriate questions when assessing orientation to person, place and time.

Section V. Managing Students with Food Allergy During an Emergency Shelter-in-Place

MANAGING STUDENTS WITH FOOD ALLERGY DURING AN EMERGENCY SHELTER-IN-PLACE

School districts and schools across the country, along with the federal government, are developing emergency plans in the event of an occurrence that would shelter children and staff in place rather than evacuating them in the event of a crisis. Some schools may refer to this as a “lockdown” or “shelter-in-place” where no one is permitted to leave the premises for a period of time (1 to 3 days or more). Such emergencies may result from a disaster involving hazardous materials outside of the school building(s), a threat of terrorism, or an act of nature (earthquake, tornado and hurricane).

The safety of all children during a lockdown is critical, this includes students with life-threatening food allergies. Emergency plans must take into account the special needs of children with medical conditions, including children with food allergy. Of particular concern is the risk posed to children with food allergies when the emergency food supply could be harmful to them (for example, peanut butter sandwiches for children with peanut allergy). As part of schools planning for emergency situations the safety of all food-allergic children during the event of a lockdown situation must be taken into account.

Response kits should be prepared for school nurses, teachers and other staff so they have easy access to needed supplies. For example, a response kit should include student emergency care plan (ECP)/food allergy action plan (FAAP), emergency medicines for use in sudden allergic reactions, in breathing difficulties, including anaphylaxis, as well as first aid supplies.

Below are specific suggestions regarding access to specific foods and medications for students with LTFA which would be applicable to students with other medical conditions as well.



Food

- Schools should work with the parents/guardians of children with food allergy to ensure an adequate supply of safe, non-perishable foods for that child.
- Schools should educate the staff about food allergies and make the necessary arrangements to ensure that each student has an adequate supply of safe food, as well as an emergency care plan (ECP)/food allergy action plan (FAAP) to treat any reactions.

- Parents/guardians of students with food allergies may want to consider providing a 3-day supply of safe food from home, in case supplies of certain safe foods run low during the emergency.
- Every effort should be made to have all children wash their hands with soap and water or use hand wipes before and after each meal/snack.

Medications

- The student's parents/guardians should provide the school with his/her prescribed medication in the original pharmacy container with dosage, frequency, etc.
- Each student should have an emergency care plan (ECP)/food allergy action plan (FAAP) that is provided to the school by the student's parents/guardians which includes written instructions, signed by a physician, indicating how and when medication is to be administered during a reaction.
- An emergency bag filled with the student's ECP/FAAP, medications and written instructions should be created for students with special medical needs. The bag should be assembled in collaboration with the parent/guardian, student, private health care provider, school personnel and the school nurse. This bag would need to travel with the child at school and to school-related activities.
- Proper disposal methods of an exposed needle, such as an epinephrine auto-injector, should follow current OSHA standards.
- Many children with food allergy also have asthma. Battery-powered nebulizers along with medication may be needed to treat asthma.
- The school's emergency plans for addressing medical emergencies need to consider where medication is to be kept, how medical treatment can quickly be given, and by whom, in case a food-allergy induced reaction or other medical emergency occurs. Schools should hold scheduled documented drills to ensure the safe care of students experiencing a medical emergency.



For more information regarding planning for an emergency, including natural disasters, violent incidents and terrorist acts in the school setting, see the U.S. Department of Education guide, *Practical Information on Crisis Planning: A Guide for Schools and Communities*. ed.gov/admins/lead/safety/emergencyplan/crisisplanning.pdf

Section VI. Recommendations on Managing LTFA and Anaphylaxis in Schools Endorsed by National Organizations

- Guidelines for Managing Food Allergies in Schools
- Policy Statement: American Academy of Pediatrics
- Position Statement: National Association of School Nurses

GUIDELINES FOR MANAGING FOOD ALLERGIES IN SCHOOLS

Today, one in 13 children has food allergies, and nearly 40 percent of these children have already experienced a severe allergic reaction. Food allergies among children increased by 50 percent between 1997 and 2011, according to a 2013 study released by the Centers for Disease Control and Prevention (CDC). Many of these reactions happen at school. If schools partner with students, parents/guardians and physicians to minimize risks, accidental exposure in schools can be reduced.

The CDC recently published *Voluntary National Guidelines for Managing Food Allergies in Schools and Early Care and Education Programs* and the information below was derived from these guidelines.

We encourage you to review the entire publication at foodallergy.org/file/cdc-guidelines.pdf.

School's Responsibility

Federal Laws and Regulations:

- Recognize that food allergies may constitute a disability and that schools should not exclude children with food allergies from activities (i.e. birthday celebrations, classroom parties, field trips, projects, etc.)
- Understand and comply with federal laws and regulations that govern food allergies at school including Section 504, ADA, ADAAMA, IDEA and FERPA.
- Follow federal and state laws and regulations regarding sharing private medical information about the student.

Create an Individual Accommodation Plan:

- Convene a team that may include the school nurse, teacher, counselor and school nutrition manager to work with parents/guardians to establish a Section 504 or other written accommodation plan. Students whose food allergies constitute a disability should be evaluated for a Section 504 plan.
- The accommodation plan (504 or other written accommodation plan) must include:
 - a. Accommodations, modifications or services needed for safe access to all school activities.
 - b. An emergency care plan with instructions on how to administer medication in the event of an allergic reaction.
 - c. If meal modifications are necessary, a written medical statement for special meals from a licensed physician is part of the plan.

Implement Recommended Practices for Safety and Inclusion:

- Avoid the use of identified allergens in class projects, parties, holidays and celebrations, arts, crafts, science experiments, cooking, snacks and rewards. Modify class materials as needed.
- Use non-food incentives for prizes, gifts and awards.
- Have rapid access to epinephrine auto-injectors in cases of food allergy emergency and train staff to use them.
- Consider designated allergy-friendly seating arrangements.
- Encourage children, school staff and volunteers to wash hands before and after handling or consuming food.
- Train transportation staff in how to respond to food allergy emergencies.
- Do not exclude children with food allergies from field trips, events or extracurricular activities.
 - Have a plan in-place and access to epinephrine auto-injector.
- Invite, but do not require, parents/guardians of children with food allergies to accompany their child in addition to the regular chaperons.
- Implement and practice emergency drills before an allergic reaction occurs to assure the effectiveness of plans.

Train Staff Members:

- Review 504 plan or other accommodation plan with core team members, teachers and other school staff who interact with student.
- Designate school personnel and properly train in administration of medications in accordance with State laws governing the administration of emergency medication.
- Have rapid access to epinephrine auto-injectors at all times including recess, sports, field trips and extracurricular events.
- Train transportation staff in how to respond to food allergy emergencies, have two way communications available, and provide rapid access to epinephrine auto-injectors during bus transportation.
- Make a positive school climate that reduces bullying and social isolation and promotes acceptance and understanding of children with food allergies.

Family's Responsibility

- Notify the school of the child's allergies.
- Provide labeled medications and replace medications after use or expiration.
- Appropriately discard expired or used medications.
- Provide emergency care instructions from physician with photo of child.

- Provide emergency contact information.
- Request a meeting to create a written plan (504 or other accommodation plan) that includes accommodations needed for safe access to all school sponsored activities and emergency care instructions to treat allergic reactions.
- Teach child age appropriate management strategies:
 - Allergen avoidance
 - Report all allergic reactions to school staff immediately
 - Self-carry/Self Administration

Student's Responsibility

- Remind students not trade food with others.
- Student should not eat anything with unknown ingredients.
- Report bullying or teasing to teacher and parents/guardians.
- Notify an adult immediately if they have eaten something they are allergic to or if they feel ill.

Additional Resources

- **Voluntary National Guidelines for Managing Food Allergies in Schools and Early Care and Education Programs**, [cdc.gov/healthyouth/foodallergies/pdf/13_243135_A_Food_Allergy_Web_508.pdf](https://www.cdc.gov/healthyouth/foodallergies/pdf/13_243135_A_Food_Allergy_Web_508.pdf)
 - Safety and Inclusion Recommendation –see pages 41-43 of the CDC guidelines
- **Trends in Allergic Condition: Data Brief from the Centers for Disease Control and Prevention (CDC)**, [cdc.gov/nchs/data/databriefs/db121.pdf](https://www.cdc.gov/nchs/data/databriefs/db121.pdf)
- **Protecting Students with Disabilities – Guidance from the Office for Civil Rights (OCR)**, [ed.gov/about/offices/list/ocr/504faq.html](https://www.ed.gov/about/offices/list/ocr/504faq.html)
- **Food Allergy & Anaphylaxis Emergency Care Plan**, [foodallergy.org/FAAP](https://www.foodallergy.org/FAAP)
- Gupta, Ruchi, S.; et al. "The Prevalence, Severity, and Distribution of Childhood Food Allergy in the United States", *Pediatrics*, Vol. 128, No: 1, June, 2011.
- **Epinephrine Auto-Injector Training for School Staff "Get Trained" – National Association of School Nurses**, [nasn.org/ToolsResources/FoodAllergyandAnaphylaxis/GetTrained](https://www.nasn.org/ToolsResources/FoodAllergyandAnaphylaxis/GetTrained)
- **Food Allergy Management and Education (FAME) – National FAME Manual and Tool-kit – Federal/State Laws**, [stlouischildrens.org/fame/federal-state-laws](https://www.stlouischildrens.org/fame/federal-state-laws)

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Role of the School Physician

COUNCIL ON SCHOOL HEALTH

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POLICY STATEMENT

Role of the School Physician

abstract



The American Academy of Pediatrics recognizes the important role physicians play in promoting the optimal biopsychosocial well-being of children in the school setting. Although the concept of a school physician has existed for more than a century, uniformity among states and school districts regarding physicians in schools and the laws governing it are lacking. By understanding the roles and contributions physicians can make to schools, pediatricians can support and promote school physicians in their communities and improve health and safety for children. *Pediatrics* 2013;131:178–182

HISTORY OF PHYSICIANS IN THE SCHOOL SETTING

Physicians associated with schools have held a variety of titles over the years. For the purpose of this article, a school physician is any physician who serves in any capacity for a school district, such as, but not limited to, an advisor, consultant, medical director, volunteer, team physician, medical inspector, or district physician.¹ This statement does not address the role of physicians in school-based health centers² or the role of community pediatricians as private providers to school-aged children. Information on these topics is available on the American Academy of Pediatrics (AAP) Council on School Health Web site (<http://www.aap.org/sections/schoolhealth/>).

The tradition of a school physician dates back to the late 1800s, as parents and public officials recognized that public school facilities needed national systematic medical inspection.³ Over time, the role of the school medical inspector expanded to include containment of prevalent infectious diseases of childhood^{3,4} and eventually as an important vehicle to manage universal immunization.⁵ Modern school physicians focus on the needs of individual children as well as the public health of the school community.^{3,6,7} They often assist schools in accommodating students who have special health care needs, manage acute and chronic illness, and oversee emergency response, environmental health and safety, health promotion, and education.^{8,9}

Millions of children spend roughly 7 hours per day, 180 days per year, in school¹⁰ and may only visit their medical home once annually. In 1999, Dr Joycelyn Elders acknowledged the interdependence of health and education when she said, “You cannot educate a child who is not healthy, and you cannot keep a child healthy who is not educated.”¹¹ In addition, Bright Futures, a national health care promotion initiative, encourages public schools and public health communities to become partners in prevention efforts.¹² Despite the value of coordinating

COUNCIL ON SCHOOL HEALTH

KEY WORDS

coordinated school health, school, school health, school physician

ABBREVIATION

AAP—American Academy of Pediatrics

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health and education, physicians are not effectively and consistently involved in schools across the nation. As a result, US children have varying levels of medical support and safety, depending on the community in which they live. Well-placed school physician expertise can contribute to the creation of policies and practices that provide sound, evidence-based structure to coordinated school health teams.

CURRENT LAWS PERTAINING TO THE PHYSICIAN IN SCHOOLS

Currently, there is no single national set of school health laws. School health services are primarily regulated by state or local governments or individual school districts, and these regulations vary.^{13–15} Some states mandate school physicians; most do not.^{16,17} However, “no one has systematically identified the full range of relevant legal authorities pertinent to schools that may help shape the health of children and adolescents.”¹⁵

Federal law guarantees antidiscrimination and equal protection to individuals who have disabilities.^{18–20} These laws require federally funded states to provide “related services,” such as school nursing, as part of a child’s Individualized Education Plan. However, the US Supreme Court ruled that school districts are not required to provide physician services for individual students, except for diagnostic or evaluative purposes for special education services.^{13–15} This ruling’s broad interpretation has limited funding to schools for physician services, despite the fact that many states, and the AAP, established basic minimal health services schools should provide without established guidance for pediatrician involvement.^{21,22}

The AAP recommends that all schools have a registered professional school nurse, hereafter referred to as school

nurse, to provide health services in schools.²³ The American Medical Association not only recommends that school health be provided by “a professionally prepared school nurse” but also that “health services in schools must be supervised by a physician, preferably one who is experienced in the care of children and adolescents. Additionally, a physician should be accessible to administer care on a regular basis.”²⁴

Despite a scarcity of laws addressing school physicians, pediatricians remain leaders in child health care and are integral members of the school health team.^{22,25–29} Certainly, pediatricians need to know the laws that apply to their patients and themselves and will benefit from collaboration with their AAP chapter, state and local health departments, and school district to understand the laws specific to their role in the schools. However, the lack of uniformity of laws or standards of best practice for school physicians complicates the role physicians

have in schools and results in a difference of health care for children based on the schools they attend.

CRITICAL KNOWLEDGE BASE FOR PHYSICIANS WORKING IN THE SCHOOL SETTING

Ideally, school physicians should be board-certified pediatricians or physicians with expertise in pediatrics.²⁴ In addition to basic training in child growth and development, disease processes, and well-child maintenance including adolescent and reproductive health and sports medicine, physicians who work with schools need additional expertise in key school health topics.^{30–32} The degree of mastery required depends on the extent of the physician’s role with the schools. Overall, a school physician can become a positive liaison between the medical home, the family, and the school.⁸ Table 1 contains a nonexclusive list of essential areas of expertise required of a school physician.

TABLE 1 Critical Knowledge Base for School Physicians

Infectious diseases (eg, outbreak control)
Public health (eg, risk assessment and management, resources)
Immunizations (eg, school requirements and medical contraindications)
Medical-legal issues
State and district school and public health laws, regulations, and policies
IDEA, Section 504, and ADA
FERPA and HIPAA and how they intersect in the school setting
Adolescent health (eg, brain development and reproductive health)
Sports medicine ^a
The value of physical education and physical activity at school
Injury prevention
Conditioning
Disqualifying conditions
Hydration
The effects of climate extremes on athletes
Concussion management
Adaptive physical education
Emergency preparedness (eg, children with special health care needs)
Environmental and occupational health (eg, indoor air quality)
Health and learning (eg, medical, emotional, attentional, and learning problems that affect learning)
Social services resources (eg, access to health insurance and assistance programs)
A coordinated school health model (eg, health services, health education, healthy and safe environment, physical education and activity, nutrition services, counseling/psychology/social services, staff health promotion and family/community involvement)

ADA, Americans With Disabilities Act; FERPA, Family Education Rights and Privacy Act; HIPAA, Health Insurance Portability and Accountability Act; IDEA, Individuals With Disabilities Act.

^a Unless there is a separate team physician.

CURRENT ROLES AND RELATIONSHIPS FOR SCHOOL PHYSICIANS

The roles and types of relationships for physicians working in schools are broad. Involvement can range from fulfilling mandated services, serving as an advisor to a school health advisory group, or being the leader of a coordinated school health program. School physicians function based on the medical and social needs or demands of the community, the school district's priorities, and state laws. School physicians not only bring value to the quality of health services but also may provide a cost savings to districts, with decreased liability from physician oversight of sound school health programs. For example, school physician-coordinated concussion management programs, established climate standards for outdoor activity, or guided anaphylaxis management protocols can potentially save lives, reduce morbidity, improve outcomes, and prevent potential costly litigation against school districts.^{33–36} Because states fund schools on the basis of student attendance, a school physician can potentially save schools money by decreasing absenteeism through advocacy and education, such as in improved asthma or diabetes management.^{37–40} The Council on School Health Web site (<http://www.aap.org/sections/schoolhealth/>) provides guidance on these activities and how pediatricians can work with schools (Table 2).

Physicians can have a professional relationship with schools in many ways, such as a full- or part-time employee, an independent contractor, or a volunteer on a school health advisory group. Where feasible, a school physician does not serve as a private physician for a child in that school district, however, because it can create a potential conflict of interest between the physician as

TABLE 2 Roles for School Physicians

Mandated Services
Physical exams (grade mandated, special education, work permits, sports participation)
Oversight of return to sports (eg, concussion management programs)
Active member on teams/committees (eg, special education, wellness, health education)
Consultation
Write standing nursing orders/protocols
Athletic advisor/team physician
Oversee health aspects of athletic programs and best practice standards
Infectious diseases esp. for close contact sports
Participation of athletes with serious medical conditions
Adaptive physical education for acutely injured or chronically disabled youngsters
Mixed gender competition
Develop policies
Contagious diseases/pandemics
Restraint, suspension, expulsion
Bullying
Reproductive health
Chronic school absenteeism
Develop protocols
Delivery of medications
Seizure management
Diabetes care
Anaphylaxis management
Asthma education and management
Assist in the management of specific medical emergencies or immediacies
Participate at the building level in comprehensive, multidisciplinary teams and wellness councils
Programmatic leadership
Health program evaluation and quality improvement
Health education
Mental health promotion programs
Nutrition and food services
Physical activity and education
Staff wellness
Family and community education
Liaison with primary care physicians regarding specific concerns
Professional performance development
Evaluation and collaborative oversight of nursing staff and other health service providers, including one-on-one nurses and door-to-door transportation
Reviews of emergency care plans for children with life-threatening conditions.
Classroom observations of children with special needs
Health education curriculum development
Direct consultation with principals or the superintendent
Medical-legal issues
Parent attorneys or advocates in accommodation disputes and hearings
Building and playground health and safety
Bloodborne pathogen incidents
School closure related to illness or weather extremes, or infections that affect public health

representative/advocate for a patient versus the school.

Whatever the relationship, once a school district asks a physician to participate in hands-on medical practice for compensation in exchange for services, a clear definition of district expectations of the physician is essential. An agreement, accounting for laws governing the relationship of the physician to the public school district, should define indemnification and

liability. It is critical that physicians understand the specifics of their relationship and that the legal implications are articulated clearly in a written agreement renewed periodically. Although community volunteerism is attractive, physicians should take some precautions before volunteering to serve as a school or team physician. It is essential that he or she knows and understands state laws that address whether a district has an obligation to

hire a medical director. Regardless of the type of relationship, the physician should notify his or her professional liability insurance company of involvement in school health activities and determine whether the insurance covers such activities. If covered, this decision should be noted in writing. If a district has an obligation to provide compensation for physician services, this will allow the physician to schedule time for the school district and to improve the quality and consistency of service.

RECOMMENDATIONS

Given the contribution a school physician can make to the overall well-being of a child within the context of the school setting, the AAP recommends the following:

1. Pediatricians should advocate that all school districts have a school physician to oversee health services. The school physician's roles and responsibilities should be well defined, fairly compensated, and outlined within a written contract.
2. Pediatricians should support their patients and local school health programs by working closely with the school health services team. In districts without school physicians, pediatricians should educate these districts about the benefits of having a school physician and work to foster private-public partnerships for school physicians.
3. School physicians should be experts in key school health topics and be

educated about the medical-legal environment in which they practice. They need to provide proper notification of their role and responsibility to their medical liability insurer and should collaborate with their AAP chapter, state and local health departments, and school district to understand the laws specific to their role in the schools.

4. Community pediatricians should be knowledgeable about key school health topics and how to work effectively with schools their patients attend.
5. Pediatricians should consider becoming a school physician or serving on school boards or school health advisory groups to develop sound school health policies and community programs.
6. All physicians who work with school-aged children should recognize the value to the child when there is a comprehensive, coordinated team effort among the child's medical home, the school, and family.
7. Pediatric medical investigators should consider further research to determine how comprehensive coordinated school health programs under the direction of a school physician can improve health care in schools and enhance the goals of the medical home without attempting to replace it.
8. AAP districts and chapters should support school health and school physicians and use the school physician's expertise to advocate for

important changes to state and local school health policy. In addition, AAP districts and chapters should advocate to develop and promote school health policies that benefit children by advocating for additional research on the benefits of school physicians in school health services.

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Position Statement

SUMMARY

It is the position of the National Association of School Nurses (NASN) that the safe and effective management of allergies and anaphylaxis in schools requires a collaborative, multidisciplinary team approach. The registered professional school nurse (hereinafter referred to as the school nurse), is the leader in a comprehensive management approach which includes planning and coordination of care, educating staff, providing a safe environment, and ensuring prompt emergency response should exposure to a life-threatening allergen occur. Furthermore, NASN supports, in states where laws and regulations allow, the maintenance of stock non-patient specific epinephrine and physician-standing orders for school nurses to administer epinephrine in life-threatening situations in the school setting.

School districts must have a clear, concise, all-inclusive policy in place to address the management of allergies in the school setting that should be reviewed annually (National School Boards Association (NASB), 2010). This policy shall be consistent with federal and state laws, nursing practice standards and established safe practices in accordance with evidence-based information and include development of a developmentally appropriate Individualized Healthcare Plan (IHP) and Emergency Care Plan (ECP).

HISTORY

Food and insect sting allergies that may result in anaphylaxis, a potentially life-threatening allergic reaction, have been diagnosed with an increased frequency (Branum & Lukacs, 2009). Food allergies have soared in school-age children and now affect 1 in every 25 students, which is an increase of 18% from 1997 to 2007 (Young, Munoz-Furlong, & Sicherer, 2009).

Food allergies induce 30%-50% of anaphylaxis cases (Cianferoni & Muraro, 2012). The eight most common food allergies that account for 90% of food allergy reactions are milk, eggs, peanuts, tree nuts, fish, shellfish, soy, and wheat (National Institute of Allergy and Infectious Diseases [National Institute of Allergy and Infectious Disease (NIAID), 2010). Children with food allergies are 2-4 times more likely to experience other allergic reactions and asthma than those without food allergies (Branum & Lukacs, 2008).

DESCRIPTION OF ISSUE

Anaphylaxis is a severe allergic reaction that has a rapid onset and may be fatal. During anaphylaxis, tissues in the body release histamines that cause the airways to tighten and lead to many systemic symptoms, the most important being those that are life threatening, e.g. difficulty breathing and swallowing, systemic hives, feelings of impending doom, wheezing, decreased blood pressure and loss of consciousness. Common causes of anaphylaxis are medications (i.e. antibiotics), foods, natural rubber latex, and insect bites/stings (Kim & Fischer, 2011). Cold-induced and exercise-induced anaphylaxis, although rare, can also occur. Some people have anaphylactic reactions with unknown causes (MA Department of Public Health Data Health Brief, 2010). Food allergies are the most common source of anaphylaxis in children, whereas adults are more likely to experience venom and drug-induced response (Kim & Fisher, 2011).

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Once an infrequent occurrence, anaphylaxis has increased dramatically, and 16-18% of students with food allergies have experienced an allergic reaction in school (Young, Munoz-Furlong, & Sicherer, 2009). Epinephrine administration reports from Massachusetts indicate that approximately 25% of students who experience anaphylaxis were not previously diagnosed with a life-threatening allergy (MA Department of Public Health Data Health Brief, 2010). This indicates a need for non-patient specific epinephrine to be available for use in the school setting, which is supported by NASN, American Academy of Asthma Allergy Immunology (AAAI), American Academy of Pediatrics (AAP) and the Food Allergy Anaphylaxis Network (FAAN) (School Access to Emergency Epinephrine Act, 2011). Prevention of anaphylaxis is vital for identified allergens and begins with avoidance of allergens or treatment of symptoms (NIAID, 2010).

Accidental ingestion of food allergens occurs frequently among students in the school environment. One study reports accidental ingestion of milk protein by children with known milk allergies resulted in a 40% reaction rate with 15% of those reactions being severe (Boyno-Martinez, Garcia-Ara, Pedrosa, Diaz-Pena, & Quince, 2009). Maintaining a healthy environment is essential. All environments in the school setting require special attention to protect students by limiting allergens or providing areas that are allergen safe (National School Boards Association [NBSA], 2011). Completely banning nuts or other foods is not recommended as it is 1) not possible to control what other people bring onto the school grounds, and 2) does not provide the allergic student with an environment where he/she can safely learn to navigate a world containing nuts. When a ban is instituted, parents feel their child will not be exposed to allergens. A ban can create a false sense of security (“Banning allergies from school”, 2012).

There are many considerations in the management of an anaphylactic reaction. Biphasic or rebound reactions can occur hours after the initial reaction without a further exposure and affect as high as 20% of individuals who receive epinephrine for anaphylaxis (NIAID, 2010). Epinephrine administration requires immediate activation of Emergency Medical Services, or 911 (Morris, Baker, Belot, & Edwards, 2011; NSBA, 2011).

School staff must not only be aware but also prepared to prevent or respond to an anaphylactic reaction to be effective in supporting a student with a life-threatening emergency (NSBA, 2011). Training must be provided at least annually to school personnel that are involved with the student during the school day, extracurricular activities, field trips and before/after school programs.

Most states have laws allowing emergency medication such as epinephrine to be carried by the students and be self-administered as needed. Several states also have laws supporting the supply and use of stock epinephrine in the school setting for both non-patient specific and diagnosed patient use. When developmentally appropriate, students should be allowed to self-administer and self-manage their allergy.

Allergies have a significant impact on the lives of families. Families with allergies report a higher level of stress for both parents and the child. Parents are anxious about sending their child to school with an allergy. Entering school or changes in the school environment are stressful events, and many parents view these events as opportunities that increase their child’s chance of exposure to allergens (Roy & Roberts, 2011).

RATIONALE

Federal laws including the American Disabilities Act, Individual with Disabilities Education Act, and Section 504 of the Rehabilitation Act of 1973 protect the legal rights of students with allergies along with the Food Safety Modernization Act (FSMA) which became law January 2011. These laws protect students’ individual rights as well as direct schools to develop voluntary guidelines on food allergy management while they prohibit preempting state laws (FMSA, 2010).

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In 1998, the American Academy of Allergy Asthma and Immunology advocated that every student with a food allergy diagnosis have an ECP and a prescription for epinephrine (Carlisle et al., 2010). Schools are responsible for planning and preparing for the complex medical and nursing needs of students. The school nurse functions as the leader in coordinating health services in the school setting (AAP, 2008). As the school health professional, the school nurse is uniquely prepared with the education, experience and expertise to coordinate student health-care, the development and implementation of a comprehensive IHP and ECP with the parents/guardian, health care provider, school staff and when appropriate, the student (Sicherer & Mahr, 2010).

School nurses can decrease the stress and anxiety of parents of children with allergies by working in partnership with families, implementing evidence-based strategies to prevent allergen exposure and preparing school personnel to respond to anaphylaxis, acknowledging parents' concerns, and emphasizing that the school takes allergy seriously (Roy & Roberts, 2011).

Managing allergies and anaphylaxis at school is complicated and multifaceted and is best accomplished through coordination of care within a multidisciplinary team (including but not limited to the student and his or her family, school nurse, teachers, school administrators, nutrition services, and bus drivers) (Carlisle et al., 2010; NASB, 2010). Research shows that schools and childcare settings **with** school nurses are more likely to provide immediate treatment (47% with a school nurse vs. 34% without) and have emergency care plans (62.3% with vs. 39.2% without) in place (Greenhawt, McMorris, & Furlough, 2008). Prompt treatment leads to an increase in positive outcomes (Young, Munoz-Furlong, & Sicherer, 2009). The school nurse is the key school professional to lead the school staff in the awareness, prevention and treatment of life-threatening allergic reactions keeping students safe at school and ready to learn.

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www.nasn.org
National Association of School Nurses
8484 Georgia Avenue Suite 420
Silver Spring, Maryland 20910
1-240-821-1130

Adopted: 2001
Revised: June 2012

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Section VII. Applicable Laws

FEDERAL LAWS

The Rehabilitation Act of 1973 (29 USC s.794)

This federal civil rights law, commonly referred to as **Section 504**, helps ensure that individuals with handicaps/disabilities are not excluded from participating in any program or activity that receives federal financial assistance. All public schools and some private schools usually receive some form of federal financial assistance. Most, if not all, school districts already have procedures to implement Section 504. Students who are covered by this law are eligible to receive what is known as a 504 Plan.

Students with life-threatening food allergy fall under this law, as their health condition meets its definition of handicap/disability; i.e., a physical condition that substantially limits one or more major life activity (i.e., eating, breathing). As a result, schools need to make sure that these students are able to fully participate, alongside their peers, in the school day and curriculum related activities.

A **504 Plan** is a written management plan outlining certain accommodations made by the school that address the student's food allergy. Examples of 504 accommodations may include, but not be limited to, special seating arrangements, curriculum adjustments, field trips, special school events and staff training. Parents/guardians are within their rights to request an evaluation for eligibility and to pursue such a plan. All schools subject to this law should have a 504 Coordinator on staff who can help parents/guardians throughout the 504 process.

In addition, schools are required to a) notify parents/guardians that their child/children may be entitled to accommodations under 504 and b) are required to identify potentially eligible students, "Child Find." Parents of children with LTA's should ask the school nurse or administrator to speak with the 504 coordinator and, if needed request a comprehensive 504 plan evaluation. If further action is needed parents should contact their school superintendent. Some parents may require additional steps such as contacting a civil rights attorney or educational advocate.

The law is overseen by the US Department of Education's Office for Civil Rights (OCR).

- **Regional OCR contacts can be found at:**
wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm
- **More information about Section 504 can be found at:**
ed.gov/about/offices/list/ocr/504faq.html

The Americans with Disabilities Act (ADA) of 1990

The ADA and Section 504 are both federal civil rights laws; however, the ADA can be applied to institutions that do not receive federal financial assistance, such as some private schools, private child care centers, etc. Congress amended the ADA in 2008 (ADAAA) to clarify that it had always intended a broad definition of disability. Disability under ADAAA means a physical or mental impairment that substantially limits one or more major life activities; a record (or past history) of such an impairment; or being regarded as having a disability. The regulations that implement the ADAAA require broad interpretation of the term disability. Parents/advocates of children with food allergy often point to the ADAAA as further evidence that food allergy is a disability as defined by this law; i.e., an impairment that is episodic or in remission is a disability if it would substantially limit a major life activity when active.

- **More information about the ADAAA can be found at:**

[ed.gov/about/offices/list/ocr/docs/dcl-504faq-201109.html](https://www.ed.gov/about/offices/list/ocr/docs/dcl-504faq-201109.html)
(ADA Amendment Act Q & A)

The Individuals with Disabilities Education Act (IDEA) originally adopted in 1975 and amended in 2004

IDEA provides protections for students with learning and other disabilities. Among the key provisions are the right to a free and appropriate public education (FAPE), placement in the least restrictive environment, and parent participation. The law also establishes safeguards to ensure enforcement. IDEA generally applies to students who have disabilities that impact their learning i.e., autism, vision/hearing impairment, etc. A food allergy alone generally does not apply to IDEA; however, some children with learning disabilities may also have food allergy. Typically in this situation, the child's food allergy is incorporated into an Individual Education Plan (IEP). IDEA is governed by each state's department of education.

The Individuals with Disabilities Education Act (IDEA) includes the Child Find mandate. Child Find requires all school districts to identify, locate and evaluate all children with disabilities, regardless of severity. This obligation to identify all children who may need special education services exists even if the school is not providing special education services to the child.

The IDEA requires all States to develop and implement a practical method of determining which children with disabilities are receiving special education and related services and which children are not.

Overall, the goal of IDEA is to provide children with disabilities the same opportunity for education as those students who do not have a disability.

- **More information about the IDEA can be found at:**

idea.ed.gov

The Food Allergen Labeling and Consumer Protection Act (FALCPA),

PUBLIC LAW 108–282—AUG. 2, 2004 took effect January 1, 2006, mandates that the labels of foods containing one of the eight major food allergens (milk, eggs, fish, crustacean shellfish, peanuts, tree nuts, wheat, and soy) declare the allergen in plain language, either in the ingredient list or via:

- the word “Contains” followed by the name of the major food allergen (i.e.)
“Contains milk, wheat”
- a parenthetical statement in the list of ingredients—(i.e.) “albumin (egg)”

Such ingredients must be listed if they are present in any amount, even in colors, flavors, or spice blends. Additionally, manufacturers must list the specific nut (e.g., almond, walnut, cashew) or seafood (e.g., tuna, salmon, shrimp, lobster) that is used.

It is important to remember that FALCPA only applies to the eight major allergens listed above. Other potential allergens, such as sesame or mustard, would still have to be included in the ingredient list—if in fact they are in the food item—but would not warrant a separate “Contains ...” statement or a parenthetical.

Also be aware that processing aids that contain major allergens, though at an insignificant level unlikely to cause an allergic reaction, are used by the food industry and fall under the scope of FALCPA. As an example, soy lecithin is used as a processing aid in nonstick spray to keep baked goods from sticking to baking pans, or as a carrier for certain flavor, spice, or vitamin ingredients. FALCPA requires food companies to label ingredients like soy lecithin, regardless of its level in the food you purchase. You, therefore, may notice “soy lecithin” or “Contains soy” on products that did not previously list soy, despite the fact that the amount of soy in the finished food is highly unlikely to trigger a reaction.

You may also see other ingredients derived from major allergens being treated as processing aids that had not been labeled pre-FALCPA. It is advised that, if you see a newly added allergen statement as a result of a processing aid such as soy lecithin, to consult with your health care provider instead of ignoring the newly added statement on the label.

It is also important to keep in mind that FALCPA does NOT regulate the use of precautionary allergen advisory statements such as “may contain”, “processed in a facility” or “manufactured on shared equipment”. It has always been advised that you do NOT purchase any food product with such a “may contain” statement. By using such a statement, the manufacturer is proclaiming that there may be a risk of cross-contact during the manufacturing process, and therefore the product may not be safe for an allergic individual.



This change to the food label may reduce the choice of food products available to someone with food allergy. However, it is potentially dangerous to assume that any label change is related to insignificant levels having to be labeled by FALCPA rather than a true reformulation of the food product. So rather than ignore “Contains...” statements, speak to your health care provider.

This act has made food label reading easier to identify food allergens for millions of Americans living with and caring for those with food allergies. However, ingredient labels on all packaged food items must be read carefully each time food is to be consumed.

- **More information about the FALCPA can be found at:**

[fda.gov/food/guidanceregulation/guidancedocumentsregulatoryinformation/allergens/ucm106890.htm](https://www.fda.gov/food/guidanceregulation/guidancedocumentsregulatoryinformation/allergens/ucm106890.htm)

The Food Labeling Modernization Act of 2015

Sections pertaining to food allergies.

The Secretary is required to finalize the following three sections/regulation no later than three years following enactment of the Food Labeling Modernization Act of 2015.

Sec. 8–Food Allergen Labeling for Sesame: This section includes sesame on the list of major food allergens, however the manner in which sesame must be disclosed will be determined.

Sec. 9–Information about Major Food Allergens in Non-prepackaged Foods:

This section requires that signs listing major food allergens be placed adjacent to non-packaged foods being offered for sale at retail.

Sec. 10–Submission and Availability of Food Label Information: This section requires the manufacturer or importer of any food to submit to the Secretary all information that is to be included in the labeling of food, specifically: the nutrition facts panel; ingredients; any natural or artificial flavoring; an image of the primary display panel; allergy warnings or information; nutrient content claims; health related claims; and other relevant information as determined by the Secretary.

This section also requires the manufacturer or importer to update or supplement the information to keep the information up-to-date. It provides penalties for any violation of reporting requirements. It also creates a public database containing all information submitted that is searchable by the public.

Public Law 117–11–Food Allergy Safety, Treatment, Education, and Research Act of 2021 or the FASTER Act of 2021

An act to improve the health and safety of Americans living with food allergies and related disorders, including potentially life-threatening anaphylaxis, food protein-induced enterocolitis syndrome, and eosinophilic gastrointestinal diseases, and for other purposes.

What the FASTER Act Means for Food Allergy Families

More than 1.5 million people living in the U.S. are allergic to sesame. Reactions to sesame can be severe, even fatal, yet sesame ingredients aren't always identified on packaged foods. The FASTER Act of 2021 solves this problem by adding sesame to the list of allergens that must be labeled in plain language under the Federal Food, Drug, and Cosmetic Act.

As of January 1, 2023, sesame will be labeled on packaged foods sold in the U.S., in the same way that the other top allergens—milk, egg, peanut, tree nuts, wheat, soy, finned fish and crustacean shellfish—have been labeled since 2006. The FASTER Act of 2021 marks the first time that food allergen labeling has been expanded since the Food Allergen Labeling and Consumer Protection Act (FALCPA) became law in 2004.

In addition to labeling sesame, the FASTER Act mandates that the Secretary of Health and Human Services report to Congress on the prevalence, severity, diagnosis, prevention, treatment and management of food allergies. This report, to be delivered in late 2022, will also propose strategies to acquire accurate food allergy prevalence data and make recommendations toward developing and implementing a framework to label new major food allergens.

- **For more information:**

foodallergy.org/resources/how-fare-advocates-helped-pass-faster-act
fda.gov/food/food-labeling-nutrition/food-allergies

The FDA Food Safety Modernization Act

In 2011, Congress passed the FDA Food Safety Modernization Act to improve food safety in the United States by shifting the focus from response to prevention. Section 112 of the act calls for the Secretary of U.S. Department of Health and Human Services, in consultation with the Secretary of the U.S. Department of Education, to develop voluntary guidelines for schools and early childhood education programs to help them manage the risk of food allergies and severe allergic reactions in children.

In response, the Centers for Disease Control and Prevention of the U.S. Department of Health and Human Services, in consultation with the U.S. Department of Education, developed the **Voluntary Guidelines for Managing Food Allergies in Schools and Early Care and Education Programs**.

- **More information and the Guidelines can be found at:**
cdc.gov/healthyouth/foodallergies

The School Access to Emergency Epinephrine Act

The School Access to Emergency Epinephrine Act was passed into law in 2013. This federal law encourages states to implement policies requiring schools to stock undesignated epinephrine auto-injectors for use in emergencies. States that develop such policies will be given additional preference for federal asthma education grants.

The new law stresses the importance for schools to be prepared to treat anaphylaxis; however, it does not mandate that schools stock epinephrine. The law encourages states to pass their own laws mandating that schools within that state stock epinephrine.

Parents/Guardians whose children have prescribed epinephrine to treat anaphylaxis need to provide the child's school with a physician's written order and a supply of prescribed epinephrine auto-injectors.

Substitutions or Modifications in School Meals

For schools participating in a federally-funded school nutrition program, USDA regulations 7 CFR Part 15b require substitutions or modifications in school meals for students whose disabilities restrict their diets. A student with a disability or medical condition must be provided substitutions in foods when that need is supported by a statement signed by a licensed physician. The physician must identify:

- The student's disability or medical condition
- An explanation of why the disability restricts the student's diet
- The major life activity affected by the disability
- The food or foods to omit from the student's diet
- The food or choice of foods to substitute in the student's diet

Generally, students whose food allergy may result in severe, life-threatening reactions (anaphylaxis) meet this law's definition of disabled, and the school food service personnel must make the substitutions prescribed by the licensed physician. Parents/Guardians who encounter difficulties with schools and these USDA regulations are often advised to contact their regional USDA civil rights office.

- **More information about USDA regulations can be found at:**

fns.usda.gov/school-meals/guidance-and-resources

USDA regulations have not been amended to reflect the ADA Amendments Act. Regulation will be updated by Department of Agriculture (198 section 131).

The Family Education Rights and Privacy Act of 1974 (FERPA)

FERPA is a privacy act that addresses student confidentiality. Schools should be careful if they attempt to somehow identify or publicize a student's food allergy without consent from the student's parents/guardians. For example, there have been instances where schools have posted food allergy signs, notices etc. that specifically identify a particular student. Without parental consent, this may represent a violation of FERPA. Be aware that some states have school student records laws that are more restrictive than FERPA.

- **More information about FERPA can be found at:**

ed.gov/policy/gen/guid/fpco/ferpa/index.html

State Educational Agency (SEA)

According to 34 CFR 77.1 (c) [Title 34—Education; Subtitle A—Office of the Secretary, Department of Education; Part 77—Definitions that apply to Department Regulations], the term State educational agency means “the State board of education or other agency or officer primarily responsible for the supervision of public elementary and secondary schools in a State. In the absence of this officer or agency, it is an officer or agency designated by the Governor or State law.”

- **Link to the State listing to find SEAs:**

ed.gov/about/contacts/state/index.html

Food Allergy Management & Prevention Plan (FAMPP)

From CDC Vol. Guidelines 3. Page 25—Centers for Disease Control and Prevention. Voluntary Guidelines for Managing Food Allergies in Schools and Early Care and Education Programs. Washington, DC: US Department of Health and Human Services; 2013.

USDA REGIONAL CIVIL RIGHTS OFFICES

Mid-Atlantic Regional States

Delaware, District of Columbia, Maryland, New Jersey, Puerto Rico, Pennsylvania, Virgin Islands, Virginia and West Virginia

Regional Director MARO Civil Rights

Mercer Corporate Park
300 Corporate Boulevard
Robbinsville, NJ 08691-1598
(609) 259-5123

Midwest Regional States

Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin

Regional Director MWRO Civil Rights

77 West Jackson Blvd, 20th Floor
Chicago, IL 60604-3507
(312) 353-3353

Mountain Plains Regional States

Colorado, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, Utah and Wyoming

Regional Director MPRO Civil Rights

1244 Speer Boulevard, Suite 903
Denver, CO 80204
(303) 844-0307



Northeast Regional States

Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island and Vermont

Regional Director NERO Civil Rights

10 Causeway Street, Room 501
Boston, MA 02222-1065
(617) 565-6424

Southeast Regional States

Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina and Tennessee

Regional Director SERO Civil Rights

61 Forsyth Street, SW, Room 8t36
Atlanta, GA 30303
(404) 562-1808

Southwest Regional States

Arkansas, Louisiana, New Mexico, Oklahoma and Texas

Regional Director SWRO Civil Rights

100 Commerce Street, Room 5-A-6
Dallas, TX 75242
(214) 290-9820

Western Regional States

Alaska, American Samoa, Arizona, California, Commonwealth of the Northern Mariana Islands, Guam, Hawaii, Idaho, Oregon, Trust Territories, Nevada and Washington

Regional Director WRO Civil Rights

550 Kearny Street, Room 400
San Francisco, CA 94108
(415) 705-1322

STATE LAWS

A variety of state laws can impact the way a school manages students with food allergy.

For example:

- Most states have laws allowing students to self-carry their prescribed epinephrine while at school, at a school-sponsored event, or while in transit to and from school.
- Some states have a law or regulation allowing schools to obtain a non-student-specific (stock) epinephrine auto-injector to keep on hand for emergency use.
- Many states have published (through the department of education and/or department of health) statewide food allergy management guidelines for schools.
- Some states have laws/regulations pertaining to training of various school personnel on the usage of epinephrine.



For more information about state laws or regulations regarding life-threatening allergies, see the following state guidelines (next page). In addition, you can contact your states department of education and/or health.

STATE GUIDELINES FOR SCHOOLS

Arizona State Guidelines for School Management of Food Allergies

azdhs.gov/phs/oeh/fses/pdf/allergies1007.pdf

Connecticut State Guidelines for School Management of Food Allergies

sde.ct.gov/sde/lib/sde/pdf/publications/food_allergies/food_allergies.pdf

Illinois State Guidelines for Managing Life-Threatening Food Allergies in Illinois Schools

isbe.state.il.us/nutrition/pdf/food_allergy_guidelines.pdf

Maryland State Guidelines for School Management of Food Allergies

wcps.k12.md.us/depts_programs/student_services/documents/anaphylactic_guidelines.pdf

Massachusetts State Guidelines for School Management of Food Allergies

doe.mass.edu/cnp/allergy.pdf

Mississippi State Guidelines for School Management of Food Allergies

healthyschoolsms.org/health_services/documents/GuidelinesforManagingFoodAllergies.pdf

Missouri State Guidelines for Allergy Prevention and Response

dhss.mo.gov/living/families/schoolhealth/pdf/mo_allergy_manual.pdf

New Jersey State Guidelines for School Management of Food Allergies

state.nj.us/education/students/safety/health/services/allergies.pdf

New York State Guidelines for School Management of Food Allergies

health.ny.gov/professionals/protocols_and_guidelines/docs/caring_for_students_with_life_threatening_allergies.pdf

**Pennsylvania State Guidelines for Management of Food Allergies in Schools–
Recommendations & Resource Guide for School Personnel**

pears.ed.state.pa.us/forms/files/PDE032i.pdf

Rhode Island (Sample Rhode Island Food Allergy Policy)

thrivetri.org/documents/Sample_School_Food_Allergy_Policy_10-08-08.pdf

Tennessee State Guidelines for School Management of Food Allergies

tennessee.gov/education/schoolhealth/healthservices/doc/HealthCareProfessionals-HealthySchoolsGuidelines.pdf

Texas State Guidelines for the Care of Students with Food Allergies at Risk for Anaphylaxis

dshs.state.tx.us/schoolhealth/docs/SB-27-guidelines-edit.doc

Vermont State Guidelines for School Management of Food Allergies

education.vermont.gov/documents/food_allergies_manual_0608.pdf

Washington State Guidelines for School Management of Food Allergies

wwps.org/support/healthservices/documents/allergy/GuidelinesCareStudentsAllergies.pdf

West Virginia State Guidelines for School Management of Food Allergies

wvde.state.wv.us/healthyschools/documents/WVDEAllergyGuidelines.pdf

Section VIII. Food Allergy Resources

ADDITIONAL FOOD ALLERGY INFORMATION

Federal Resources

Centers for Disease Control and Prevention (CDC) School Health Branch

Phone: 1 (800) 232-4636

E-mail: cdcinfo@cdc.gov

cdc.gov/healthyyouth/foodallergies

CDC–Voluntary Guidelines for Managing Food Allergies in Schools and Early Care and Education Programs

cdc.gov/healthyyouth/foodallergies/pdf/13_243135_A_Food_Allergy_Web_508.pdf

National Institute of Allergy and Infectious Diseases (NIH)

niaid.nih.gov

NIH–Guidelines for the Diagnosis and Management of Food Allergy in the United States

niaid.nih.gov/topics/foodallergy/clinical/Pages/default.aspx

United States Department of Agriculture (USDA) Food and Nutrition Information Center (FNIC)

National Agricultural Library USDA

10301 Baltimore Avenue, Room 105

Beltsville, MD 20705-2351

Phone: (301) 504-5414

Fax: (301) 504-6409

fnic.nal.usda.gov/diet-and-disease/allergies-and-food-sensitivities

United States Department of Education–Office for Civil Rights (OCR)

Phone: 1 (800) 421-3481

Fax: (202) 453-6012

E-mail: ocr@ed.gov

ed.gov/about/offices/list/ocr/index.html

United States Food and Drug Administration (FDA)

10903 New Hampshire Ave.

Silver Spring, MD 20993

fda.gov/Food/ResourcesForYou/Consumers/ucm079311.htm

National Resources

Academy of Nutrition and Dietetics

Phone: 1 (800) 877-1600 (Chicago, IL)

Phone: 1 (800) 877-0877 (Washington, D.C.)

eatright.org

Allergy & Asthma Network (AAN)

Phone: 1 (800) 878-4403

Fax: (703) 288-5271

allergyasthmanetwork.com

American Academy of Allergy Asthma & Immunology (AAAAI)

Phone: (414) 272-6071

E-mail: info@aaaai.org

aaaai.org

aaaai.org/conditions-and-treatments/allergies/food-allergies.aspx

American Academy of Pediatrics (AAP)

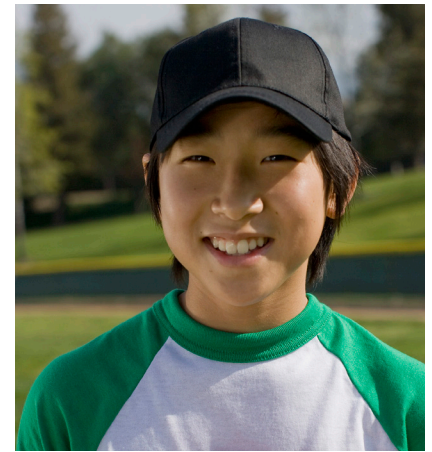
Phone: 1 (800) 433-9016

Fax: (847) 434-8000

aap.org

• **Council on School Health (COSH)**

aap.org/sections/schoolhealth



American College of Allergy, Asthma & Immunology (ACAAI)

Phone: (847) 427-1200

Fax: (847) 427-1294

E-mail: mail@acaai.org

acaai.org

American Latex Allergy Association (ALAA)

Phone: 1 (888) 972-5378

latexallergyresources.org

American Partnership for Eosinophilic Disorders (APFED)

Phone: (713) 493-7749

apfed.org/drupal/drupal/what_is_eeo

Asthma and Allergy Foundation of America (AAFA)

Phone: 1 (800) 727-8462

E-mail: info@aafa.org

aafa.org

• **AAFA's State Honor Roll of Asthma and Allergy Policies for Schools:**

StateHonorRoll.org

Food Allergy & Anaphylaxis Connection Team (FAACT)

Phone: (513) 342-1293

Fax: (513) 342-1239

E-mail: info@FoodAllergyAwareness.org

FoodAllergyAwareness.org

Food Allergy Management and Education (FAME) Program

St. Louis Children's Hospital

E-mail: FAME@bjc.org

stlouischildrens.org/FAME

Food Allergy Research & Education (FARE)

Phone: 1 (800) 929-4040

Fax: (703) 691-2713

foodallergy.org

Institute of Child Nutrition (formerly NFSMI— National Food Service Management Institute)

[childnutritioninstitute.org/ResourceOverview.aspx?](http://childnutritioninstitute.org/ResourceOverview.aspx?ID=507Food Allergy)

[ID=507Food Allergy](#)

Training for school nutrition professionals



International Association for Food Protein Enterocolitis (IAFFPE)

E-mail: contact@iaffpe.org

iaffpe.org

Kids with Food Allergies—A Division of the Asthma and Allergy Foundation of America (AAFA)

Phone: (215) 230-5394

Fax: (215) 340-7674

kidswithfoodallergies.org

National Association of School Nurses (NASN)

Phone: 1 (866) 627-6767

Fax: 1 (301) 585-1791

E-mail: nasn@nasn.org

nasn.org

nasn.org/ToolsResources/FoodAllergyandAnaphylaxis

National Association of State School Nurse Consultants

schoolnurseconsultants.org

National Education Association (NEA)

Phone: (202) 833-4000

Fax: (202) 822-7974

nea.org

School Nutrition Association

Toll-free: 1 (800) 877-8822, ext. 154

Fax: (301) 686-3115

schoolnutrition.org

State Educational Agency

Every state has a State Educational Agency (SEA), which should be responsive to requests for information.

ed.gov/about/contacts/state/index.html

The Council of Parent Advocates and Attorneys

copaa.org

Online Resources

allergyhome.org/schools

Food allergy education tools and resources designed to assist school nurses or their designees in school-wide food allergy education and awareness (staff/administration, parents and students.)

allergyready.com

Interactive online course designed to help teachers, administrators and other school personnel prevent and manage potentially life-threatening allergic reactions.

cofargroup.org

Consortium of Food Allergy Research

foodallergyawareness.org/schoolresources

FAACT is proud to announce the release of our Food Allergy Curricula Program for Schools, another program that fulfills our mission to educate, advocate and raise awareness for all individuals and families affected by food allergies and life-threatening anaphylaxis.

stlouischildrens.org/FAME

Food Allergy Management & Education (FAME) Program is made up of comprehensive resources that provide management strategies to create a safe learning environment for children with life-threatening food allergies. All resources as well as manual and tool- kit are easy to navigate, easy to access and available free for nurses, educators, physicians, school personnel, students, families and other community stakeholders.

Auto-Injector Devices

Generic Adrenaclick®

epinephrineautoinject.com

Auvi-Q™

auvi-q.com

Mylan Speciality (Manufacturer of Epi-Pen® auto-injectors)

myepipen.com

Food Allergy and Bullying

healthychildren.org/English/Pages/default.aspx (type bullying in the search box)

kidshealth.org (type bullying in the search box)

nea.org/bullyfree

olweus.org/public/effects-bullying.page

stopbullying.gov

Book Resources

Food Allergies and Schools: A Pocket Guide for Educators

Julie Trone and Maria Acebal, 2010

Food Allergies for Dummies,

Robert A. Wood, MD. Wiley, 2007

How To Manage Your Child's Life-Threatening Food Allergies: Practical Tips for Everyday Life

Linda Marienhoff Coss. Plumtree Pr (2004)

Living Confidently With Food Allergy

Michael Pistiner, MD, MMSc, Jennifer LeBovidge, PhD, Laura Bantock, Lauren James, and Laurie Harada. Anaphylaxis Canada, 2013. allergyhome.org/handbook
(freely available HTML and PDF versions)

The Parent's Guide to Food Allergies

Marianee Barber, Maryanne Bartoszek Scott and Elinor Greenberg. Henry Holt & Company; 1st Edition, 2001

The Peanut Allergy Answer Book

Michael C. Young. Fair Winds Press; 2nd Edition, 2006

Understanding and Managing Your Child's Food Allergies

Scott H. Sicherer, M.D. The Johns Hopkins University Press; 1st Edition, 2006

FOOD ALLERGY INFORMATION FOR TWEENS/TEENS

Allergic Girl Resources, inc. Supportive Services

AllergicGirl.com

Anti-bullying

stopbullying.gov

FARE Resources for Teens

foodallergy.org/resources/teens

FARE Resources for College Students

foodallergy.org/managing-food-allergies/at-college

Food Allergy & Anaphylaxis Connection Team (FAACT)

FoodAllergyAwareness.org

Medic Alert

medicalert.org

Food Allergy Posters

allergyhome.org/teach

foodallergyawareness.org/education/food_allergy_awareness_resources-12/stlouischildrens.org/Fame

Restaurant Guide, Active Blog & Videos

AllergyEats.com

Singing Grams to Fight Food Allergies

EZgreetings.org

Teen FA Tumblr

foodallergyteens.tumblr.com

Why Risk It: Where Real Life and Allergies Collide

whyriskit.ca/pages/en/resources/videos.php

FOOD ALLERGY INFORMATION FOR CHILDREN

Book Resources

Alexander the Elephant Book Series

Food Allergy and Anaphylaxis Network. foodallergy.org

- *Always Be Prepared*
- *A Special Day At School*
- *Alexander's First babysitter*
- *Alexander's First Plane Ride*
- *Alexander Goes Out to Eat*
- *Alexander Goes to a Birthday Party*
- *Alexander Goes Trick-or-Treating*
- *Alexander Learns His Lesson*
- *Alexander and His Pals Visit the Main Street School*
- *Alexander's Special Holiday Treat*

Food Allergies & Me

Juniper Skinner. Create Space, 2010. foodallergiesandme.com

No Nuts for Me

Aaron Zevy. Tumbleweed Pr, 1996

Nurse Teddy Bear Learns About Food Allergies

Ann Lempert Deutsch, 2012

The BugaBees: Friends with Food Allergies Book Series

Amy Recob. Beaver's Pond Press. thebugabees.com

- *The Bugabees: Friends with Food Allergies*
- *The BugBops: Friends for All Time* (The BugaBees Series)

The No Biggie Bunch Children's Book Series

Heather M.Mehra. Parents Perk, Inc. nobiggiebunch.com

- *Dairy-Free Dino-Licious Dig*
- *Everyday Cool With Food Allergies*
- *Peanut-Free Tea for Three*
- *Sports-tastic Birthday Party Book*
- *Trade-or-Treat Halloween*

The Peanut Butter Jam Book

Elizabeth Sussman Nassau and Margot Janet Ott. Health Press (NM), 2001

Taking Food Allergies to School

Ellen Weiner and Moss Freedman. JayJo Books; 1st Edition, 1999

The Kid-Friendly Food Allergy Cookbook

Leslie Hammond and Lynne Marie Rominger. Fair Winds Press, 2004

DVD Resource

Binky Goes Nuts: Understanding Peanut Allergies (2007)

Online Resources

Allergy Home

allergyhome.org

AllergyReady.com

allergyready.com

American Academy of Allergy Asthma & Immunology

aaaai.org/conditions-and-treatments/just-for-kids.aspx

FARE Resources for Kids

foodallergy.org/resources/kids

FARE Resources for Teens

foodallergy.org/resources/teens

FARE Resources for College Students

foodallergy.org/resources/college-students

Kids with Food Allergies

community.kidswithfoodallergies.org

Kids Health

kidshealth.org

Food Allergy and Bullying

healthychildren.org/English/Pages/default.aspx (type bullying in the search box)

kidshealth.org (type bullying in the search box)

nea.org/bullyfree

violencepreventionworks.org/public/bullying.page

stopbullying.gov

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X. Glossary of Terms

GLOSSARY OF TERMS

Acute: Symptoms which can occur suddenly with a short and severe course.

Adrenaline: Synonym for epinephrine.

Allergen: A substance that the immune system identifies as harmful then triggers your immune system to make antibodies against it which causes an allergic reaction.

Allergies: A chronic condition involving an abnormal reaction to an ordinarily harmless substance called an allergen. It is characterized by an overreaction of the immune system to protein substances — either inhaled, ingested, touched or injected — that normally do not cause a reaction in non-allergic people.

Allergic Reaction: An immune system response to a substance (allergen) that itself is not harmful but the body mistakes as harmful. When an allergen is eaten, white blood cells of the immune system produce IgE antibodies. These antibodies attach themselves to special cells called mast cells, causing a release of potent chemicals such as histamine. These chemicals cause inflammatory reactions in the skin (itching, hives, rash), the respiratory system (cough, difficulty breathing, wheezing), the gastrointestinal tract (vomiting, diarrhea, stomach pain), and the cardiovascular system (lowered blood pressure, irregular heartbeat, shock). Each person with a food allergy reacts to the allergen which may be mild or severe (anaphylaxis: an-a-fi-LAK-sis). Also, there is no way to know if an allergic reaction the child has will be mild or life-threatening.

Anaphylaxis: A sudden, severe allergic reaction that involves various areas of the body simultaneously or causes difficulty breathing and swelling of the throat and tongue. In extreme cases, it can cause death. This type of reaction is sometimes called a systemic, or general body, reaction or allergic shock.

Anaphylaxis Drill: Practice in procedures that would be carried out if there were an anaphylactic emergency. The drill may include but is not limited to: who helps the student, who retrieves the epinephrine auto-injector or administers it, who calls 9-1-1 and who directs the paramedics to the child.

Antihistamines: A class of medications used to block the action of histamines in the body and modify the symptoms of an allergic reaction.

Asthma: A chronic, inflammatory disorder of the airways characterized by wheezing, breathing difficulties, coughing and chest tightness. The primary manifestations of asthma are bronchospasm leading to bronchoconstriction, increased bronchial mucus and inflammation of bronchial tissue leading to edema. These changes make breathing difficult and can cause a feeling of not getting enough air into the lungs or shortness of breath.

Auvi-Q™: a single use epinephrine auto-injector that is used in emergency treatment of allergic reactions. The Auvi-Q™ is prescribed based upon the patients weight. Always call for emergency personnel when epinephrine is given. auvi-q.com

Biphasic Reaction: The reoccurrence of an allergic reaction. Children who have an anaphylactic reaction may experience another reaction following the beginning of the first reaction and require further medical treatment. The secondary reaction is called “biphasic,” meaning “phase II.”

Chronic: Symptoms that occur frequently or are long-lasting.

Consumer Hotline (for food staff): Major food distributors’ toll-free numbers (usually found on packaging). Can be used to check for information on ingredients in a food or the food’s processing procedures (i.e. the potential for cross contact).

Cross Contact: Occurs when the proteins from various foods mix, rendering a “safe” food “unsafe.” This can occur in the cooking process by using contaminated utensils, pans, frying oils, grills, etc.

Delegate/Designee: The lay person that has been educated and trained to administer epinephrine.

Emergency Care Plan(ECP): a written emergency care plan for students who have a food allergy. See Food Allergy Action Plan for additional details.

EpiPen® and EpiPen Jr.®: EpiPen®: a single use epinephrine auto-injector that is used in emergency treatment of allergic reactions. The EpiPen® is prescribed based upon the patients weight. Always call for emergency personnel when epinephrine is given. epipen.com/how-to-use-epipen

Epinephrine (Adrenaline): The drug of choice for anaphylaxis. It is the first medicine that should be used in the emergency management of a child having a potentially life-threatening allergic reaction. It’s a natural chemical that works by telling the heart to pump faster and stronger. It also opens up the airways. There are no contraindications (reason not to give) to the use of epinephrine for a life-threatening allergic reaction. Always call 911 for emergency personnel when epinephrine is given.



504 Plan: The Rehabilitation Act of 1973 contains Section 504 Regulations, 34 C.F.R. Part 104. This section states that a recipient of Federal financial assistance cannot discriminate, exclude from participation in, or deny the benefits of any program or activity on the basis of an individual's disability. As it relates to the educational setting, this is a regular education issue, not a special education issue. Procedural safeguards are handled through due process or the Office of Civil Rights and discrimination court cases. A person is defined as handicapped if they have a mental or physical impairment that significantly limits one or more of the following major life activities: caring for one's self, walking, seeing, hearing, speaking, breathing, learning, working or performing manual tasks.

Food Allergy Action Plan (FAAP): A written emergency care plan for students who have a food allergy. An FAAP provides specific directions about what to do in a medical emergency such as an accidental exposure to the allergen. The ECP/FAAP is a part of the IHP (Individual Health Plan). foodallergy.org/document.doc?id=125

Food Allergy Management and Prevention Plan (FAMPP): A comprehensive plan that should include all strategies and actions needed to manage food allergies in schools or Early Childhood Education program. The FAMPP should reinforce the efforts of each school or ECE program to create a safe learning environment for all children. It should address system wide planning, implementation and follow-up, and include specific actions for each individual child with a food allergy. Source: *Voluntary Guidelines for Managing Food Allergies in Schools and Early Care and Education Programs*. Washington, DC: US Department of Health and Human Services; 2013.

Food Allergies: An immune system response to proteins in certain foods. Upon ingestion, the body creates antibodies to that food. When the antibodies react with the food, histamine and other chemicals are released from cells. The release of those chemicals may cause hives, difficulty breathing or other symptoms of an allergic reaction. (See Allergic Reaction)

Food Allergy Challenge: A food challenge may be done to confirm the diagnosis of food allergy or to determine if the food allergy has been "outgrown." Food challenges are performed in a hospital or Allergist office based upon the child's history and testing results. During a food challenge the child eats the allergy causing food. The food is provided in several doses, starting with a very small amount. If there are no reactions, the dose is increased to larger amounts over several hours. Food challenges should be done only under direct medical supervision by a team prepared to handle reactions, including anaphylaxis. A food challenge is the only way to determine if a child no longer is allergic to a specific food.

Food Intolerance: When the body has difficulty digesting food and the immune system is not affected. Unlike the case of food allergies, the food intolerant person may be able to eat small quantities of the food without any problems (i.e., lactose intolerance with milk).

Generic Adrenaclick®: a single use epinephrine auto-injector that is used in emergency treatment of allergic reactions. The Generic Adrenaclick® is prescribed based upon the patient's weight. Always call for emergency personnel when epinephrine is given.
epinephrineautoinject.com

Histamine: Histamine is a naturally occurring substance that is released by the immune system after being exposed to an allergen. When you are exposed to an allergen, mast cells release histamine. Histamine then attaches to receptors on nearby blood vessels, causing them to enlarge (dilate). Histamine also binds to other receptors causing redness, swelling, itching and changes in the secretions.

Hives: Itchy, swollen, red bumps or welts on the skin that appear suddenly. They may be a result of the body's adverse reaction to certain allergens. They can appear anywhere on the body including the face, lips, tongue, throat or ears. Hives vary in size and can last for minutes or days. Hives are also known as urticaria.

Immune System: The immune system protects the body from infections and diseases. In some people, substances such as pollen, certain foods, latex, mold, pet dander, dust mites or insect stings are allergens that trigger the production of antibodies called Immunoglobulin E (IgE). These antibodies travel to cells that release chemicals, causing symptoms most often in the nose, lungs, throat, sinuses, ears, lining of the stomach or on the skin. In the food allergic child the reaction (symptoms) can be mild or severe that can be potentially life-threatening (anaphylaxis) emergency.

Individualized Healthcare Plan (IHP): The IHP is a nursing document based on nursing diagnosis, nursing interventions and expected student outcomes. This document is written in nursing language and outlines the plan of care that the registered school nurse writes in response to a medical diagnosis by the student's private healthcare provider.

Medical History: A list of a child's past health problems, any reactions to foods, name of the food(s) that caused a reaction and what kind of reaction was it (hives, rash, difficulty breathing, etc.), current symptoms, medicines and health risk factors.

MedicAlert™ Bracelet/Necklace: A necklace or bracelet worn by a student with food allergies that states the allergens and gives emergency contact numbers or information.

Prick Skin Test: A skin test in which an extract of the food is placed on the skin of the lower arm. The provider will then scratch this portion of the skin with a needle and look for swelling or redness, which would be a sign of a local allergic reaction. Skin tests are simple and relatively safe when performed in a physician's office.

RAST (Radioallergosorbent Test): Measures the presence of food-specific IgE in the blood.

State Educational Agency (SEA): The State board of education or other agency or officer primarily responsible for the supervision of public elementary and secondary schools in a State. In the absence of this officer or agency, it is an officer or agency designated by the Governor or State law. Find your state SEAs at: ed.gov/about/contacts/state/index.html



There is no cure for food allergies. Strict avoidance is the only way to **PREVENT** life-threatening food allergies (LTFA) reactions.

After reviewing the FAME tool-kit you will learn the following:

- How to create/provide a safer school environment
- How to recognize and respond to an allergic reaction
- Steps to avoid food allergens in the school environment
- Components of a comprehensive school-based food allergy program

Food Allergy
Management & Education

FAME@bjc.org | stlouischildrens.org/FAME