GUIDELINES FOR THE CARE OF STUDENTS WITH FOOD ALLERGIES



Texas Department of State Health Services This document is intended to serve as a reference and illustrative guide for local school boards or charter school leadership. It can be used to help create and implement school district policies and administrative regulations. This document should not serve as treatment guidelines for healthcare practitioners. Any portion of this document may be reproduced for educational purposes or policy development.

Contents

Acknowledgements 3
Helpful Links
Additional Links
Purpose
Legislative Guidelines
Introduction 8
Food Allergy and Anaphylaxis
Signs and Symptoms of an Allergic Reaction12
Treatment of Food Allergies12
Treatment of Anaphylaxis13
Food Allergy Management in the School Setting14
Identification of Students with Food Allergies at Risk for Anaphylaxis15
Development, Implementation, Communication, and Monitoring of Emergency Care Plans, 504 Plans, or Individualized Health Care Plans18
Reducing Exposure Risk Through Environmental Controls19
Training for School Staff on Food Allergies, Anaphylaxis, and Emergency Response21
Review of Policy and Procedures after an Anaphylactic Reaction
Conclusion
Resources
About the Texas Department of State Health Services

Acknowledgements

The Commissioner of the Texas Department of State Health Services (DSHS), in consultation with the Food Allergy Ad-Hoc Committee, created by Senate Bill (SB) 27, 82nd Legislative Session, 2011, developed the following guidelines for use by local boards of trustees of school districts and governing bodies of open-enrollment charter schools.

The Commissioner thanks the 2011 Food Allergy Ad-Hoc Committee for their contribution in developing these guidelines.

Committee Member	Representing
Drew Bird, MD	Food Allergy Initiative
Laurie Combe, MN, RN	Texas School Nurses Organization
Carla Davis, MD	Texas Allergy, Asthma Immunology Society
Elva Gladney	School Board
Michael Lade	Food Allergy and Anaphylaxis Network
Christy Johnson	Parent
Beth Martinez	Parent
Regina Matus	Parent
Karalei Nunn	Charter School Board Member
Anita Wheeler	Texas Department of State Health Services
Mary Ann Whiteker	Superintendent
Sharon Wright	Principal (alternate)
Wendy McAshlan	Classroom Teacher
Angela Hilger, MD	Texas Medical Association/Texas Pediatric Society

2011 Food Allergy Ad Hoc Committee

In addition, DSHS also thanks the Stock Epinephrine Advisory Committee (2020) and the Texas School Health Advisory Committee (2020) for reviewing this updated Food Allergy Guidelines, pending the appointment of the Food Allergy Ad-Hoc Committee required by **SB 869, 86th Legislature, Regular Session, 2019**. Links to the committee's websites are listed below.

Helpful Links

Department of State Health Services (DSHS)

dshs.texas.gov

Improves the health, safety, and wellbeing of Texans through good stewardship of public resources, and a focus on core public health functions.

Texas School Health Program

dshs.texas.gov/schoolhealth/

The Texas School Health Program envisions a Texas where all children are healthy, ready to learn and prepared to make healthy lifelong choices.

Texas School Health Advisory Committee

dshs.texas.gov/schoolhealth/shadvise/ Provides assistance in establishing a leadership role for DSHS in the support for and delivery of coordinated school health programs and school health services.

Stock Epinephrine Advisory Committee

dshs.texas.gov/schoolhealth/allergiesandanap hylaxis/seac/ In response to Senate Bill 66, from the 84th Legislative Session, the Stock Epinephrine Advisory Committee (SEAC) was formed to examine and review the administration of epinephrine autoinjectors to a person experiencing an anaphylactic reaction on a school campus.

DSHS Allergies and Anaphylaxis

dshs.texas.gov/schoolhealth/allergiesandanap hylaxis/ Provides research, resources, and tools for schools and other entities on management of allergies and anaphylaxis.

Friday Beat Newsletter

dshs.texas.gov/schoolhealth/fridaybeat.shtm The Friday Beat is a weekly e-newsletter that connects those interested in school health to training, funding sources, and resources.

Additional Links

Department of State Health Services

dshs.texas.gov

Health and Human Services

hhs.texas.gov

Health Promotion and Chronic Disease Prevention Section

dshs.texas.gov/chronic/default.shtm



Texas Department of State Health Services

Purpose

In response to the increase in students with diagnosed food allergies at risk for anaphylaxis, **Senate Bill 27** (82nd Legislative Session, 2011) amended Chapter 38 of the Texas Education Code (TEC) by adding **Section 38.0151**. Statute requires the board of trustees of each school district and the governing body, or appropriate officers of open-enrollment charter schools, adopt and administer a policy for the care of students with diagnosed food allergies at risk for anaphylaxis. The policy must be based on guidelines developed by the state Commissioner of Health in consultation with the Food Allergy Ad Hoc Committee. In addition, a school district or open-enrollment charter school should review and revise their policy as necessary to ensure it is consistent with the DSHS guidelines.

Legislative Guidelines

The following federal and state legislation and administrative rules should be considered by school districts when developing or updating school policy and administrative regulations related to children with diagnosed food allergies at risk for anaphylaxis. It should be noted that a life-threatening food allergy is recognized as a disability by the United States Department of Education and United States Department of Agriculture.



Federal Legislation

- Section 504 of the Rehabilitation Act of 1973
- Americans with Disabilities Act Amendments of 2008
- Individuals with Disabilities Education Act
- United States Department of Agriculture Public Law 111-296, "Healthy, Hunger-free Kids Act of 2010"
- FERPA Family Educational Rights and Privacy Act of 1974, (20 U.S.C. Section 1232)
- Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy and Security Rules

State Legislation

Texas Education Code

- Chapter 22, Section 22.052 Administration of Medication by School District Employees or Volunteer Professionals; Immunity from Liability
- Chapter 25, Section 25.0022 Food Allergy Information Requested Upon Enrollment
- Chapter 38, Section 38.015 Self-Administration of Prescription Asthma or Anaphylaxis Medicine by Students
- Chapter 38, Section 38.0151 Policies for Care of Certain Students At Risk for Anaphylaxis
- Chapter 38, Section 38.017 Availability of Automated External Defibrillator
- Chapter 38, Section 38.018 Procedures Regarding Response to Cardiac Arrest
- Chapter 38, Section 38.051 Establishment of School-Based Health Centers
- Chapter 38, Subchapter E, Sections 201-2015 Maintenance, Administration, and Disposal of Epinephrine Auto-Injectors and Asthma Medicine

Texas Family Code

- Texas Family Code, Chapter 32, Section 32.001 Consent by Non-Parent
- Texas Family Code, Chapter 32, Section 32.002 Consent Form
- Texas Family Code, Chapter 32, Section 32.003 Consent to Treatment by Child

Texas Administrative Code

- Texas Administrative Code, Title 4, Part 1, Chapter 26, Subchapter A Texas School Nutrition Policies
- Texas Administrative Code, Title 25, Part 1, Chapter 37, Subchapter U Epinephrine Auto-Injector Policies in Schools

Policies listed below are not required elements of a food allergy policy. However, school boards or charter school leadership may want to review the following local policies, if applicable, as there are opportunities to include provisions for children with food allergies at risk for anaphylaxis:

- Bullying policy,
- Consent to medical treatment policy,
- Emergency response policy,

- Food allergy information policy,
- Medical administration policy,
- Self-administration of asthma or anaphylaxis medication policy,
- Unassigned epinephrine auto-injector policy, and
- Unassigned asthma medication policy.

The **Texas Education Agency** has more information on caring for children with health issues in the school setting.

Introduction

A **food allergy** is an abnormal response to a food, triggered by the body's immune system (National Institute of Allergy and Infectious Disease [NIAID], 2020). Symptoms of a food induced allergic reaction may range from mild to severe and may become life-threatening. Reactions vary with each person. Each exposure to a food allergen and the severity of an allergic reaction is not predictable.



The Centers for Disease Control and Prevention reported that food allergies are a growing food safety and public health concern effecting approximately 8 percent of children in the United States (Gupta et al.,2018). Current estimates state

that between 1 in 13 children (approximately 2 students per classroom) are affected by food allergies (Gupta et al.,2018). In addition, 1 in 25 children are now affected by food allergies (Food Allergy Research and Education, 2020) and more than 40 percent of children with food allergies have experienced a severe allergic reaction such as anaphylaxis (Gupta et al.,2018).

Recent data shows that up to 25 percent of first-time anaphylactic events in children occur on school grounds (Greenhawt et al.,2018). Children spend up to 50 percent of their waking hours in school where they can come into contact with foods containing allergens. There is no cure for food allergies. Strict avoidance of food allergens and early recognition and management of allergic reactions are important measures to prevent serious health consequences (U.S. Food and Drug Administration, 2016). Therefore, school personnel should be ready to effectively manage students with food allergies. They should be prepared to recognize symptoms of an allergic reaction in both diagnosed and undiagnosed students to respond to the students' emergency needs.



Caring for students with diagnosed food allergies at risk for anaphylaxis requires a collaborative partnership with the students, parents, healthcare providers, and school staff. School superintendents may want to designate or assign a school staff member who is knowledgeable about food allergies to serve as the district's point of contact. This person would oversee the development, implementation, and monitoring of a school district's food allergy management plan. The staff member would coordinate the activities of the food allergy management team on each campus. The school district should consider several key elements when developing the district's food allergy management plan. The

goal is to promote the physical safety of children with diagnosed food allergies at risk for anaphylaxis and support their emotional needs.

Key elements that are fundamental in developing a comprehensive food allergy management plan for schools include the following:

- Identifying students with food allergies at risk for anaphylaxis;
- Developing, implementing, communicating, and monitoring of emergency care plans, 504 plans, or individualize health care plans for students with food allergies at risk for anaphylaxis;
- Reducing exposure risk in the school setting;
- Training school staff to recognize anaphylaxis and have an appropriate emergency response; and
- Reviewing school policy and procedures after an anaphylactic reaction has occurred.

These guidelines are intended to assist a district in developing and administering a policy for the care of students with diagnosed food allergies at risk for anaphylaxis.

Food Allergy and Anaphylaxis

A **food allergy** is a potentially serious immune-mediated response that develops after ingesting or encountering specific foods or food additives. It is estimated that 4 out of every 50 children have a food allergy (Gupta et al.,2018). Recent data shows that up to 25 percent of first-time anaphylactic events occurring on school grounds (Greenhawt et al., 2018). A lifethreatening allergic reaction to food usually takes place within a few minutes to several hours after exposure to an allergen. These 8 foods account for about 90 percent of all reactions (CDC, 2020), many of which are ingredients in prepared foods:

- Eggs,
- Milk,
- Peanuts,
- Tree nuts,
- Fish,
- Shellfish,
- Wheat, and
- Soy.

Although most allergic reactions are attributed to these eight foods, any food has the potential of causing a reaction. In addition, school settings may have non-food items, such as arts and crafts materials, that contain trace amounts of food allergens. Many products used in the school setting may contain food allergens. Food allergies are developed when the body reacts to the food allergen. Cross contamination can occur when an allergen is transferred from one item (utensils, pots, pans, countertops, surfaces, etc.) to another. When preparing, handling, and serving food, it is critical to make sure that food preparation and



serving utensils are not exposed to allergens. Allergic reactions can occur with trace exposure to food allergens. Early recognition and management of allergic reactions are important to the safety of children with food allergies at risk for anaphylaxis.

Other common causes of anaphylaxis include latex, insect stings or bites, and medication. While these guidelines are specific to food allergens, the treatment for suspected anaphylaxis is the same regardless of the trigger.

Anaphylaxis is defined as "... a severe life-threatening generalized or systemic hypersensitivity reaction, an acute, potentially fatal, multi-organ system, allergic reaction" (Panesar et al., 2013). Anaphylaxis includes a wide range of symptoms that can occur in many combinations and is highly unpredictable. Children with food allergies are more likely to experience other allergies. Children diagnosed with asthma may be more likely to experience an anaphylactic reaction to foods and be at higher risk of death.

Deaths from food allergies are more likely to occur when the symptoms of anaphylaxis are not recognized and there is a delay in life saving treatment. The only life-saving treatment for anaphylaxis is epinephrine (Chooniedass et al., 2017) and it must be administered quickly if a child is having signs or symptoms of anaphylaxis. In a study of 13 children who experienced a life-threating anaphylactic reaction due to a food allergy, the 6 children who died had a significant delay in treatment with epinephrine compared to the 7 children who survived (Sampson, 1992).

Epinephrine is available through a physician's prescription and is delivered through an autoinjectable device.

The severity of one reaction does not predict the severity of subsequent reactions. Any exposure to an allergen should be treated based on the child's Food Allergy Action Plan (FAAP), Emergency Action Plan (EAP), and Individualized Healthcare Plan (IHP).

Food allergies can have a wide-ranging, negative effects on children and their families. It affects not only life at home but also school, work, vacation, and entertainment. Virtually no life activity remains unaffected by the presence of a potentially fatal allergy (Greenhawt, 2011).

Currently, management of food allergies consists of educating children, parents, and care providers (including school personnel) on the importance of strict avoidance of the food allergen, recognizing the signs and symptoms of an allergic reaction, and initiating emergency treatment in case of an unintended ingestion or exposure. To address the complexities of food allergy management in schools, it is important that students, parents, caregivers, and school personnel work cooperatively to create a safe and supportive learning environment (Food Allergy Research & Education, 2020).



Signs and Symptoms of an Allergic Reaction

Signs and symptoms of a life-threatening food allergy can involve multiple parts of the body. Areas affected can include the mouth, throat, nose, eyes, ears, lungs, stomach, skin, heart, and brain. The most dangerous symptoms include breathing difficulties and a drop in blood pressure or shock, which is potentially fatal.

Alert

Body Part	Sign or Symptom
Mouth	Tingling, itching, swelling of the tongue, lips, or mouth;
	blue/grey color of lips
Throat	Tightness of throat; tickling feeling in back of throat;
	hoarseness or change in voice
Nose/Eyes/Ears	Runny, itchy nose; redness and/or swelling of eyes;
	throbbing in ears
Lung	Shortness of breath; repetitive shallow cough; wheezing
Stomach	Nausea; vomiting; diarrhea; abdominal cramps
Skin	Itchy rash; hives; swelling of face or extremities; facial
	flushing
Heart	Thin weak pulse; rapid pulse; palpitations; fainting;
	blueness of face or nail beds; paleness

Treatment of Food Allergies

The best way to treat food allergies is to avoid the food allergens. However, avoidance is not as easy as it seems because it is impossible to eliminate all potential sources of accidental exposure in everyday life. The following section addresses a few of the possible treatment therapies for food allergies. It is not meant to serve as treatment guidelines for healthcare practitioners.

Food allergies are generally classified into three categories: IgE-mediated, non-IgE-mediated, and mixed (IgE and non-IgE-mediated) (Sampath, Sindher, Zhang, and Nadeau, 2018). These classifications help direct treatment options.

IgE-mediated food allergy reactions usually occur within minutes or up to two hours after ingesting or coming into contact with the food allergen. Common symptoms of IgE-mediated reactions include nausea, diarrhea, stomach pain, breathing issues, and anaphylaxis. Non-IgE-

mediated food allergy reactions are delayed and take longer than two hours. Food allergies may lead to food protein-induced allergic proctocolitis, food protein-induced enteropathy, and food protein-induced allergic enterocolitis (Sampath et al, 2018). Learn more about food allergy reactions from the **American College of Allergy, Asthma, and Immunology.**

There is growing research in oral, sublingual, and epicutaneous immunotherapy as treatment for individuals with food allergies (Burks, Sampson, Plaut, Lack, and Akdis, 2018). Oral immunotherapy requires the daily ingestion of an allergen, usually in powder form. Sublingual immunotherapy involves holding an allergen, typically in tablet or liquid form, under the tongue for two to three minutes and then swallowing it daily. Epicutaneous immunotherapy involves placing a small allergen patch on the individual's back or upper arm (Burks et al, 2018). Other emerging therapies include vaccines and anti-IgE therapies.

It is important to note that schools should not be administering food allergy treatments to students or staff except for an epinephrine auto-injector in emergency situations. For more information about medication administration, review the Texas School Health Program's **Guide to Medication Administration in the School Setting**.

As research continues to expand, new treatment options may be available to those with food allergies. Schools should consult their medical director or the student's allergist for additional questions about the student's food allergies and allergy treatment.

Treatment of Anaphylaxis



Epinephrine is the first-line treatment in cases of anaphylaxis. Other medications have a delayed onset of action. Epinephrine is generally prescribed as an autoinjector device that is relatively simple to use. It is important to administer the epinephrine auto-injector at the first sign of symptoms to prevent serious consequences.

Anaphylaxis can occur immediately or up to two hours following exposure to an allergen. In approximately one third of anaphylactic reactions, the initial symptoms are followed by a delayed wave of symptoms two to four hours

later. This combination of an early phase of symptoms followed by a late phase of symptoms is defined as biphasic reaction. While initial symptoms respond to epinephrine, the delayed biphasic response may not respond to epinephrine and may not be prevented by steroids. **Therefore, it is critical that after giving epinephrine, emergency medical services (EMS)**

should transport the student to the nearest hospital emergency department, even if the symptoms appear to have resolved.

Because the risk of death or serious disability from anaphylaxis itself usually outweighs other concerns, existing studies clearly favor the benefit of epinephrine administration in most situations. There are no medical conditions that absolutely prohibit the use of epinephrine when anaphylaxis occurs (Boyce, 2010).

Food Allergy Management in the School Setting

School districts and open-enrollment charter schools are required to develop and implement policies to address children with diagnosed food allergies at-risk for anaphylaxis. The school district's policy and administrative regulations should be comprehensive yet flexible. They should focus on different food allergens, varying ages, and maturity levels of students, as well as the physical properties and organizational structures of schools and communities.



While policies may differ in the detail, they should all address common evidence-based strategies in managing food allergies and anaphylaxis in the school setting. Policy and administrative regulations needed to support students with food allergies at risk for anaphylaxis should include:

- Identifying students with food allergies at risk for anaphylaxis;
- Developing, implementing, communicating, and monitoring of emergency care plans, 504 plans, and/or individualized health care plans for students with food allergies at-risk for anaphylaxis;
- Reducing exposure risk within the school setting;
- Training school staff to recognize anaphylaxis and appropriate emergency response; and
- Reviewing policy and procedures after an anaphylactic reaction.

To coordinate the management of food allergies within the school district, the superintendent may designate a school district (central office) employee who is knowledgeable about food allergies. The employee would serve as the point of contact for parents, healthcare providers, campus food allergy management team (if established by the campus), and other school staff. The superintendent's designee can help facilitate the development, implementation, and

monitoring of comprehensive and coordinated administrative regulations. The designee can convene a multi-disciplinary team to address the components listed previously in this section. This person should receive ongoing training on how to manage food allergies in the school setting, including how to administer epinephrine. The superintendent's designee may also work with the local School Health Advisory Council (SHAC) to gain parent and community input to develop administrative regulations. They also can help to locate and coordinate resources necessary to fulfill the food allergy management strategies.



In order to achieve, coordinate, and monitor food allergy management on a campus, a food allergy management team (see the DSHS Allergies and Anaphylaxis webpage for sample staff roles) may be created. Members of the food allergy management team may include but are not limited to: a school nurse (when available), the principal, food service staff, custodial staff, a counselor, classroom teacher(s), and bus driver(s). The food allergy management team

can work with parents to support students with food allergies on the campus. The team also can help campus staff to carry out administrative regulations and student specific strategies.

Identification of Students with Food Allergies at Risk for Anaphylaxis

The prevalence of food allergies has increased as well as the potential for a food allergic reaction to become more life-threatening. As such, schools need information to promote safety for children with food allergies who are at risk for anaphylaxis. It is important for parents to provide accurate and current health information when requested. This helps schools to take the following actions:

- Identify the child's food allergens;
- Specify the nature of the child's allergic reactions;
- Reduce the risk of exposure to food allergens;
- Provide emergency treatment to the student during the school day and at schoolsponsored activities in case unintended exposure to a food allergen occurs; and
- Help with communication between the school and the student's healthcare provider.

Texas Education Code, Section 25.0022, states that upon enrollment of a child in a public school, a school district must request, by providing a form or otherwise, that a parent or other person with legal control of the child under court order take the following actions:

- Disclose whether the child has a food allergy or a severe food allergy that, in the judgement of the parent or other person with legal control, should be disclosed to the district to enable the district to take necessary precautions regarding the child's safety; and
- Specify the food to which the child is allergic and the nature of the allergic reaction.

In addition, the United States Department of Agriculture regulations (Texas Department of Agriculture, 2020) require substitutions or modifications in school meals for children whose disabilities restrict their diets. When in the licensed physician's assessment, food allergies may result in severe, life-threatening (anaphylactic) reactions, the child's condition would meet the definition of "disability" and the substitutions prescribed by the licensed physician must be made. The school nutrition program must receive a signed statement by a licensed physician that identifies the following:

- The child's disability;
- An explanation of why the disability restricts the child's diet;
- The major life activity affected by the disability; and
- The food or foods to be omitted from the child's diet and the food or choice of foods that must be substituted.

It is important to note that, because of the risk of anaphylaxis, school staff should also be trained to recognize the signs and symptoms of an allergic reaction. They should be able to provide emergency treatment and properly activate EMS for all children showing signs and symptoms of an anaphylactic reaction.

School boards, especially those with school campuses located in remote areas with limited access to EMS, may want to consider adopting an unassigned epinephrine auto-injector policy. They also may want to have stock epinephrine to use if a person with a diagnosed food allergy has a life-threatening allergic reaction but does not have access to epinephrine or a person with an undiagnosed allergy has a life-threatening allergic reaction. **Texas Administrative Code, Title 25, Part 1, Chapter 37, Subchapter U (Epinephrine Auto-Injector Policies in Schools)** has more details and requirements for schools that want to adopt this voluntary policy. A voluntary unassigned epinephrine auto-injector policy requires a standing medical order for an emergency epinephrine auto-injector pack and training to administer an epinephrine auto-injector to a person reasonably suspected of experiencing anaphylaxis. Read more about unassigned epinephrine auto-injector policies on the **DSHS Allergies and Anaphylaxis website.**

School districts should develop, implement, and monitor standardized procedures to obtain information about diagnosed food allergies from parents and the child's healthcare provider when they register for school. Parents or legal guardians must disclose, at the request of the school district, whether the child has a food allergy and should report as soon as possible after a child is diagnosed with a food allergy that places them at risk for anaphylaxis. For better communication across the districts, schools may want to use standardized forms to collect this information on an annual basis. (See the DSHS Allergies and Anaphylaxis webpage for sample forms).

The identification process is essential. Information from the identification process allows schools to take the following actions:

- More easily follow-up with parents, healthcare providers, and the campus food allergy management team (if established);
- Secure the FAAP/EAP; and
- Where appropriate, begin planning for the child's care through the development of a 504 Plan or IHP.



Development, Implementation, Communication, and Monitoring of Emergency Care Plans, 504 Plans, or Individualized Health Care Plans

There are several types of adverse reactions that can occur with food. Adverse reactions can range from "food intolerance" to a food allergy that puts a child at risk for anaphylaxis (Sicherer, 2011). Unlike a food allergy, a food intolerance does not involve the immune system and is not life threatening. A food allergy diagnosis requires a careful medical history, laboratory studies, and other diagnostic tests ordered by a licensed healthcare provider. The healthcare provider makes the medical diagnosis of a food allergy. After a medical diagnosis is made, a Food Allergy Action Plan or Emergency Action Plan (FAAP/EAP) will be developed by the healthcare



provider in collaboration with the parents or legal guardians. The FAAP/EAP gives details about the child's food allergy, outlines the care that the child will need to manage the food allergy, and states the actions to be taken in case of an allergic reaction. (See the DSHS Allergies and Anaphylaxis webpage for sample FAAP/EAP forms).

For clear communication between parents, healthcare providers, school administrators, and the campus food allergy management team (if established) in the case that a student has an allergic reaction at school, the FAAP/EAP may outline the following:

- Name, date of birth, and grade level of the child;
- A picture to easily identify the child;
- List of the foods to which the child is allergic;
- Indication if the child has asthma (there is a higher risk for severe reaction if the child has asthma);
- Description of past allergic reactions, including triggers and warning signs, as well as information about the child's emotional response to the condition and their need for support;
- Clear instructions on what symptoms require the use of epinephrine immediately;
- Clear instructions, including diagrams, on how epinephrine should be administered;
- List of medications to use in an emergency, including the brand name, generic name, dosage to be given, and when to give an additional dose of emergency medications;

- Instructions about monitoring the child and communicating to EMS the medications that were given, what time the medications were given, and how to position the child when they have had a severe reaction;
- Place for a signature and date by the parent and the physician (or healthcare provider), school nurse, or another designated school representative or school administrator; and
- Place to list contact information for parents or guardians, healthcare providers, and other emergency contact information, including phone numbers.

In schools with a school nurse, the FAAP/EAP may be used to develop an individualized healthcare plan (IHP), which outlines day-to-day nursing care to manage the student's food allergy. The National Association of School Nurses' IHP position statement describes what IHPs are and how to use them in the school setting. The school nurse may aid the process of implementing the FAAP/EAP by working with the campus food allergy management team (if established) and the parents.

To ensure a safe learning environment for the student with life-threatening food allergies, the parents and the student (when age appropriate) should meet with the campus food allergy management team (if established) to review the FAAP/EAP. The school may confirm that all consent forms are signed to administer medications, including self-administration. The school also can help to develop the IHP if there is a school nurse assigned to the campus. The meeting should occur before the child attends school, when returning to school after an absence related to the diagnosis, and anytime there are changes to the student's FAAP/EAP. This meeting is an opportunity to discuss how the campus will promote safety, minimize exposure, recognize signs and symptoms, and provide emergency treatment as outlined in the EAP.

In some instances, the school may also develop a 504 Plan to address the health and learning needs of a student. Students at risk for anaphylaxis may be considered to have a disability that requires services and program modifications. This can allow a student with food allergies at risk for anaphylaxis to safely participate in the learning environment.

Reducing Exposure Risk Through Environmental Controls

Protecting students with a food allergy from exposure to allergens is the most important way to prevent life-threatening anaphylaxis. Current management of food allergies relies on strict avoidance of the food allergen, early recognition of symptoms, and prompt treatment when an allergic reaction occurs due to unintended exposure to the food. For children, dietary management in schools can be difficult because of allergens in classroom activities, such as arts and crafts, counting, science projects, parties, holidays and celebrations, cooking, food sharing, or school projects (CDC, 2020).



To promote safety, policies and administrative regulations should outline district-wide, campus-wide, classroom-wide, and individual strategies used to manage children with food allergies at risk for anaphylaxis. Consideration should be given to promoting safety in the following areas, including (but not limited to), the cafeteria, all classrooms, hallways, common areas in the school, on the bus, and during all school-sponsored activities (for example, field trips,

athletic events, on-campus, off-campus, and before and after school activities, etc.).

The superintendent's designee serves as the point of contact and works with the campus food allergy management team (if established). The designee and parents may help to develop individual campus strategies to support students with food allergies at risk for anaphylaxis. Implementing appropriate environmental controls can help minimize risk of exposure to a food allergen (see the **DSHS Allergies and Anaphylaxis webpage** for *Sample Roles and Responsibilities related to Students, Families, and Schools*).

Environmental controls include consideration of the following strategies.

- Identify high-risk areas in the school and implement strategies to limit exposure to food allergens. Likewise, implement general risk reduction strategies throughout the school and at school-sponsored activities. Children at risk for anaphylaxis should not be excluded from classroom activities based on their food allergies.
- Limit, reduce, or eliminate food from classroom(s) and other learning environments used by children with food allergies at risk for anaphylaxis.
- Notify and educate school staff and parents to limit foods as needed on the campus, in the classroom, or at school-sponsored activities.
- Develop procedures to manage parent-provided classroom snacks, as allowed by Texas statute, to ensure that students with food allergies at risk for anaphylaxis are considered.
- Implement appropriate cleaning protocols in the school and ensure that special attention is given to identified high-risk areas.
- Train the school food service department to reduce the risk of cross-contamination during food preparation and food service, as well as minimizing foods served in the cafeteria that may contain food allergens.
- Train teachers, staff, and parents on food allergy awareness.
- Post visual reminders promoting food allergy awareness.

- Educate children to not trade or share food, snacks, drinks, or utensils.
- Have hand washing protocols before and after meals. Hand washing should be done with soap and water because hand sanitizers are not sufficient for removing allergens.
- Assign staff trained in the administration of epinephrine as monitors in the food service area, as appropriate.
- Provide ready access to epinephrine in an accessible, secure (locked) area.
- Implement risk reduction strategies for the school bus, during extracurricular activities, on field trips, during before and after school activities, and at sporting events.
- Reinforce rules and expectations regarding bullying, including bullying of students with food allergies.

(See the DSHS Allergies and Anaphylaxis webpage for Considerations)

Training for School Staff on Food Allergies, Anaphylaxis, and Emergency Response

Education is key in identifying and supporting students with life-threatening food allergies in the school setting. A tiered approach to training can prepare all staff in identifying and providing emergency care to students with a life-threatening anaphylactic reaction. A school may establish a training schedule to ensure that all staff are prepared to recognize and manage a life-threatening anaphylactic reaction. The tiered approach includes an "awareness training" for all school staff and more "comprehensive training" for other staff. The campus food allergy management team (if established by the campus) and staff members responsible for the care of individual students would receive the comprehensive training. Resources and information about free online training are found at the DSHS Allergies and Anaphylaxis webpage.

Awareness training gives an overview of food allergies and anaphylaxis, including the signs and symptoms of an allergic reaction, as well as information on the treatment of anaphylaxis. Training should include information about the most common food allergens, hazards on using food for instructional purposes, and the importance of environmental controls to protect the health of students at risk for food allergy related anaphylaxis. The training should provide guidance on how to respond when a child shows signs and symptoms of an allergic reaction to food, implement the FAAP/EAP (including needed skills to administer epinephrine) and notify the local EMS using the school's emergency response policy and procedures. This generalized training gives an overview for all staff. It also gives basic instruction on how to identify and take emergency action if an allergic reaction occurs.

More comprehensive training may be conducted with the campus food allergy management team (if established), interested parents, and other school staff responsible for the care of individual students. This training is more detailed and may include, but is not limited to, more in-depth information on the following topics (See the **DSHS Allergies and Anaphylaxis webpage** for sample agendas):



- Identifying students at risk for anaphylaxis and planning for students that do not have epinephrine at school;
- Reviewing signs and symptoms of anaphylaxis;
- Implementing FAAPs/EAPs, including training to administer and store epinephrine;
- Developing and implementing IHPs and 504 Plans;
- Identifying communication procedures for initiating emergency protocols, including substitute staff;
- Identifying environmental control measures, to reduce the risk of exposure to a food allergen, including safe food handling, handwashing, and cleaning procedures;
- Working with local EMS; and
- Debriefing after an anaphylactic reaction and continued monitoring of the food allergy management plans on the campus.

Review of Policy and Procedures after an Anaphylactic Reaction

To stay current with managing food allergies in the school setting, policies and administrative regulations should be reviewed and updated at least annually. The review may include looking at the following information:

- Current science on managing food allergies in the school setting;
- School district's annual incident report summaries;
- Current policies and administrative procedures; and
- Recommendations from the campus food allergy management team (if established) or the local SHAC.

Reviewing policies and procedures for alignment with current statute, rules, and evidencebased practice can help ensure that the most current information is used to care for students with food allergies.



For students who have experienced an allergic reaction at school, additional review will help promote safety when the child returns to school. The approach taken by the school depends on the severity of the reaction, the student's age, and whether their classmates witnessed the event. If a child who has had a moderate to severe reaction is preparing to return to school, the superintendent's designee, the campus food allergy management

team (if established), or both, may want to work with the student's parents to collect and review information. They can carry out the following activities to prepare for the child's return to the classroom.

- Identify, if possible, the source of allergen exposure and take steps to prevent future reactions.
- Review accurate and updated information on the allergic reaction, including any new medication(s) which would require new consent forms to be signed by the parents.
- Identify and interview those who were involved in the emergency care of the student and those who witnessed the event.
- Meet with school staff to dispel rumors and review administrative regulations.
- Provide factual information to parents of other classroom students that complies with FERPA law and does not identify the individual student.
- If the allergic reaction is thought to have been caused from food provided by the school food service, work with the school food service department to determine what potential food item was served, consumed, or both. Also determine how to reduce risk in the cafeteria by reviewing food labels, minimizing cross-contamination, and other strategies.
- Review of the FAAP/EAP, IHP, the 504 Plan, or all three, and amend to address any changes that were made by the student's healthcare provider.
- If an epinephrine auto-injector was used during the reaction, ensure that the parent or guardian replaces it with a new one.

In the rare but plausible event of a fatal reaction, the school's crisis plan for dealing with the death of a student should be implemented. Mental health professionals and healthcare

providers with knowledge about food allergies should be on hand to answer questions that may come up.

Conclusion

Food allergies require long-term, often lifelong treatment to prevent reactions and promote symptom management. Health professionals and nurses play a key role in sharing information about food allergies in schools to other parents, peers and staff (Moen, 2019).

Given the increasing prevalence of food allergies in children and as children transition into the school setting, schools can play a major role to help parents. School can implement policies and administrative regulations that promote the physical and emotional health of children with diagnosed food allergies at risk for anaphylaxis. There are many resources available to help schools develop policies and regulations that help promote safety for all children (see the **DSHS Allergies and Anaphylaxis webpage** for additional resources).

The resources available on the DSHS Allergies and Anaphylaxis webpage are intended to serve as samples. They are not required to be implemented by school boards or school districts. In addition, school boards should consider local policies, practices, and available resources in developing the policy and administrative regulations related to children with food allergies at risk for anaphylaxis. School districts should consult with their local attorney in developing district policies and administrative regulations.



Resources

Arizona Department of Health Services. 2011. Arizona resource guide for supporting children with life-threatening food allergies. Available at:

azdhs.gov/documents/prevention/azwic/food-allergies-resource-guide.pdf. Accessed March 30, 2020

Boyce, J., Assa'ad, A., Burks, A., Jones, S., Sampson, H., Wood, R., Plaut, M., Cooper, S. and Fenton, M., 2011. Guidelines for the Diagnosis and Management of Food Allergy in the United States: Summary of the NIAID-Sponsored Expert Panel Report. *Journal of the American Dietetic Association*, 111(1), pp.17-27.

Branum, A. and Lukacs, S., 2008. *Products - Data Briefs - Number 10 - October 2008*. [online] Cdc.gov. Available at: cdc.gov/nchs/products/databriefs/db10.htm. Accessed March 30, 2020.

Branum, A. and Lukacs, S., 2009. Food Allergy Among Children in the United States. *PEDIATRICS*, 124(6), pp.1549-1555.

Burks, A., Sampson, H., Plaut, M., Lack, G. and Akdis, C., 2018. Treatment for food allergy. *Journal of Allergy and Clinical Immunology*, 141(1), pp.1-9.

CDC, 2020. Center for Disease Control and Prevention. CDC: Healthy Schools, Food Allergies. Available at cdc.gov/healthyschools/foodallergies/index.htm. Accessed November 18, 2020.

Chooniedass, R., Temple B., Becker A., 2017. Clinical Perspective-Epinephrine use for anaphylaxis: too seldom, too late. *Annal of Allergy, Asthma & Immunology.* 119(2) p108-110.

Food Allergy and Anaphylaxis Network. 2011. School Guidelines for Managing Students with Food Allergies. Available at: **foodallergy.org**. Accessed December 2, 2020.

Food Allergy Research & Education. 2020. *Facts and Statistics*. [online] Available at: **foodallergy.org/resources/facts-and-statistics**. Accessed March 30, 2020.

Greenhawt, M., 2011. *Environment Exposure to Peanut and the Risk of Allergic Reaction*. Annal of Allergy, Asthma & Immunology. Available at: **annallergy.org/article/S1081-1206(18)30209-6/abstract**. Accessed December 2, 2020.

Greenhawt, M., et al., 2018. *Current trends in food allergy–induced anaphylaxis management at school.* Annal of Allergy, Asthma & Immunology, 121 (2), pp174-178.

Greenhawt, M., 2020. *Helping Families Manage Food Allergy in Schools*. Medscape. Available at: **medscape.com/viewarticle/746589**. Accessed March 31, 2020.

Gupta RS, Warren CM, Smith BM, Blumenstock JA, Jiang J, Davis MM, Nadeau KC. The public health impact of parent-reported childhood food allergies in the united states. *Pediatrics*. 2018;142(6):e20181235.

Maryland Departments of Health and Department of Education. 2009. Management of Students at Risk for Anaphylactic Reaction. Available at: **FoodAllergy.Org**. Accessed December 2, 2020.

National Association of School Nurses. 2020. *Allergies and Anaphylaxis - National Association of School Nurses*. Available at: nasn.org/nasn/nasn-resources/practice-topics/allergies-anaphylaxis. Accessed March 31, 2020.

National Institute of Allergy and Infectious Disease. 2020. *Food Allergy | NIH: National Institute of Allergy and Infectious Diseases*. Available at: www.niaid.nih.gov/diseases-conditions/food-allergy. Accessed March 31, 2020.

National School Boards Association, 2011. *Safe at School and Ready to Learn. A Comprehensive Policy Guide for Protecting Students with Life-Threatening Food Allergies*. Alexandra, VA: National School Boards Association.

New Jersey Department of Education. 2008. Guidelines for the Management of Life-Threatening Food Allergies in School. New Jersey, Education. Available at **nj.gov/education/students/safety/health/services/allergies.pdf**. Accessed on December 2, 2020.

Nowak-Wegrzyn, A., Conover-Walker, M. and Wood, R., 2001. Food-Allergic Reactions in Schools and Preschools. *Archives of Pediatrics & Adolescent Medicine*, 155(7), p.790.

Moen, O. L., Opheim, E., & Trollvik, A., 2019. Parents Experiences Raising a Child with Food Allergy; A Qualitative Review. *Journal of pediatric nursing*, 46, p52-63.

Sampath, V., Sindher, S., Zhang, W., and Nadeau, K. 2018. New Treatment directions in food allergy. *Ann Allergy Asthma Immunol*, 120(3) pp. 254-262

Sampson, H., 2004. Update on food allergy☆. *Journal of Allergy and Clinical Immunology*, 113(5), pp.805-819.

Sampson, H. and Mendelson, Louis and Rosen, James P.,

Fatal and Near-Fatal Anaphylactic Reactions to Food in Children and Adolescents, New England Journal of Medicine, 327(6},380-384,1992.

Sheetz, A., Goldman, P., Millett, K., Franks, J., McIntyre, C., Carroll, C., Gorak, D., Harrison, C. and Carrick, M., 2004. Guidelines for Managing Life-Threatening Food Allergies in Massachusetts Schools. *Journal of School Health*, 74(5), pp.155-160.

Sicherer SH, Simons, 2007. FER. Self-injectable epinephrine for first-aid management of anaphylaxis. *Pediatrics*.;119:638-646.

Sicherer, S., 2011. Food Allergy. *Mount Sinai Journal of Medicine: A Journal of Translational and Personalized Medicine*, 78(5), pp.683-696.

Sicherer, S., 2002. Food allergy. *The Lancet*, 360(9334), pp.701-710.

Sicherer, S. and Mahr, T., 2010. Management of Food Allergy in the School Setting. *Pediatrics*, 126(6), pp.1232-1239.

Simons, F. and Sampson, H., 2008. Anaphylaxis epidemic: Fact or fiction? *Journal of Allergy and Clinical Immunology*, 122(6), pp.1166-1168.

Texas Department of Agriculture. 2020. Accommodating children with special dietary needs. USDA Child Nutrition Guidelines. Austin, Texas: Texas Department of Agriculture.

Texas Department of Agriculture. 2011. Accommodating children with special dietary needs. Austin: Texas Department of Agriculture.

Turner PJ, Worm M, Ansotegui IJ, et al. 2019. Time to revisit the definition and clinical criteria for anaphylaxis? *World Allergy Organ J*. 12(10):100066. Published 2019 Oct 31.

U.S. Food and Drug Administration. 2020. *What You Need to Know About Food Allergies*. Available at: **fda.gov/food/buy-store-serve-safe-food/what-you-need-know-about-food-allergies**. Accessed March 31, 2020.

Vermont Department of Education. 2008. Life Threatening Allergic Conditions. Available at: **Education.vermont.gov**. Accessed December 2, 2020.

Vermont Department of Education. 2008. Managing Life-threatening allergic conditions in schools. Retrieved from Vermont Department of Education.

Young, M. M.-F. 2009. Management of food allergies in schools: a perspective for allergists. Journal of Allergy and Clinical Immunology, pp. 175-182

About the Texas Department of State Health Services

General Information

The Texas Department of State Health Services (DSHS) has been restructured to sharpen our focus on public health. Our job is to promote and protect the health of people, and the communities where they live, learn, work, worship, and play. We understand no single entity working by itself can improve the health of across Texas. We must all work together to create a better system that includes prevention, intervention, and effective partnerships.



Texas Department of State Health Services

Our Goals

- Improve health outcomes through public and population health strategies, including prevention and intervention.
- Optimize public health response to disasters, disease threats, and outbreaks.
- Improve and optimize business functions and processes to support delivery of public health services in communities.
- Enhance operational structures to support public health functions of the state.
- Improve recognition and support for a highly skilled and dedicated workforce.
- Foster effective partnership and collaboration to achieve public health goals.
- Promote the use of science and data to drive decision-making and best practices.

Our Mission

To improve the health, safety, and well-being of Texans through good stewardship of public resources, and a focus on core public health functions.

Contact Information

School Health Program

Texas Department of State Health Services PO Box 149347, MC 1945 1100 West 49th Street Austin, Texas 78714-9347 Phone: 512-776-7279 Fax: 512-776-7555 Email: schoolhealth@dshs.texas.gov

Website: dshs.texas.gov/school health

Texas School Health Program dshs.texas.gov/schoolhealth