ALLERGY & ANAPHYLAXIS TOOLKIT

NASN
National Association of School Nurses

nasn.org

TABLE OF CONTENTS

National Association of School Nurses

FACT SHEET – FOOD ALLERGY TYPES

IgE-mediated food allergy

IgE-mediated reactions cause the immune system to produce IgE antibodies in response to a trigger. IgE antibodies stimulate mast cells and basophils to produce chemical mediators such as histamine (AAAAI, 2023). These chemical mediators cause an abrupt increase in vascular permeability, vascular smooth muscle relaxation, and bronchial smooth muscle constriction, resulting in the signs and symptoms one experiences during an IgE-mediated allergic reaction. Most IgE-mediated reactions occur within minutes to 2 hours of exposure to a trigger (Watts & Marie Ditto, 2019). An IgE-mediated reaction can be unpredictable in occurrence and severity (AAAAI, 2023).

Some IgE-mediated allergic reactions can be mild, resulting in mild symptoms in only one body system. Mild allergic reactions may be self-limiting or can be treated with oral medications such as antihistamines (Cosme-Blanco et al., 2020; Davis & Kelso, 2018; Wang et al., 2017).

Non-IgE-mediated food allergy

Non-IgE-mediated reactions are not fully understood but are thought to involve a cell-mediated response, such as the T-cells of the immune system (Cianferoni, 2020). Non-IgE-mediated reactions tend to be delayed in nature with the onset of signs and symptoms beginning hours to days after exposure to an allergen. Signs and symptoms typically include gastrointestinal-related complaints such as stomach pain, nausea, vomiting, diarrhea, and bloody stools (Cianferoni, 2020). Examples of non-IgE-mediated reactions include eosinophilic esophagitis (EoE), food protein-induced proctocolitis (FPIAP), and food-protein-induced enterocolitis (FPIES), which can present as acute or chronic reactions (Cianferoni, 2020). The diagnosis of a non-IgE-mediated reaction can be difficult as there are no biomarkers that can be used for diagnosis or monitoring. Diagnosis typically involves food challenges or diagnostic testing such as endoscopies (Cianferoni, 2020). Treatment of non-IgE-mediated food allergies is primarily dependent on dietary restrictions, although medications such as steroids and proton pump inhibitors can be useful in minimizing symptoms of EoE, and ondansetron and IV fluids can be helpful in managing FPIES (Cianferoni, 2020).

- **Eosinophilic Esophagitis**
  AAAAI defines eosinophilic esophagitis as an allergic condition caused by inflammation of the esophagus. Common symptoms include abdominal discomfort, vomiting, difficulty swallowing, and low weight gain. These symptoms/reactions are often delayed and may take days to develop. Although it is caused by an allergic reaction to a food protein, most children do not get a rash or breathing difficulty. Many who have eosinophilic esophagitis have a family history of disorders such as asthma, eczema, or food allergy.

- **Food Protein-Induced Enterocolitis Syndrome (FPIES)**
  Any food can trigger FPIES; however, common food allergens are milk, soy, and grains, usually when first introduced during infancy. Since this generally occurs in infancy, FPIES symptoms of vomiting and diarrhea can quickly progress to dehydration and shock.

Oral Allergy Syndrome

Some fruits and vegetables have a protein very similar to those found in pollen and can trigger the immune systems of people with food or outdoor allergies. Oral allergy syndrome (OAS) is also known as pollen fruit syndrome (PFS). OAS involves itchiness or swelling of the mouth, face, lip, tongue, and throat. Symptoms usually appear immediately after eating raw fruits or vegetables, but can occur more than an hour later.

References

American Academy of Allergy Asthma & Immunology. (2023). *Food allergy*. https://www.aaaai.org/Conditions-Treatments/Allergies/Food-Allergy

American Academy of Allergy Asthma & Immunology. (2023). *Oral allergy syndrome defined*. https://www.aaaai.org/Tools-for-the-Public/Allergy,-Asthma-Immunology-Glossary/Oral-Allergy-Syndrome-(OAS)-Defined

Cianferoni, A. (2020). Non-IgE mediated food allergy. *Current Pediatric Reviews*, *16*(2), 95-105. https://dx.doi.org/10.2174/1573396315666191031103714

Cosme-Blanco, W., Arroyo-Flores, E., & Ale, H. (2020). Food Allergies. *Pediatrics in review, 41*(8), 403–415. https://doi.org/10.1542/pir.2019-0037

Davis, C. M., & Kelso, J. M. (2018). Food Allergy Management. *Immunology and allergy clinics of North America, 38*(1), 53–64. https://doi.org/10.1016/j.iac.2017.09.005

Wang, J., Bingemann, T., Russell, A. F., Young, M. C., & Sicherer, S. H. (2018). The Allergist's Role in Anaphylaxis and Food Allergy Management in the School and Childcare Setting. *The journal of allergy and clinical immunology. In practice, 6*(2), 427–435. https://doi.org/10.1016/j.jaip.2017.11.022

Watts, M. M., & Marie Ditto, A. (2019). Anaphylaxis. *Allergy and asthma proceedings, 40*(6), 453–456. https://doi.org/10.2500/aap.2019.40.4270

ALLERGY AND ANAPHYLAXIS
LATEX ALLERGIES FACT SHEET

National Association of School Nurses

Reactions to a latex allergy can range from mild to severe. Here are three categories of latex allergies (American Academy of Allergy Asthma & Immunology, 2023):

- Immunoglobulin E (IgE)-mediated (immediate allergic reaction or with a combination of body system reactions, anaphylaxis)
- Contact dermatitis within 12-48 hours post contact
- Oral or throat itching or lip swelling (from cross-reactive food proteins)

Products that may contain latex include:

- Nipples for baby bottles
- Balloons
- Erasers
- Bandages or Band-Aids
- Orthodontic rubber bands
- Condoms and diaphragms
- Pacifiers
- Catheters
- Rubber balls
- Rubber gloves (for cleaning or medical grade)
- Elastic in clothes
- Rubber bands
- Stethoscopes
- Medical supplies

Foods that may cross-react with latex include:

- Banana
- Apple
- Papaya
- Kiwi
- Carrot
- Potato
- Avocado
- Celery
- Tomato
- Chestnut
- Melons

Resources

Ask the Experts Videos

American Academy of Allergy Asthma & Immunology. (2023). *What is a latex allergy?* [Video]. https://www.aaaai.org/Tools-for-the-Public/Video-Library/Allergy-Videos/Latex-Allergy-Video

Allergy & Asthma Network. (2023). Ask the allergist: *Latex allergy and cross-reactivity* [Video]. https://allergyasthmanetwork.org/news/ask-the-allergist-latex-allergy-and-cross-reactivity/

References

American Academy of Allergy Asthma & Immunology. (2020). *Latex allergy.* https://www.aaaai.org/tools-for-the-public/conditions-library/allergies/latex-allergy

American Academy of Allergy Asthma & Immunology. (2020). *Latex allergy.* https://www.aaaai.org/Conditions-Treatments/Allergies/Latex-Allergy

Asthma & Allergy Foundation of America. (2023). *Latex allergy.* https://aafa.org/allergies/types-of-allergies/latex-allergy/

ANAPHYLAXIS ALGORITHM

National Association of School Nurses

ANAPHYLAXIS

Anaphylaxis is a severe, life-threatening, systemic hypersensitivity reaction. The onset can occur within seconds of exposure to the allergen or can be delayed up to an hour or more.

Exposure to an Anaphylaxis Trigger

Common triggers include foods such as milk, eggs, fish, shellfish, peanuts, tree nuts, wheat, soy, or sesame. Also: medication, latex, or insect stings.

YES

Are there signs of anaphylaxis?

One SEVERE symptom or more than one mild symptom in two body systems:

Skin: hives, itchy skin, flushing

Throat: swelling of lips and/or tongue, hoarseness, cough

Chest: tightness of throat or chest, shortness of breath, cough, wheeze

Heart: weak pulse, dizziness, passing out

Gut: vomiting, diarrhea, cramps

Neurologic: feeling of impending doom, change in behavior or alertness

NO

Follow Emergency Allergy Action Plan for MILD allergic reaction symptoms

such as red, itchy eyes or localized hives, or rash, sneezing, or runny nose. Consider administering oral antihistamine and have a trained adult recognize signs/symptoms of reaction and monitor student for worsening signs/symptoms of a reaction. Escalate therapy if indicated.

**Children may experience a delayed allergic reaction up to 2 hours after exposure.*

YES

Follow Emergency Allergy Action Plan

- **Administer epinephrine and call 911.**
- **Monitor circulation, airway, breathing and begin CPR and rescue breathing if indicated.**
- **Give second dose of epinephrine if symptoms get worse, or do not get better in 5 minutes.**

Are there signs that symptoms are evolving into a severe reaction/ anaphylaxis?

Symptoms in more than one body system or increased severity of symptoms.

YES

If your state law and school policy permit stock epinephrine, follow your written protocol for administering epinephrine for a severe allergic reaction.

Alert parent/guardian and school administration.
Monitor vital signs until 911/EMS takes over.

MILD ALLERGIC REACTION VERSUS ANAPHYLAXIS AND BIPHASIC REACTIONS

A mild reaction to an allergen is described as mild and non-progressing symptoms from one organ system.

Symptoms may include sneezing, runny nose, watery eyes, itchy mouth, or a rash (Blazowski et al., 2021; ACAAI, 2018). Other single organ symptoms may be a mild stomachache, nausea, or discomfort (AAP, 2017).

Treatment for a mild allergic reaction is to follow the student's emergency action plan (Wang, 2017).

- Monitor the student, including vital signs, and document.
- Administer antihistamine (if prescribed).
- Notify the parent/guardian.
- **If symptoms develop in more than one body system or symptoms of severe allergy/anaphylaxis develop, administer epinephrine and call 911 or your local emergency number (NASN, 2023).**

Severe Allergic Reaction/Anaphylaxis

Anaphylaxis is an acute, life-threatening hypersensitivity disorder, defined as a rapidly evolving, multi-system allergic reaction (McLendon & Sternard, 2023). Anaphylaxis involves symptoms from two or more of the following body systems: skin and mucocutaneous, respiratory, cardiovascular, central nervous, and gastrointestinal (Nomura et al., 2020). Common causes of anaphylaxis include food, medicines, insect stings/venom, and latex (Carlson et al., 2020).

Signs/symptoms of anaphylaxis: one SEVERE symptom or more than one mild symptom in two body systems (AAP, 2017):

Skin: Hives, itchy skin, flushing
Throat: Swelling of lips and/or tongue, hoarseness, cough
Chest: Tightness of throat or chest, shortness of breath, cough, wheeze
Heart: Weak pulse, dizziness, passing out, drop in blood pressure
Gut: Vomiting, diarrhea, cramps
Neurologic: Feeling of impending doom, change in behavior or alertness

First-line treatment:

- Administer epinephrine as per the student's emergency action plan or per your school district's standing order.
- Call 911 or your local emergency number.
- Notify parent/guardian.
- Remain with student and monitor until transfer of student to emergency responders is complete.
- Complete documentation.

Persistent, Refractory, and Biphasic Reactions

Although anaphylaxis is usually a uniphasic reaction, it may also present as a persistence reaction, refractory reaction, or if the initial response resolves, then comes back a biphasic reaction (Dribin, et al., 2020). This is worth mentioning since the biphasic reaction could occur without a second exposure to the allergen and outside the time that the patient spends in the emergency room. A recent study did not reveal consistent factors that would predict the onset of a biphasic reaction (Nomura et al., 2020).

References

American Academy of Pediatrics. (2017). *Allergy and anaphylaxis emergency plan*. https://downloads.aap.org/HC/AAP_Allergy_and_Anaphylaxis_Emergency_Plan.pdf

American College of Allergy, Asthma & Immunology. (2018). *Anaphylaxis*. https://acaai.org/allergies/symptoms/anaphylaxis/

Blazowski, L., Majak, P., Kurzawa, R., Kuna, P., & Jerzynska, J. (2021). A severity grading system of food-induced acute allergic reactions to avoid the delay of epinephrine administration. *Annals of Allergy, Asthma & Immunology, 127*(4), 462-470.

Carlson, J. N., Cook, S., Djarv, T., Woodin, J. A., Singletary, E., & Zideman, D. A. (2020). Second dose of epinephrine for anaphylaxis in the first aid setting: A scoping review. *Cureus, 12*(11), e11401. https://doi.org/10.7759/cureus.11401

Dribin, T. E., Sampson, H. A., Camargo Jr, C. A., Brousseau, D. C., Spergel, J. M., Neuman, M. I., ... & Schnadower, D. (2020). Persistent, refractory, and biphasic anaphylaxis: A multidisciplinary Delphi study. *Journal of Allergy and Clinical Immunology, 146*(5), 1089-1096.

McLendon, K., Sternard B.T. (Updated 2023). *Anaphylaxis*. StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK482124/

Nomura, T., Sekii, H., Sugita, M., & Nakahara, S. (2020). Association between biphasic reactions and the systems of symptoms and treatment in patients with anaphylaxis hospitalized from the emergency department. *Acute medicine & surgery, 7*(1), e599. https://doi.org/10.1002/ams2.599

Wang, J., Sicherer, S. H., Matsui, E., Abramson, S., Dinakar, C., Irani, A. M., ... & Pistiner, M. (2017). Guidance on completing a written allergy and anaphylaxis emergency plan. *Pediatrics, 139*(3).

SAMPLE SCHOOL DISTRICT ANAPHYLAXIS RESPONSE POLICY (REV. 2023)

Students at risk for anaphylaxis benefit from a school district policy that coordinates a planned response in the event of an anaphylactic emergency. The outline for a sample policy and links to policies can be found below. These policies relate to the care and response to anaphylaxis and address the use of epinephrine in the school setting. For a full food allergy management plan, refer to the CDC document, Voluntary Guidelines for Managing Food Allergies in Schools and Early Care and Education Programs (2013).

State laws and nurse practice acts differ from state to state. Each school district and each school nurse must ensure, before enacting any policy, that it is consistent with applicable state laws and regulations, including those governing delegation.

A study revealed that schools who have food allergy policies or guidelines were 3.5 times more likely to require individual student food allergy action plans than schools that did not have a policy or guidelines (Eldredge et al., 2014; Gereige et al., 2022).

The National Association of School Nurses (2014) recommends the following considerations for a comprehensive anaphylaxis school policy. School districts and schools need to prepare for school anaphylactic reactions in all children and youth, with or without a prior history of allergies.

A comprehensive school policy should address these elements:

1. Identifying individuals with life-threatening allergies, including those with first-time anaphylactic emergencies
2. School programs and environments covered by the policy
3. Annual education/training of all staff
   - Allergic reaction recognition and management training
     - Review non-IgE vs IgE-mediated reaction symptoms
     - Review that IgE-mediated reactions can be caused by food, drugs, stinging insects, latex, and vaccines
   - Epinephrine auto-injector (EAI) training
     - Review EAIs
     - Location/storage of EAI
     - Site of injection
     - Expiration date
     - Position of patient when giving EAI
     - How long to hold EAI in place
     - Who can administer EAI in the absence of a school nurse (according to state law and local policy)
     - Calling 911 or local EMS
     - Disposal of used EAI
     - Monitoring/follow-up care until passed off to EMS
     - School communication protocol
     - Good Samaritan Law

4. Obtaining and using stock epinephrine auto-injectors
   - School prescription and standing order
   - Procurement of stock epinephrine (i.e., MD, PA, NP, school medical consultant)
   - Stock locations, usually multiple/ensure secure access
   - Stock supply dosages, number of doses
   - Disposal after use and expiration
   - Administration and documentation
   - Reporting
   - Who supplies/funds the stock epinephrine
   - Clarify if student needs diagnosis of allergy condition that could result in anaphylaxis for UAP to administer, especially in setting of first-time anaphylaxis
5. Proper labeling of all food offered at school per Food Allergen Consumer Protection Act guidelines
6. Resources and support to ensure adherence to special diets
7. Resources and support to ensure latex safe settings in schools
8. Medical emergency preparedness and response plan for allergic emergencies
   - Implement AAP, ECP, IHP, 504 plan, and IEP as appropriate and communicate with student, family, school personnel, and HCP to improve and revise as needed
   - Collaborate with students, families, school administrators, and HCP to identify and train school personnel to administer emergency medications in the absence of the school nurse, in accordance with district policies, competency training and criteria, and state Nurse Practice Act rules
   - Collaborate with teachers and family to plan for field trips
   - Provide evidence-based allergic reaction education and training, including prevention, food policies, food label reading, stinging insect avoidance measures, latex avoidance measures, reviewing AAP/ECP, epinephrine auto-injector training, medication management, and first aid to schoolteachers, staff, and students (when appropriate)
     - Review student specific considerations with personnel that work directly with a student, per ECP/IHP
   - Establish collaboration between school nurse, families/caregivers, and HCP to ensure consistent communication.
     - School nurse will communicate allergic reactions and medication administration to families and HCP as soon as possible
     - Communication from family of exposures, reactions, and outcomes outside of school to the school nurse.
   - Document according to school policy, protocols, and procedures
     - Student/school nurse visits and disposition
     - Treatment and student response
     - Medications administered
9. Follow-up and updates to procedure for improvement

Every staff member needs to be trained to know the signs and symptoms of anaphylaxis and know how to initiate the emergency protocol.

A district's all-hazard emergency plan should address schools, parents, healthcare providers, emergency medical services (EMS), and the community at large.

Sample Policies/Guidelines

Illinois State Board of Education. (2022). *Anaphylaxis response policy for Illinois schools*. https://www.isbe.net/Documents/Anaphylactic-policy.pdf

Michigan State Board of Education. (2014). *Addendum to the 2002 model policy and guidelines for administering medications to pupils at school guidelines for responding to an anaphylaxis emergency at school*. http://www.michigan.gov/documents/mde/Epi_Addendum_6-1814_461400_7.pdf?20140801084835

Missouri School Boards' Association. (2010). *Student allergy prevention and response*. https://dese.mo.gov/media/pdf/allergy-prevention-and-response-policy

Missouri Department of Health & Senior Services. (2014). *Guidelines for allergy prevention and response*. https://health.mo.gov/living/families/schoolhealth/pdf/mo_allergy_manual.pdf

National School Boards Association. (2012). *Safe at school and ready to learn: A comprehensive policy guide for protecting students with life-threatening food allergies*. https://cdn-files.nsba.org/s3fs-public/reports/Safe-at-School-and-Ready-to-Learn.pdf

Disclaimer: A policy does not guarantee an allergy free school environment. These policies are designed to create and maintain an evidence-based system to reduce the chance of allergen exposure, and provide education/training for prevention and response to an allergic reaction/anaphylaxis.

References

Centers for Disease Control & Prevention. (2013). *Voluntary guidelines for managing food allergies in schools and early care and education programs*. Voluntary Guidelines for Managing Food Allergies In Schools and Early Care and Education Programs (cdc.gov)

Eldredge, C., Patterson, L., White, B., & Schellhase, K. (2014). Assessing the readiness of a school system to adopt food allergy management guidelines. *Wmj, 113*(4), 155-161.

Gereige, R. S., Gross, T., Jastaniah, E., & COUNCIL ON SCHOOL HEALTH AND COMMITTEE ON PEDIATRIC EMERGENCY MEDICINE. (2022). Individual Medical Emergencies Occurring at School. *Pediatrics, 150*(1), e2022057987.

National Association of School Nurses. (2014). *Epinephrine Policies and Protocols*. Developed by the Epinephrine Policies and Protocols Workgroup of the National Association of School Nurses https://www.nasn.org/nasn-resources/resources-by-topic/allergies-anaphylaxis

ALLERGY AND ANAPHYLAXIS CHECKLIST TO INITIATE AND SUSTAIN STOCK EPINEPHRINE PROGRAMS

In 2013, the School Access to Emergency Epinephrine Act was signed into law. This federal law encourages states to implement policies requiring schools to stock undesignated epinephrine auto-injectors (AAAAI, n.d.). Since then, all 50 states and the District of Columbia allow undesignated epinephrine in schools for emergency use to treat allergic or anaphylactic reactions (Volerman et al., 2022). As more states mandate, as opposed to allow, stock epinephrine in schools, there is a need for guidance to initiate and sustain stock epinephrine programs in schools.

- Know the interpretation of your state law regarding emergency epinephrine in schools.
  *This should come from your state Department of Health or your state Department of Education. You can also ask your state school nurse consultant if one is available.
- Know your school district policy to stock and administer undesignated stock epinephrine. If one does not exist, consider working with the school administration to draft such a policy.
- When developing protocols and procedures consider the following:
  - Written order for epinephrine auto-injectors (e.g., school consulting or local department of health physician, physician assistant, nurse practitioner, school district medical director)
  - Number of epinephrine auto-injectors to stock at each school. (Is the school nurse designated in the state law to make this decision? If not, who makes this decision?)
  - Secure but readily accessible area for storage. Location should be easily identified and clearly labeled.
  - Funding for the school/school district's stock epinephrine supply. (Work with your local pharmacy for discount, local grants from hospital foundations.)
  - Identification of who can administer undesignated stock epinephrine. (This requires critical decision making; check with your state and local guidelines and your state nurse practice act.) Those persons need to be identified by the building administrator to all staff and the superintendent.
  - Additional training needed
  - Data collection: method to document administration, reason for use, 911 or EMS call, and disposition (emergency room, admitted to hospital, return to school after emergency room visit)
  - Post-event debrief (evaluate outcomes, identify any gaps, successes, and areas needing improvement or revisions)
  - Interval for evaluation of programs

References

American Academy of Allergy Asthma & Immunology. (n.d.). *School access to emergency epinephrine act*. https://www.aaaai.org/about/advocacy/archive/emergency-epinephrine-act

Missouri Department of Health & Senior Services. (2020). *Emergency guidelines for schools and childcare facilities*. (2nd ed.) https://health.mo.gov/living/families/schoolhealth/pdf/emergency-guidelines-for-schools-and-childcare.pdf

Tarr Cooke, A., & Meize-Grochowski, R. (2019). Epinephrine auto-injectors for anaphylaxis treatment in the school setting: A discussion paper. *SAGE open nursing*, *5*, 2377960819845246. https://doi.org/10.1177/2377960819845246

Volerman, A., Brindley, C., Amerson, N., Pressley, T., & Woolverton, N. (2022). A national review of state laws for stock epinephrine in schools. *Journal of School Health*, *92*(2), 209-222.

ASSESSMENT OF EPINEPHRINE AUTOINJECTOR SELF-ADMINISTRATION

Student name: _____ Grade: _____ Teacher: _____

Physician: _____ Phone: _____

Medication: _____ Dose: _____ Time: _____

Special Instructions: _____

_____

The Authorization for Student Possession and Use of an Epinephrine Auto-Injector form must be completed according to school policy. The EpiPen should be labeled with the student's name.

Responsibilities for Carrying an Epinephrine Autoinjector

	Observation	
Allergy action plan returned	Yes	No
Student demonstrates correct administration of Epinephrine Autoinjector	Yes	No
Student verbalizes allergen identification and precautions	Yes	No
Student verbalizes the importance of not sharing Epinephrine Autoinjector with others	Yes	No
Epinephrine Autoinjector is kept with student's belongings	Yes	No
Student agrees to report symptoms and necessity for Epinephrine Autoinjector administration	Yes	No
A back-up Epinephrine Autoinjector is provided to the school office/clinic	Yes	No

Comments: _____

_____

_____

If the student does not demonstrate safe use and storage of the Epinephrine Autoinjector, parent/guardian and physician should be notified and an alternate approach to Epinephrine Autoinjector use/allergy management will need to be determined.

Nurse Signature: _____ ***Date:*** _____

Spot Check for Student Possession of Epinephrine Autoinjector

Date					
Initials					
Yes/No					
Exp. Date					

Initials	Signature	Initials	Signature

LANGUAGE CONSIDERATIONS – ALLERGIES AND ANAPHYLAXIS

Schools must communicate information to limited English proficient parents in a language they can understand. This includes any school program, service, or activity called to the attention of parents including health information.

Schools must respond to parent requests for language assistance, even if their child is proficient in English.

Schools may not rely on or ask students, siblings, friends, or untrained school staff to translate or interpret for parents.

As part of the enrollment process, schools may provide a language survey or similar form to fill out that helps the school identify need for language assistance services.

School districts must develop and implement a process for identifying a family's language needs.

School districts must provide effective language assistance (translated material or interpreter) to limited English proficient parents.

Language assistance must be provided free of charge and provided by appropriate and competent staff (approved by the school district) or through appropriate outside resources.

School districts should ensure that interpreters and translators have knowledge in both languages of any specialized terms or concepts to be used in the communication at issue and are trained on the role of an interpreter and translator, the ethics of interpreting and translating, and the need to maintain confidentiality (U.S. Department of Education, n.d.).

It is not sufficient for the staff merely to be bilingual.

Find an Interpreter

Contact your state's Department of Education for an approved list of contract interpreter/translation agencies or your local hospital.

References

U.S. Department of Education Office for Civil Rights (OCR). (n.d.). *Information for limited English proficient (LEP) parents and guardians and for schools and school districts that communicate with them.* https://www2.ed.gov/about/offices/list/ocr/docs/dcl-factsheet-lep-parents-201501.pdf

U.S. Department of Health & Human Services. (n.d.) *Section 1557 of the Patient Protection and Affordable Care Act.* https://www.hhs.gov/civil-rights/for-individuals/section-1557/index.html

FOOD ALLERGY AND ANAPHYLAXIS FAMILY MENTAL HEALTH CONSIDERATIONS/RESOURCES

How a food allergy diagnosis affects a family often varies depending on the age of the child/youth (Rubeiz & Ernst 2021). An analysis of mental health and lifestyle impact of parents of children/youth with food allergy revealed feelings of fear, anxiety, depression, and the concern of bullying (Abrams et al., 2020; Westwell-Roper, et al. 2022). Education, social support, and school engagement may promote resilience (Rubeiz & Ernst 2021). Schools can address bullying/prevention via individualized healthcare plans (IHP) and through the student's 504 plan or IEP. In the classroom, research revealed that the implementation of Social Emotional Learning (SEL) resulted in a reduction of bullying, physical aggression, and peer victimization among students with disabilities (Espelage, Rose, & Polanin, 2015).

AAAAI has developed Food Allergy Stages handouts to support and educate families about food allergy management. According to a report based on the responses of caregivers of children/youth/older teens, it was suggested that handouts provide easy to understand, valuable information to engaging in food allergy management and addressing the psychosocial issues that can be associated with food allergy (LeBovidge et al., 2022). Please see the resources below.

Resources for Parents

Age-Appropriate Food Allergy Handouts from the American Academy of Allergy, Asthma & Immunology:

AAAAI. (2022). *Food allergy stages: Basics for all ages*. https://www.aaaai.org/Aaaai/media/Media-Library-PDFs/Tools%20for%20the%20Public/Conditions%20Library/AAAAI-0622-205-FA-01.pdf

AAAAI. (2022). *Food allergy stages: Preschool (3-5 years).* https://www.aaaai.org/Aaaai/media/Media-Library-PDFs/Tools%20for%20the%20Public/Conditions%20Library/AAAAI-0622-205-FA-04.pdf

AAAAI. (2022). *Food allergy stages: Early grade school (5-8 years).* https://www.aaaai.org/Aaaai/media/Media-Library-PDFs/Tools%20for%20the%20Public/Conditions%20Library/AAAAI-0622-205-FA-05.pdf

AAAAI. (2022). *Food allergy stages: Late grade school (8-11 years).* https://www.aaaai.org/Aaaai/media/Media-Library-PDFs/Tools%20for%20the%20Public/Conditions%20Library/AAAAI-0622-205-FA-06.pdf

AAAAI. (2022). *Food allergy stages: Early teen (11-14 years).* https://www.aaaai.org/Aaaai/media/Media-Library-PDFs/Tools%20for%20the%20Public/Conditions%20Library/AAAAI-0622-205-FA-07.pdf

AAAAI. (2022). *Food allergy stages: Late teen (14 -18 years).* https://www.aaaai.org/Aaaai/media/Media-Library-PDFs/Tools%20for%20the%20Public/Conditions%20Library/AAAAI-0622-205-FA-08.pdf

References

Abrams, E. M., Simons, E., Roos, L., Hurst, K., & Protudjer, J. L. (2020). Qualitative analysis of perceived impacts on childhood food allergy on caregiver mental health and lifestyle. *Annals of Allergy, Asthma & Immunology, 124*(6), 594-599.

Espelage, D. L., Rose, C. A., & Polanin, J. R. (2015). Social-emotional learning program to reduce bullying, fighting, and victimization among middle school students with disabilities. *Remedial and special education, 36*(5), 299-311.

LeBovidge, J. S., Herbert, L. J., Ramos, A., Rotter, N., Sicherer, S. H., Young, M. C., ... & Bingemann, T. A. (2022). The Development of Age-Based Food Allergy Educational Handouts for Caregivers and Patients: A Work Group Report of the AAAAI Adverse Reactions to Foods Committee. *The Journal of Allergy and Clinical Immunology: In Practice, 10*(10), 2552-2558.

Rubeiz, C. J., & Ernst, M. M. (2021). Psychosocial aspects of food allergy: resiliency, challenges and opportunities. *Immunology and Allergy Clinics, 41*(2), 177-188. https://doi.org/10.1016/j.iac.2021.01.006

Westwell-Roper, C., To, S., Andjelic, G., Lu, C., Lin, B., Soller, L., ... & Stewart, S. E. (2022). Food-allergy-specific anxiety and distress in parents of children with food allergy: A systematic review. *Pediatric Allergy and Immunology, 33*(1), e13695.

National Association of School Nurses

SAMPLE ALLERGY AND ANAPHYLAXIS NURSING DIAGNOSES

Nursing Diagnoses: Quick list of possible nursing diagnoses

- Risk for social isolation
- Ineffective therapeutic regimen management
- Ineffective breathing pattern
- Impaired gas exchange
- Decreased cardiac output
- Risk for injury
- Altered tissue perfusion
- Acute pain
- Risk for fluid imbalance
- Effective self-management of anaphylaxis
- Risk for anxiety

National Association of School Nurses

GUIDELINES FOR HEALTH PERSONNEL ROLES MANAGING STUDENT ANAPHYLAXIS (REV. 2023)

Unlicensed Assistive Personnel (UAP) or Licensed Practical/Vocational Nurse (LPN/LVN)	Registered Nurse (RN) Note: Delegation of a nursing activity by an RN to a UAP or LPN/LVN is dependent on assessed capabilities. State laws and regulations and school regulations and standards of school nursing practice must be followed (National Association of School Nurses, 2022).
I. IDENTIFY STUDENTS with food allergies or a history of anaphylaxis who require emergency epinephrine auto-injector (EAI).	
1. Notify RN of students with food allergies or history of anaphylaxis following established communication procedure. **2.** Identify students with anaphylaxis by reviewing the following at the beginning and throughout the school year: **a.** Forms and documents in the school health office (emergency cards, student health record medication forms, early childhood screening forms, primary care physical exam forms, field trip permission forms, new student health records, emergency care plan (ECP) also known as anaphylaxis action plan (AAP) or food allergy action plan (FAAP) and athletic physical exam forms) **b.** Verbal or written reports from student, family, teachers, or staff **c.** Reports or notes from Emergency Department (ED) or hospital admissions	**1.** Conduct case finding for anaphylaxis by reviewing data from a variety of sources including the student/family, student health record, school staff, health/medical records, health history form, emergency cards, field trip permission forms. **2.** Record health data in the paper or electronic student health record. **3.** Obtain additional history as needed.
II. NURSING CARE PROCEDURES are processes of anaphylaxis management at school: assessment, implementation of management plan, and communication with families and providers. Procedures include the delegation of certain tasks by the school nurse to trained, designated staff.	
UAP or LPN/LVN	**Registered Nurse**
1. Collect family food allergy health history, medication authorization, AAP, EAP, FAAP, or other communications from parent/guardian and/or health care provider. **2.** Distribute family food allergy health history, medication authorization, anaphylaxis action plans, or other forms as directed by the RN.	**1.** The food allergy health history intake form is given annually to students requiring EAI or emergency anaphylaxis management: ■ Students requiring antihistamine for food allergy reaction ■ Newly identified or discovered students with food allergies ■ Students with food allergies, for which more information is needed

	2. Food allergy health history intake form may be sent home with student, mailed, given to parent/guardian, or completed over phone if necessary. 3. Document in student health record that allergy health history was given or sent to parent/guardian. 4. Information from allergy health history is summarized in student health record nursing notes. 5. Add "allergy with potential for anaphylaxis" in student health record in uniform designated location. 6. RN uses food allergy health history intake form to develop individualized health plan. 7. If student requires food substitutions or allergen-free table, notify school food service department.
Anaphylaxis Action Plan/Emergency Care Plan 1. Annually, send request for AAP, ECP, FAAP for students who require emergency medication (EAI or antihistamine) for allergy exposure. 2. Share anaphylaxis action plan/emergency care plan to RN for review. If RN is not on site, contact RN as soon as possible.	**Anaphylaxis Action Plan/Emergency Care Plan** 1. Annually, send request for AAP, EAP, FAAP for students who require emergency medication (EAI or antihistamine) for allergy exposure. 2. Review anaphylaxis action plan/emergency care plan when received and document in the student's health record. 3. Place anaphylaxis action plan/emergency care plan in medication book and/or emergency health plan folder or designated standard location. 4. Develop anaphylaxis action plan/emergency care plan for the classroom teacher(s) as needed. 5. Distribute to all staff responsible for emergency treatment. 6. Include one copy for teacher substitute folder. Place sticker on sub folder indicating presence of student in classroom with anaphylaxis action plan/emergency care plan/food allergy action plan.
	Individual Health Plan (IHP) and 504 Plan 1. Develop individual health plan (IHP) for students who require emergency medication (EAI or antihistamine) for allergy exposure. 2. School nurse or designated 504 coordinator sends notice of eligibility for 504 plan and notice of rights to parent/guardian. 3. Develop 504 plan for students based on eligibility. 4. Review and modify IHP and 504 plan as needed 5. Summarize progress towards goals/education on IHP form regularly, and at least annually, or upon student's withdrawal from school.

III. EMERGENCY CARE

Provision of emergency medication, calling 911 or local EMS, and connecting to healthcare provider for urgent care and follow-up and actions to prevent or manage emergency situations.

UAP or LPN/LVN	Registered Nurse
Emergency Care **1.** Administer medications per RN delegation and anaphylaxis action plan when indicated (as appropriate per state Nurse Practice Act).	**Emergency Care** **1.** Collaborate with building administrator to determine staff who will be designated to provide epinephrine. **2.** Collaborate with the building administrator to determine anaphylaxis training dates for all staff. **3.** Collaborate with parent/guardian and building administrator to determine where emergency medication (EAI and/or antihistamine) and other supplies will be located. **4.** Train and document all designated staff in identification of anaphylaxis, the student's individualized AAP, ECP, FAAP, and administration of emergency medication (EAI and/or antihistamine). **5.** Implement anaphylaxis action plan/emergency care plan when indicated. **6.** If student is self-carrying EAI, complete self-carry agreement and review use of EAI with student.
	Emergency Care **1.** Follow school district protocols for calling for emergency response. **2.** Document all 911 calls in student health record. Call health services administrator to report 911 call. **3.** Document AAP, ECP, or FAAP in student's health record when emergency medication (EAI and/or antihistamine) is administered. **4.** Document other pertinent information in nursing notes. **5.** Hold a debrief session for all school personnel to evaluate emergency response per anaphylaxis action plan. **6.** At end of year or upon student withdrawal, file allergy health history form, IHP, AAP, ECP, FAAP, and self-carry form (if applicable) in the student's cumulative education record.

IV. STUDENT COUNSELING/EDUCATION ■ Build students' allergy knowledge, behavior, and positive attitude about their role in anaphylaxis prevention and allergy self-management. ■ Educate and share information and materials with parents, teachers, staff, and coaches to support anaphylaxis management of students.	
UAP or LPN/LVN	**Registered Nurse**
	Group Education 1. Review general information on allergies and anaphylaxis at a faculty or grade-level meeting. 2. Provide written signs and symptoms in lay language for faculty as needed. **Individual Education** 1. Review allergy trigger identification and avoidance measures with student. 2. Review anaphylaxis action plan with student. 3. If student is self-administering EAI, review medication administration technique and what to do immediately after self-administration 4. Provide counseling and educate students, families, and school staff on key components of anaphylaxis management. 5. Document education of student, families, and staff on IHP. 6. Encourage students to be assertive self-advocates. Encourage students to inform subs, coaches, and other before- and after-school staff of their allergies.

(Adapted from Minneapolis Special School District #1 (2023). *Components of Anaphylaxis/Allergy Management in School*, Healthy Learner Model for Student Chronic Condition Management. Original work published 2009.)

References

Bingemann, T. A., Nanda, A., & Russell, A. F. (2021). Pharmacology Update: School Nurse Role and Emergency Medications for Treatment of Anaphylaxis. *NASN school nurse (Print), 36*(5), 264–270. https://doi.org/10.1177/1942602X211021902

Texas Health & Human Services. (2023) *Guidelines for the care of students with food allergies at risk for anaphylaxis*. https://www.dshs.texas.gov/sites/default/files/schoolhealth/pdf/FINAL%20Guidelines%20for%20Food%20Allergies%203.2023.pdf

National Association of School Nurses. (2022). Glossary. *School Nursing: scope and standards of practice*. (4th ed., p. 100).

OUT OF SCHOOL TIME (OST) PROGRAMS – STUDENTS WITH ALLERGIES/ANAPHYLAXIS CARE COORDINATION CHECKLIST

The Centers for Disease Control and Prevention (2002) states that "out of school time supports student health and learning." Further, "It is the position of the National Association of School Nurses (NASN) that all students, including those with disabilities or special healthcare needs, must have equal opportunity to safely take part in school-sponsored before, after, and extended school year programs and activities, also known as Out of School Time" (NASN, 2023). To help students participate safely in OST programs, the Alliance for a Healthier Generation (2023) and NASN have developed a roadmap to provide a path of evidence-based care.

The school nurse is responsible for complying with applicable federal, state, and local laws, regulations, ordinances, executive orders, policies, and any other applicable sources of authority, including any applicable standards of practice. The school nurse can connect the parents to the 3rd party contractor (for non-school sponsored OST) so parents can communicate the issues and needs of their student's chronic medical condition. NOTE: School supplies and stock medications may not be made available for use by the 3rd party contractor even though the program is administered on the school campus grounds (National Association of School Nurses, 2021).

The following checklist includes considerations for care coordination between the OST administrator/director, school health services, and parent/guardian to address the needs of students with food allergies/anaphylaxis. This includes the training of staff on prevention and response for when the school nurse is not available during OST activities. School nurses may provide training for school sponsored OST personnel. Non-school sponsored OST programs must seek appropriate training for their personnel based on their policies and procedures.

Planning, Mitigation and Prevention of Anaphylaxis/Medical Emergency

- Collaborate between the OST administrator/director and school health services to review existing policies/protocols for safe participation.
- Connect with parent/guardian of students with known latex, insect venom, or food allergies and any other comorbid health condition(s) such as asthma to discuss the needs of the student during OST activities.
- Discuss with parent/guardian the importance of sharing any updates in their students' allergies and emergency contact information with school and OST personnel.
- Identify which students will be able to self-carry/medicate. Ensure that proper education, competency, and documentation has been completed.

  *It is now legal for students to carry and use prescribed anaphylaxis medications in all 50 states (Asthma & Allergy Network, 2023).
- Develop a system/protocol that includes:
  - Where emergency medication will be stored
  - Where the student's emergency care plan/emergency action plan will be stored

- Method to document OST emergency medication administration
- Method for disposal of epinephrine auto-injector post-administration
- A plan for what to do if medication is lost or misplaced (e.g., contacting parents/guardians or obtaining additional medication)

OST Staff Education and Training

Educate all OST staff about food allergies/anaphylaxis, including:

- Respecting student health information confidentiality
- Types of food allergies (common and those that are less common)
- Prevention, cleaning, and avoidance of cross contamination
- Reading food labels and having parent/guardian clear any foods to be consumed by the student
- Signs and symptoms of an anaphylactic reaction
- Review of a sample food allergy action plan or emergency care plan
- Hands-on demonstration, practice, and demonstrated competency of recognizing signs and symptoms of anaphylaxis, following the FAAP or EAP, administration of epinephrine auto-injector, making a 911 call to EMS and then parent/guardian, monitoring the student's ABC's, continuing to follow the student's FAAP or EAPEAP until EMS arrives, documenting event and response details, and debriefing with appropriate personnel.

Emergency Preparedness for OST Field Trips

- For all students, especially students with food allergies/anaphylaxis or other chronic diseases, request consents and insurance information from parents/guardians to obtain emergency medical services for their child while on a field trip (keep this information in a confidential file).
- Make sure cell phones are fully charged and other emergency communication devices are available and in working order.
- Evaluate the availability and response time of Emergency Medical Services (EMS) while on the field trip.
- Plan emergency procedures for areas in which cell phone reception may not be available.
- Understand how to directly communicate with the student's parent/guardian in the event of an emergency and ensure all designated adults have emergency contact numbers.
- Identify hospital locations along the field trip route.
- For "out-of-the-country" field trips, obtain copies of all prescriptions for prescribed medications.

References

American Academy of Allergy, Asthma, & Immunology. (n.d.). *Immunoglobulin E (IgE) defined*. https://www.aaaai.org/tools-for-the-public/allergy,-asthma-immunology-glossary/immunoglobulin-e-(ige)-defined

American Academy of Allergy, Asthma, & Immunology. (n.d.). *Food intolerance versus food allergy.* https://www.aaaai.org/tools-for-the-public/conditions-library/allergies/food-intolerance

Alliance for a Healthier Generation. (2023). *Healthy out-of-school time roadmap*. https://www.healthiergeneration.org/take-action/out-of-school-time/healthy-out-of-school-time-roadmaps

Asthma & Allergy Network (2023). *State laws*. https://advocacy.allergyasthmanetwork.org/laws-to-protect-those-with-allergies-and-asthma/state-laws/

Centers for Disease Control and Prevention. (2022) *Out of school time*. https://www.cdc.gov/healthyschools/ost.htm

Centers for Disease Control and Prevention. (n.d.). *Managing food allergies in schools: The role of the school teachers and paraeducators*. https://www.cdc.gov/healthyschools/foodallergies/pdf/20_316712-G_FA_teachers_508tagged.pdf

Food Allergy and Anaphylaxis Connection Team. (2020). *Field trips for school personnel*. https://www.foodallergyawareness.org/education/for-school-personnel/field-trips/

National Association of School Nurses. (2021). *A model for school nurse-led case management*. https://learn.nasn.org/courses/33713

National Association of School Nurses. (2021). *Code of ethics*. https://www.nasn.org/nasn-resources/resources-by-topic/codeofethics

National Association of School Nurses. (2021). *School nursing evidence-based clinical practice guideline: Medication administration in schools implementation toolkit*. https://learn.nasn.org/courses/36927

National Association of School Nurses. (2020). *Improving care coordination for students with chronic health conditions toolkit*. https://learn.nasn.org/courses/25340

Resources

Sample Contract for Self-Carry and Self-Administration of Medication

National Association of School Nurses. (2021). *Sample contract for student self-carry and self-administration of medication Form*. https://cdn.fs.pathlms.com/6LFFuePRu2ID9PgDnHAu

Sample Emergency Action Plans for Anaphylaxis

American Academy of Allergy, Asthma, & Immunology. (2020). *Anaphylaxis emergency action plan*. https://www.aaaai.org/Aaaai/media/MediaLibrary/PDF%20Documents/Libraries/Anaphylaxis-Emergency-Action-Plan_FILLABLE.pdf

American Academy of Pediatrics. (2019). *Allergy and anaphylaxis emergency plan*. (Original work published 2017.) https://downloads.aap.org/HC/AAP_Allergy_and_Anaphylaxis_Emergency_Plan.pdf

FARE. (2020). *Food allergy & anaphylaxis emergency care plan*. (Available for download in English and Spanish.) https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/food-allergy-anaphylaxis-emergency-care-plan

Sample Report of Epinephrine Administration

Maryland State Department of Education. (n.d.). School health services form. https://marylandpublicschools.org/about/Documents/DSFSS/SSSP/SHS/MSDEReportingFormAnaphylacticReaction.pdf

Sample Handout for Families of Students with Food Allergies

Massachusetts General Hospital. (2023). *Managing anxiety: A handout for families of children with food allergies*. https://www.massgeneral.org/children/food-allergies/managing-anxiety-a-handout-for-families-of-children-with-food-allergies

Sample Medication Administration Delegation Checklist

National Association of School Nurses. (2021). *Medication administration delegation checklist*. https://cdn.fs.pathlms.com/cAAmT4MRTniIGm82oM91

Sample Non-Food Rewards Tipsheet

Action for Healthy Kids. (n.d.). Healthy nonfood rewards tipsheet. https://www.actionforhealthykids.org/wp-content/uploads/2019/05/Healthy-Non-Food-Rewards-Tip-Sheet_English.pdf

School Nurse's Role

Keller A, Morse B, Conroy M. (2022). Food allergies and anaphylaxis in the community: The school nurse's role. *NASN school nurse. 38*(1):41-46. Doi:10.1177/1942602X221110083

Tip Sheet for Delegating to Unlicensed Assistive Personnel

National Association of School Nurses. (2021). *Medication administration: Delegation checklist*. https://cdn.fs.pathlms.com/cAAmT4MRTniIGm82oM91

Tip sheet for Sharing Student Health Information

National Association of School Nurses. (2020). Fact sheet for school administrators, families, and school personnel: Sharing student health information. https://cdn.fs.pathlms.com/rCRHq93qSTyALjuvBaT4

National Association of School Nurses

FIELD TRIP PREPARATION CHECKLIST

(adapted from Emergency Medication Administration Field Trip Preparation Checklist)

This document includes a checklist of considerations for preparation before a field trip and emergency medication to treat signs/symptoms of anaphylaxis on field trips.

The school nurse is responsible for complying with applicable federal, state, and local laws, regulations, ordinances, executive orders, policies, and any other applicable sources of authority, including any applicable standards of practice (National Association of School Nurses, 2021).

Mitigation and Prevention of Anaphylaxis/Medical Emergency

- Prior to field trip, connect with parent/guardian of students with known latex, insect venom, or food allergies and any other comorbid health condition such as asthma to discuss the needs of the student.
- Discuss with parent/guardian any updates to emergency contact information.
- Review student's health plans and revise as needed for field trip circumstances.
- Discuss with the school administrator and field trip supervisor the staffing that is necessary to meet student health needs. Abide by the state Nurse Practice laws and student's 504 plan or IEP.
- For overnight field trips: If deemed appropriate, request rooms with kitchens, refrigerators, and microwaves so students with food allergies can prepare their own meals.
- Call all destination locations, including travel stops, restaurants, and hotels, ahead of time to ensure accommodations are available for student(s) with food allergies.
- If a field trip will be outdoors or in locations with potential exposure to insect/animal allergen, plan to reduce potential exposure.
- Store lunches of students with food allergies separately to minimize cross-contamination.
- After the field trip, initiate debrief to evaluate what worked well and suggestions for improvement on subsequent trips.

School Nurse Practice Considerations

- Explore the Nurse Practice laws of the state(s) the students will visit or travel through. Can the nurse practice in those states?
- Determine if the state(s) where the field trip occurs allows for delegation of nursing health services to unlicensed assistive personnel (UAP).
- Determine whether the state(s) where the field trip occurs allows for medication administration to the student by anyone other than a licensed healthcare professional. In the event of allowable delegation, determine if remote supervision is allowed if school nurse is not attending field trip.
- If the state is not part of the Nurse Compact, determine what the state(s) where the field trip will occur requires in order for the licensed registered nurse to provide nursing care in that state.

- If the student self-carries their epinephrine auto-injector, review competencies prior to field trip.
  *It is now legal for students to carry and use prescribed anaphylaxis medications in all 50 states (Asthma & Allergy Network, 2023).
- For an "out-of-country" field trip, investigate applicable laws as nursing licensures are not recognized out of the United States.
- Evaluate the need for extended liability of the school nurse for the performance of nursing acts while outside normal working or contract hours.

Staff Education and Training

- Educate all field trip staff about anaphylaxis, including:
  - Signs and symptoms
  - Emergency management who is responsible for administering the emergency medication and where the emergency medication will be located during the field trip
  - Documentation of training
  - Review emergency protocols with appropriate field trip staff

Emergency Preparedness

- For all students, especially students with chronic diseases, obtain consents and insurance information from parents/guardians to obtain emergency medical services for their child while on a field trip (keep this information in a confidential file).
- Make sure cell phones are fully charged and other emergency communication devices are available and in working order.
- Evaluate the availability and response time of Emergency Medical Services (EMS) on the field trip route and final destination.
- Plan emergency procedures for areas in which cell phone reception may not be available.
- Understand how to directly communicate with the student's parent(s) in the event of an emergency and ensure all designated adults have emergency contact numbers.
- Identify where hospitals are located on the field trip route and destination.

Medication Storage

- Determine where medication, including emergency medication, will be stored, keeping in mind temperature stability, accessibility, and safety.
- Medications, especially emergency medication, or equipment, should NOT be left in a backpack on the bus or with school staff who is not with the student.
- Determine where the student's emergency care plan/emergency action plan will be stored, ensuring accessibility during an emergency.
- Develop a plan on what to do if medication is lost or misplaced including: contacting parents/guardians and obtaining additional medication.
- Identify which students will be able to self-carry/medicate. Ensure that proper education, competency, and documentation have been completed.
- For "out-of-the-country" field trips, obtain copies of all prescriptions for prescription medications.

Medication Administration

- Ensure a system to document medication administration.
- Develop a plan on how to obtain additional medication if needed.
- Plan for the disposal of epinephrine auto-injector post administration (e.g., give to EMS upon their arrival).

References

Asthma & Allergy Network (2023). *State laws*. https://advocacy.allergyasthmanetwork.org/laws-to-protect-those-with-allergies-and-asthma/state-laws/

Centers for Disease Control and Prevention. (n.d.). *Managing food allergies in schools: The role of school teachers and paraeducators*. https://www.cdc.gov/healthyschools/foodallergies/pdf/20_316712-G_FA_teachers_508tagged.pdf

Food Allergy & Anaphylaxis Connection Team. (2020). *Field trips for school personnel*. https://www.foodallergyawareness.org/education/for-school-personnel/field-trips/

National Association of School Nurses. (2021). *School nursing evidence-based clinical practice guideline: Medication administration in schools implementation toolkit*. https://learn.nasn.org/courses/36927

Wisconsin Department of Public Instruction. (2019). *Meeting student health needs while on field trips tool kit for Wisconsin schools*. https://dpi.wi.gov/sites/default/files/imce/sspw/pdf/Meeting_Student_Health_Needs_While_on_Field_Trips_Tool_Kit.pdf

SAMPLE SEVERE ALLERGY HEALTH HISTORY INTAKE FORM

Student name: _____ Date of Birth: _____ Today's Date: _____

Parent(s)/Guardian: _____

Home Phone: _____ Work: _____ Cell: _____

Primary Healthcare Provider: _____ Phone: _____

Allergist: _____ Phone: _____

Does your child/youth have a diagnosis of an allergy from a healthcare provider? ☐ Yes ☐ No

Type of Food Allergy

☐ IgE response (characterized by the rapid onset of symptoms following ingestion)

☐ Non-IgE response (typically affects the gastrointestinal tract, which can result in a chronic inflammation of the gut; common acute symptoms include vomiting, diarrhea, and abdominal cramping)

What is your child/youth allergic to?

☐ Milk ☐ Peanuts ☐ Eggs ☐ Tree nuts ☐ Fish

☐ Shellfish/crustaceans ☐ Wheat ☐ Soy ☐ Sesame

Other food(s) _____

☐ Insect stings (what type) _____

☐ Latex ☐ Chemicals (list) _____

☐ Medication or vaccine (list) _____

Age of child/youth when allergy was first discovered: _____ Number of times child/youth had a reaction: _____

What are the early signs and symptoms of your child/youth's allergic reaction? _____

_____

How might your child/youth communicate symptoms? _____

How quickly have symptoms appeared after exposure to food(s)?

☐ Seconds ☐ Minutes ☐ Hours ☐ Days ☐ Never had a reaction

Please check the symptoms that your child/youth has experienced in the past:

Skin: ☐ Hives ☐ Itching ☐ Rash ☐ Flushing ☐ Swelling (face, arms, hands, legs)

Mouth: ☐ Itching ☐ Swelling (lips, tongue, mouth)

Gut: ☐ Nausea ☐ Cramps ☐ Vomiting ☐ Diarrhea

Throat: ☐ Itching ☐ Tightness ☐ Hoarseness ☐ Cough ☐ Trouble Swallowing

Lungs: ☐ Shortness of Breath ☐ Repetitive Cough ☐ Wheezing

Heart: ☐ Weak pulse ☐ Loss of consciousness ☐ Dizziness/fainting

Neurologic: ☐ Sense of impending doom ☐ Irritability/change in mood ☐ Change in alertness ☐ Confusion

☐ Other: _____

☐ Symptoms unknown, avoidance of food for testing

How have reactions been treated in the past? _____

Has 911/EMS ever been called? ☐ Yes ☐ No

Has your child/youth ever been treated in an ER? ☐ Yes ☐ No

Does your child/youth have a food allergy action plan or emergency care plan from their medical provider?

☐ Yes ☐ No

Has your child/youth been prescribed an epinephrine auto-injector to treat an allergic/anaphylactic reaction?

☐ Yes ☐ No

Food Allergy – Does your child/youth know:

- What food(s) to avoid ☐ Yes ☐ No
- To refuse a food that may be a problem ☐ Yes ☐ No
- To ask about food ingredients ☐ Yes ☐ No
- How to read and understand food labels ☐ Yes ☐ No
- To tell an adult if they may have had an exposure ☐ Yes ☐ No
- To wear a medical alert bracelet, necklace, or watchband ☐ Yes ☐ No
- How to reach a parent/guardian in an emergency ☐ Yes ☐ No

Has your child/youth been evaluated by their medical provider for readiness and competency to self-carry and administer their emergency medication? ☐ Yes ☐ No

Has your child/youth ever administered their own emergency medication? ☐ Yes ☐ No

Do you have concerns about how your family is coping with your child/youth's food allergy? ☐ Yes ☐ No

Would you like to discuss any concerns with the school nurse? ☐ Yes ☐ No

Does your child/youth have asthma? ☐ Yes ☐ No

What medication has been prescribed for your child/youth's asthma? _____

Does your child/youth have an asthma action plan or emergency care plan from their medical provider?

☐ Yes ☐ No

Does your child/youth have any other health conditions? _____

Parent/Guardian Signature: _____ Date: _____

Reviewed by Registered Nurse: _____ Date: _____

SCHOOL NURSE CONSIDERATION CHECKLIST – ALLERGY AND ANAPHYLAXIS

The school nurse is responsible for complying with applicable federal, state, and local laws, regulations, ordinances, executive orders, policies, and any other applicable sources of authority, including any applicable standards of practice (National Association of School Nurses, 2021).

- Review school district policies, protocols, and procedures related to allergy/anaphylaxis.
- Review IgE-mediated and non-IgE-mediated allergic reactions (see Types of Food Allergy Fact Sheet).
- Assess student health history (see Sample Student Intake Form).
- Obtain from parents a food allergy action plan/emergency action plan (current school year).
- Review food avoidance plan and food allergy action plan or emergency action plan with all who educate/care for student.
- Communicate to parents/guardians about food allergies in the classroom so that food allergens are not sent to school.
- Communicate non-food celebration suggestions with parent/guardian.
- Coordinate protocols with school nutrition services.
- Review Allergy and Anaphylaxis Latex Allergies Fact Sheet.
- Identify possible sources and opportunities for latex exposure.
- Use non-latex gloves for healthcare delivery, food prep, housekeeping, etc.
- Remove healthcare supplies containing latex (bandages, gloves, medial tape, catheters, etc.).
- Remove supplies with latex from classroom such as erasers, rubber bands, art supplies, balloons, etc.
- Remove playground/gym equipment with latex such as rubber mats, balls, etc.
- Coordinate protocols with school nutrition services. Avoid foods that are cross-reactive with latex such as banana, kiwi, avocado, chestnut, white potato, and tomato.
- Post latex aware signage.
- Look for and have insect nests removed.
- Coordinate with building administration to maintain insecticides.
- Establish/follow protocol to limit exposure while eating and drinking outside, especially near trash cans.
- Coordinate with building administration measures to prevent stinging insects from entering school (e.g., intact window screen, closed doors).
- Provide staff/UAP training so students can safely participate in school-sponsored activities.
- Reduce risk of bullying in the school setting through education and enforcement by all staff.
- Assess competence to effectively self-carry emergency medications and manage allergic reactions. Document training and proficiency of students.
- Plan for emergency treatment, as ordered by HCP and written in ECP, in the school setting if experiencing an allergic reaction.
- Plan for emergency treatment if experiencing an allergic reaction for the first time in the school setting.
- Plan for "shelter in place" and other disasters.

References

Bobo, N. (2018). *Principles for practice nursing delegation to unlicensed assistive personnel in the school setting* (2nd ed.) National Association of School Nurses.

National Association of School Nurses. (2021). *A model for school nurse-led case management*. https://learn.nasn.org/courses/33713

National Association of School Nurses. (2021). *Code of ethics*. https://www.nasn.org/nasn-resources/resources-by-topic/codeofethics

National Association of School Nurses. (2021). *School nursing evidence-based clinical practice guideline: Medication administration in schools implementation toolkit*. https://learn.nasn.org/courses/36927

National Association of School Nurses. (2020). *Improving care coordination for students with chronic health conditions toolkit*. https://learn.nasn.org/courses/25340

Missouri Department of Health & Senior Services. (2020). *Medication administration in Missouri schools: Guidelines for developing training and practice*. https://health.mo.gov/living/families/schoolhealth/pdf/MedicationManual.pdf

Resources

Sample Emergency Action Plans for Anaphylaxis

American Academy of Allergy, Asthma, & Immunology. (2020). *Anaphylaxis emergency action plan*. https://www.aaaai.org/Aaaai/media/MediaLibrary/PDF%20Documents/Libraries/Anaphylaxis-Emergency-Action-Plan_FILLABLE.pdf

American Academy of Pediatrics. (2017). *Allergy and anaphylaxis emergency plan*. https://downloads.aap.org/HC/AAP_Allergy_and_Anaphylaxis_Emergency_Plan.pdf

FARE. (2020). *Food allergy & anaphylaxis emergency care plan*. (Available for download in English and Spanish.) https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/food-allergy-anaphylaxis-emergency-care-plan

Sample Report of Epinephrine Administration

Maryland State Department of Education. (n.d.). *School health services form*. https://marylandpublicschools.org/about/Documents/DSFSS/SSSP/SHS/MSDEReportingFormAnaphylacticReaction.pdf

Sample Handout for Families of Students with Food Allergies

Massachusetts General Hospital. (2023). *Managing anxiety: A handout for families of children with food allergies*. https://www.massgeneral.org/children/food-allergies/managing-anxiety-a-handout-for-families-of-children-with-food-allergies

Sample Individualized Healthcare Plan

National Association of School Nurses. (2019). *Sample individualized healthcare plan – Severe allergy management.* https://www.nasn.org/nasn-resources/resources-by-topic/allergies-anaphylaxis

Sample Medication Administration Delegation Checklist

National Association of School Nurses. (2021). *Medication administration delegation checklist*. https://cdn.fs.pathlms.com/cAAmT4MRTniIGm82oM91

Sample Non-Food Rewards Tipsheet

Action for Healthy Kids. (2019). *Healthy nonfood rewards tipsheet*. https://www.actionforhealthykids.org/wp-content/uploads/2019/05/Healthy-Non-Food-Rewards-Tip-Sheet_English.pdf

National Association of School Nurses Position Statements that Support the Care of Students with Food Allergies

NASN. (2018). *Bullying and cyberbullying – Prevention in schools*. https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-bullying

NASN. (2023). *IDEIA and section 504 teams – The school nurse as an essential member.* https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ideia

NASN. (2018). *School-sponsored before, after, and extended school year programs*. https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-before-after-programs

NASN. (2019) *School-sponsored trips – The role of the school nurse*. https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-trips

NASN. (2020). *The school health services team – Supporting student outcomes*. https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-team

NASN. (2019). *Transition planning for students with healthcare needs*. https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-transition

NASN. (2020). *Use of individualized healthcare plans to support school health services*. https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ihps

ALLERGY AND ANAPHYLAXIS PROGRAM – SAMPLE DEVELOPMENT OF THE STUDENT HEALTHCARE PLANS CHECKLIST

The NASN Framework for 21st Century School Nursing Practice has five non-hierarchical key principles: Standards of Practice, Care Coordination, Leadership, Quality Improvement, and Community/Public Health. This framework helps guide school nursing practice in the development of student healthcare.

** "Evidence-based practice in nursing involves providing holistic, quality care based on the most up-to-date research and knowledge rather than traditional methods, advice from colleagues, or personal beliefs" (ANA).*

- Continuous systematic data collection to determine if the student needs an individualized healthcare plan. It is important for the school nurse to know their state and local laws as well as their school district's policies. Some state or local school district policies now require that students with certain medical diagnosis such as a food allergy have an Individualized Healthcare Plan.
- Use the nursing process to develop data tracking tool for student's healthcare plan(s).
    - Type of food allergy
        - IgE-mediated
        - Non-IgE-mediated
            - Eosinophilic Esophagitis
            - Food Protein Induced Enterocolitis
    - Type of venom allergy
    - Type of drug allergy
    - Type of vaccine allergy
    - Latex allergy
- Emergency Action Plan prepared by the school nurse based on the students Individualized Health Care Plan (IHP). *Check to see if you have a state law that dictates what must be included in the student's food allergy emergency plan.*
- Current Allergy Action Plan signed by students' healthcare provider.

Writing the student IHP

- **Assessment**
    - Identify students with life-threatening allergies.
    - Collect assessments from the healthcare provider, student, and family.
        - Healthcare provider orders.
        - Health history related to food allergies and anaphylaxis.
    - Type of allergy.
    - Known allergy or life-threatening anaphylactic event without a previous allergy history.

- Number of reactions/events due to exposure.
- How the exposure occurred.
- Timing of response.
  - Emergency Action Plan
  - Social determinants of health and education (e.g., family, health literacy, access to health insurance and health care)
  - School environment
  - Individual student characteristics (e.g., developmental level, self-management competency)
  - Review of systems
  - Objective data
  - Equipment and supplies

- **Nursing diagnosis** – formalize a student-centered statement of the problem or focus of care such as:
  - Risk for social isolation
  - Ineffective therapeutic regimen management
  - Ineffective breathing pattern
  - Impaired gas exchange
  - Decreased cardiac output
  - Risk for injury
  - Altered tissue perfusion
  - Acute pain
  - Risk for fluid imbalance
  - Effective self-management of anaphylaxis
  - Risk for anxiety
  - Deficient knowledge
  - Fear
  - Health awareness
  - Risk for environmental hazards

- **Identified outcomes and evidence-based interventions**
  - Collaborate with student and parent/caregiver to create the healthcare plan(s).
  - Discuss balance between student safety and privacy/confidentiality at school.
  - Obtain written authorization for exchange of information with healthcare provider(s).
  - Plan for increasing student self-care capability.
  - Identify the school personnel needed to provide student support (e.g., nutrition services, classroom teachers, social services).
  - Develop the student's emergency care plan and identify school personnel who should receive a copy, based on need to know.
  - Determine student and school personnel access to rescue medication.
  - Plan for periodic evaluation (e.g., monthly, at the semester).

- **Planning**
  - Collaborate with the child's HCP to obtain an up-to-date AAP/EAP and orders to be used in the school setting
    - (See Toolkit for example).
  - Advocate for the most effective/appropriate medication based on presenting symptoms of an allergic reaction.
    - Mild vs severe symptom treatment of IgE- mediated reaction
    - IgE vs non-IgE allergic reactions
  - Ensure stock epinephrine is available on school grounds (if applicable).

- Consult with student to determine readiness and appropriateness to self-carry auto-injectable epinephrine.
- IHP to address student's individual needs related to allergies and anaphylaxis, including (but not limited to):
  - Food
    - Avoidance of food allergen(s).
      - Prevent food being brought in for parties.
      - Prevent food being used for rewards in classroom.
    - Allergen free classroom if student with food allergies is not developmentally capable of avoiding food.
    - Avoid offering unlabeled food in school settings.
  - Latex
    - Avoidance of latex in school settings.
  - Stinging insect
    - Avoidance of stinging insects.
    - Removal of visible stinging insect nests on school grounds.
  - Enforcing cleaning policies/protocols in classrooms and cafeterias.
  - Have copy of AAP/EAP.
  - Ensure teacher/classroom staff in classroom are aware of allergens and comfortable recognizing and treating an allergic reaction.
  - Development and enhancement of self-management skills.
  - Development and enhancement of social and emotional support skills.

- **Implement the care plan**
  - Develop policies, protocols, and procedures related to:
    - Allergic reaction recognition and management training.
      - Review non-IgE vs IgE mediated reaction symptoms.
      - Review IgE-mediated reactions can be caused by food, drugs, stinging insects, latex, and vaccines.
    - Epinephrine auto-injector training.
      - Review EAIs students at the school have
      - Site of injection
      - Storage
      - Expiration date
      - How long to hold EAI in place
      - Position of patient when giving EAI
      - Who can administer
      - Monitoring/follow-up care
      - School communication protocol
    - Medication administration to allow for delegation of rescue medication administration (if allowed by state/local policies) or plan for medication administration if school nurse is absent.
    - Policy to obtain and use stock epinephrine auto-injectors.
      - Location it is stored.
      - Who orders the stock epinephrine (i.e. MD, PA, NP).
      - Who supplies/funds the stock epinephrine.
      - Who can administer stock epinephrine.
        - Dependent on state and local guidelines.
          - Clarify if student needs diagnosis of allergy condition that could result in anaphylaxis for UAP to administer, especially in setting of first-time anaphylaxis.

        - Resources and support to ensure proper labeling of food offered at school per FALCPA Guidelines.
        - Resources and support to ensure adherence to special diets.
        - Resources and support to ensure latex free settings in schools.
        - Medical emergency preparedness and response plan for allergic emergencies.
    - Implement AAP, ECP, IHP, 504 plan, and IEP as appropriate and communicate with student, family, school personnel, and HCP to improve and revise as needed.
    - Collaborate with students, families, school administrators, and HCP to identify and train school personnel to administer emergency medications in the absence of the school nurse, in accordance with district policies, competency training and criteria, and state Nurse Practice Act Rules.
    - Collaborate with teachers and family to plan for field trips.
    - Provide evidence-based allergic reaction education and training, including prevention, food policies, food label reading, stinging insect avoidance measures, latex avoidance measures, reviewing AAP/ECP, epinephrine auto-injector training, medication management, and first aid to schoolteachers, staff and students (when appropriate).
        - Review student specific considerations with personnel that work directly with a student, per ECP/IHP.
    - Establish collaboration between school nurse, families/caregivers, and HCP to ensure consistent communication.
        - School nurse will communicate allergic reactions and medication administration to families and HCP as soon as possible.
        - Communication from family of exposures, reactions, and outcomes outside of school to the school nurse.
    - Document according to school policy, protocols, and procedures.
        - Student/school nurse visits and disposition
        - Treatment and student response
        - Medications administered
        - Follow-up and updates to procedure for improvement

- **Evaluate student outcomes**
    - Receive health and educational support through use of AAP, EAP, IHP, 504 plan, and/or IEP.
    - Receive support to safely participate in school activities such as birthday parties and lunch.
        - Avoid bringing food for parties.
        - Proper cleaning protocols are followed.
        - Proper handwashing protocols are followed.
    - Receive support to safely participate in school-sponsored activities.
        - Chaperone/teacher/staff/coach is trained in recognizing and treating allergic reactions
    - Experience reduced risk of bullying in the school setting.
    - Receive support and guidance to effectively self-carry emergency medications and manage allergic reactions.
    - Receive appropriate emergency treatment, as ordered by HCP and written in AAP and EAP, in the school setting if experiencing an allergic reaction.
    - Be transported to the emergency room by EMS for further assessment and treatment if:
        - Epinephrine has been administered for the allergic reaction.
        - The student does not have a history of allergies and is experiencing symptoms of an allergic reaction for the first time.
    - Receive appropriate emergency treatment if experiencing an allergic reaction for the first time in the school setting.

- **Update healthcare plans based on evaluation**

- **Treatment/data points**
  - Epinephrine auto-injector; 911 or EMS call
  - Was a second epinephrine auto-injector used
  - Student outcome – hospitalized, returned to school, returned home
- **Post event de-briefing following food allergy and anaphylaxis event.**
  - Review event data
  - Identify gaps in mitigation measures and response
  - Identify other concerns – (e.g., need to provide counseling for any students who witnessed the event)
- **Annual review of school Allergy Response Policy and Allergy Management Program/protocols and update as needed. Consider trends, gaps, any new state laws, or nursing practice regulations.**

References

American Academy of Allergy, Asthma, & Immunology. (2020). *Anaphylaxis emergency action plan*. https://www.aaaai.org/Aaaai/media/MediaLibrary/PDF%20Documents/Libraries/Anaphylaxis-Emergency-Action-Plan_FILLABLE.pdf

American Academy of Pediatrics. (2019). *Allergy and anaphylaxis emergency plan*. https://downloads.aap.org/HC/AAP_Allergy_and_Anaphylaxis_Emergency_Plan.pdf

American Nurses Association (n.d.) *What is evidence-based practice in nursing?* https://www.nursingworld.org/practice-policy/nursing-excellence/evidence-based-practice-in-nursing/

National Association of School Nurses. (2021). *School nursing evidence-based clinical practice guideline: Medication administration in schools implementation toolkit*. https://learn.nasn.org/courses/36927

National Association of School Nurses. (2016). Framework for 21st century school nursing practice: National Association of School Nurses. *NASN school nurse (Print), 31*(1), 45-53. doi: 10.1177/1942602X15618644. https://pubmed.ncbi.nlm.nih.gov/26739934/

43 TexReg 909 (February 16, 2018). What is a food allergy emergency plan? *Texas Register.* http://txrules.elaws.us/rule/title26_chapter746_sec.746.3817

Massachusetts General Hospital. (2023). *Managing anxiety: A handout for families of children with food allergies*. https://www.massgeneral.org/children/food-allergies/managing-anxiety-a-handout-for-families-of-children-with-food-allergies

Maryland State Department of Education. (n.d.). *School health services form.* https://marylandpublicschools.org/about/Documents/DSFSS/SSSP/SHS/MSDEReportingFormAnaphylacticReaction.pdf

Other National Association of School Nurses Resources

National Association of School Nurses. (2016). *Allergies and anaphylaxis*. https://www.nasn.org/nasn-resources/resources-by-topic/allergies-anaphylaxis

National Association of School Nurses. (2016). Framework for 21st century school nursing practice: National Association of School Nurses. *NASN school nurse (Print), 31*(1), 45-53. doi: 10.1177/1942602X15618644. https://pubmed.ncbi.nlm.nih.gov/26739934/

NASN. (2018). *Bullying and cyberbullying – Prevention in schools*. https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-bullying

NASN. (2023). *IDEIA and section 504 teams – The school nurse as an essential member.* https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ideia

NASN. (2020). *Use of individualized healthcare plans to support school health services*. https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ihps

National Association of School Nurses

ENGAGING STAKEHOLDERS TO SUPPORT STUDENTS WITH FOOD ALLERGIES THROUGH A COORDINATED FOOD ALLERGY MANAGEMENT PROGRAM – CHECKLIST (REV. 2023)

The school nurse is responsible for complying with applicable federal, state, and local laws, regulations, ordinances, executive orders, policies, and any other applicable sources of authority, including any applicable standards of practice (National Association of School Nurses, 2021).

- Identify key health and education stakeholders (e.g., local EMS, school principal, early childhood program administrator, nutrition services, school counselor, classroom teachers, school consulting physician, community pediatric healthcare providers, parent/guardian groups, health insurers).
- Identify food allergy and anaphylaxis champions (e.g., school nurse, parent/caregiver, student, local chapter of Asthma and Allergy Foundation of America, local allergist).
- Identify and advocate for use of evidence-based clinical practice guidelines.
- Engage with stakeholders and champions to build and/or sustain student-centered allergy and anaphylaxis school program.
- Identify and clarify shared student-centered goals such as increased allergen and anaphylaxis awareness (e.g., decrease of allergen exposure, improved attendance, full participation in school activities, student feels safe and supported)
- Discuss and agree upon roles and responsibilities (e.g., administrator, school nurse, classroom teacher, nutrition services, etc.). Review and evaluate annually, making revisions as needed.
- Identify and appreciate each other's expertise.
- Identify resources and how to leverage/share (e.g., staff/parent/community education on food allergies by school nurse, local allergist, or local department of health).
- Identify preferred communication channels (e.g., in-person vs. virtual meetings).
- Identify and share outcomes (e.g., improved management of allergen exposure, decreased time spent out of the classroom, improved student academic success, full participation in all school activities, decreased allergic reactions and episodes of anaphylaxis, improved quality of life, improved mental well-being).
- Invite stakeholders to participate on school wellness committees or school health advisory committee.
- Examine existing and/or new school policy and protocols with input from stakeholders.
- Discuss and align care with emergency medical services first responders (e.g., the school district's protocols for anaphylaxis, how to efficiently transfer care to EMS).
- Identify existing federal, state, and local guidelines and regulations as well as gaps. (Do the state laws allow for stock epinephrine and stock albuterol?)
- Build and foster ongoing relationships with stakeholders through shared vision, productive meetings, sharing outcomes with stakeholders, recognizing contributing stakeholders, and celebrating successes.

References

Centers for Disease Control and Prevention. (2013). *Voluntary guidelines for managing food allergies in schools and early care and education programs*. https://www.cdc.gov/healthyschools/foodallergies/pdf/20_316712-A_FA_guide_508tag.pdf

Greenhawt, M., et al. (2020). Managing food allergy in schools during the COVID-19 pandemic. *The journal of allergy and clinical immunology. In practice, 8*(9), 2845–2850. https://doi.org/10.1016/j.jaip.2020.07.016

National Association of School Nurses. (2021). *Code of ethics*. https://www.nasn.org/nasn-resources/resources-by-topic/codeofethics

Sauer, K., Patten, E., Roberts, K., & Schartz, M. (2018). Management of food allergies in schools. J. *Child Nutr. Manag, 42*, 1-9.

ALLERGY AND ANAPHYLAXIS TRAINING FOR ALL SCHOOL STAFF – CHECKLIST

- **Prevention of food allergic reactions**
  - Label foods prepared in school cafeteria per Food Allergen Labeling Consumer Protection Act (FALCPA) guidelines.
  - Institute evidence-based cleaning protocols.
  - Consider restricting/banning foods in individual classrooms/cafeteria if developmentally indicated for the child versus universal ban.
- **Prevention of insect sting**
  - Remove nests.
  - Keep insecticides available.
  - Avoid eating and drinking outside.
  - Avoid gathering near trashcans and promptly empty outdoor trashcans.
- **Recognizing symptoms of an allergic reaction**
  - IgE-mediated (see Types of Food Allergy Fact Sheet)
    - Food
    - Insects
    - Drug
    - Vaccine
  - Non-IgE-mediated
    - Eosinophilic esophagitis
    - Food protein-induced enterocolitis
- **Identifying severity of the allergic reaction**
  - Mild
    - One mild symptom
  - Severe
    - More than one symptom from different body systems
    - One severe symptom
- **Managing IgE-allergic reaction**
  - Mild reactions
    - First- or second-generation antihistamines
  - Severe reactions/anaphylaxis
    - Epinephrine is first-line treatment for anaphylaxis
- **Review how to administer the epinephrine auto-injectors (EAI) that students have at school**
  - Site of injection
  - How long to hold (EAI) in place
  - Position of patient when giving EAI
  - Escalating care if indicated

- **Frequency of training offered**
  - At least annually, but consider more often if a student is more prone to reactions
    - Student and family training on recognition and management of allergic reactions
    - Self-carry policy
    - Delegation of Unlicensed Assistive Personnel-UAP that can administer emergency/rescue medications if:
      - Nurse unavailable at school
      - The student is on a field trip
      - First-time reaction
    - Documentation of allergic reactions and treatment
      - Consider electronic record systems
    - Anti-bullying policy
- **Classroom celebrations**
  - Celebrate special days/students without food.
  - Suggestions to consider: donate a book or game to the class in honor of the child, perhaps celebrate by dancing to a favorite song in the classroom, or for a birthday, decorate a box and send in a pack of index cards so the class can each write something they like about the child who is being celebrated. For additional ideas, refer to: https://www.actionforhealthykids.org/wp-content/uploads/2019/05/Healthy-Non-Food-Rewards-Tip-Sheet_English.pdf.

Resources

Blazowski, L., Majak, P., Kurzawa, R., Kuna, P., & Jerzynska, J. (2021). A severity grading system of food-induced acute allergic reactions to avoid the delay of epinephrine administration. *Annals of Allergy, Asthma & Immunology, 127*(4), 462-470.

U.S. Food & Drug Administration. (2022). *Food Allergen Labeling Consumer Protection Act (FALCPA) guidelines*. https://www.fda.gov/food/cfsan-constituent-updates/fda-issues-guidances-food-allergen-labeling-requirements

Removing Allergen from Surfaces Study

Bedford, B., Liggans, G., Williams, L., & Jackson, L. (2020). Allergen removal and transfer with wiping and cleaning methods used in retail and food service establishments. *Journal of food protection, 83*(7), 1248–1260. https://doi.org/10.4315/JFP-20-025

Stinging Insect Allergy

American Academy of Allergy, Asthma, & Immunology. (2023) *Stinging insect allergy: Symptoms & diagnosis*. Stinging Insect Allergy Symptoms, Diagnosis, Treatment & Management (aaaai.org)

Sample Emergency Action Plans for Anaphylaxis

American Academy of Allergy, Asthma, & Immunology. (2020). *Anaphylaxis emergency action plan*. https://www.aaaai.org/Aaaai/media/MediaLibrary/PDF%20Documents/Libraries/Anaphylaxis-Emergency-Action-Plan_FILLABLE.pdf

FARE. (2020). *Food allergy & anaphylaxis emergency care plan*. (Available for download in English and Spanish.) https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/food-allergy-anaphylaxis-emergency-care-plan

American Academy of Pediatrics. (2019). *Allergy and anaphylaxis emergency plan*. https://downloads.aap.org/HC/AAP_Allergy_and_Anaphylaxis_Emergency_Plan.pdf

Sample Report of Epinephrine Administration

Maryland State Department of Education. (n.d.) *Report of anaphylactic reaction/epinephrine administration*. https://marylandpublicschools.org/about/Documents/DSFSS/SSSP/SHS/MSDEReportingFormAnaphylacticReaction.pdf

NASN Position Statements that Apply to the Care and Support of Students with Food Allergies

NASN. (2018). *Bullying and cyberbullying – Prevention in schools*. https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-bullying

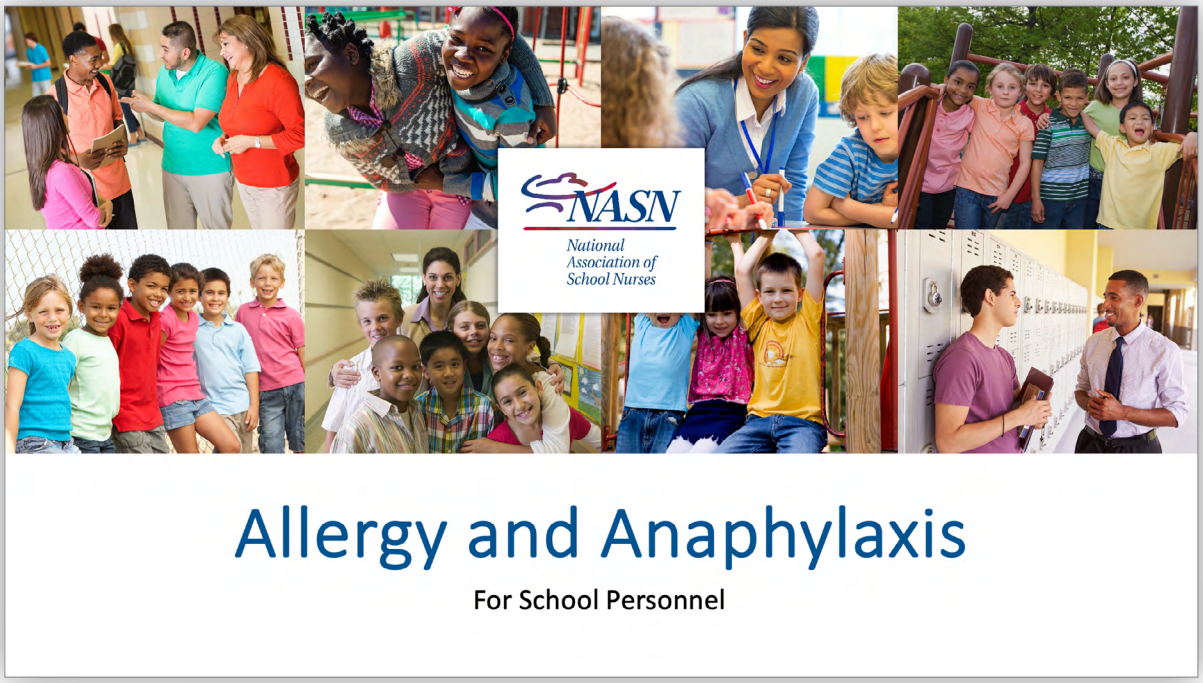
NASN. (2023). *IDEIA and section 504 teams – The school nurse as an essential member.* https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ideia

NASN. (2018). *School-sponsored before, after, and extended school year programs*. https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-before-after-programs

NASN. (2019). *Transition planning for students with healthcare needs*. https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-transition

NASN. (2020). *Use of individualized healthcare plans to support school health services*. https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ihps

SAMPLE TRAINING POWERPOINT PRESENTATION FOR SCHOOL STAFF – ALLERGY AND ANAPHYLAXIS



Dear School Nurse,

This is a customizable presentation. You can download this slide deck and add your school's logo or mascot and district name. Then, use to train your staff and administration.

NASN

Allergy and Anaphylaxis

For School Personnel

Learning Outcomes

As a result of this training, the learner will be able to…

- Recite basic signs and symptoms of an allergic reaction and how to respond to anaphylaxis.
- Explain the importance of collaboration with school staff and families in responding to anaphylaxis.
- Locate resources for driving creating policy and practice.

Prevalence of Food Allergy in Children

Data from the National Health Interview Survey in 2021 revealed 5.8% of children between the ages of 1-17 years had a food allergy. (Centers for Disease Control and Prevention, 2023)

One third of children/youth with food allergies also has asthma. (Centers for Disease Control and Prevention, 2008)

Allergic conditions affect about 50 million children and adults living in the United States. (American Academy of Allergy Asthma & Immunology, 2020)

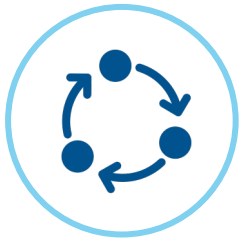
Non-Hispanic Black children were more likely than non-Hispanic White and Hispanic children to have a food allergy. (Zablotsky et al., 2023)

NASN
National Association of School Nurses

Food Intolerance

A food intolerance response occurs in the **digestive system**, not the immune system.

Some people can tolerate eating small amounts of the food.



Causes: enzyme deficiencies, sensitivity to food additives, or chemicals in the foods.

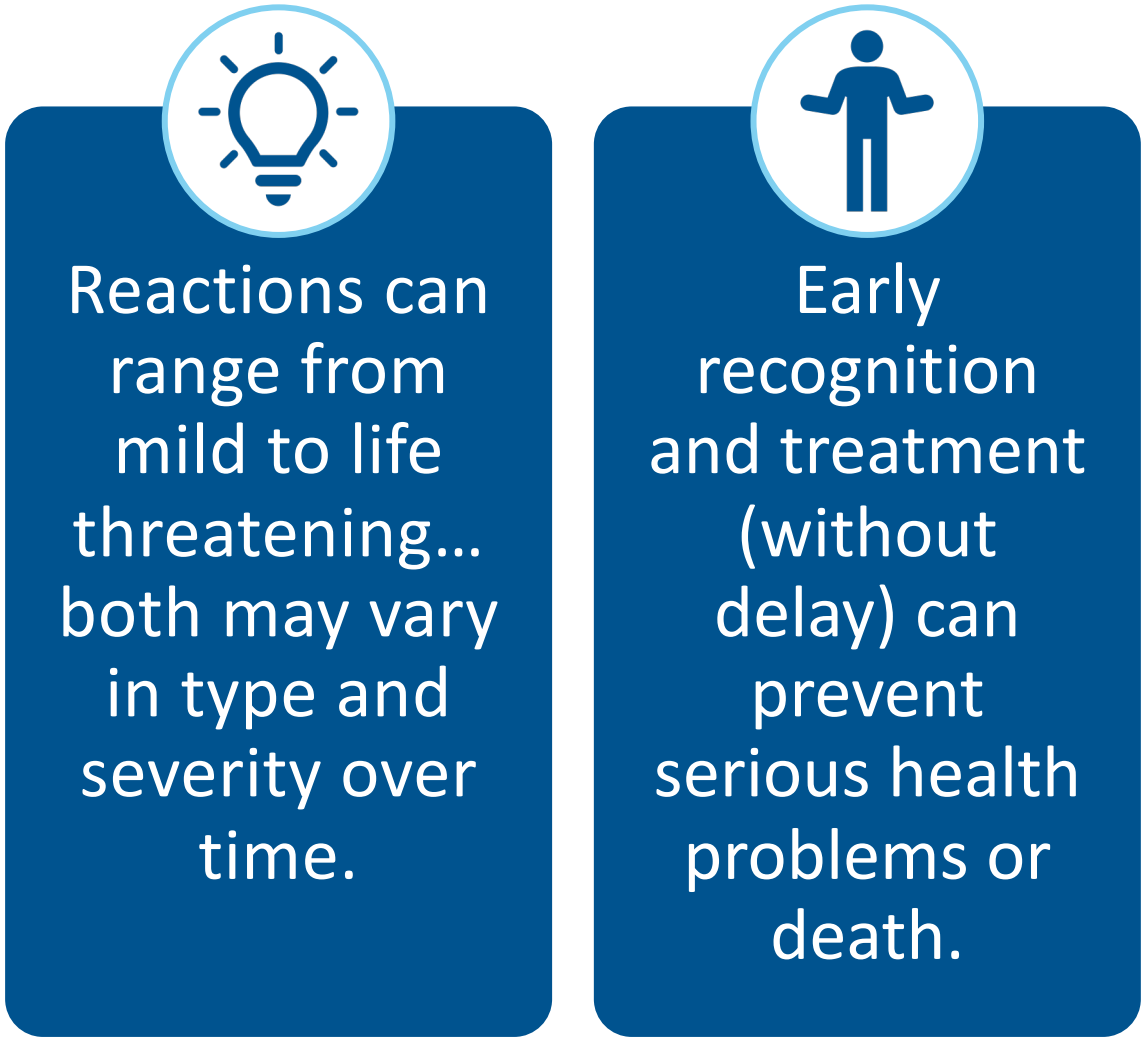
(American Academy of Allergy, Asthma, & Immunology, n.d.)

Food Allergy can be a Life-Threatening Immune Response

- A food allergy response occurs when eating or coming into contact with certain foods or food additives.
- IgE are antibodies produced by the immune system.
- When your immune system identifies a food protein as dangerous, your immune system overreacts and produces IgE.
- To protect your body, substances such as histamine are released into the blood which produces an allergic reaction.
- The allergic reaction causes symptoms in the nose, lungs, throat, or on the skin.

(American Academy of Allergy, Asthma, & Immunology, n.d.)

Allergic Reactions to Food



(Centers for Disease Control and Prevention, n.d.)

Top Food Allergens

(Food & Drug Administration, 2023)

Learn to Read Food Labels

Manufacturers are required to list the ingredients on the label. This does not guarantee that all ingredients are listed. Cross contamination is still possible. If in doubt, do not eat it and notify the school administration. Did you know?

Some pet foods contain one or more of the top nine allergens.

Tree nuts and coconut are in many skin and haircare products.

Different brands of Play-Doh may contain wheat.

Casein, sodium caseinate, and whey are all milk proteins.

(Food & Drug Administration, 2023)

Latex Allergies

Safer buildings:

- Identify possible sources of allergens and mitigate opportunities for exposure.
- Use non-latex gloves for healthcare delivery, food prep, housekeeping, etc.
- Remove healthcare supplies containing latex (bandages, gloves, medical tape, catheters, etc.)

Latex Allergies Cont.

- Remove supplies with latex from classroom such as erasers, rubber bands, art supplies, balloons, etc.
- Remove playground/gym equipment with latex such as rubber mats, balls, etc.
- Avoid foods that are cross-reactive with latex such as banana, kiwi, avocado, chestnut, white potato, and tomato.
- Post signage in areas of potential exposure to possible allergens.

Insect Stings - Prevention

- Remove nests.
- Keep insecticides available.
- Take measures to limit exposure while eating and drinking outside, especially near trash cans.
- Take measures to prevent stinging insects from entering school (e.g., intact window screen, closed doors).

(American Academy of Allergy, Asthma, & Immunology, n.d.)

Anaphylaxis

"**Anaphylaxis** is distinguished from a mild or moderate allergic reaction by the sudden involvement of two or more organ systems manifesting with a variety of symptoms such as difficulty breathing, swelling of the tongue, swelling or tightness in the throat, wheezing, sudden persistent cough, abdominal pain, vomiting, and hypotension."

(Sampson et al., 2006; Pflipsen & Vega Colon, 2020)

The **onset** of anaphylaxis can occur within seconds of exposure to the allergen or can be delayed up to an hour or more.

(Turner et al., 2019)

Anaphylaxis

An **allergic reaction is considered severe or anaphylaxis** if there are mild symptoms in more than one body system present or if any of the following severe signs or symptoms are present:

- Shortness of breath
- Wheezing
- Repetitive cough
- Cyanosis
- Pallor
- Dizziness
- Weak pulse
- Fainting
- Throat tightness
- Throat hoarseness
- Trouble swallowing or breathing
- Swelling of tongue or lips
- Many hives all over the body or widespread flushing
- Severe diarrhea or vomiting
- Anxiety, or confusion

(FARE, n.d.)

Treatment for Anaphylaxis

Epinephrine by injection and call 911 or EMS

Administration of epinephrine without delay is key to saving a life

Repeat epinephrine injection if symptoms are not better in 5 minutes

Transport to the emergency room for observation over 4-6 hours

(Shaker et al., 2020)

How to Administer Epinephrine

https://www.epipen4schools.com/Members/Training/

https://www.youtube.com/watch?v=FMxHo8CM7aw

Biphasic Reactions

Reoccurring Reactions

- A biphasic reaction (if/when anaphylaxis returns) occurs about 20% of the time, within 72 hours. Simply retreat with antihistamines and epinephrine.

- A biphasic reaction can be worse than the initial reaction.

(Shaker et al., 2020)

H.R. 2468, School-Based Allergies and Asthma Management Program Act

Signed into Law 1-5-2021

States can earn financial rewards for putting the following in place:

- •Methods to identify all students who have allergies or asthma
- •Create individual student action plans
- •Require school nurses or on-site trained staff during operating hours to administer medicines for both asthma and allergies
- •Asthma and allergy training education for school staff
- •Efforts to reduce indoor asthma and allergy triggers
- •Coordinate management of care with families and health care providers

(H.R. 2468, School-Based Allergies and Asthma Management Program Act, 2021)

Legal Considerations

Life-threatening food allergy can be considered a disability under federal laws:

- Rehabilitation Act of 1973, Section 504
- The Individuals with Disabilities Education Act (IDEA)
- The Americans with Disabilities Act (ADA), along with the ADA Amendments of 2008 (ADA)

Privacy and confidentiality assurance laws:

- Family Educational Rights and Privacy Act (FERPA)
- Health Insurance Portability and Accountability Act of 1996 (HIPAA)

ADA, Section 504, IEP, IHP and Diet Rx form

Section 504 eligibility is determined on a case-by-case basis by a licensed healthcare provider (e.g., PCP or allergist).

A life-threatening food allergy alone is not considered a condition warranting protection under IDEA. Some students may have comorbid conditions that impact learning, such as a hearing impairment. For such students, IDEA coverage generally applies, and an individual education plan (IEP) is developed.

Not all students with food allergy require a 504 plan (or IEP). Accommodations may be documented in an individual healthcare plan (IHP or IHCP).

A diet prescription form, completed by a licensed healthcare provider, needs to be included in the 504 plan or the IHP. Your school nutrition staff must be made aware of this Rx to make appropriate accommodations.

(Texas Education Agency, 2020)

Mental Health and Food Allergies

It is understandable that parents/guardians as well as the child/youth may feel anxious about their food allergies, which may include fear of a life-threatening reaction, or social isolation.

What can schools do?

- Create and maintain a safe, supportive, equitable school environment for all students.
- Promote efforts to support all students by building a positive school climate.
- Reinforce the school's rules against bullying and discrimination.
- Address all reports of bullying or harassment of a student with a food allergy to school administrators.
- Inform parents if their child has been bullied.

(National Association of School Nurses, 2018)

Risk Reduction Strategies for Anaphylaxis with a Care Coordination Approach

School Staff: Allergy and Anaphylaxis training for all school staff.

Classroom: Reduce the presence of identified allergens in classrooms, promote hand washing hygiene, and follow cleaning protocols. Communicate expected behavior to all students. There is no way to guarantee an allergen-free classroom.

- **Cafeteria**: Enforce responsibilities of school nutrition staff and contracted food service staff to take a food allergy safety training each year and clean each table before each lunch to be “allergen-safe.” Making children with food allergies sit at separate tables is not inclusive or equitable.

(Centers for Disease Control and Prevention, 2013)

Risk Reduction Strategies (continued)

Bus: Encourage a no-eating protocol, require bus companies and personnel to be familiar with local EMS procedures, and equip all school vehicles with functional two-way communication devices.

Field Trips: All staff attending a field trip must be trained to recognize and treat anaphylaxis.

Promote hand washing hygiene and discourage trading of food or drink.

Consider allowing parents to attend the field trip/activity as an extra precaution. *A parent may only give medication to their child/youth while on the field trip.*

School staff will be responsible for administering medications to any other students whose parents are not present.

The student's personal EAI must accompany the student on the field trip.

(Centers for Disease Control and Prevention, 2013)

Administration and Storage of Emergency Medication Protocol

- The school nurse or designee obtains written orders from the licensed healthcare provider for medication.
- Medication should be stored safely allowing for quick access.
- Medication administered should be documented in the student health record, even if it is administered at school or during school-related activities, and parents should be notified.
- Protect the safety of students and the medications.
- Follow state laws for storage, access, and administration of medication Training.

Students who Self-Carry and/or Self-Administer Epinephrine to Stop Anaphylaxis

Hear pediatric allergists Dave Stukus, MD, and Mike Pistiner, MD, MMSc discuss what to consider: https://community.kidswithfoodallergies.org/blog/when-is-a-child-ready-for-self-care-of-anaphylaxis

Considerations:

There is no specific age when a child is ready to self-carry or self-administer epinephrine. Readiness should be determined by the child's primary healthcare provider.

- Can the child recognize symptoms of a severe allergic reaction/anaphylaxis?
- Can the child demonstrate how to use an epinephrine auto-injector?
- What is the child's comfort level with self-carrying and self-administering?
- Does the student have a previous history of anaphylaxis?
- Are there comorbid conditions such as developmental delay, ADHD, autism spectrum disorder, and depression?

(American Academy of Allergy, Asthma, & Immunology, n.d.)

Develop Appropriate Plans

Using Care Coordination

- Care coordination is key in the development of healthcare plans. Collaborate with the school nurse or designee, student's parents, district or school nutrition staff, and licensed healthcare providers to create the plan.

- The school nurse should develop and maintain an individualized healthcare plan (IHP) and an emergency action plan (EAP), also called a food allergy action plan (FAAP), to address the student's medical needs and any special accommodations.

(Kids with Food Allergies, 2021)

Develop Appropriate Plans

Using Care Coordination Cont.

- Set date to evaluate plans and revise as needed for student's age/developmental level and consistency with state/federal laws.
- The school nurse or designee is responsible for establishing and monitoring the individual written management plans.
- Develop medication storage protocols and allergy incident reports.
- When the student's diagnosis indicates a disability because of the food allergy, a 504 plan and/or an IEP determination should take place.

(Kids with Food Allergies, 2021)

Supporting Students with Food Allergies in School-Based Out of School Time (OST) Programs

- Many schools/school districts offer or sponsor organizations that have OST programs located on school grounds.
- Students with allergies (food, insect, latex) or other chronic health conditions may require either emergency or ongoing management in the OST setting.
- Currently, no federal legislation exists that mandates information sharing between schools and OST programs.
- Federal laws governing health information and privacy include the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act of 1996 (HIPAA), and can help guide considerations for schools, OST staff, and families about confidentiality.

(Centers for Disease Control and Prevention, 2022)

Training to Support the Needs of Students with Food Allergies in School-Based Out of School Time (OST) Programs

All students deserve to participate in OST programs.

The school nurse is uniquely positioned to provide these trainings.

Provide training to OST staff and volunteers on the chronic health conditions of the students in their care.

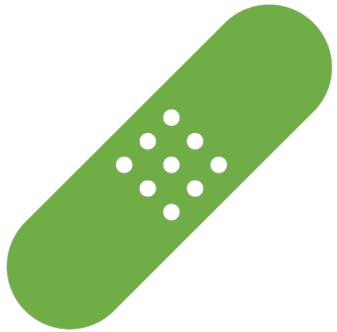
Train OST staff the basics of health condition(s), EAPs, and delegation of emergency medicine.

(Centers for Disease Control and Prevention, 2022)

Transition Planning - Communication

Family Educational Rights and Privacy Act (FERPA) allows the sharing of a child/youth record to school officials with a legitimate educational interest.

Transition planning should be considered when developing plans for preventing an allergic reaction and responding to a food allergy emergency.



The school nurse communicates “need to know” (ECP or FAAP, IHP, 504, or IEP) when progressing to a new teacher, the next grade, or new school.

(Centers for Disease Control and Prevention, n.d.)

Additional Resources

CDC Field Trip Checklist: Managing Food Allergies in Schools:
https://www.cdc.gov/healthyschools/foodallergies/pdf/teachers_508_tagged.pdf

8 Tips to Help Teachers and School Staff Read Food Labels for Food Allergies (Kids with Food Allergies is a division of the Asthma & Allergy Foundation of America):
https://community.kidswithfoodallergies.org/blog/8-tips-to-help-teachers-and-school-staff-read-food-labels-for-food-allergies

Medical Statement for Student Requiring Special Meals Due to Food Allergy or Intolerance:
http://www.usd261.com/Foods/Special_Dietary_Forms/Form_19D.docMedical_Statement_for_Student_Requiring_Special_Meals_Due_to_Food_Allergy_or_Intolerance.pdf

Sample Student Epinephrine Autoinjector Self Carry Authorization Form:
https://odh.ohio.gov/know-our-programs/school-nursing-program/media/sample_school_epinephrine_autoinjector_authorization

NASN Position Statements that Apply to the Care and Support of Students with Food Allergies

Bullying and Cyberbullying, Prevention in Schools: https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-bullying
IDEIA and Section 504 Teams, The School Nurse as an Essential Member: https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ideia
Use of Individualized Healthcare Plans to Support School Health Services: https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-ihps
School-Sponsored Before, After, and Extended School Year Programs: https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-before-after-programs
School-Sponsored Trips: https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-trips
Transition Planning for Students with Healthcare Needs: https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-transition

References

American Academy of Allergy, Asthma, & Immunology. (n.d.). *Immunoglobulin E (IgE) defined.* https://www.aaaai.org/tools-for-the-public/allergy,-asthma-immunology-glossary/immunoglobulin-e-(ige)-defined

American Academy of Allergy, Asthma, & Immunology. (n.d.). *Food intolerance versus food allergy.* https://www.aaaai.org/tools-for-the-public/conditions-library/allergies/food-intolerance

American Academy of Allergy, Asthma, & Immunology. (n.d.). *When should children and adolescents assume responsibility for self-treatment of anaphylaxis?* https://www.aaaai.org/Tools-for-the-Public/Conditions-Library/Allergies/children-epinephrine

Butler, S. M., Boucher, E. A., Tobison, J., & Phan, H. (2020). Medication use in schools: Current trends, challenges, and best practices. *The journal of pediatric pharmacology and therapeutics : JPPT : the official journal of PPAG*, *25*(1), 7–24. https://doi.org/10.5863/1551-6776-25.1.7

Centers for Disease Control and Prevention. (n.d.). *Food allergies*. https://www.cdc.gov/healthyschools/foodallergies/index.htm

Centers for Disease Control and Prevention. (2013). *Voluntary guidelines for managing food allergies in schools and early care and education programs.* Washington, DC: US Department of Health & Human Services. https://www.cdc.gov/healthyschools/foodallergies/pdf/20_316712-A_FA_guide_508tag.pdf

Centers for Disease Control and Prevention. (2022). *Supporting students with chronic health conditions in school-based OST programs.* https://www.cdc.gov/healthyschools/managing_CHC_OST.htm

Family Educational Rights and Privacy Act (FERPA). U.S. Department of Education. https://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html

References

Food & Drug Administration. (2023), *Food allergies.* https://www.fda.gov/food/food-labeling-nutrition/food-allergies

Food & Drug Administration. (2023). *Have food allergies? Read the label*. https://www.fda.gov/consumers/consumer-updates/have-food-allergies-read-label

H.R. 2468, School-Based Allergies and Asthma Management Program Act. (2021). https://www.congress.gov/bill/116th-congress/house-bill/2468/text

Kids with Food Allergies. (2021). School health care plans for your child with food allergies. https://kidswithfoodallergies.org/living-with-food-allergies/planning-for-school/school-health-care-plans/

Lee, S., Bellolio, M. F., Hess, E. P., & Campbell, R. L. (2014). Predictors of biphasic reactions in the emergency department for patients with anaphylaxis. *The journal of allergy and clinical immunology. In practice*, *2*(3), 281–287. https://doi.org/10.1016/j.jaip.2014.01.012

National Association of School Nurses. (2021). *School nursing evidence-based clinical practice guideline: Medication administration in schools implementation toolkit.* https://learn.nasn.org/courses/36927

National Association of School Nurses. (2018). *Bullying and cyberbullying – Prevention in schools.* https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-bullying

National School Boards Association. (2012). Safe at school and ready to learn: A comprehensive policy guide for protecting students with life-threatening food allergies. https://cdn-files.nsba.org/s3fs-public/reports/Safe-at-School-and-Ready-to-Learn.pdf

References

Pflipsen, M. C., & Vega Colon, K. M. (2020, September 15) Anaphylaxis: Recognition and management. *American Family Physician, 102*(6), 355-362. https://www.aafp.org/pubs/afp/issues/2020/0915/p355.html

Polloni, L., & Muraro, A. (2020). Anxiety and food allergy: a review of the last two decades. *Clinical & Experimental Allergy*, *50*(4), 420-441.

Sampson, H. A., Muñoz-Furlong, A., Campbell, R. L., Adkinson Jr., N. F., Bock, S. A., Branum, A., Brown, S. G. A., Camargo Jr., C. A., Cydulka, R., Galli, S. J., Gidudu, J., Gruchalla, R. S., Harlor Jr., A. D., Hepner, D. L., Lewis, L. M., Lieberman, P. L., Metcalfe, D. D., O'Connor, R., Muraro, A., Rudman, A., Schmitt, C., Scherrer, D., Simons, F. E. R., Thomas, S., Wood, J. P., & Decker, W. W. (2006). Second symposium of the definition and management of anaphylaxis: Summary report- Second National Institute of Allergy and Infectious Disease/Food Allergy and Anaphylaxis Network symposium. *Journal of Allergy and Clinical Immunology, 117*(2), 391-397. https://doi.org/10.1016/j.jaci.2005.12.1303

Shaker, M. S., Wallace, D. V., Golden, D. B., Oppenheimer, J., Bernstein, J. A., Campbell, R. L., ... & Contributors, W. (2020). Anaphylaxis—a 2020 practice parameter update, systematic review, and Grading of Recommendations, Assessment, Development and Evaluation (GRADE) analysis. *Journal of Allergy and Clinical Immunology*, *145*(4), 1082-1123.

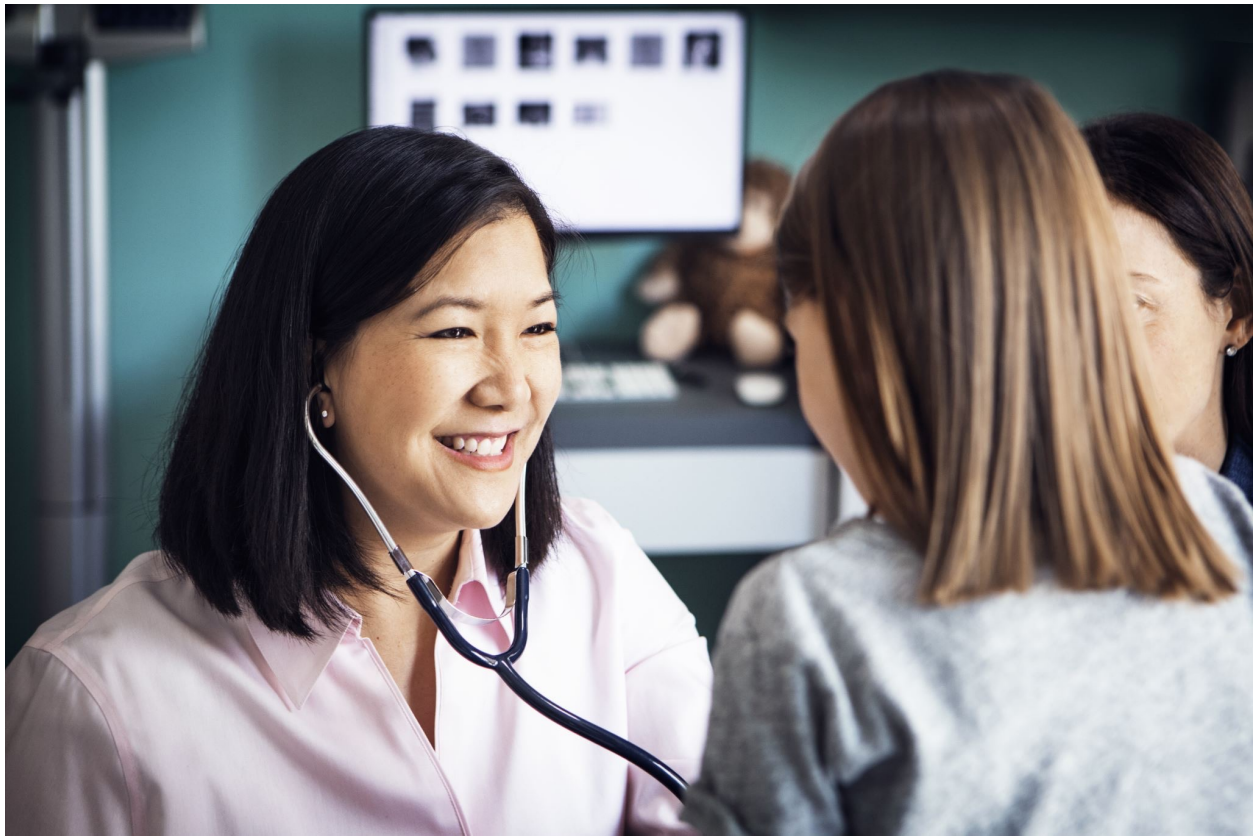
Texas Education Agency. (2020). *Technical assistance: Section 504*. https://tea.texas.gov/sites/default/files/504_guide.pdf

Turner, P. J., Worm, M., Ansotegui, I. J., El-Gamal, Y., Rivas, M. F., Fineman, S., Geller, M., Gonzalez-Estrada, A., Greenberger, P. A., Tanno, L. K., Borges, M. S., Senna, G., Sheikh, A., Thong, B. Y., Ebisawa, M., Cardona, V., & WAO Anaphylaxis Committee (2019). Time to revisit the definition and clinical criteria for anaphylaxis? *The World Allergy Organization Journal*, *12*(10), 100066. https://doi.org/10.1016/j.waojou.2019.100066

Zablotsky, B., Black, L. I., & Akinbami, L. J. (2023). Diagnosed allergic conditions in children aged 0–17 years: United States, 2021.

Any Questions?

Thank You!



SAMPLE NOTIFICATION LETTER TO PARENTS ABOUT FOOD ALLERGIES IN THE CLASSROOM

Dear Families,

This year we welcome several students to our classrooms with food allergies. We invite your assistance and cooperation to keep our students safe from food allergens. We have students who are allergic to various foods or food groups. Reactions range from mild to life threatening.

There are several practices that will be in place to help prevent allergic reactions:

1. Students will be encouraged to wash their hands upon arrival in the classroom, and before and after lunch.
2. All classrooms will be designated as allergy-aware spaces.
3. Parents/guardians/caregivers who send lunch from home for their children are free to pack the food of their choice. Our hope is that families CHOOSE not to send foods containing the following allergens: _____ _____.
4. Students will celebrate special days without food. Some suggestions to consider: donate a book or game to the class in honor of your child, perhaps celebrate by dancing to a favorite song in the classroom, or for a birthday, decorate a box and send in a pack of index cards so the class can each write something they like about the child who is being celebrated.
5. Please have a conversation with your child about the following:
   - Explain that to keep their classmates safe from food allergens, do not offer, share, or exchange any foods with other students at school.
   - Discuss why handwashing with soap and water after eating is necessary to decrease the chance of cross-contamination on surfaces at school.
   - If your child rides the bus, remind them, "No eating on the bus."

Thank you for your help.

(Signed by the school nurse or designee.)

Reference

National Association of School Nurses. (2021). *Allergies and anaphylaxis*. https://www.nasn.org/nasn-resources/resources-by-topic/allergies-anaphylaxis

ALLERGY & ANAPHYLAXIS CPG DATA POINTS TOOL

National Association of School Nurses

Allergy (Life-Threatening) HCP	# of Students	# EAPs on file	# IHP	# 504	#IEP	# of students chronically absent
Food						
Stinging insect						
Latex						
Other						

Emergency Medication		
# Students with antihistamine		
# Students with EAI		
# Students with self-carry		
#SN spot check for EAI self-carry	Student prepared	
	Student NOT prepared	
	# SN reinforcement provided	
Allergic Reaction Management		
# Students with allergic reaction at school		
Total # allergic reactions at school		
# students with first-time reaction symptoms at school		
# students with allergic reaction to known allergy at school		
# students requiring administration of EAI	Student EAI	
	Stock EAI	
# students requiring administration of antihistamine		
Disposition following allergic reaction	EMS/911	
	Home	
	RTC	
Administration of EAI	RN	
	LPN/LVN	
	UAP	
	Office staff	
	Teacher	
	Other	

Staff Training	
# Trainings	
Training drills	
Debriefing of allergic event	
School Nurse Feedback/Evaluation of Allergy Management Care	
Student/caregiver satisfaction with care coordination efforts of the school	
SN evaluation of effectiveness of staff training	
SN evaluation of effectiveness of staff response to allergy emergency management	
Policy changes noted	
Practice changes noted	
General notes	

SAMPLE ALLERGY AND ANAPHYLAXIS PROGRAM QUALITY IMPROVEMENT CHECKLIST

- **Continuous systematic data collection for students with known food, insect, latex, and/or medication allergy (e.g., electronic health record or other data tracking tool)**
  - Identify students with life-threatening allergies
  - Flag students with life-threatening allergies in data tracking system. Include details of:
    - Type of allergy
    - Whether allergy is known from life-threatening anaphylactic event without a previous allergy history or identified via allergy testing with no life-threatening anaphylactic event experienced
    - Number of reactions/events due to exposure
    - Number of days absent due to exposure
  - Develop tool to track periodic review of stock epinephrine
- **For anaphylactic events that occur at school, document the following:**
  - How the exposure occurred
  - Timing of response
  - If emergency action plan/food allergy action plan was followed
  - Treatment provided (if treatment included epinephrine auto-injector, document that 911 or EMS was called)
  - If a second epinephrine auto-injector was used
  - Student outcome: hospitalized, returned to school, returned home
- **Debriefing following food allergy and anaphylaxis event**
  - Review event data
  - Identify gaps in mitigation measures and response plan guidance
  - Identify other concerns (e.g., need to provide counseling for any students who witnessed the event)
- **For students who self-carry an epinephrine auto-injector:**
  - Competencies of allergy knowledge and response skills documented
  - Number of self-carry spot checks completed by school nurse and results
- **Staff training**
  - Develop tracking tool for yearly staff training and any other additional review training
- **Annual review of school allergy response policy and allergy management program/protocols and update as needed. Consider trends, gaps, any new state laws, or nursing practice regulations.**

Resources

Sample Emergency Action Plans for Anaphylaxis

American Academy of Allergy, Asthma, & Immunology. (2020). *Anaphylaxis emergency action plan*. https://www.aaaai.org/Aaaai/media/MediaLibrary/PDF%20Documents/Libraries/Anaphylaxis-Emergency-Action-Plan_FILLABLE.pdf

American Academy of Pediatrics. (2017). *Allergy and anaphylaxis emergency plan*. https://downloads.aap.org/HC/AAP_Allergy_and_Anaphylaxis_Emergency_Plan.pdf

FARE. (2020). *Food allergy & anaphylaxis emergency care plan*. (Available for download in English and Spanish.) https://www.foodallergy.org/living-food-allergies/food-allergy-essentials/food-allergy-anaphylaxis-emergency-care-plan

Sample Report of Epinephrine Administration

Maryland State Department of Education. (n.d.) *School health services form*. https://marylandpublicschools.org/about/Documents/DSFSS/SSSP/SHS/MSDEReportingFormAnaphylacticReaction.pdf

Other National Association of School Nurses Resources

National Association of School Nurses. (2016). Framework for 21st century school nursing practice: National Association of School Nurses. *NASN school nurse (Print), 31*(1), 45-53. doi: 10.1177/1942602X15618644. https://pubmed.ncbi.nlm.nih.gov/26739934/

National Association of School Nurses. (2019). *Electronic health records: An essential tool for school nurses to keep students healthy*. https://www.nasn.org/nasn-resources/professional-practice-documents/position-statements/ps-electronic-health-records