



Emergency response for life-threatening conditions in schools: Anaphylaxis guidelines

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Anaphylaxis Guidelines Task Force 2020

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Anaphylaxis guidelines

Introduction

There are times when students in school may need medication to help with their chronic health condition. Many students with allergies will need rescue medication to use during an allergy emergency. Students should have their own rescue medication (an epinephrine auto-injector) available at the school to use when necessary. This requires a medication authorization form (which may be combined with an allergy and anaphylaxis action plan) signed by a parent and healthcare provider and submitted every year to the student's school.

Utah code [26B-4](#) requires schools to stock an epinephrine auto-injector for use by anyone showing signs of anaphylaxis. The intent is to have medication available for students whose own medication has run out, the student who accidentally left their medication at home, or for someone experiencing an undiagnosed allergic reaction. This statute is not meant to replace a student's own rescue medication. A student's parent or guardian must still provide a student's medication.

These guidelines have been developed to instruct school staff on how to use a stock epinephrine auto-injector, and the requirements of the statute ([Utah code 26B-4](#)).

What are allergies?

Allergy symptoms occur when the immune system overreacts to food proteins, insect stings, or environmental triggers that are harmless to most people but can cause a serious and potentially life-threatening reaction to others. Allergies are sometimes hereditary. While allergies are more common in children, they can appear at any age.

Common triggers include animal dander, grass or tree pollen, insect stings, and food proteins. In the United States the most common food allergens are milk, egg, peanut, tree nuts, soy, wheat, fish, and shellfish. Common allergy symptoms include sneezing, coughing, an upset stomach, a skin rash, and difficulty breathing (American College of Allergy, Asthma & Immunology [ACAAI], n.d. & Food Allergy Research & Education [FARE] n.d.).

In the case of most environmental allergens, such as animal dander and pollen, reactions consist of mild symptoms such as watery eyes, a runny nose, or a rash. Allergic reactions to food and insect stings can cause a life-threatening allergic reaction known as anaphylaxis. This severe reaction can affect several areas of the body, including breathing, blood circulation, the

skin, reduced blood pressure, and gastrointestinal symptoms (American Academy of Allergy Asthma & Immunology [AAAAI], n.d.).

Anaphylaxis is a serious, life-threatening allergic reaction. The most common anaphylactic reactions are to foods, insect stings, medication, and latex.

Anaphylaxis requires immediate medical treatment with epinephrine and a trip to the emergency room. Even after treatment with epinephrine, some people have a secondary wave of symptoms called a biphasic reaction. The risk of a biphasic reaction is why they should be observed in the emergency room for an additional 4 to 6 hours after successful treatment of anaphylaxis. Antihistamines will not stop the life-threatening symptoms of anaphylaxis.

All allergic reactions have the potential of causing anaphylaxis, even if past reactions have been mild (AAAAI). However, certain people with allergies are at greater risk of dying from anaphylaxis.

- People with asthma
- People with a personal or family history of anaphylaxis
- If epinephrine treatment is delayed

Health-related forms

All students with a chronic health condition should have a healthcare plan on file if there is a chance the condition might result in a health crisis while at school. This can be an individualized healthcare plan (IHP) or an emergency action plan (EAP). A healthcare plan is written by the school nurse. It outlines how to manage the student's chronic health condition. A medication authorization must be on file with the school if a student requires medication to be available at school. This form must be signed by a parent and the student's healthcare provider every year.

The following are forms that a student with allergies may need:

- Individualized healthcare plan (IHP): The IHP is written by the school nurse with input from the family. The IHP outlines the plan of care necessary to keep the student safe at school (National Association of School Nurses [NASN], 2020). The student must have a confirmed medical diagnosis by a licensed healthcare provider before an IHP can be written (DOPL 2023).
- Emergency action plan (EAP): an EAP is a type of individualized healthcare plan that instructs school staff how to manage a specific student's medical emergency. The EAP is written by the school nurse with input from the family

but is designed for staff without any medical training. The EAP is usually in an “if you see this – do this” format.

- Medication authorization: This form must be submitted to the school if emergency medication may be required at school. It should be submitted to the school every year and must be signed by a parent and the student’s healthcare provider. This can be a separate document or may be combined with the EAP (for example, an allergy and anaphylaxis IHP/EAP).
- Section 504 of the Rehabilitation Act of 1973 (Section 504 Plan): A written plan to direct the team on accommodations necessary for the student to have free and appropriate public education (regular education students). The Section 504 plan does not replace an individualized healthcare plan but should be used together with an individualized healthcare plan if the student requires certain accommodations for their chronic health condition.
- Individualized education plan (IEP): A written plan for students in special education who are protected by the Individuals with Disabilities Education Act (IDEA, 2004). Accommodations for students with health conditions who are served by special education can be outlined in an IEP but may also require a separate individualized healthcare plan or emergency action plan.

The Utah Department of Health and Human Services (DHHS) has created a combination form that includes the allergy and anaphylaxis IHP/EAP (AAEAP) and the medication form. This form can be found in the school nursing section of the [HEAL website](#).

Possible warning signs and symptoms

Symptoms of anaphylaxis typically start within 5 minutes to 2 hours of encountering the allergen. Students may not always recognize the symptoms of anaphylaxis. Triggers and symptoms that are specific to the student should be listed in their allergy and anaphylaxis IHP/EAP or individualized healthcare plan.

The best way to manage allergies is to avoid the allergens that trigger the allergic reactions, and to be prepared for an emergency.

Warning signs typically affect more than one part of the body and may include:

Mild symptoms:

- Itchy or runny nose
- Itchy mouth
- A few hives that are mildly itchy
- Mild nausea or discomfort

Treatment for mild to moderate symptoms includes taking an antihistamine (if ordered by the student's healthcare provider) and watching the student closely for changes. Give the student epinephrine if their symptoms get worse or they have more than 1 mild symptom listed above.

Severe symptoms:

- Short of breath, wheezing, or repeated coughing
- Pale or blue skin
- Faint, weak pulse, or dizzy
- Tight throat, hoarse, or having trouble breathing or swallowing
- Significant swelling of the tongue or lips
- Many hives over the body (widespread redness)
- Vomiting or severe diarrhea
- Feeling something bad is about to happen, anxiety, or confusion

Inject epinephrine immediately and call 911 if a student has any of these severe symptoms. Give the student a second dose of epinephrine if their symptoms do not improve within 5 minutes of giving the first dose. Anyone who has been given epinephrine must be transported to the emergency department even if their symptoms resolve. The person should stay at the emergency department for at least 4 hours (and up to 6 hours) because symptoms may return during a biphasic reaction.

Allergy medication

People with allergies may take an antihistamine to manage mild symptoms. Antihistamines will not help prevent an anaphylactic reaction. Those at risk for anaphylaxis should never try to treat an anaphylactic reaction with an antihistamine.

People who are at risk of anaphylaxis should carry epinephrine auto-injectors. These contain a prescribed single dose of medication that is injected into the thigh during an anaphylactic emergency. Epinephrine auto-injectors are prescribed in packs of 2 and are meant to be kept together in case more than 1 dose of epinephrine is needed before emergency responders arrive. Call emergency medical services (911) immediately after an epinephrine auto-injector is used so the person can be transported to the nearest emergency department for evaluation, monitoring, and any further treatment by healthcare professionals.

Stock epinephrine auto-injectors

Utah law 26B-4-406 (5(a)) requires all schools (primary or secondary, public, and private) to stock at least 1 emergency epinephrine auto-injector for use in a "person exhibiting potentially life-threatening symptoms of anaphylaxis."

The intent of this law is to have this medication available for use for students whose own medication was inadvertently left at home, or if there is someone experiencing an anaphylactic reaction for the first time. This is not meant to replace a student's own epinephrine auto-injector. A student's parent or guardian must still provide a student's medication.

Student specific epinephrine

Students may possess or possess and self-administer an epinephrine auto-injector if an authorization is signed by a parent and healthcare provider. This form must be signed each year. If the student is not able to possess or self-administer their medication, the medication should be kept in an unlocked, but secure, location. All student-specific medication (including epinephrine auto-injectors) must have a signed medication authorization (or AAEAP/EAP) on file that is updated each year.

Qualified epinephrine auto-injector entity

According to Utah law [26B-4-401 \(13\)\(a\)](#) the following entities are allowed to carry stock epinephrine auto-injectors:

- Recreation camps
- Schools or universities
- Day care facilities
- Youth sports leagues
- Amusement parks
- Food establishments
- Places of employment
- Recreation areas

Schools (all primary and secondary, public, and private) must keep at least 1 epinephrine auto-injector on hand for use in an anaphylactic emergency (Utah code 26B-4-406 [5][a]).

Qualified adults

Qualified adults can receive training required to administer stock epinephrine auto-injectors to those experiencing an anaphylactic emergency. To be a qualified adult this person must:

- Be 18 years of age or older.
- Volunteer to administer the medication.
- Complete an approved training program.

People who don't work at schools but who may come into contact with a person who has a life-threatening allergic reaction may also receive training to administer an epinephrine auto-injector in an emergency. These people can include camp counselors, scout leaders, forest

rangers, tour guides, and other people who have contact with the public (Utah code 26B-41-407 [6][b]).

Stock epinephrine auto-injector training

Utah code 26b-4-407 (6)(a)(i) states the Utah Department of Health and Human Services will approve training programs for using epinephrine auto-injectors (EAI). Training programs will include the following:

- Proper use and storage of EAI.
- Techniques for recognizing symptoms of anaphylaxis.
- Standards and procedures for the storage and emergency use of stock epinephrine auto-injectors.
- Emergency follow-up procedures, including calling 911 and contacting, if possible, the student's parent.
- Written materials covering the information presented.

If the school has a school nurse, the nurse should be the person who makes sure the training has been completed, and that the volunteer is competent to provide the service as required by the Utah Nurse Practice Act for any medication being administered in the school. If the school does not have a nurse, the training may be done by a nationally recognized organization experienced in training laypersons in emergency health treatment of anaphylaxis. Additional authorized trainers include physicians, advanced practice registered nurses, physician assistants, pharmacists, or paramedics.

Approved training programs include the following:

[A Shot to Live \(University of Utah\)](#)

[Get Trained – Epinephrine Administration \(National Association of School Nurses\)](#)

[Epipen4Schools Training Video \(Mylan\)](#)

[How to Use the Auvi Q \(Boston Children's Hospital\)](#)

Procedures to follow after administration

Always follow the instructions on the student's allergy and anaphylaxis individualized healthcare plan or emergency action plan when administering any epinephrine auto-injectors.

Prescription

Schools may obtain a prescription for stock epinephrine from the school medical director, medical director of the local health department, local emergency medical services director, or other person or entity authorized to prescribe or dispense prescription drugs.

Obtaining stock epinephrine auto-injectors

All schools should have at least 1 epinephrine auto-injector at all times. These devices require a prescription from a licensed healthcare provider. Each school should obtain a prescription from their medical consultant for the epinephrine auto-injector and may fill that prescription at the pharmacy of their choice (at their cost).

There is currently a program from Mylan Pharmaceuticals that will provide up to 4 free EpiPens for each school. A school must submit a valid prescription to qualify for this program. More information can be found at <https://www.epipen4schools.com/>. This free program may stop functioning at any time.

Storage of stock epinephrine auto-injectors

The stock epinephrine auto-injector must be stored in a secure and easily accessible, but unlocked, location known to the school nurse and all school staff who have been designated to administer the medication in case of the nurse's absence.

Disposal

If an epinephrine auto-injector has been administered, it should be discarded in a sharps container or sent with the emergency medical services responders for them to discard. It should not be thrown away in the trash.

It is the responsibility of the parent or guardian to retrieve any unused medication if the student is withdrawn from the school or at the end of the school year. The school should maintain a written policy to cover the following issues regarding any medications that are not retrieved (Utah Department of Health and Human Services (DHHS), 2024).

- Written communication should be sent to the parent or guardian before the end of the school year to let them know all unused medications must be picked up by a specified date. The same communication needs to be sent to the parents of any student who withdraws during the school year.
- Any medications not picked up by the specified date should be disposed of by the school nurse in the presence of another school employee in a manner to prevent any

possibility of further use of the medications. Environmental considerations should be kept in mind when disposing of unused medications.

- The school nurse and the school employee in charge of the disposal of unused medications should document the name of the medication and the amount disposed of along with the name of the student for whom it was prescribed. Both individuals should sign the documentation.

Documentation

The school's written policy should include documentation of medication given at school and the practice for administering medications. Each dose of medication administered or witnessed by school staff should be documented on a medication log either on paper or electronically. This log becomes a permanent health record for parents and healthcare providers and provides legal protection to those who assist with medications at school. It also helps make sure students receive medications as prescribed, and can help reduce medication errors (DHHS, 2024).

The medication log should contain the following information:

- Student name
- Prescribed medication and dosage
- Schedule for medication administration
- Name(s) and signature(s)/initial(s) or electronic identification of individual(s) authorized and trained to supervise administration of medications.
- Whether the medication administered was the student's own epinephrine or stock epinephrine.

Reporting

The Utah Department of Health and Human Services (DHHS) asks schools to report aggregate asthma rescue medication data every year. This should be done in the School Health Workload Report submitted to DHHS at the end of the school year. Aggregate data to be submitted may include but is not limited to:

- Whether the local education agency (LEA) had a policy in place for administration of stock epinephrine.
- Whether the LEA carried stock epinephrine.
- Total number of individual orders in the LEA for student specific epinephrine.
- The number of staff trained to administer epinephrine.
- The number of times an epinephrine auto-injector was administered by school staff (non-nurse) and school nurse.

Medication errors

A medication incident or error report form should be used to report medication errors and must be filled out every time a medication error occurs.

Routine errors include the following:

- Wrong student
- Wrong medication
- Wrong dosage
- Wrong time
- Wrong route

All medication incident or error reports should be shared between the school nurse, the student's parent or guardian, and other appropriate school and healthcare personnel according to school policy. The school should retain all medication error forms.

The Utah Poison Control Center may need to be consulted for medication errors. Call 800-222-1222 for help 24 hours a day, 7 days a week.

Definitions

Administration: the provision of prescribed medication to a student according to the orders of a healthcare provider, and as permitted by Utah law.

Allergy: a reaction to substances in the environment that are harmless to most people.

Anaphylaxis: is a serious allergic response that often involves swelling, hives, lowered blood pressure, and in severe cases, shock or death.

Epinephrine auto-injector: an automatic device designed to deliver a specific dose of epinephrine to a person experiencing an anaphylactic emergency. The most common epinephrine auto-injector is the EpiPen. Other devices include Auvi-Q, the Adrenaclick, and a generic device.

Healthcare provider: a medical or health practitioner who has a current license in the state of Utah with a scope of practice that includes prescribing medication.

Local education agency (LEA): the school district, charter, or private school.

Medication: prescribed drugs and medical devices controlled by the U.S. Food and Drug Administration and ordered by a healthcare provider. It includes prescription and over-the-counter medications prescribed through a standing order by the school physician or prescribed by the student's healthcare provider.

Medication authorization form: a form required before medication can be stored, administered, or carried by a student. This form must be submitted to the school every year and must be signed by a parent and healthcare provider. This form can be the form designed by the Utah Department of Health and Human Services, or a form created by the LEA (as long as that form meets the requirements of the specific statute).

Medication error: occurs when a medication is not administered as prescribed. This includes when the medication prescribed is not given to the correct student, at the correct time, in the dosage prescribed, by the correct route, or when the wrong medication is administered.

Medication log: a form that provides required documentation when medication is administered to a student. This form can be the error reporting form designed by the Utah Department of Health and Human Services, or a form created by the LEA.

Parent: a natural or adoptive parent, a guardian, or person acting as a parent of a student with legal responsibility for the student's welfare.

School employee volunteer: a school employee who does not have a professional license that allows them to administer medication. These people may also be called unlicensed assistive personnel.

School nurse: a registered professional nurse with a current nursing license who practices in a school setting.

Self-administration: when the student administers medication independently to themselves.

Unlicensed assistive personnel (UAP): a school employee who does not have a professional license that allows them to administer medication. This person may also be called a school employee volunteer.

References

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Section 504 of Rehabilitation Act of 1973 (P.L. 102-569. 199229 U.S.C.A – 794;34 C.F.R., Part 104). U.S. Department of Labor.

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Model epinephrine auto-injector policy

Model policy: stock epinephrine auto-injectors in schools

The [insert name of LEA] Board of Education recognizes anaphylaxis is a chronic, life-threatening condition. Students with a diagnosis of anaphylaxis who are prescribed epinephrine are strongly encouraged to self-carry and self-administer their medication, if appropriate. Students who are unable to self-carry and self-administer their medication should bring their epinephrine auto-injector to school and follow the allergy and anaphylaxis emergency action plan (AAEAP) written by the school nurse, student's parent or guardian, and healthcare provider.

Under this policy, the school board shall allow the school to provide stock epinephrine to students with anaphylaxis in the event the student is experiencing an anaphylactic emergency and does not have access to their own epinephrine auto-injector, as required in Utah code [26B-4-406\(5\)\(a\)](#).

Conditions for administering stock epinephrine

Persons experiencing an anaphylactic emergency whose personal epinephrine auto-injector is temporarily unavailable may receive an emergency dose of school-stocked epinephrine. They do not need to have a previously diagnosed allergy.

The LEA, its employees, and agents, including authorized licensed prescribers providing the standing prescription of stock epinephrine auto-injectors are to incur no liability, with the exception of gross negligence, as a result of injury arising from the administration of stock epinephrine.

This policy should not be interpreted to relieve a student's parent or guardian of providing a student's medication or create an expectation that a school will have stock epinephrine available.

Administering and storing stock epinephrine auto-injectors

Follow these procedures to administer and store the stock epinephrine:

- Only epinephrine auto-injectors shall be used in schools. Epinephrine administered via syringe and vial is not permitted except by a student's parent or guardian or an EMS first responder.

- Any trained school staff may administer stock epinephrine. Each school may find volunteer school employees to administer the stock epinephrine when the nurse is not available. All who administer stock epinephrine, including the nurse and other designated personnel, are required to complete the appropriate training.
- The stock epinephrine shall be stored in an unlocked, but secure and easily accessible location known to the school nurse and all school staff designated to administer the stock epinephrine in case of the nurse's absence.
- Each school shall document each time the stock epinephrine is used, by which student, and make a note of parent/guardian notification.

Obtaining stock epinephrine auto-injectors

The stock epinephrine auto-injectors shall be prescribed by the school's medical director, local health department medical director, or local emergency medical services medical director.

A provider may prescribe stock epinephrine in the name of (insert school district or school) to be maintained for use when deemed necessary based on the provisions of this section.

All stock epinephrine must be obtained from a licensed pharmacy or manufacturer. No epinephrine auto-injector devices can be accepted from private individuals.

All expired medication shall be discarded in accordance with proper procedure.

Effective date

This policy shall take effect in full on [insert date].