

TOOLKIT

Advocating for Undesignated Stock Epinephrine in Your School





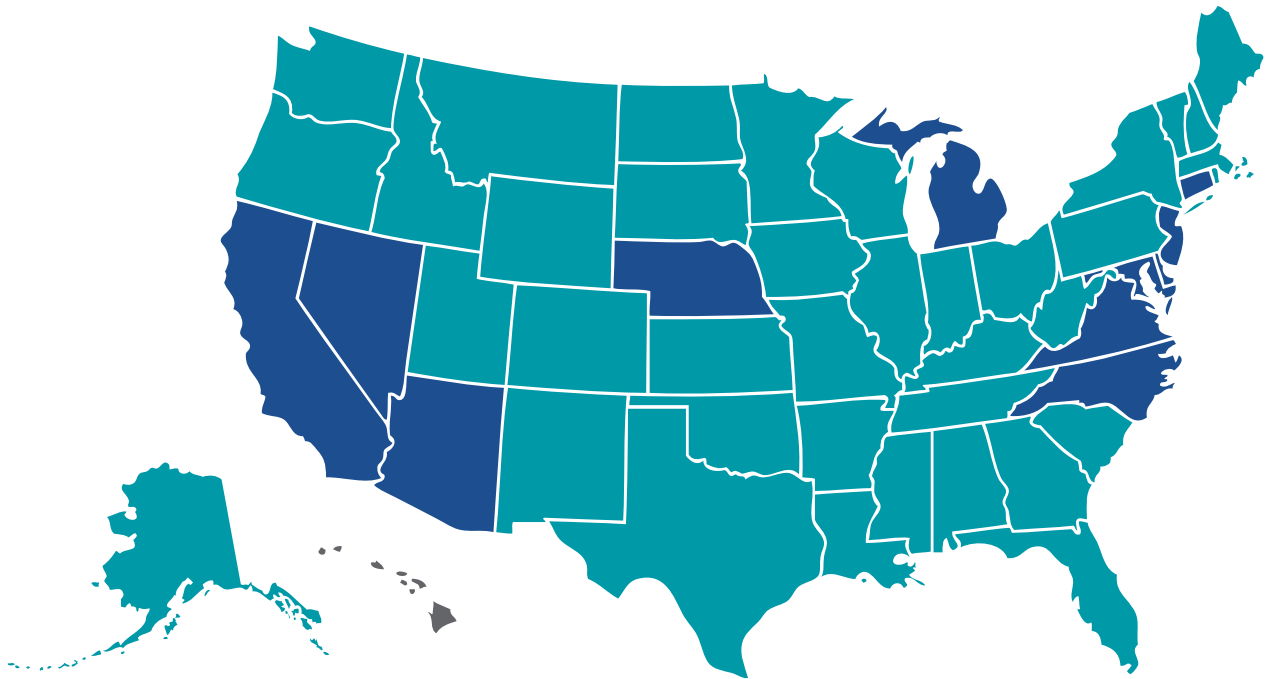
Why Undesignated Stock Epinephrine Matters in K–12 Schools

Access to epinephrine auto injectors (EAI) that have not been prescribed to a particular person, and can be used in emergencies (known as stock epinephrine), is critical—not just for those with an undiagnosed allergy, but also for those with a confirmed allergy who may not have access to their EAI or may need additional doses. Sadly, there have been too many fatal reactions in students who did not have access to epinephrine—the only medication that can reverse a severe allergic reaction, or anaphylaxis.

Nearly a quarter of all epinephrine administrations in the K–12 school setting have been for students or staff whose allergy was unknown at the time of the allergic reaction¹; therefore, they would not have an EAI with them or in the building.

In 2013, President Obama signed the School Access to Emergency Epinephrine Act, which encourages states to adopt laws requiring K–12 schools to have undesignated EAI on hand. While nearly every state has passed legislation or guidelines regarding stock epinephrine in schools, the rules differ by state. Some states *require* K–12 schools to stock epinephrine and other states *allow* schools to stock it.

To see what laws/guidelines your state has in place, see the map below. If your state allows K–12 schools to stock epinephrine but your child's school does not do so, the information on the following pages can be shared with school administrators to help you advocate for having undesignated EAI in the school. Keep in mind that some state laws only apply to public K–12 schools while others apply to public, private and/or charter K–12 schools. We've provided key talking points for you on the next page.



- State has law/guideline **allowing** schools to stock epinephrine.
- State has law/guideline **requiring** schools to stock epinephrine.
- State has pending legislation.

¹ McIntre CL, Sheetz AH, Carroll CR, Young MC. Administration of epinephrine for life-threatening allergic reactions in school settings. *J Pediatr.* 2005; 116(5): 1134-1140.





Key Talking Points:

The Case for Undesignated Stock Epinephrine in K–12 Schools

- Food allergies can be life-threatening and are a serious and growing public health problem—one for which there currently is no cure. Up to 15 million Americans have a food allergy, including 5.9 million children. (It is important to note that food intolerance is often confused with food allergy. An intolerance—such to gluten or lactose—affects the digestive system, and while it can cause discomfort, it is not life-threatening.)
- Approximately eight percent of U.S. children have food allergies—that is one in every 13 children, or roughly two in every classroom. Nearly 40 percent of children with food allergies already have experienced a severe or life-threatening reaction.
- Epinephrine is the first-line treatment for anaphylaxis, a potentially fatal allergic reaction. Epinephrine is safe and simple to administer.
- Schools need to be prepared to treat allergic reactions in the event a student's personal epinephrine auto-injector isn't available, in the event additional doses are needed, or the student is having a reaction and hadn't been previously diagnosed and thus would not have their own auto-injector.
- Seconds count in anaphylactic emergencies, and the sooner epinephrine is given, the better the outcome. Epinephrine in schools should be readily available and easily accessible.
- Stock epinephrine has been used to treat allergic reactions in schools where the stock epinephrine law is in place. One study highlighted 310 such instances nationwide in the 2013–2014 school year (see article, page five).
- Programs are currently in place that can enable schools to obtain stock epinephrine at little to no cost.

Allergic Reactions at School

- More than 20 percent of all epinephrine administrations that occur in the school setting involve individuals with a previously unknown allergy.
- An estimated 16 to 18 percent of school-aged children in the U.S. have had a reaction in school.
- Education on food allergies and anaphylaxis should be provided to school staff, including but not limited to school nurses, teachers, administrators, bus drivers, cafeteria workers and aides.

There are 15 million people with food allergies; nearly six million are children.

One in 13 children have a food allergy. That's roughly two per classroom.

Epinephrine is the only medication that can counteract the symptoms of an allergic reaction.

With anaphylaxis, seconds count.

24 percent of epinephrine use in a school setting was on those without a previous diagnosis of an allergy.





Food Allergy Research and Education (FARE): Position on Undesignated Stock Epinephrine in K–12 Schools

Food allergy is a potentially life-threatening immune response to eating specific foods or food additives. Eight types of food account for the majority of allergic reactions: milk, egg, peanut, tree nuts, fish, shellfish, soy, and wheat. Food allergies may result in a severe reaction, including: obstructive swelling of the lips, tongue, and/or throat; trouble swallowing; shortness of breath or wheezing; turning blue; drop in blood pressure; loss of consciousness; chest pain; and/or a weak pulse, any of which require urgent medical attention and, if left untreated, may cause death.

There are 15 million Americans with food allergies. It has been well documented that the prevalence of food allergies is on the rise. A 2011 study published in the medical journal *Pediatrics* showed that the prevalence of food allergies had grown nearly 50 percent to 5.9 million, or one in 13 children. That's roughly two per classroom.

While there is currently no cure for food allergies, epinephrine is the only medication that can halt the symptoms and save the lives of those experiencing a severe reaction. Nearly all states have passed laws either requiring or allowing schools to stock epinephrine for students who may or may not have a diagnosed food allergy.

FARE strongly supports the presence of stock epinephrine in all K–12 schools. It has, and will continue to, save lives. A study in *Pediatrics* showed that 24 percent of epinephrine use in a school district was on those without a previous diagnosis of food allergy. There are many children who may not know they are allergic and therefore do not have a prescribed epinephrine auto injector.

Keeping this life-saving medication on hand is a matter of basic, but critical, first aid. Precious minutes can be lost waiting for emergency responders. There are no counter-indications to administering epinephrine, but delaying its use may have catastrophic results.

Food Allergy Research & Education (FARE) works on behalf of the 15 million Americans with food allergies, including all those at risk for life-threatening anaphylaxis. This potentially deadly disease affects 1 in 13 children in the United States—or roughly two in every classroom. Learn more at www.foodallergy.org.





Common Questions about Food Allergies and Undesignated Stock Epinephrine in K-12 Schools

Q. How often do allergic reactions happen in school?

A. An estimated 16 to 18 percent of school-aged children in the U.S. have had a reaction in school. More than 20 percent of all epinephrine administrations that occur in the school setting involve individuals with a previously unknown allergy. Prompt administration of epinephrine is key to surviving an anaphylactic reaction. Studies have shown that fatalities to anaphylaxis result when there is a delay in epinephrine administration, or when epinephrine isn't administered at all.

Q. Since epinephrine requires a physician's prescription, how does a school get EAI's?

A. The prescription must be written by a licensed medical professional (not necessarily an allergist) and the rules vary by state. Schools have relied on a variety of approaches depending on what is allowed and who is available. This includes asking a physician in private practice, the school district's chief medical officer (if there is one), or the county or state's senior most medical official.

Q. A set of EAI's can cost hundreds of dollars. Is there financial assistance available to help schools purchase them?

A. Currently, Mylan Specialty, the maker of EpiPen® and EpiPen, Jr.®, provides free and discounted auto-injectors to qualified schools through its *EpiPen4Schools* program. Learn more at www.epipen4schools.com.

Q. Who is allowed to administer an undesignated EAI?

A. The laws vary by state, but in addition to the school nurse(s), school personnel who have been trained to administer epinephrine may be able to do so. To view your state's requirements, go to www.foodallergy.org/advocacy/epinephrine/map. This web page features links to each state's law.

Regardless of who is allowed to administer an EAI, education on food allergies and anaphylaxis should be provided to all school staff, including teachers, administrators, clerical staff, bus drivers, cafeteria workers and aides.

Q. What kind of training would staff have to take?

A. EAI training requirements vary by state. For example, Connecticut's law required the state Departments of Education and Public Health to create a training program to be completed annually by school nurses and any personnel designated to administer EAI. Other states, like Idaho, leave it to the school district to develop training, and some, like Missouri, don't specify training requirements in the law. Check with your state Department of Education for requirements.

Q. What liability protection is there for the school personnel who administer an EAI?

A. Many of the states' undesignated stock epinephrine laws extend protection from liability to trained school personnel who administer an EAI in good faith to someone he/she believes is suffering an allergic reaction. To view your state's liability protection in regards to epinephrine injection at school, go to www.foodallergy.org/advocacy/epinephrine/map and scroll down to the table of links to each state's law.





Hundreds Saved By Stock Epinephrine in Schools Last Year

This article, excerpted from a March 2015 FARE blog post, highlights the life-saving impact of stock epinephrine.

A total of 919 anaphylactic episodes occurred in schools last year, according to a new survey of schools participating in the EpiPen4Schools program. This program, offered by Mylan Specialty, provides free epinephrine auto-injectors to qualifying schools in the U.S. Results of this survey were provided during a poster presentation at the recent meeting of the American Academy of Allergy, Asthma & Immunology.

Out of the 5,683 responding schools, 10 percent had one to two cases of anaphylaxis occur within the 2013-2014 school year, meaning more than one in 10 schools had to respond to a severe allergic reaction on school grounds.

Importantly, in 22 percent of cases, anaphylaxis occurred in students or staff members with no known allergies. These individuals had no reason to believe they would be susceptible to having an allergic reaction, and therefore would not have a prescribed epinephrine auto-injector on hand. These schools all had stock auto-injectors on hand, provided by the EpiPen4 Schools program, which were used to treat 310 cases of anaphylaxis in schools that year.

While students and staff with known allergies should always have two prescribed auto-injectors on hand, it has been proven that undesignated auto-injectors play an important role in treating reactions for the previously undiagnosed or individuals with allergies who may not have immediate access to their medication.

One of the most compelling findings of the survey is that nearly 50 percent of students who experienced anaphylaxis were in high school. Research shows that teens are more likely to engage in risk-taking behaviors when it comes to their food allergies, and teens are at the highest risk for fatal reactions. Additional findings of the survey include:

- A second epinephrine injection was given in nine percent of cases, emphasizing the need for individuals to carry two prescribed auto-injectors with them at all times, as well as the need to have extra auto-injectors on hand in case the need arises.
- In 36 percent of schools, a limited number of adults (only the school nurse and select staff) were trained on how to recognize the signs and symptoms of anaphylaxis and administer epinephrine.
- Epinephrine is the first-line treatment for anaphylaxis; however, 157 anaphylactic episodes were reportedly treated with antihistamines only instead of epinephrine.
- Symptoms may return after the initial treatment of anaphylaxis, so it is imperative to transport the person to the hospital for observation. This survey showed that 20 percent of patients were not taken to the hospital, suggesting that further education is needed on this treatment step.

The results of this survey are encouraging in that they show that stock epinephrine saves lives—making the additional time and effort it takes to maintain a supply of the devices well worth it.

A poster of the survey results can be viewed at http://www.ispor.org/research_pdfs/49/pdf/PR52.pdf.





Resources for Schools and School Nurses

Partnerships for Progress: A School Nurse's Perspective on Supporting Students with Food Allergy, webinar: www.foodallergy.org/tools-and-resources/webinars#nurse.

Emergency Epinephrine Used 38 Times in Chicago Public Schools, <http://blog.foodallergy.org/2014/10/31/emergency-epinephrine-used-38-times-in-chicago-public-schools>.

Centers for Disease Control & Prevention (CDC)'s Voluntary Guidelines for Managing Food Allergies in Schools and Early Care and Education Programs: www.foodallergy.org/cdc.

National Association of School Nurses, Epinephrine Resource School Nurse Program: www.nasn.org/ToolsResources/FoodAllergyandAnaphylaxis/EpinephrineResourceSchoolNurseProgram.

National Association of School Nurses, Food Allergy and Anaphylaxis Toolkit: <https://www.nasn.org/ToolsResources/FoodAllergyandAnaphylaxis>.

Emergency Epinephrine Act, Illinois Physicians' Toolkit: http://www.illinoisfaea.org/wp-content/uploads/2012/08/epinephrine-toolkit-8_13_12-release1.pdf.

