

Anaphylaxis and Epinephrine Frequently Asked Questions (FAQs)

Q1.What is anaphylaxis?

Anaphylaxis is a severe allergic reaction brought upon by several factors, but most commonly caused by insect stings or bites, medication and eating certain foods (i.e. nuts or fish). In the presence of these substances that the body deems harmful, the immune system, which fights off foreign invaders, becomes sensitive to it. As a result, the body exhibits signs and symptoms typical of anaphylaxis such as severe swelling of the lips, hives, low blood pressure or trouble breathing. If a student experiencing anaphylaxis isn't responded to in an appropriate amount of time, their symptoms can potentially become life threatening.

Q2. How can you distinguish between symptoms of anaphylaxis and other illnesses? (e.g., asthma attack, random hives, stomach cramps, or anxiety attack)

Anaphylaxis symptoms occur suddenly and can progress quickly. What we want to do is interpret the symptoms in the context of the overall situation and the chance that there's been a food or environmental exposure. A helpful clue to tell these apart is that anaphylaxis may closely follow ingestion of a medication, eating a specific food, or getting stung or bitten by an insect.

Q3. How does epinephrine turn off an anaphylactic reaction?

The ability of epinephrine to treat the many signs of anaphylaxis. It acts on a number of receptors in the body to exert its effects. First, it causes constriction, or tightening, of the blood vessels, which decreases swelling and also helps to increase blood pressure. It also increases the heart's contraction and heart rate, which can help to prevent or reverse cardiovascular collapse. Epinephrine relaxes the muscles around the airways in the lungs, helping the airways to open up. Finally, it prevents the release of additional allergic chemicals, which aids in stopping further progression of the reaction. No other medicine acts on so many body systems, which is why epinephrine is the drug of choice for anaphylaxis.

Q4. Are people with asthma more at risk of fatal anaphylaxis, and why?

Yes. Anaphylaxis reaction can be life threating to people with asthma condition (may shut down airways). Because of the underlying asthma, your airways are likely to be more sensitive to an allergic reaction.

Q5. Does the risk of an anaphylactic response increase with each exposure to an allergen?

Absolutely not. The next reaction is completely unpredictable. The biggest variable in that next reaction will be the dose of exposure. Since we have no idea what that dose will be, we can't predict the reaction severity. The potential to experience an anaphylactic reaction is based on many factors and cannot always be determined from previous allergic reactions. For example, studies of individuals with peanut allergies have shown that 44-59% of mild allergic reactions may be followed by a severe reaction after a second exposure to the same allergen.

Q6. How are the people tested for the anaphylaxis triggers?

In individuals who have experienced anaphylaxis, it is important to confirm the trigger(s). Several tests are available to help identify triggers of anaphylaxis: Skin tests identify allergies which may be a trigger for anaphylactic reactions such as food, medications and stinging insects. In the case of a skin prick/puncture test, a positive result is indicated by the size of an inflammation when compared to placebo.

Q7. Should my children test for food allergies before any exposure has occurred?

Guideline published by the National Institute of Allergy and Infectious Diseases (NIAID) state that only children with risk factors for food should be tested before any exposure has occurred. Children who have moderate to severe atopic dermatitis or eczema (which appears as dry, itchy red skin) are more likely to have food allergies and should be tested. Also, if one child has allergies, it is recommended that her siblings be tested for food allergies too. For example, if the parents have allergies themselves (whether it be seasonal allergies, atopic dermatitis, or food allergies), it is recommended to check the child for food allergies. Food allergies have a genetic component.

Q8. What is the Access to Emergency Epinephrine in Schools Amendment Act of 2015?

The District of Columbia have passed this legislation to allow schools to stock undesignated epinephrine injector as a part of their emergency medical kits and maintain two unexpired undesignated epinephrine auto- injectors (one adult and one child dosage).

Q9. In a school setting, who is authorized to administer epinephrine?

Beginning Fall of 2016, your child's school will be required to train and certify at least two school employees or agents- using specified training methods by the Office of the State Superintendent of Education (OSSE) - on how to safely and effectively administer epinephrine auto-injectors.

Q10. My child has a diagnosed allergy and has his/her own prescribed epinephrine auto-injector. Does the Act change the requirements of who administers their medication?

It does not change the requirements but please contact the school for specific questions.

Q11. When is the right time to use Epinephrine?

The epinephrine pen(s) may be used in the event of an anaphylactic emergency. If an anaphylactic emergency occurs, your child's school has been advised to take these steps:

- 1. Administer the epinephrine auto-injection at the first sign of a known or suspected anaphylactic reaction
- 2. Call 9-1-1 or local Emergency Medical Services
- 3. Monitor the student for any recurring symptoms until medical personnel arrive.
 - i. Note: A second dosage of epinephrine may be administered after 5 minutes if the symptoms persist.

Q12. Are there ways to prevent anaphylaxis?

Yes. The best way to prevent anaphylaxis is to strictly avoid exposure to substances known to have caused an anaphylactic reaction for you in the past.

Q13. Can students refuse to participate?

No, your child's school is responsible for their student's health, safety, and shall provide emergency assistance to students in the event of an emergency. The "Access to Emergency Epinephrine in Schools Amendment Act of 2015" enables your child's school to provide emergency assistance to students experiencing anaphylaxis during the school day or at any school sponsored activity.

Q14. Who shall I contact in regards to the Undesignated Epinephrine Auto-Injector Program?

District-wide questions, please contact <u>osse.epi@dc.gov</u>. For school level implementation, please contact the school's main office.

Q15. Where do I find additional information about the District's Undesignated Epinephrine Auto-Injector Program?

The District of Columbia's Undesignated Epinephrine Auto-Injector Program can be found on the <u>OSSE's</u> <u>website</u>.

Q16. Will I have to pay for the undesignated epinephrine auto-injector once it is used on my child during an anaphylaxis emergency?

No. The use of the epinephrine auto-injector during an anaphylaxis emergency is at no cost to the student.