

## What You Should Know About Anaphylaxis

**A**naphylaxis is a sudden, severe, potentially fatal allergic reaction that involves 2 or more organ systems simultaneously (i.e. hives and feeling faint) or the respiratory tract (shortness of breath). It is commonly caused by:

- **Food allergy:** peanuts, tree nuts, milk, fish and shellfish (although any food can cause a reaction)
- **Stinging insects:** yellow jackets, honeybees, wasps, hornets, and fire ants
- **Medications**
- **Latex allergy** (natural rubber products)

In most cases, anaphylaxis results when several organ systems react at once. Left untreated, these symptoms can cause death.

Food allergy is the leading cause of anaphylactic reactions outside the hospital setting.

Scientists estimate that food allergy-induced anaphylactic reactions account for 30,000 hospital visits and 150-200 deaths each year.

Insect stings account for about 50 deaths each year.

### Typical Symptoms of a Severe Allergic Reaction

SKIN	GASTROINTESTINAL	RESPIRATORY	CARDIOVASCULAR (CIRCULATORY)
Hives	Cramps	Itchy, watery eyes	Drop in blood pressure
Swelling	Nausea	Runny nose	Fainting
Itchy, red rash	Vomiting	Stuffy nose	Shock
Eczema flare	Diarrhea	Sneezing	
		Coughing	
		Itching or swelling of lips, tongue, throat	
		Change in voice	
		Difficulty swallowing	
		Tightness of chest	
		Wheezing	
		Shortness of breath	
		Repetitive throat clearing	



## What You Should Know About Anaphylaxis

### MEDICATION STORAGE

Medications should be stored in an easily accessible location. *The best place is with the student.*

Be sure all staff members know where medications are kept.

If medications are kept in a locked cabinet, be sure staff members know where it is kept and where to find the key!

Keep medications at room temperature. Extremes in temperature may affect the medication's effectiveness.

Check expiration dates regularly. Replace the epinephrine if it is out of date or discolored.

### TREATMENT OF ANAPHYLAXIS

Prevention of anaphylaxis by avoidance of triggers is paramount. Quick treatment can be life saving. A written action plan should be on file for all at risk students, particularly students with food allergy and asthma.

Up to 20% of students who will eventually have an anaphylactic reaction may have their first in school. Therefore, staff should become familiar with the symptoms of anaphylaxis. Check with the district advisory council to determine their epinephrine policy, and work with the school physician to develop appropriate standing orders for these allergic emergencies.

Children who have had a severe reaction to a high risk food such as peanut, tree nuts, or shellfish are at high risk of having a similar reaction with an accidental ingestion. Recent studies show that some of these children may have a fatal outcome if the administration of autoinjectable epinephrine is delayed until severe symptoms begin. Current guidelines recommend that such children should probably receive autoinjectable epinephrine if they ingested the high risk food, even without symptoms, and 911 should be called.

### PROCEDURE:

- Administer autoinjectable epinephrine and other medications per doctor's instructions.
- Call 911 (even if symptoms abate). Tell them the individual is experiencing an anaphylactic reaction and may need epinephrine (if not given already).
- Call parents.

### MEDICATIONS

**Epinephrine.** Epinephrine is the ONLY medication that can reverse severe symptoms, available by prescription.

The child's physician should provide guidance for when and how much epinephrine to use if a reaction occurs. The effects of epinephrine may abate after 15 to 20 minutes.

All children who require epinephrine should be seen in the emergency room.

**Antihistamines.** Antihistamines, such as Benadryl®, are often used to further improve the recovery of a person with anaphylaxis.

Antihistamines may be administered with epinephrine but *never* instead of epinephrine because it cannot reverse many of the symptoms of anaphylaxis, such as a drop in blood pressure.

**Asthma medications.** Asthma medications, such as bronchodilators, should never be given in place of epinephrine to treat an anaphylactic reaction, although they may be helpful for asthma symptoms in **addition** to epinephrine.

**Steroids.** Steroids are often given in an attempt to protect against the "late" reaction that can occur several hours after the allergic reaction.

For some patients, particularly those with asthma, this late reaction could be even more severe than the initial reaction.