Signs and Symptoms of More Severe Food Allergy Symptoms (Anaphylaxis)

Body System	Sign or Symptom
Mouth	**Tingling, itching, swelling of the tongue, lips or mouth; blue/grey color of the lips**
Throat	**Tightening of throat; tickling feeling in back of throat; hoarseness or change in voice**
Nose/Eyes/Ears	**Runny, itchy nose; redness and/or swelling of eyes; throbbing in ears**
Lung	**Shortness of breath; repetitive shallow cough; wheezing**
Stomach	**Nausea; vomiting; diarrhea; abdominal cramps**
Skin	**Itchy rash; hives; swelling of face or extremities; facial flushing**
Heart	**Thin weak pulse; rapid pulse; palpitations; fainting; blueness of lips, face or nail beds; paleness**

Treatment of Anaphylaxis

Epinephrine is the first-line treatment in cases of anaphylaxis. Other medications have a delayed onset of action. Epinephrine is generally prescribed as an auto-injector device that is relatively simple to use.

Anaphylaxis can occur immediately or up to two hours following exposure to an allergen. In approximately one third of anaphylactic reactions, the initial symptoms are followed by a delayed wave of symptoms two to four hours later. This combination of an early phase of symptoms followed by a late phase of symptoms is defined as a biphasic reaction. While initial symptoms respond to epinephrine, the delayed biphasic response may not respond to epinephrine and may not be prevented by steroids.

Therefore, it is imperative that following the administration of epineprhine, the student be transported by emergency medical services (EMS) to the nearest hospital emergency department even if the symptoms appear to have resolved.

Because the risk of death or serious disability from anaphylaxis itself usually outweighs other concerns, existing studies clearly favor the benefit of epinephrine administration in most situations. There are no medical conditions which absolutely prohibit the use of epinephrine when anaphylaxis occurs (Boyce, 2010).

Food Allergy Management in the School Setting

School districts and open-enrollment charter schools are required to develop and implement policies to address children with diagnosed food allergies at-risk for anaphylaxis. The school district's policy and administrative regulations should be comprehensive yet flexible in addressing different food allergens, varying ages and maturity levels of students, as well as the physical properties and organizational structures of schools and communities. While the policies may differ in the detail, they should all address common evidence-based stategies in the management of food allergies and anaphylaxis within the school setting. The following components should be addressed in policy and administrative regulations needed to support students with food allergies at risk for anaphylaxis.

1. Identification of Students with Food Allergies At-Risk for Anaphylaxis
2. Development, Implementation, Communication and Monitoring of Emergency Care Plans, 504 plans, and/or Individualized Health Care Plans for Students with Food Allergies At-risk for Anaphylaxis.
3. Reducing the Risk of Exposure Within the School Setting
4. Training for School Staff on Anaphylaxis and Emergency Response to Anaphylactic Reactions
5. Post Anaphylaxis Reaction-Review of Policies and Procedures

In order to coordinate the management of food allergies within the school district, the superintendent may consider designating a school district (central office) employee, that is knowledgable about food allergies, to serve as the point of contact for parents, healthcare providers, campus food allergy management team, if established by the campus, and other school staff. The superintendent's designee can help facilitate the development, implementation, and monitoring of comprehensive and coordinated administrative regulations by convening a multi-disciplinary team in addressing the components listed previously in this section. The designee should receive ongoing training in the management of food allergies in the school setting, including the provision of administration of epinephrine. The superintendent's designee may

also want to consider working with the local School Health Advisory Council (SHAC) in gaining parent and community input into the development of administrative regulations and assistance in locating and coordinating resources necessary to implement the food allergy management strategies.

In order to implement, coordinate, and monitor food allergy management on a campus, a food allergy management team (see Appendix G for sample staff roles) may be created. Members of the food allergy management team may include, but is not limited to, the following: a school nurse (when available), the principal, food service staff, custodial staff, a counselor, classroom teacher(s), and bus driver(s). The food allergy management team can work with parents in supporting students with food allergies on the campus as well as assist campus staff in implementing administrative regulations and student specific strategies.