

Belgrade Public School Protocol:

## USE OF AUTO- INJECTABLE EPINEPHRINE IN THE EVENT OF SEVERE ALLERGIC REACTION

### Background

A severe allergic reaction, known as anaphylaxis, can occur when the immune system strongly reacts to an otherwise harmless substance in the environment known as an allergen. The most common allergens are food, insect venom, medications and latex. Unlike most allergic reactions, anaphylaxis can be fatal. Signs and symptoms of anaphylaxis may occur within minutes or may take up to a couple of hours after exposure.

The incidence of anaphylaxis has increased over the years. In a statement from the CDC:

“ Food allergies are a particular concern in the school environment. Studies show that 16%–18% of children with food allergies have had allergic reactions to accidental ingestion of food allergens while in school. Moreover, food-induced anaphylaxis data reveals that 25% of anaphylaxis reactions in schools occur among students without a previous food allergy diagnosis.”

For students with known allergies it may be possible to successfully avoid exposure to known allergens. These students should also have an Emergency Health Care Plan and an epinephrine auto-injector (provided by parents) available at all times in case of accidental exposure.

### Protocol

It is the protocol of Belgrade Public Schools to provide at least two (2) doses of auto-injectable epinephrine (to be called stock epinephrine) in each school, to be administered by a school nurse or employee who has been authorized and trained in the administration of epinephrine to any student or non-student believed to be having an anaphylactic reaction on school premises, during the academic day. In accordance with the provisions of section 2 of 20-5-420 MCA, a school district and its employees and agents are not liable as a result of any injury arising from the administration of epinephrine to a student or non-student unless an act or omission is the result of gross negligence, willful or wanton misconduct, or an intentional tort.

### Protocol Limitations

Parents of students with known life-threatening allergies should provide the school with written instructions from the students' health care provider for handling anaphylaxis and all of the necessary medications for implementing the student specific order on an annual basis. The anaphylaxis policy/protocol is **not intended to replace student specific orders** or parent provided individual medications. This policy does not extend to activities off school grounds (including transportation to and from school, field trips, etc.) or outside of the academic day (sporting events, extra-curricular activities, etc.).

## Recognizing Anaphylaxis

Onset of symptoms may be immediately or take up to 2 hours, or may be progressive. Usually several symptoms co-occur, but it is possible to have a single symptom indicate anaphylaxis.

- \* Respiratory: Sudden difficulty breathing, wheezing
- \* Skin: Hives, general flushing, itching, or redness of the skin
- \* Mouth: Tingling sensation itching, or metallic taste in mouth
- \* Face: Swelling of the throat, lips, tongue; difficulty swallowing
- \* Feeling of apprehension, agitation

## Common Allergens

Foods: Eggs, Milk, Fish, Shellfish, Peanuts, tree Nuts, Soy, and Wheat  
Also- Insect Venom, Medications, Latex, Animal Dander

## Medication and Treatment

The drug epinephrine, also known as “adrenalin”, is the drug of choice used to treat and reverse the symptoms of anaphylaxis. It works by raising blood pressure, relaxing the bronchial muscles and reducing tissue swelling. *It is generally considered safer to inject epinephrine at the first sign of anaphylaxis than to wait or delay treatment.* The drug is very fast acting, but its effects only last from 5 to 15 minutes. Therefore it is imperative that Emergency Services (911) always be called as a second dose may be required. The side effects of this drug are rapid heart rate, tremor and nervousness/anxiety.

Auto-injectors are available in the following single dose units:

**EPIPEN JR (0.15mg)      For children weighing 33 to 66 pounds (approx. 3yrs to 9 or 10 yrs)**

**EPIPEN (0.3mg)      For individuals greater than 66 pounds (older children and adults)**

Epinephrine auto injectors should be stored in a safe, unlocked and accessible location at room temperature. Stock epinephrine is intended for use on school premises and should not be carried offsite. Each school should maintain documentation that stock epinephrine has been checked on a monthly basis to ensure proper storage, expiration date, and medication stability.

## Standard Orders and Training

All school personnel should be taught to recognize the signs and symptoms of a severe allergic reaction. Standing Orders are written by an authorized medical provider to cover multiple people as opposed to individual-specific orders, which are written for one person. Belgrade Public Schools has designated Bozeman Health- Belgrade Clinic to prescribe non-student specific epinephrine, to be administered to any student or non-student believed to be having

an anaphylactic reaction on school grounds, during the academic day. Standing Orders must be renewed annually and with any change in prescriber.

Epinephrine will be administered to any student or non-student believed to be having an anaphylactic reaction by a school nurse, or a designated employee of the school who is authorized and trained in the administration of epinephrine.

### **Post Event Actions**

Once epinephrine has been administered, local EMS (911) shall be activated and the student transported to the emergency room for follow up care. In some reactions the symptoms go away, only to return one to three hours later. This is called a biphasic reaction. These second phase reactions often affect the respiratory tract and may be more severe than the first phase reaction. Therefore follow up care is necessary.

The event shall be documented and an Incident Report completed. Stock epinephrine will be replaced.