

**Sample Protocol for Treatment of Symptoms of Anaphylaxis -
Epinephrine Autoinjector Administration by School Health Professionals and Trained Personnel
For School Age Children – Kindergarten - Grade 12**

ARE SIGNS AND SYMPTOMS OF POSSIBLE ANAPHYLAXIS PRESENT AND WAS THERE AN EXPOSURE TO A POSSIBLE TRIGGER? (food, insect sting, latex, medication or other trigger). Contact the school nurse immediately.

If YES, proceed with this protocol.

If NO, see Signs, Symptoms & Triggers section on reverse.

If the student has an **Emergency Care Plan**, follow the plan immediately.

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| <p><u>Are any of these signs and symptoms present and severe?</u></p> <p>LUNG: Short of breath, wheeze, repetitive cough HEART: Pale, blue, faint, weak pulse, dizzy, confused THROAT: Tight, hoarse, trouble breathing/swallowing MOUTH: Obstructive swelling (tongue and/or lips) SKIN: Hives over body</p> | <p><u>Or is there a COMBINATION of symptoms from different body areas?</u></p> <p>SKIN: Hives, itchy rashes, swelling (eyes, lips) GUT: Vomiting, cramping pain, diarrhea HEENT: Runny nose, sneezing, swollen eyes, phlegmy throat OTHER: Confusion, agitation, feeling of impending doom</p> <p>If YES, quickly follow the protocol below: If No, see Signs, Symptoms & Triggers section on reverse.</p> |
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DO NOT DELAY TREATING ANAPHYLAXIS. When in doubt, give epinephrine. Contact the School Nurse immediately.
Treating anaphylaxis in the first few minutes can save a life. Not all anaphylaxis has skin symptoms.

Follow the building emergency response plan/protocol and:

1. IMMEDIATELY ADMINISTER EPINEPHRINE AUTOINJECTOR PER STANDING ORDER:

- 0.15 mg - body weight less than 55 pounds (*see reverse page if weight unknown*)
- 0.3 mg - body weight 55 pounds or more
- Inject into middle outer side of upper leg, note time and site of injection
- *Stay with student and monitor closely*

2. Designate a person to call Emergency Medical System (911) and request ambulance with epinephrine

3. Designate a person to notify, school administration and student's emergency contact(s)



4. Stay with and observe student until EMS (ambulance) arrives.

- Maintain airway, monitor circulation, start CPR as necessary.
- Do not have the student rise to an upright position.
- Consider lying on the back with legs elevated, but alternative positioning is needed for vomiting (side lying, head to side) or difficulty breathing (sitting).
- Observe for changes until EMS arrives.

5. IF NO IMPROVEMENT OR IF SYMPTOMS WORSEN IN ABOUT 5 OR MORE MINUTES, ADMINISTER A SECOND EPINEPHRINE DOSE according to local policy

- Provide EMS with identifying information, observed signs and symptoms, time epinephrine administered, used epinephrine autoinjector to take with to the hospital
- **Transport to the Emergency Department via EMS even if symptoms seem to get better.**

Physician Signature: _____ Date: _____

See reverse for additional information.

Protocol Notes - For an emergency, follow the directions on the reverse side

Epinephrine Autoinjector Administration by School Health Professionals and Trained Personnel

DO NOT DELAY TREATING ANAPHYLAXIS. Treating anaphylaxis in the first few minutes can save a life.

School nurse administration is preferable. Training non-licensed staff to recognize and treat first time anaphylaxis requires extensive and well thought out training.¹ Nursing assessment cannot be delegated.

Signs, Symptoms & Triggers:

- SEVERE SYMPTOMS WITH NO KNOWN TRIGGER: Seeing rashes such as hives AND additional serious symptoms warrant epinephrine administration.
 - If no trigger found and symptoms are severe, then consider asthma, fainting, heart condition, seizure, viral illness and contact the school nurse. If there is no school nurse available, contact the school designee for assistance and CALL 911 as needed per district guidelines.
 - When unsure or unclear, do not let concerns over whether severe difficulty breathing is caused by anaphylaxis or asthma keep you from using epinephrine. Severe asthma can be treated with epinephrine.⁴
- MILD SYMPTOMS: Whether or not there was exposure to a known trigger, refer to the school nurse to monitor closely and assess. Do not delay administration of epinephrine if symptoms progress.
 - Do not leave the student. Mild symptoms can quickly become severe.
 - If symptoms become severe, administer epinephrine per protocol on reverse.**

Determining the proper dose of stock epinephrine (recommended):

Currently several methods may be used to decide at what weight or age to give an adult strength dose autoinjector.

- Weight based, although most accurate, may not be practical in emergency situations and an alternative method should be determined by local policy. Do not delay giving epinephrine to obtain weight.
- See your state's regulations and train accordingly.

| Weight | Length | Grade | Age | Epinephrine Autoinjector |
|---|---|------------------------------|-----------|--|
| Less than 55 lb. (25kg) ² | Less than 125 cm. (measure top of head to heel) Consider using tape or a string of this length and storing with stock epinephrine | Pre-k or Kindergarten | 3 – 6 | 0.15 mg Junior <i>May give adult dose if pediatric dose unavailable.</i> |
| Greater or equal to 55 lbs. (25kg) ² | Greater than or equal to 125 cm. (measure top of head to heel) | 1 st grade and up | 7 – adult | 0.30 mg Adult |

Transporting to the hospital:

- Students should always be transported to the hospital following administration of epinephrine.
- They are at risk for a secondary or biphasic reaction which may require immediate treatment (as many as 1/3 of children will experience a secondary reaction).³

After an emergency event:

- Make sure parents/guardians are notified to follow up with private physician. Follow up with family - evaluate plan.
- In the case of the student with known history, discuss how exposure occurred and if new allergen avoidance measures are needed. For students with no previous history of anaphylaxis, consider developing an IHP in collaboration with the PCP for possible future occurrences.
- Complete documentation per district policy.
- Make sure replacement epinephrine autoinjector is obtained.
- Review response and emergency communication, update as needed to improve outcomes.

¹Role of the School Nurse in Providing School Health Services. Council on School Health Pediatrics 2008;121;1052.

²Sicherer, S. & Simons, E. (2007). Self-injectable epinephrine for first-aid management of anaphylaxis. *Pediatrics*, 119 (3), 638 – 646. NIAID food allergy guidelines 6.3.1, accessed from <http://www.niaid.nih.gov/topics/foodallergy/clinical/Pages/default.aspx>

³Schoessler, S. & White, M. (2013). Recognition and treatment of anaphylaxis in the school setting: The essential role of the school nurse. *Journal of School Nursing*, 29, 407 – 415. doi: 10.1177/1059840513506014

⁴NAEPP Suggested Emergency Nursing Protocol for Students with Asthma Symptoms Who Don't Have a Personal Asthma Action Plan at <http://www.nhlbi.nih.gov/files/docs/resources/lung/sch-emer-actplan.pdf>