Anaphylaxis Policy

I. Introduction:

The purpose of this Scott County School Policy on Anaphylaxis is to provide best-practice guidelines for responding to anaphylaxis in the school setting. It is not intended to supersede the individual prescriptive orders for epinephrine administration contained in the individualized healthcare plans of students with an established need for epinephrine availability. In fact, all students who have had a prior anaphylactic reaction or otherwise identified as with need for epinephrine availability, should have this addressed specifically in an individualized healthcare plan and should provide epinephrine for their personal use to their school.

II. Definition of Anaphylaxis:

Anaphylaxis is one type of allergic reaction, in which the immune system responds to otherwise harmless substances from the environment (called "allergens"). A variety of allergens can provoke anaphylaxis, but the most common culprits are food, insect venom, medications, and latex. Unlike other allergic reactions, however, anaphylaxis is potentially lethal and can kill in a matter of minutes. Anaphylaxis typically begins within minutes or even seconds of exposure, and can rapidly progress to cause airway constriction, skin and intestinal irritation, and altered heart rhythms. Without treatment, in severe cases, it can result in complete airway obstruction, shock, and death. Initial emergency treatment is the administration of injectable epinephrine (also known as "adrenaline") coupled with immediate summoning of emergency medical personnel and emergency transportation to the hospital. Appropriate, timely treatment can totally reverse anaphylaxis and return a child or adult to their prior state of health.

III. Signs and Symptoms of Anaphylaxis:

- Sudden difficulty breathing, wheezing
- Sneezing or coughing
- Hives, generalized flushing, itching, or redness of the skin, or paleness
- Swelling of the throat, lips, tongue, eyes, face; tightness/change of voice; difficulty swallowing
- Blueness around lips, inside lips, eyelids
- Low blood pressure, dizziness and/or fainting
- Heart beat complaints: rapid or decreased
- Tingling sensation, itching, or metallic taste in mouth
- Sweating and anxiety
- Feeling of apprehension, agitation
- Nausea, abdominal pain, vomiting and diarrhea
- Loss of consciousness
- Burning sensation, especially face or chest

Although anaphylaxis typically results in multiple symptoms, reactions may vary substantially from person to person. In some individuals, a single symptom may indicate anaphylaxis. Anaphylaxis usually occurs quickly-within seconds or minutes of exposure; death has been reported to occur within minutes. An anaphylactic reaction occasionally can occur up to one to two hours after exposure to the allergen.

IV. Treatment of Anaphylaxis

A. **Epinephrine**- also known as "adrenaline" is the drug of choice to treat and reverse the symptoms of anaphylaxis by constricting blood vessels and raising blood pressure, relaxing the bronchial muscles and reducing tissue swelling. It is a prescribed medication and is administered by injection, either intramuscularly by an auto-injector or intramuscularly by syringe. **It should be administered at the first sign of anaphylaxis.** It is safer to administer epinephrine than to delay treatment for anaphylaxis. The sooner it is treated, the greater the person's chance for survival. It is fast acting, but its effects last only 5-15 minutes; therefore, a second dose may be required if symptoms continue or return.

B. **Doses**- epinephrine is available premeasured in an auto-injector or by ampule or vial. The single dose epinephrine auto-injector is available in two doses: **.15mg (for individuals weighing 33-66 lbs.) and .3mg (for individuals weighing greater than 66 lbs.)** Each school will stock 2 doses of both concentrations. Unless the principal can say 100% of the students weigh >66 lbs, only 2 doses of the .3mg concentration will be mandatory. Schools will use only the auto-injectors.

C. **Trained Personnel-** Epinephrine auto-injectors can be administered in the school setting by both licensed personnel (i.e., registered nurse, physician) and by trained unlicensed personnel as well as by self-administration in the case of older students. Persons rendering emergency care in good faith shall not be liable for any civil damages for ordinary negligence in acts or omissions resulting from the rendering of such treatment. (Code of Virginia § 8.01-225) Unlicensed personnel shall be trained on an annual basis by a licensed registered nurse or physician. Training shall be conducted utilizing the most current edition of the Virginia Department of Education *Manual for Training of Public School Employees in the Administration of Medication*. **Each school administrator shall appoint 2 personnel to receive Epinephrine Administration training and administer epinephrine in the absence of the school nurse. All school staff shall be trained annually on the signs and symptoms of Anaphylaxis by a registered nurse or physician.**

D. **Storage**- Epinephrine auto-injectors should be stored in a safe, unlocked and accessible location, in a dark place at room temperature (between 59-86 degrees F). It should be protected from exposure to heat, cold or freezing temperatures. Supplies associated with responding to suspected anaphylaxis should be stored along with the epinephrine (ex. Incident Form, copy of Anaphylaxis guidelines, Epi Injection Directions)

E. **Inspection**- The expiration date of epinephrine solutions should be periodically checked. Each school should maintain documentation that stock epi has been checked on a monthly basis to ensure proper storage, expiration date, and medication stability. The medication should be discarded if expired and immediately replaced. The drug should be checked for discoloration or contents of solid particles if contents are visible. If contents are cloudy or contain solid particles, the drug should be discarded in a sharps container and replaced immediately. For replacement, nurse coordinator should be contacted.

V. Administration of Epinephrine by Auto-injector

A. Based on symptoms, determine that an anaphylactic reaction appears to be occurring. Act quickly. It is safer to give epinephrine than to delay treatment. ***Anaphylaxis is a life-threatening reaction.***

B. If you are alone and are able to provide epinephrine, call out or yell for help as you immediately go to get the epinephrine. Do not take extra time seeking others until you have provided the epinephrine.

C. If you are alone and do not know how to provide epinephrine, call out or yell for help. If someone is available to help you, have them get the personnel trained to provide

epinephrine while you dial 911 and follow the dispatcher's instructions. Advise 911 operator that anaphylaxis is suspected and epinephrine is available. Your goal is to get someone (EMS or trained personnel) to provide epinephrine and care as soon as possible.

D. Select appropriate epinephrine auto-injector to administer, based on weight.
   Dosage: .15 mg if <66 lbs
   .3 mg if >66lbs
   Frequency: If symptoms persist or return, a second dose should be administered 5-15 minutes after the first dose.
E. Inject epinephrine via auto-injector: Pull off safety release cap. Swing and jab firmly into upper, outer thigh (through clothing if necessary). **Hold in place for 10 seconds to deliver medication and then remove.** Massage area for 10 seconds. Note the time.
F. Call or have a bystander call 911 immediately or activate the Emergency Medical System (EMS). Advise the 911 operator that anaphylaxis is suspected and epinephrine was given.
G. Keep the individual either lying down or seated. If they lose consciousness, check if they are breathing and have a pulse. If not, begin CPR, call out for help and continue CPR until the individual regains a pulse and is breathing or until EMS arrives and takes over.
H. Call school nurse, administrator, or office staff and advise of situation.
I. Repeat the dose after 5-15 minutes if symptoms persist or return.
J. Stay with the individual until EMS arrives, continuing to follow the directions in #5 above.
K. Provide EMS with Epinephrine auto-injector labeled with name, date, and time administered to transport to the ER with the student.
L. Follow up: make sure parents have been notified and are encouraged to let child's pediatrician know about the episode.
M. Complete required documentation of incident.
N. Order replacement epinephrine auto-injector(s) by contacting nurse coordinator.

VI. Standing Order

Standing orders are written to cover multiple people as opposed to individual-specific orders, which are written for one person. Scott County Schools shall designate an authorized medical provider (MD, DO, PA, or NP with prescriptive authority) to prescribe non-student specific epinephrine in the school division, to be administered to any **student** believed to be having an anaphylactic reaction on school grounds, during the academic day. This order does not cover faculty or guests, only Scott County Students. Standing orders must be renewed annually and with any change in prescriber.

VII. Incident Report of Anaphylactic Reaction

A "Report of Anaphylactic Reaction" must be filled out immediately following the incident and rescue of the anaphylactic reaction. (see attached form) Person responsible for initiating the completion of this form should be either the 1st Responder who administered the epinephrine or the school Administrator. All parties involved in the rescue shall have input in the completion of this report. Once completed, a copy should be sent to the nurse coordinator, School Board Office, and the original shall be filed in the student's medical records.

VIII. Offsite School Activities

Stock Epinephrine is intended for use on school premises and should not be carried offsite. Additional epinephrine should be made available along with arrangements for administration during field trips and other official offsite school activities.