Kentucky Department for Public Health

Clinical Protocol for Epinephrine Use in the School Setting

Our mission is to improve the health and safety of people in Kentucky through prevention, promotion and protection.

TEAM KENTUCKY®

CABINET FOR HEALTH AND FAMILY SERVICES

Revised: 2026

Kentucky Public Health

Prevent. Promote. Protect.

Kentucky regulations state that the Kentucky Department for Public Health (KDPH) shall develop clinical protocols to address emergency medication administration, including epinephrine, in the school health section of the Clinical Service Guide that is maintained by the local health department. This protocol addresses epinephrine kept by schools to administer to any student believed to be having a life-threatening allergic or anaphylactic reaction and to advise on clinical administration of the epinephrine. This protocol shall be developed in collaboration with local health departments or local clinical providers, local schools and school districts.

Each school electing to keep epinephrine shall implement policies and procedures for treatment of anaphylaxis, developed and approved by the local school board.

Contact Information: For questions about this protocol, contact:

Micha Compton, MSN-PH, RN
Branch Manager
Kentucky Department for Public Health
Division of Maternal and Child Health
Clinical Support Services Branch
275 East Main Street, HS2-EE
Frankfort, KY 40621
Office: 502-564-3433
Micha.Compton@ky.gov

Michelle Malicote, BSN, RN
School Health Section Supervisor
Kentucky Department for Public Health
Division of Maternal and Child Health
Clinic Support Services Branch
Work cell: 502-229-5007
Michelle.Malicote@ky.gov

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The following individuals and organizations contributed to this protocol.

- Lori Caloia, MD, MPH, FAAFP, Deputy Commissioner for Clinical Affairs
- Lyndsey Neese, MD, MMM, CPE, FACOG, Director, Division of Maternal and Child Health
- Andrew Waters, MPH, RS, Assistant Director, Division of Maternal and Child Health
- Micha Compton, MSN-PH, RN, Clinical Services Support Branch Nurse Manager, Division of Maternal and Child Health
- Michelle Malicote, BSN, RN, School Health Section Supervisor, Division of Maternal and Child Health
- Beth Thomas, BSN, RN, School Health Administrator, Division of Maternal and Child Health
- Candace Carpenter, BSW, MS, School Health Coordinator, Division of Maternal and Child Health

School Nursing Practice

- Ruth C. Willard, DNP, MBA, RN-BC, Director of Nursing

Administrative Support

- Kyra Vermillion Dailey, MBA, Director of Public Health Content, Office of the Commissioner

Collaborating Agencies:

Kentucky Department of Education

- Jim Tackett, School Health Branch Manager, Division of District Support, Kentucky Department of Education
- Angie Spaw McDonald, RN, Education State School Nurse Consultant, School Health Branch, Kentucky Department of Education

University of Kentucky

- Angela D. Houchin, MD, Assistant Professor of Pediatrics

Public Health Authority for School Health

The KDPH serves as Kentucky's statewide public health authority for school health, providing expertise, standards and clinical guidance to help schools deliver safe, consistent and medically sound services to students. Its work spans several core areas.

Public health leadership in school health

KDPH develops and shares evidence-based health guidance that supports schools in managing everyday student health needs and responding to emergencies. This includes shaping clinical expectations for managing chronic conditions, addressing communicable disease concerns and promoting preventive health practices that reduce risks for students and staff.

Partnership with the education system

KDPH works closely with the Kentucky Department of Education (KDE) to align school health practices with public health principles. This collaboration ensures that school districts have access to medically accurate standards, training expectations and resources that support safe delivery of health services by nurses and trained school personnel.

Emergency preparedness and response

KDPH provides the clinical direction schools rely on during health emergencies, including anaphylaxis, asthma attacks, severe hypoglycemia and suspected opioid overdoses. By offering medically grounded protocols and training support, the department helps ensure that school staff can respond quickly and appropriately while maintaining student safety.

Support for healthier school environments

KDPH contributes to statewide efforts to promote healthier school environments, including initiatives in disease prevention, environmental health and student wellness. Its guidance helps schools adopt practices that support attendance, learning and overall well-being.

Statewide consistency and public health alignment

Through its expertise, KDPH helps create uniform expectations for school health across Kentucky, reducing variation among districts and ensuring that student health services reflect current public health knowledge. While schools and the education system manage day-to-day operations, KDPH provides the medical foundation that underpins safe and effective school health practice.

Purpose

This protocol establishes standardized procedures for the emergency use of epinephrine by trained school personnel to respond to any student believed to have an anaphylactic reaction in the school setting. It also provides guidance on recognizing and responding to a student believed to be experiencing anaphylaxis and on safely administering or assisting in administering these medications to any student believed in good faith to be experiencing anaphylaxis, regardless of diagnosis. The goal is to reduce morbidity and mortality by making sure schools have access to this potentially lifesaving emergency treatment, enabling trained school personnel to respond rapidly and safely during a medical emergency.

This protocol was developed in collaboration with the Kentucky Department of Education (KDE), local school districts, local health departments, local clinical providers and pharmacists to provide guidance on the clinical administration of epinephrine and to address its use in the school setting and is available for download from our website.

Scope

This protocol applies to:

- Schools and school districts that maintain emergency epinephrine.
- Trained school personnel are authorized to administer epinephrine under a district standing order signed by a qualified health care provider.
- Any student on school property or at a school-sponsored event who is reasonably believed to be experiencing anaphylaxis, regardless of known anaphylaxis diagnosis or possession of a personal epinephrine delivery device.

Definitions

- Standing Order: Written authorization from a licensed healthcare practitioner permitting trained personnel to administer epinephrine.
- Epinephrine, also known as adrenaline, is both a neurotransmitter and a hormone. It plays an important role in your body's "fight-or-flight" response. It's also used as a medication to treat many life-threatening medical conditions.
- Anaphylaxis: A severe, rapid-onset, life-threatening allergic reaction involving multiple body systems and requiring immediate emergency treatment.
- Trained School Personnel: Employees who have completed district-approved training and are authorized to administer medication under KRS 156.502.

Legal Authority

This protocol is developed in accordance with state laws that permit schools to maintain and administer emergency medication under a standing order from a licensed healthcare provider and states that the KDPH shall develop clinical protocols to address the supply of emergency medication, including epinephrine kept by schools. These laws provide civil and criminal immunity for good-faith administration during emergency administration.

KRS 160.290 General powers and duties of the board, in summary, gives each local board of education broad authority to manage and oversee all public schools within its district. This includes the power to:

- Establish schools, courses and services that support education, student health and student welfare, if they align with Kentucky Board of Education regulations.

About Local Board Policies

- District policies created under this authority:
- Explain how the district will carry out state laws and regulations.
- Provide guidance, protocols and procedures for staff and schools.
- Help protect students, employees and the district by ensuring consistent practices.
- May be developed with support from the Kentucky School Boards Association (KSBA), which offers a policy-writing service to districts.

Each school electing to keep undesignated glucagon shall implement policies and procedures for managing a student's life-threatening hypoglycemic episode, developed and approved by the local school board.

KRS 156.502 Health services in the school setting, in summary, states that school employees may perform certain health services only when properly trained, formally delegated and documented in writing by a qualified health professional

KRS 158.836 Possession and use of asthma or anaphylaxis medications -- Students with documented life-threatening allergies -- Schools electing to keep epinephrine on premises-Limitation of Liability allows students who have asthma or are at risk for anaphylaxis to carry and use their prescribed medications—such as inhalers or epinephrine—while at school, during school-sponsored activities, under school staff supervision and on school property before or after school, including programs like childcare or after-school activities. The law ensures these students can access lifesaving treatment when needed.

KRS 311.646 Prescription injectable epinephrine auto-injectors and bronchodilator rescue inhalers allows trained individuals and authorized entities (such as schools, businesses, or organizations) to obtain, store and use prescription epinephrine auto-injectors and bronchodilator rescue inhalers for emergency treatment of severe allergic reactions, asthma symptoms, or respiratory distress.

KRS 311.647 Immunity from civil liability for rendering emergency care or treatment provides civil immunity to people or organizations that in good faith administer emergency treatment using an epinephrine auto-injector or a bronchodilator rescue inhaler.

Delegation

- KRS 314.011 Definitions.
- KRS 314.021 Policy states that "all individuals licensed shall be responsible and accountable for making decisions that are based upon the individuals' educational preparation and experience and shall practice with reasonable skill and safety."
- Nurses who make delegatory decisions regarding the performance of acts/tasks by others are governed by 201 KAR 20:400 Delegation of nursing tasks.
- Kentucky Board of Nursing RN Supervision and Delegation - KBN.
    - AOS #15 Supervision and Delegation.
    - AOS #30 School Nursing Practice.

KDPH recommends that school staff be familiar with the laws governing medication administration in schools.

Training Requirements

School staff must complete the approved Medication Administration Training Program prior to administering medication to students as required per KRS 156.502. Training must be provided annually, documented and retained by the school for 1 year.

Staff should review manufacturer instructions for injectable epinephrine or intranasal epinephrine spray/powder (approved for children weighing 33 pounds or more) as source material and, to the extent possible, utilize manufacturer training instructions, including available visuals and videos, with clarifications specific to the situation.

All school personnel authorized to administer epinephrine, including those in extracurricular programs, should receive annual training that provides:

- Basic understanding of anaphylaxis.
- How to recognize symptoms and how to distinguish respiratory distress from anaphylaxis.
- How to respond to an emergency involving anaphylaxis.
- Understanding epinephrine's purpose and limitations.
- Safe administration techniques.
- Emergency response procedures, including calling 911.
- Identification of the appropriate staff person(s) to contact immediately in case of an emergency.
- Post event monitoring and documentation.

- A test demonstrating competency of the knowledge required to recognize respiratory distress and administer asthma medication.

Procedure

Required Supplies

Each school that maintains stock emergency medication must have the following supplies readily available for emergency use:

- Epinephrine medication.
- Personal protective equipment — gloves, face shields and other barrier devices to support safe response.
- Emergency response materials — items such as a CPR mask (if available), disposable wipes and a small trash bag for contaminated materials.
- Incident documentation forms — district-approved forms for recording epinephrine medication administration and emergency response details.
- Copies of the standing order and this protocol — kept with the epinephrine or in an immediately accessible location.
- Optional supportive supplies — such as a pocket pulse oximeter or rescue breathing mask, if the district chooses to include them.

Storage, Security and Maintenance

- Store the epinephrine medication in a secure but readily accessible location for emergency use.
- Maintain storage within the recommended controlled room temperature.
- Conduct monthly checks for:
    - Expiration dates
    - Package integrity
- Replace epinephrine medication immediately if used, expired, or damaged.
- School staff should be familiar with the type of medication maintained by their agency and its use.

School staff should refer to the package insert for the specific stock emergency medication used in their facility and store it according to the individual manufacturer's directions.

Injectable epinephrine

- Store epinephrine auto-injectors as close to room temperature as possible. Leaving them in extreme heat or cold can make the epinephrine ineffective or cause the auto-injector to malfunction. Do not store them in a car or in a refrigerator.
- Keep auto-injectors out of direct sunlight. This can cause epinephrine to oxidize (when combined with oxygen), altering its structure and making it ineffective. Oxidized epinephrine will appear dark or have solid particles in it.

- Epinephrine can also oxidize on its own over time, so check your device regularly to be sure the liquid inside is clear.

Intranasal epinephrine spray/powder

- Keep at standard room temperature (generally 68–77°F).
- Avoid prolonged exposure to extreme heat or freezing temperatures.
- Store in a secure but quickly accessible location, like stock epinephrine auto-injectors.
- Maintain it in its original packaging to protect it from light and damage.

Indications for Use

Anaphylaxis has a sudden onset (minutes to a few hours) after exposure to a food, drug, insect sting, or other trigger, of two body system symptoms at the same time. It potentially involves some of the following signs and symptoms:

- Shortness of breath, wheezing, coughing or tightness in chest
- Trouble breathing or swallowing
- Skin changes like rash, redness or hives and/or pale or bluish color
- Swelling of the lips or tongue
- Sneezing, stuffy nose, runny nose
- Tight throat, difficulty swallowing, hoarseness
- Weak pulse
- Vomiting, diarrhea (if severe or combined with other symptoms)
- Dizziness or fainting
- Feeling of "doom," confusion, drowsiness or agitation

Contraindications

There are no absolute contraindications to giving epinephrine, which is the first line, life-saving treatment, to a student who is reasonably believed to be experiencing anaphylaxis in a public-school setting.

Administration of epinephrine devices

Act Fast!! Always go with a distressed individual. Never send the individual to the health room/school nurse alone or leave them alone. Do not move an individual who is in severe distress.

Initial Assessment

1. Identify that symptoms of an anaphylactic reaction are present.
2. Assess the child's airway, breathing, circulation, and skin.
3. Call for assistance.
4. Ask that another school staff person call 911 or emergency medical services.

5. Explain the procedure to the child at their level of understanding.
6. Assemble supplies and place on a clean surface.
7. Wash your hands if possible.
8. Put on gloves.
9. Administer epinephrine as described below.
10. If needed, ask another person for assistance.
11. If you are alone with the student and you have not called 911 or emergency medical services, do so now.
12. Monitor the student's arousal, pulse and respirations.
13. Place the student on their back.
14. Elevate the lower extremities.
    a. Do not allow standing, walking, or running.
15. If the child vomits or has trouble breathing, put the student in the side-lying position.
16. If breathing stops, begin rescue breaths.
17. If breathing and heartbeat stop, begin administering CPR.
18. Once the rescue squad arrives, inform them of the medication administered, including the type of medication, dose and time.
19. Send along the used dose of epinephrine.
20. Dispose of all used materials in proper receptacles.
21. Remove gloves and wash hands.
22. Follow up with the parent or guardian and healthcare provider, as needed.
23. Document medication administration in the student's medication administration log.

Monitoring

- Stay with the individual until EMS arrives.
- If breathing improves, place the person in the recovery position.
- Be aware that symptoms may return as the epinephrine wears off.
  - A 2-hour observation period following an initial dose of epinephrine is recommended for most children presenting with anaphylaxis.

Injectable epinephrine

Note: Refer to the specific manufacturer instructions.

1. Take off the cap.
2. Press the tip firmly on the thigh at a perpendicular (right) angle.
3. Swing and push the injectable epinephrine device firmly until you hear a click.
4. Hold firmly for 10 seconds.
5. Remove the injectable epinephrine device.
6. Massage the area for 10 seconds.
7. Begin monitoring airway and breathing.
8. For a severe reaction, consider keeping the student lying on their back with legs raised.
9. Remain with the student and reassure him or her as needed.
10. A second dose of epinephrine may be given 5 minutes or more after the first if symptoms persist or recur.

11. Document the student's name, date and time epinephrine was administered on the used injectable epinephrine device.
12. Give it to EMS, when EMS arrives, so that the information will accompany the student to the emergency department.
13. Even if symptoms subside or go away, EMS must still be summoned to respond, and the student must be evaluated by a physician. A delayed or secondary reaction may occur up to several hours later.
14. Document the incident and complete the school incident report.
15. Replace epinephrine stock medication as appropriate.

Intranasal epinephrine spray/powder

Note: Refer to the specific manufacturer instructions.

1. Remove packaging.
2. Hold the device as shown with your thumb on the bottom of the plunger and a finger on either side of the nozzle.
3. Do not pull or push the plunger before activation.
4. Do not test or prime. Each device has only 1 spray (dose).
5. Insert the nozzle into a nostril until your fingers touch their nose. Keep the nozzle straight into the nose, pointed towards their forehead. Do not point or angle the nozzle to the nasal septum or outer wall of the nose.
6. Press the plunger up firmly until it snaps up and sprays liquid into the nostril. Do not sniff in during or after the dose is given to prevent going into the throat or improper absorption of the nasal product.
7. If any liquid drips out of the nose, you may need to give a second dose after checking symptoms.
8. If a response is seen within 5 to 10 minutes a second dose may not be necessary.
9. After 5 minutes, if symptoms are not responding (improving) or getting worse, give a repeat dose of intranasal epinephrine.
10. Dispose of the used device in a household trash can. Do not recycle.

Post-Event

- Notify school administration and the school nurse.
- Notify parent/guardian if the individual is a student.
- Replace the used emergency medication promptly.
- Complete required documentation within 24 hours.

Documentation Requirements

Documentation must include:

- Date, time and location of the incident.
- Observed symptoms and circumstances.
- Emergency medication administration details.

- Response to emergency medication.
- EMS involvement.
- Names of staff involved.
- Parent/guardian notification (if applicable).
- Name, date, time and route the medication was administered.
  - Give this information was given to EMS so that the information would accompany the individual to the hospital's emergency department.
  - All documentation must be submitted to the school nurse or designated administrator.
  - Complete the school incident report.
  - Replace stock emergency medication as soon as possible.

Quality Assurance

The district will:

- Review all stock emergency medication administration reports annually.
- Maintain inventory and expiration logs.
- Monitor staff training compliance.
- Update this protocol annually in collaboration with the prescribing healthcare provider.

Integration with Individual Health Plans (IHPs)

- Clarify that students with known anaphylaxis should have an IHP and personal use epinephrine.
- Stock epinephrine use is primarily for:
  - Emergencies when a student's epinephrine is unavailable, or
  - Students without a known diagnosis.

Resources

Allergy and Asthma Network

- Managing Allergies in Schools: A Guide for Parents - Allergy & Asthma Network
- Anaphylaxis = Epinephrine: Treating a Severe Allergic Reaction (allergyasthmanetwork.org)
- Anaphylaxis | Allergy & Asthma Network (allergyasthmanetwork.org)
- What is Epinephrine? | Allergy & Asthma Network (allergyasthmanetwork.org)

American Academy of Allergy Asthma & Immunology (AAAAI)

- Anaphylaxis Symptoms, Diagnosis, Treatment & Management | AAAAI
- Stock Epinephrine Toolkit for Schools (aaaai.org) American Academy of Pediatrics
- Allergy and Anaphylaxis Management in Schools (aap.org)

- Epinephrine for First-aid Management of Anaphylaxis | Pediatrics | American Academy of Pediatrics (aap.org)
- Guidance on Completing a Written Allergy and Anaphylaxis Emergency Plan | Pediatrics | American Academy of Pediatrics (aap.org)
    - AAP_Allergy_and_Anaphylaxis_Emergency_Plan.pdf

ARS Pharmaceuticals

- Epinephrine Nasal Spray for Type I Allergy Patients | Neffy
- Neffy Introduction and How to Use Presentation-ARS Pharma

Centers for Disease Control and Prevention

- Food Allergies in Schools
- Food Allergies in Schools Toolkit
- Voluntary Guidelines for Managing Food Allergies In Schools and Early Care and Education Programs

Food Allergy and Anaphylaxis Network (FAAN)

- Back-to-School Resource Hub | Food Allergy Research & Education
- Food Allergy & Anaphylaxis Emergency Care Plan - FoodAllergy.org

Food Allergy Research and Education

- Food Allergy and Anaphylaxis Emergency Care Plan
- Microsoft Word - Anaphylaxis Emergency Action plan updated 2020_AM.docx (aaaai.org)

Kentucky Department of Education

- Student Health Services - Kentucky Department of Education

National Association for School Nurses (NASN)

- Allergies and Anaphylaxis - National Association of School Nurses (nasn.org)
    - Sample Planning Checklists
    - Sample Policy
    - Sample Practice Forms
    - School Personnel Training Resources
    - Education Resources

References

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American Academy of Pediatrics. (2026, March 17) *Allergy and Anaphylaxis Management in Schools,* https://www.aap.org/en/patient-care/school-health/management-of-chronic-conditions-in-schools/allergy-and-anaphylaxis-management-in-schools/

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Tanner, A., & Clarke, C. (2016). Epinephrine Policies and Protocols Guidance for Schools: Equipping School Nurses to Save Lives. *NASN school nurse (Print)*, *31*(1), 13–22. https://doi.org/10.1177/1942602X15607604.

Infographics for Printing

- Symptoms of Anaphylaxis
- How to administer an epinephrine auto-injector
- How to administer intranasal Neffy (epinephrine spray/powder)

District Policy: Emergency Medication Standing Orders, Procedures, and Protocols

Standing orders

- The district shall maintain current standing orders issued by a licensed healthcare provider authorizing the purchase, storage, and emergency administration of epinephrine, bronchodilator rescue inhalers, nebulizers, glucagon, and any other approved emergency medications. Standing orders shall define the medical authority under which designated school personnel may administer these medications during a suspected emergency.

Policies and Procedures

- The district shall develop and implement written policies and procedures to support the safe execution of these standing orders. These procedures shall include requirements for staff training, delegation, documentation, storage, monitoring, and emergency response actions. Designated personnel must complete annual training approved by the Kentucky Department of Education, the Kentucky Department for Public Health, and the Kentucky Board of Nursing.

Protocols

- All standing orders and district procedures shall be carried out in accordance with the clinical protocols developed by the Kentucky Department for Public Health. These protocols, located in the School Health section of the Clinical Service Guide, provide the standardized clinical guidance for recognizing emergencies, administering the authorized medications, and ensuring appropriate follow-up care.

Approval Signatures

School District Superintendent:

Name: _____

_____

Signature Date

District School Health Coordinator:

Name: _____

_____

Signature Date

Health Care Provider:

Name: _____

_____

Signature Date