



Kentucky Department for Public Health
Clinical Protocol for Stock Bronchodilator Rescue Inhaler (BRI)
Emergency Use in the School Setting

Background

[KRS 158.836](#), Possession and use of asthma or anaphylaxis medications -- Students with documented life-threatening allergies -- Schools electing to keep epinephrine injectable epinephrine devices and bronchodilator rescue inhalers on premises -- Limitation of liability. (June 29, 2021) states:

- (3) (a) Each school is encouraged to keep an injectable epinephrine device in a minimum of two (2) locations in the school, including but not limited to the school office and the school cafeteria, so that epinephrine may be administered to any student believed to be having a life-threatening allergic or anaphylactic reaction.
- (b) Each school is encouraged to keep a bronchodilator rescue inhaler in a minimum of two (2) locations in the school, including but not limited to the school office and athletic office, so that bronchodilator rescue inhalers may be administered to any student believed to be having asthma symptoms or respiratory distress.
- (c) Each school electing to keep injectable epinephrine devices or bronchodilator rescue inhalers shall implement policies and procedures for managing a student's life-threatening allergic reaction, anaphylactic reaction, or asthma developed and approved by the local school board.
- (d) The Kentucky Department for Public Health shall develop clinical protocols in the school health section of the Core Clinical Service Guide manual that is maintained in the county or district public health department to address injectable epinephrine devices and bronchodilator rescue inhalers kept by schools under this subsection and to advise on clinical administration of the injectable epinephrine devices and bronchodilator rescue inhalers.
- (4) Any school employee authorized under KRS 156.502 to administer medication shall not be liable for any civil damages for ordinary negligence in acts or omissions resulting from the administration or the assistance in the administration of epinephrine or a bronchodilator rescue inhaler to any student believed in good faith to be having a life-threatening allergic or anaphylactic reaction or asthma symptoms or respiratory distress.

[KRS 311.646](#) Prescription injectable epinephrine auto-injectors and bronchodilator rescue inhalers states:

- (1) A health-care practitioner may prescribe injectable epinephrine devices and bronchodilator rescue inhalers in the name of an authorized entity or to a certified individual for use in accordance with this section.
- (2) A pharmacist may dispense injectable epinephrine devices and bronchodilator rescue inhalers pursuant to a prescription issued in the name of an authorized entity or to a certified individual.
- (3) The Department for Public Health, the Kentucky Board of Medical Licensure, the Kentucky Board of Nursing, the American Red Cross, or other training programs approved by the Department for Public Health may conduct in-person or on-line training for administering lifesaving treatment to persons believed in good faith to be experiencing severe allergic reactions and asthma symptoms or respiratory distress and issue a certificate of training to persons completing the training. The training shall include instructions for recognizing the symptoms of anaphylaxis and asthma and administering an injectable epinephrine device or a bronchodilator rescue inhaler.

(4) An individual who has a certificate issued under this section may:

(a) Receive a prescription for injectable epinephrine devices and bronchodilator rescue inhalers from a health-care practitioner.

(b) Possess prescribed injectable epinephrine devices and bronchodilator rescue inhalers; and

(c) In an emergency situation when a physician is not immediately available and the certified individual in good faith believes a person is experiencing a severe allergic reaction, asthma symptoms, or respiratory distress regardless of whether the person has a prescription for an injectable epinephrine device or a bronchodilator rescue inhaler or has previously been diagnosed with an allergy or asthma:

1. Administer an injectable epinephrine device or a bronchodilator rescue inhaler to the person; and

2. Provide an injectable epinephrine device or a bronchodilator rescue inhaler to the person for immediate self-administration.

(5) An authorized entity that acquires and stocks a supply of injectable epinephrine devices or bronchodilator rescue inhalers with a valid prescription shall:

(a) Store the injectable epinephrine devices and bronchodilator rescue inhalers in accordance with manufacturer's instructions and with any additional requirements established by the department; and

(b) Designate an employee or agent who holds a certificate issued under this section to be responsible for the storage, maintenance, and general oversight of injectable epinephrine devices and bronchodilator rescue inhalers acquired by the authorized entity.

(6) Any individual or entity who administers or provides an injectable epinephrine device to a person who is experiencing a severe allergic reaction shall contact the local emergency medical services system as soon as possible.

(7) Any individual or entity who acquires and stocks a supply of injectable epinephrine devices in accordance with this section shall notify an agent of the local emergency medical services system and the local emergency communications or vehicle dispatch center of the existence, location, and type of the injectable epinephrine devices acquired if a severe allergic reaction has occurred.

- An "Authorized entity" means an entity that may at any time have allergens present that are capable of causing a severe allergic reaction and has an individual who holds a certificate issued under KRS 311.646 on the premises or officially associated with the entity.
- Schools electing to keep stock BRI's to use for students without documented asthma symptoms or respiratory distress, shall maintain stock BRI's in a secure, accessible, but unlocked location.
 - This shall apply to the extent that the BRI's are donated to a school, or a school has sufficient funding to purchase them.
- The school nurse or designee shall check the expiration date monthly and obtain a new prescription for replacement medication prior to expiration date.
- Any school employee authorized to administer medications should be aware of and understand their protections and liabilities as established in applicable regulations, including [KRS 158.836](#) and [KRS 156.502](#).



ASTHMA means a respiratory condition marked by coughing, wheezing, or shortness of breath or chest tightness. Other symptoms may include struggling to breathe, nasal flaring, increased breathing rate, blue or dusky lips/nail beds, agitation, or difficulty speaking.

Common triggers for asthma / respiratory distress:

- Respiratory infection
- Allergens, weather changes, pollen or air pollution
- Chemicals
- Odors – perfumes, deodorants and cleaning supplies, including but not limited to scented candles, incense, and air fresheners.
- Physical activity
- Emotions
- Seasonal changes
- Smoking or exposure to secondhand smoke
- Animals – dander and saliva from fur or feathers
- Foods and medicines
- Pests – dust mites and cockroaches
- Mold

Signs and Symptoms of ASTHMA/Respiratory Distress:

- Uncontrollable coughing, noisy breathing
- Wheezing—a high pitch, whistling sound during breathing out.
- Rapid breathing
- Flaring (widening) of nostrils.
- Feeling of tightness in the chest
- Not able to speak in full sentences.
- Increased use of stomach and chest muscle during breathing
- Blueness around the lips or fingernails

ACTION STEPS FOR STAFF TO MANAGE AN ASTHMA ATTACK

Act fast! Warning signs and symptoms—such as coughing, wheezing, difficulty breathing, chest tightness or pressure, and low or falling peak flow readings—can worsen quickly and even become life threatening. They require quick action.

1. **Quickly assess the situation.**
 - Call 911 or your local emergency service right away if the student is struggling to breathe, talk, or stay awake, has blue lips or fingernails; or asks for an ambulance.
 - If accessible, use a peak flow meter to measure the student's lung function.
2. **Get help but** never leave the student alone. Have an adult accompany the student to the health room or send for help from the school nurse or designee. Do not wait.
3. **Stop activity.** Help the student stay calm and comfortable.
 - If the asthma attack began after exposure to an allergen or irritant (such as furry animals, fresh cut grass, strong odors, or pollen) remove the student from the allergen or irritant, if possible.
4. **Treat symptoms.** Help the student locate and use his or her bronchodilator rescue inhaler (BRI) with a spacer or holding chamber (if available) or use the stock bronchodilator rescue inhaler (BRI).
 - Many students carry their medicine and can self-manage asthma attacks. They should follow their health care provider's instructions. For students without specific orders on file use the school policies and procedures to administer stock BRI provided by the medical director. Provide support as needed.

5. **Call the parent or guardian.**
6. **Repeat use of quick-relief inhaler per MD order / policy or if—**
 - Symptoms continue or return.
 - The student still has trouble breathing; or
 - Peak flow reading is below 80% of student's personal best peak flow number on asthma action plan



Call 9–1–1 or your local emergency service if any of the following occur:

- The student is struggling to breathe, talk, or stay awake; has blue lips or fingernails; or asks for an ambulance.
- The student does not improve, or the student has a peak flow reading below 50% of the student's personal best peak flow number after two doses of quick-relief medication, and the nurse (or designee) or parent or guardian is not available.
- No quick-relief medicine is available; the student's symptoms have not improved spontaneously, and the nurse (or designee) or parent or guardian is not available.
- You are unsure what to do.

How to use an ASTHMA Metered Dose INHALER without a Spacer:

1. **Prepare the Inhaler** – Shake the inhaler well for about 5 seconds and remove the cap.
 2. **Positioning** – Have the child sit or stand up straight.
 3. **Exhale First** – Ask them to breathe out completely to empty their lungs.
 4. **Seal the Mouthpiece** – Place the inhaler's mouthpiece in their mouth, ensuring their lips form a tight seal around it.
 5. **Inhale and Press** – As they start to take a slow, deep breath, press down on the inhaler to release the medication.
 6. **Hold the Breath** – Encourage them to hold their breath for about 5 to 10 seconds to allow the medicine to reach their lungs.
 7. **Exhale Slowly** – They should breathe out gently.
 8. **Repeat if Needed** – If another dose is required, wait about a minute before repeating the process.
 9. **Rinse Mouth**
- **Cleaning:** Clean the spacer about once a week, soak in warm, soapy water and let the air dry.
 - **Empty?** Shake it. If it feels light or you do not feel liquid moving, it is empty and needs to be replaced. Some devices have counters. "0" means empty.



Kentucky Public Health
Prevent. Promote. Protect.



How to Use a Metered-Dose Inhaler without a Valved Holding Chamber or Spacer

Prime a brand-new inhaler: Before using it for the first time, if you have not used it for more than 7 days, or if it has been dropped.



1. Shake inhaler 10 seconds.



2. Take the cap off the inhaler and make sure it is clean and there is nothing inside of the mouthpiece.



3. Breathe out away from the device.



4. Put inhaler mouthpiece in mouth.



5. Press inhaler once and breathe in deep and steady.



6. Hold your breath for 10 seconds, then breathe out slowly.

If you need another puff of medicine, wait 1 minute and repeat steps 3-6.

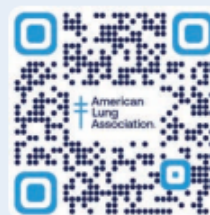


7. Rinse with water and spit it out.

Proper inhalation technique is important when taking your asthma medicine(s) and monitoring your breathing. Make sure to bring all your medicines and devices to each visit with your primary care provider or pharmacist to check for correct use, or if you have trouble using them.

For more videos, handouts, tutorials and resources, visit [Lung.org](https://lung.org).

Scan the QR Code to access How-To Videos



You can also connect with a respiratory therapist for one-on-one, free support from the American Lung Association's Lung HelpLine at **1-800-LUNGUSA**.

©2022 American Lung Association.
All rights reserved. (SEP 2022)

[How to Use a Metered Dose Inhaler CDC \(YouTube Video 1:06\)](#)
[Know How to Use Your Inhaler: CDC National Asthma Control: YouTube Video](#)

How to use an ASTHMA Metered Dose INHALER with Spacer:

1. **Prepare the Inhaler and Spacer** – Shake the inhaler well and remove the cap. Attach the inhaler to the spacer.
2. **Positioning** – Have the child sit or stand up straight.
3. **Exhale First** – Ask them to breathe out completely.
4. **Seal the Mouthpiece or Mask** – If using a mask, place it over their nose and mouth, ensuring a tight seal. If using a mouthpiece, have them close their lips around it.
5. **Press and Breathe** – Press down on the inhaler to release the medication into the spacer. Then, have the child take slow, deep breaths in and out through the spacer for about 5 to 10 seconds.
6. **Repeat if Needed** – If another dose is required, wait about a minute before repeating the process.
7. **Rinse Mouth** – If the inhaler contains corticosteroids, have them rinse their mouth with water (without swallowing) to prevent irritation.
 - Cleaning: Clean the spacer about once a week, soak in warm, soapy water and let the air dry.
 - Empty? Shake it. If it feels light or you do not feel liquid moving, it is empty and needs to be replaced. Some devices have counters. “0” means empty.

How to use your inhaler and spacer



1. Take the cap off the inhaler



2. Shake the inhaler for 5 seconds



3. Attach to spacer and take cap off spacer



4. Breathe **OUT** all the way



5. Close lips around mouthpiece



6. Press down here



7. Breathe in **SLOWLY, DEEPLY**



8. Hold your breath for 10 seconds if you can. Then breathe out slowly.



9. Rinse with water and **SPIT OUT**

For more asthma videos, handouts, tutorials and resources, visit Lung.org/asthma.

You can also connect with a respiratory therapist for one-on-one, free support the American Lung Association's Lung Helpline at 1-800-LUNGUSA.

Developed by the American Lung Association, April 2019.



American Lung Association.

1-800-LUNGUSA | Lung.org





References and Resources

American Academy of Allergy Asthma & Immunology

- [School stock inhaler program \(aaaai.org\)](http://aaaai.org)
- [Asthma Symptoms, Diagnosis, Management & Treatment | AAAAI](#)

Asthma and Allergy Foundation of America

- [Albuterol in Schools for Students with Asthma | AAFA.org](http://AAFA.org)

American Lung Association:

- [Why Schools Should Stock Asthma Inhalers | American Lung Association](#)
- [Model-Policy-on-Stock-Bronchodilators revDEC23.pdf \(lung.org\)](#)
- [What Is Asthma? | American Lung Association](#)
- [Asthma Symptoms | American Lung Association](#)
- [Reduce Asthma Triggers | American Lung Association](#)
- [Asthma Medication in Schools | American Lung Association](#)
- [Asthma-Friendly Schools Initiative Resources and Tools | American Lung Association](#)
- [How to Use Your Inhaler and Spacer \(lung.org\)](#)

American Academy of Pediatrics

- [Stock Inhaler Toolkit](#)

Center for Disease Control (CDC)

- [Asthma | CDC](#)
- [CDC - Asthma - School and Childcare Providers](#)
- [CDC - Asthma - Using an Asthma Inhaler Videos](#)

Kentucky Department for education (KDE)

- [Health Services Reference Guide - Kentucky Department of Education](#)
- Medication Administration Training Manual for Non- Licensed School Personnel, [Medication Administration Training Program - Kentucky Department of Education](#)

National Association for School Nurses (NASN) ASTHMA Resources

- [Asthma - National Association of School Nurses \(nasn.org\)](http://nasn.org)

National Institutes of Health (NIH) 2020 Focused Updates to the Asthma Management Guidelines

- [Ensuring Access to Albuterol in Schools: From Policy to Implementation. An Official ATS/AANMA/ALA/NASN Policy Statement - PMC \(nih.gov\)](#)
- [2020 Focused Updates to the Asthma Management Guidelines: A Report from the National Asthma Education and Prevention Program Coordinating Committee Expert Panel Working Group | NHLBI, NIH](#)
- [Managing Asthma: A Guide for Schools \(nih.gov\)](#)

U.S. Department of Health and Human Services National Institutes of Health “Managing Asthma” A Guide for Schools:

- [Managing Asthma: A Guide for Schools \(nih.gov\)](#)



Resource Toolkits

[Stock Asthma Medication Toolkit](#)

The American Lung Association's Stock Asthma Medication Toolkit includes templates and forms that you can modify for use while implementing an emergency stock asthma medication program at your school. Get access to an Implementation Checklist, School Staff Tracking Form, Standing Medical Order and Prescription templates, data elements for documentation and reporting, a Usage Event Log, and a template email to Parents/Guardians about the program. Learn more about how to use the tools in this toolkit by taking the course, [Stock Asthma Medication: Implementation guidance for schools](#).

[AAAAI Stock Inhaler Toolkit for Schools](#)

In 2023, the American Academy of Allergy Asthma Immunology in partnership with the American Academy of Pediatrics released the [Stock Inhaler Toolkit for Schools](#). The American Lung Association reviewed this document and is pleased to make this available to you. Use this toolkit to: 1) Understand why stock inhalers are important for your campus - for those with and without diagnosed asthma; 2) Learn about stock inhaler laws in your state and develop a compliant school program; 3) Streamline the process of finding the right devices and finding evidence-based training materials for staff; 4) Save both time and money by utilizing our example documents and guidelines; and 5) Get started quickly on the path to help create a safer learning environment.

Other Resources

- [Emergency Response for Life-Threatening Conditions in Schools: Asthma](#) (utah.gov)
- [Guidelines for Use of Undesignated Stock Albuterol in Schools](#) (virginia.gov)
- [Guidelines for Managing Asthma in Virginia Schools](#) (Word)
- [Guidelines for Use of Undesignated Stock Albuterol in Schools](#) (Word)
- [Asthma Action Plan \(2020\)](#) (PDF)
- [Order Albuterol Supplies for schools](#)

Training Resources

- [Learning Center for School Health Professionals](#) (VAsudentservices-clc.org)
- [Learning Center for School Health Professionals-Asthma](#)
- Asthma Basics <https://player.vimeo.com/video/642854554>
- Use and Maintenance of the Stock Inhaler <https://player.vimeo.com/video/642106466>
- Use of Undesignated Stock Albuterol in Schools Training <https://player.vimeo.com/video/644566364>
- [Stock Asthma Medication: Implementation Guidance for Schools](#) (lung.training)
- [Responding to Asthma Emergencies in Schools](#) (lung.training)