



Kentucky Public Health
Prevent. Promote. Protect.

Kentucky Department for Public Health (KDPH) CLINICAL PROTOCOL FOR BRONCHODILATOR RESCUE INHALER (BRI) IN SCHOOL THE SETTING

Background

[KRS 158.836](#) makes provisions for students with asthma symptoms or respiratory distress to have access to a bronchodilator rescue inhaler (BRI) in school.

- A student who has a documented life-threatening asthma symptoms or respiratory distress shall have:
 - a) A BRI provided by his or her parent or guardian in his or her possession or in the possession of the school nurse, school administrator, or his or her designee in all school environments that the student may be in.
 - b) A written individual health care plan in place for the prevention and proactive management for the student in all school environments that the student may be in. The individual health care plan may be incorporated in the student's individualized education program or student's 504 plan.
- Each school is encouraged to keep a BRI in a minimum of two (2) locations in the school, including but not limited to the school office and athletic office so it may be administered to any student believed to be having asthma symptoms or respiratory distress. To minimize the spread of disease, the BRI's and spacers, if applicable, shall be used for one individual student and are not to be shared with any other student.

Stock BRI's

- 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. BRI's may only be purchased with a prescription from a medical provider or pharmacist who may dispense per [KRS 311.646](#). The school nurse or designee shall check the expiration date monthly and obtain a new prescription for replacement medication prior to expiration date.
- Each school electing to keep BRI's shall implement policies and procedures for managing student's asthma symptoms / respiratory distress reaction developed and approved by the local school board.
- KDPH shall develop clinical protocols in the school health section of the Clinical Service Guide manual to address BRI's kept by schools and to advise on clinical administration of BRI's.
- 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 to any student believed in good faith to be having a life-threatening allergic or anaphylactic reaction or asthma symptoms or respiratory distress.
- 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](#).
- The KDPH, 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.



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.
- 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 with Spacer:

1. Take off the caps from both spacer and inhaler.
 2. Shake inhaler.
 3. Insert inhaler into spacer.
 4. Breathe out.
 5. Seal lips around the mouthpiece.
 6. Press the inhaler down once.
 7. Breathe in slowly and deeply. If you hear a whistle, breathing is too fast.
 8. Hold your breath for 5-10 seconds. If unable to hold breath, take 6 normal breaths instead.
 9. Breathe out.
 10. If another puff is required, wait as prescribed or 30-60 seconds and repeat.
 11. Replace caps.
 12. Rinse mouth with water.
- 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 a Metered Dose Inhaler with a Spacer-CDC \(YouTube Video 1:09\)](#)

[How to Use a Metered-Dose-Inhaler with a Valved Holding Chamber \(Spacer\) \(YouTube Video 2:20\)](#)

[How to Use a Metered-Dose Inhaler with a Valved Holding Chamber \(Spacer\) and Mask \(YouTube Video 2:03\)](#)



Kentucky Public Health
Prevent. Promote. Protect.

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.



If you need another puff of medicine, wait 1 minute then repeat steps 5-9.



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

For more asthma videos, handouts, tutorials and resources, visit [Lung.org/asthma](https://www.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.**

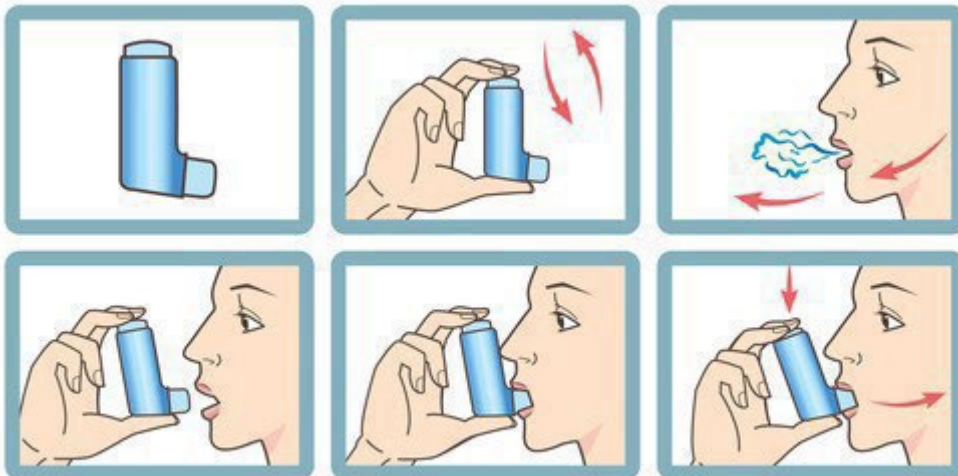
1-800-LUNGUSA | [Lung.org](https://www.lung.org)

How to use an ASTHMA Metered Dose INHALER no Spacer:

1. Take off the cap from inhaler.
 2. Shake inhaler for 10 seconds.
 3. Take a breath and breathe out all the way.
 4. Hold the inhaler upright.
 5. Put the inhaler mouthpiece into your mouth above your tongue and between your teeth.
 6. Seal lips around the mouthpiece.
 7. Breathe in slowly and deeply.
 8. Press the inhaler down once and keep breathing in.
 9. Hold your breath for 5-10 seconds.
 10. Breathe out slowly.
 11. If another puff is required, wait as prescribed or 30-60 seconds and repeat.
 12. Replace cap.
 13. Rinse mouth with water.
 14. Priming: Follow manufactures instructions
- 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 a Metered Dose Inhaler CDC \(YouTube Video 1:06\)](#)

[Know How to Use Your Inhaler: CDC National Asthma Control: YouTube Video](#)



shutterstock.com · 1674288724



Kentucky Public Health
Prevent. Promote. Protect.

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.

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 \(lung.org\)](#)

Center for Disease Control (CDC)

- [Asthma | CDC](#)
- [CDC - Asthma - School and Childcare Providers](#)
- CDC How to use an asthma inhaler [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 \(nih.gov\)](#)

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 \(VAstudentservices-clc.org\)](#)
 - [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 \(lung.training\)](#)