



KENTUCKY DEPARTMENT FOR PUBLIC HEALTH CLINICAL PROTOCOL FOR BRONCHODILATOR RESCUE INHALER (BRI) IN THE SCHOOL SETTING

Background

2020 SB 127, an amendment to KRS 158.832 as used in KRS 158.832 to 158.838, makes provisions for students with asthma symptoms or respiratory distress to have access to a bronchodilator rescue inhaler (BRI) in school. Link to update: <https://apps.legislature.ky.gov/recorddocuments/bill/21RS/sb127/bill.pdf>

- 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 BRIs

- Schools electing to keep stock BRI's to use for students without documented asthma symptoms or respiratory distress, shall maintain stock BRI' 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. 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.
- Clinical protocols shall be developed by the Kentucky Department for Public Health to address BRI's kept by schools and to advise on clinical administration of BRI's.
- Any individual or entity who, in good faith and without compensation, renders emergency care or treatment by the use of a bronchodilator rescue inhaler shall be immune from civil liability for any personal injury as a result of the care or treatment, or as a result of any act or failure to act in providing or arranging further medical treatment, if the person acts as an ordinary, reasonable prudent person would have acted under the same or similar circumstances.
- 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.



ASTHMA means a respiratory condition marked by coughing, wheezing, or shortness of breath or chest tightness. Other symptoms may include struggling to breath, 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 sentence
- Increased use of stomach and chest muscle during breathing
- Blueness around the lips or fingernails

<https://www.lung.org/lung-health-diseases/lung-disease-lookup/asthma/asthma-symptoms-causes-risk-factors/symptoms>

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 instructions. For a student 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 in 20 minutes 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.

https://www.nhlbi.nih.gov/files/docs/resources/lung/NACI_ManagingAsthma-508%20FINAL.pdf

How to use a metered Dose ASTHMA INHALER with Spacer:

<https://www.youtube.com/watch?v=YHEWtJkWgj8>

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 breathes 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.

Priming: Follow manufactures instructions

Cleaning: Clean the spacer about once a week, soak in warm, soapy water and let 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.

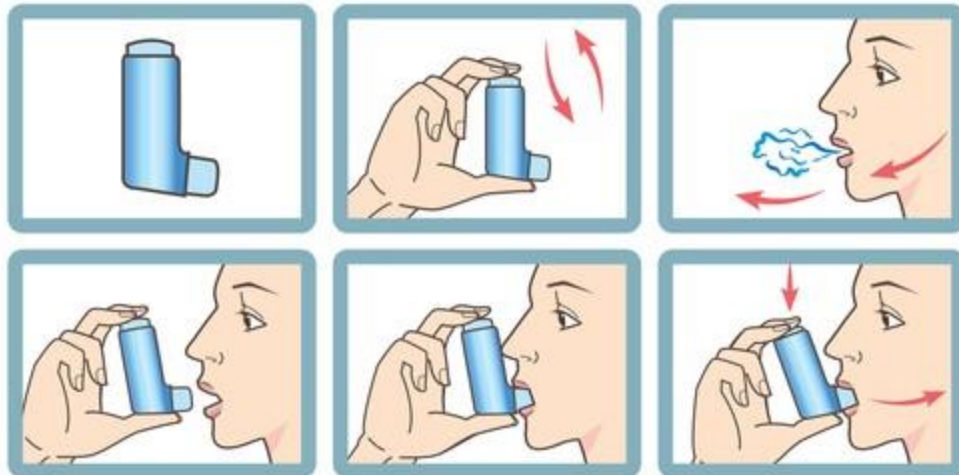


How to use an ASTHMA Metered Dose INHALER:

https://youtu.be/Lx_e5nXfi5w

1. Take off the cap from inhaler.
2. Shake inhaler.
3. Take a breath and breathe out all the way.
4. Hold the inhaler upright.
5. Put 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.

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.



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References and Additional Resources

- National Association for School Nurses (NASN) NASN Tool Kit, ASTHMA
<https://www.nasn.org/nasn/nasn-resources/practice-topics/asthma>
- American Academy of Allergy Asthma & Immunology <https://www.aaaai.org/conditions-and-treatments/asthma>
- American Lung Association <https://www.lung.org/lung-health-diseases/lung-disease-lookup/asthma/learn-about-asthma/what-is-asthma>
- American Lung Association “Asthma-Friendly Schools Initiative Toolkit”
<https://www.lung.org/lung-health-diseases/lung-disease-lookup/asthma/asthma-education-advocacy/asthma-friendly-schools-initiative/toolkit>
- U.S. Department of Health and Human Services National Institutes of Health “Managing Asthma” A Guide for Schools:
https://www.nhlbi.nih.gov/files/docs/resources/lung/NACI_ManagingAsthma-508%20FINAL.pdf
- CDC How to use an asthma inhaler https://www.cdc.gov/asthma/inhaler_video/default.htm
- KDE Medication Administration Training Manual for Non-Licensed School Personnel, Chapter 3, Emergency Medications