

What to Do During An Asthma Attack

Remember that asthma is different for everyone. Specific warning signs should be noted on each Student Asthma Action Card (SAAC) or on your school's asthma action plan. Here are important symptoms your student may have before or during an asthma attack.

Symptoms may include:

- Coughing or wheezing, but a student can be in serious distress with neither of these
- Difficulty breathing, shortness of breath
- Difficulty in talking and walking due to shortness of breath
- Chest tightness or pain

Other findings include a drop in peak flow reading, which indicates that less air is reaching the lungs.

Remember to stay calm and speak slowly while you:

- Have the student sit (not recline) and breathe in through the nose – out through pursed lips
- Follow the emergency plan on the Student Asthma Action Card or school's asthma action plan
- Medicate, as noted in the emergency plan
- Ask someone to call parents/guardians and/or healthcare professional. DO NOT leave the student alone.

Call 911 if:

- There is no improvement after 15 minutes
- Lips and/or fingernails are blue.

After the emergency has passed:

- Follow up with parents/guardians to prevent future episodes.
- Discuss with your team if any changes need to take place for the future.

Asthma Medicines and Inhaler Use

Although there is no cure for asthma, much progress has been made. We now know that by avoiding triggers and using the right medicines, students with asthma can usually participate *and* succeed. There are many medicines for asthma, but generally they fall into two categories:

- Long-term control (controllers)
- Quick-relief (relievers or rescue medicine).

Long-term control medicines treat the under-lying inflammation (swelling and mucus production) associated with asthma. **Corticosteroids**, one of the groups under the “long-term control category,” are not the same as the **anabolic steroids** that are sometimes abused by athletes. Long-term control medicines must be taken consistently, and as prescribed for maximum benefit.

Quick-relief or rescue medicines relax the muscles surrounding the airways and decrease the narrowing of the airways, usually within five minutes of use. This relaxation quiets the coughing and wheezing plus relieves the breathlessness and tightness often noted in asthma episodes. The quick-relief medicine will last for several hours. Many students find it helpful to pre-treat 5-15 minutes before exercise.

Some students might use a holding chamber or spacer, which attaches to the metered-dose inhaler (MDI), to trap the medicine until it can be completely inhaled. Other students might use a small battery-driven device called a nebulizer to deliver the medicine.

If a student uses a quick-relief inhaler, it is helpful for you to know the proper technique:

A student may hold the inhaler away from the mouth, place it between the teeth or use it with a spacer. General instructions are to:

1. Remove cap and shake inhaler.
2. Tilt head back and breathe out.
3. Hold inhaler two finger-widths away from open mouth compress and inhale.
4. Breathe in slowly for 3-5 seconds.
5. Hold breath for 10 seconds.
6. Wait at least one minute before repeating Steps 2-5, if noted on the Student Asthma Action Card or your school’s asthma action plan.

It is important to note:

- Quick-relief inhalers should be within a student’s immediate reach at all times.
- Inhalers should not be stored in very hot or cold places (in direct sunlight, glove compartments).
- A student should not use more than one quick-relief inhaler per month. Contact the parents/guardians if you observe what you believe is excessive inhaler use.

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Peak Flow Meters and Asthma

A peak flow meter (PFM) is a handheld device that should be used daily to measure how well air moves out of the airways of the lungs. During an asthma attack, or episode, the airways of the lungs usually begin to narrow slowly. Changes in the peak flow meter readings can help detect this narrowing before an attack begins. It also can be used to assess the severity of an attack.

The number that a student reaches when blowing into his/her PFM which enables you, the student, his/her parents or guardians and healthcare professionals to:

- Communicate more easily about asthma
- Identify triggers - things that cause asthma to worsen
- Decide when to initiate the emergency plan on the Student Asthma Action Card (SAAC) or your school's asthma action plan
- Decide if the emergency plan is working
- Decide when to call 911

Some of your students may use PFMs and some may not – it all depends on the student, as asthma is different for every individual.

Your student should have the same PFM at school that he/she has at home; have it labeled with his/her name and know how to use it. If you have questions about his or her ability to use the PFM independently, please contact the parents/guardians.

It is important for you to know the student's "personal best" number. For students who use PFMs, their SAAC/asthma action plan will include the personal best number or the highest number achieved over a two-three week period when asthma is under good control. A student is described as being in the **green zone** when his/her PFM reading is 80-100% of his/her personal best number and is experiencing no symptoms.

When the student is in the **yellow zone** (50-80 percent of the personal best number), the "quick-relief" or "rescue" inhaler should be used. Check the SAAC/asthma action plan because a student in this zone usually has symptoms and may get worse or crash quickly.

If the student falls into the **red zone** (below 50 percent of his personal best number), he/she should use his/her quick-relief inhaler and you should **follow the emergency plan** on the SAAC/asthma action plan **immediately**. *Be prepared to move quickly and **contact 911**, if this action is recommended on the SAAC/asthma action plan.*

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Quick Tips to Help Students with Asthma

1. Keep a signed, updated Student Asthma Action Card (SAAC) or your school's asthma action plan for each student with asthma with you at all times.
2. Have all students warm up and cool down – this is especially important for students with asthma, but please do not single them out! In cold weather, students should warm up longer and wear a mask/scarf to warm the air they breathe.
3. Remind students to make sure inhalers are ready-to-go (not empty) and to pre-treat. Instead of questioning students in front of peers, some PE instructors and coaches have established “code words.” For example, one intuitive teacher simply asked, “Hedgehog?” and with a quick thumbs-up the teacher knew the student had his inhaler and remembered to pre-treat.
4. Encourage students to label their inhalers, keep them accessible at all times, and use as prescribed. Discourage them from sharing their inhalers with other students or using them excessively.
5. Be aware of the environment and be flexible. If the field has just been mowed/sprayed or pollen and/or pollution levels are high, reconsider an outdoor activity and move inside, if possible. To check pollen counts in your area, visit www.aafa.org, enter your zip code and click “pollen”. To check air quality, visit www.airnow.gov.
6. If a student is recovering from a respiratory illness or asthma episode and cannot participate, please offer a substitute “team” position like scorekeeper or clipboard holder. Kids with asthma need to feel that they are still part of the group. Even though they may not be able to find the words to thank you, they will still feel grateful.
7. Students with asthma need to be well-hydrated, so keep plenty of water easily accessible and encourage them to drink fluids before, during and after exercising.



Sample letter to Parents/Guardians regarding their child's asthma

Child's name _____ Date _____

Dear _____,

Recently I have noticed that your child has experienced some difficulties with his/her asthma. Could you please contact me so we can help your child fully participate in activities with his/her fellow students? We really want your child to be able to have fun, stay fit and be "on the go" with asthma!

Thank you for contacting me at _____ (phone)
or _____ (e-mail) as soon as possible.

I'm looking forward to helping your child!

Sincerely,

Teacher/Coach

Resources

- Asthma and Allergy Foundation of America – www.aafa.org – 1.800.7ASTHMA (1.800.727.8462)
- American Academy of Allergy, Asthma and Immunology – www.aaaai.org
- American College of Allergy, Asthma and Immunology – www.acaai.org
- American Respiratory Alliance of Western Pennsylvania – www.healthylungs.org – 1.800.220.1990 (Click on Catalog for Scratch-a-Dose™ labels to track inhaler use)
- National Heart Lung and Blood Institute – <http://www.nhlbi.nih.gov/about/naepp> (Click on schools/childcare)
- National Jewish Health – www.nationaljewish.org – call 1.800.222.LUNG (1.800.222.5864) to speak with a nurse.

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