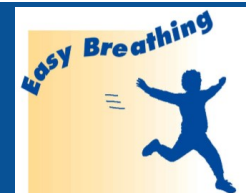


THE ASTHMA CENTER

At Connecticut Children's

STATEWIDE EASY BREATHING NEWS



Summer 2019

BEST WISHES TO TREGONY SIMONEAU, MD

It is with heavy hearts that we say goodbye to our Co-Director, Dr. Tregony Simoneau, who will be moving onto Boston Children's. Tregony joined the Asthma Center in 2016. Her contributions to the Asthma Center during her time with us cannot be overstated. Among her most valued accomplishments, Dr. Simoneau was integral in securing funding for an electronic version of the Easy Breathing program. She elevated the Asthma Center's and the Pulmonary Division's research profile by attracting a large, multi-center NIAID-funded clinical trial (PARK—Controlling and Preventing Asthma Progression and Severity in Kids with Omalizumab), establishing CT Children's as a recruitment site. She initiated ground-breaking work on understanding the role of long non-coding RNAs among children with atopic asthma.

Her passion for eliminating asthma disparities and improving adherence to daily controller therapy among children with persistent asthma led to our partnership with startup company CoHero, whose mobile app connects to a sensor on patient controllers. The goal of the CoHero clinical trial is to determine whether a mobile sensor with daily reminders can improve adherence. This project is still actively recruiting.

Dr. Simoneau was instrumental in evaluating, disseminating, and publishing results for our school nurse-led asthma program, Easy Breathing for Schools. The program provided school nurses with simple tools to manage asthma, leading to a 25% decrease in absentee rate among students with asthma. The article can be accessed here ahead of print: <https://doi.org/10.1016/j.acap.2019.07.007>.

We wish Dr. Simoneau the best of luck in her new endeavors and are thankful for her clinical and research expertise, as well as her enduring commitment to the CT Children's community.



BACK TO SCHOOL



It's that time again --- the start of the new school year! Please be sure to:

- ★ Update asthma treatment plans
- ★ Complete Medication Authorization forms
- ★ Confirm filled and picked-up rescue inhalers for school.

If you have time, try assessing inhaler technique!



HIGHLIGHTS

- Farewell to Dr. Simoneau
- Back to School
- 2019 Asthma Treatment Selection Guide
- Qvar Redihaler
- Manchester Peds
- Electronic Easy Breathing
- Primatene Mist

2019 ASTHMA TREATMENT SELECTION GUIDE

The asthma treatment selection guide is a document that contains a detailed overview of all of asthma therapies available for each severity of asthma. Each year the asthma treatment selection guide is reviewed to update the nationally recommended asthma therapies and Connecticut insurance plans' coverage of these therapies. Previously, the insurance plans in Connecticut that were detailed in the selection guide included Oxford/ UHC, Aetna, Anthem BC/BS, Connecticare, and Husky Medicaid. This year we decided to replace Oxford/ UHC insurance from the selection guide with Cigna insurance because more patients in Connecticut have Cigna insurance and fewer have Oxford/ UHC. The other insurance plans remained on the selection guide.

In regards to nationally recommended asthma therapies, generic medications were added as alternative options to brand name therapies. Specifically, Levalbuterol by nebulizer was added as a generic option for Xopenex, Zafirlukast was added as a generic option for Accolate, and Montelukast was added as a generic option for Singulair. In Connecticut, insurance coverages differ for these generic and brand name drugs; this may pertain to other states as well. Arnuity Ellipta and Asmanex HFA are recently available therapies that were added as options for persistent asthma treatments. In addition, MDIs and Xopenex HFA were added to the daily therapy treatment guide for severe persistent asthma. Age ranges were specified for all ICS. Lastly, the footnotes regarding intermittent use of higher dose ICS during exacerbations and quadrupling ICS dose under Sick plan were removed since current literature no longer supports these statements.

QVAR REDIHALER: REDESIGNED

Qvar HFA has been replaced by the Qvar Redihaler. The Redihaler differs from the old Qvar HFA because there is no press-down to release the medicine. The Redihaler is breath actuated, which means that the medicine is only released if the child can generate enough air flow while breathing in. The Redihaler should not be used for children under four years of age. It also should not be used with a spacer or be primed or shaken before use. The Qvar Redihaler is designed to eliminate the need for hand breath coordination.

- ☐ The Redihaler should not be primed or shaken before use.
- ☐ A spacer should not be used with the Redihaler.
- ☐ The child must be able to generate enough air flow while breathing to draw in the medicine. There is nothing to press.
- ☐ The cap must be closed in between doses in order for the medication to be administered.



- ☐ The inhaler should be shaken for 5 seconds before use.
- ☐ A spacer should be used if recommend.
- ☐ The patient must exhale fully before inserting the inhaler into the mouth and pressing down on the top of the inhaler.
- ☐ The inhaler should be shaken in between doses.



SPOTLIGHT ON: MANCHESTER PEDIATRIC

We welcome Manchester Pediatric Associates (MPA) as our newest Easy Breathing statewide practice. In October 2018, a total of 11 providers and 32 nurses, medical assistants and administrative staff from MPA's five sites were trained in the program. MPA is our first newly-trained CT Easy Breathing site since our statewide funding ended in June 2017. This is a testament to the continued need for Easy Breathing in the community. We commend MPA for their commitment to providing evidence-based asthma care under our fee-based model. When MPA first approached us, they had a clear vision of how they wanted to manage their asthma patients across their five locations.



After learning how Easy Breathing worked and what it had to offer, they recognized Easy Breathing as a complement to their plans, which included implementing weekly asthma clinics. One key to MPA's success with Easy Breathing is that they designated an Easy Breathing Champion within their practice, Denise Filosi, PA-C. Denise's enthusiasm and commitment to Easy Breathing has made for a strong implementation. MPA has embraced the program, focusing on re-assessing currently diagnosed asthma patients with the Easy Breathing Survey. Since the training in late October through May 2019, they have surveyed 111 patients in their practice. They have prioritized treatment plan adherence, in accordance with the National Asthma Guidelines, among their patients with asthma. Congratulations and welcome MPA!

ELECTRONIC EASY BREATHING



Easy Breathing is a paper-based program. We are currently piloting the feasibility of an electronic, tablet-based version of Easy Breathing at Community Health Services clinic in Hartford, CT. Patients fill out the Easy Breathing forms on iPads and the data is collected through an app called Tonic™. Before a patient is given the iPad, a medical assistant pre-loads the patient's demographic data into the Tonic program. Parents then complete the survey and provide eConsent. Next, providers review the patient's answers on the iPad and determine an asthma diagnosis and severity. Asthma control is captured for patients with previously diagnosed disease. The patient's asthma treatment plan is created, guided by clinical decision support embedded within Tonic. Finally, the treatment plan is printed out and given to patients. The goal is to increase program adoption in an electronic health record-driven clinical environment. Clinicians have noted an increased time spent on Easy Breathing due to logging in and out of the program. Integration of the Tonic platform with the clinic's EHR may reduce this barrier.

CONTACT EASY BREATHING

A Program of Connecticut Children's Medical Center

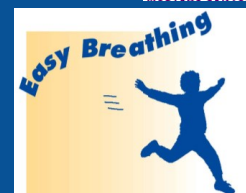
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PATIENT EDUCATION | INFORMATION SERIES

Treating Asthma Symptoms with Quick Relief Bronchodilators: Prescription or Over-The-Counter Inhalers

Asthma is a chronic lung disease. When a person has asthma, he or she can have serious airway symptoms that may come on quickly. The most common symptoms of asthma are coughing, wheezing (whistling sound when you breathe), chest pain or tightness, and/or shortness of breath. This fact sheet will focus on using quick relief bronchodilators for treating asthma flare-ups. For more detailed information about asthma, see ATS Patient Information Series fact sheet on Asthma at <http://www.thoracic.org/patients>.



Coughing can be the first sign of an asthma problem. Symptoms may be intense right away or can get worse over time. These symptoms can be scary and need treatment right away. A common treatment for symptom flare-ups is a quick relief bronchodilator (bron-ko-die-lay-tor).

What are quick relief bronchodilators?

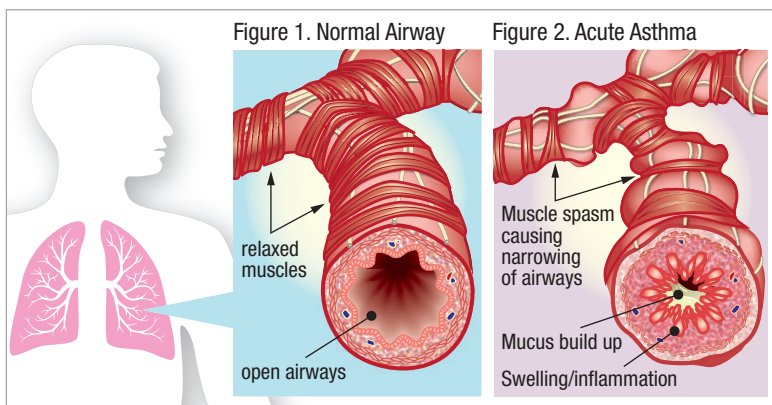
When you are having asthma symptoms or are having an asthma attack (flare-up), you need to treat your symptoms with quick relief medicines that can give fast, but not lasting relief by relaxing the airway muscles.

These medicines are inhaled using a metered dose inhaler (MDI), dry powder inhaler, slow mist inhaler (SMI), or a nebulizer (mist formed from liquid medicine in an air compressor). Inhalers work best if used with a valved holding chamber (spacer). A prescription is needed for nebulizers and spacers.

The most commonly used bronchodilators are beta-agonist medicines and include albuterol (inhaler brand names include ProAir® HFA, ProAir Respiclick®, Proventil® HFA, Ventolin® HFA) and levalbuterol (inhaler brand name Xopenex HFA®). These are available only by prescription. They start to work within a few minutes and can last for up to 4-6 hours. All types are also available as nebulizer liquid.

Another type of bronchodilator used at times is anticholinergic medicine. Ipratropium comes as a MDI or liquid for the nebulizer (brand Atrovent®). It also is available in combination with albuterol as a MDI (brand Combivent®) or liquid for nebulizer (Duoneb®).

A prescription is required and your healthcare provider can help decide if this is something for you to try.



In 2018, the US FDA approved another kind of beta-agonist bronchodilator, inhaled epinephrine (brand Primatene® Mist HFA), as an MDI inhaler to treat acute asthma symptoms. Inhaled epinephrine is different from the other beta-agonist medicines in several ways, including:

- A person can buy this medicine without a prescription (over-the-counter).
- It acts quickly but does not last as long as the prescription medicines.
- It is more likely to cause side effects such as rapid heart rate.
- The FDA approved its use for people who are 12 years and older.
- The FDA approved its use only by people who have mild asthma with intermittent (not regular) asthma symptoms. People who have persistent (chronic or long-lasting) asthma or have had repeated asthma attacks can benefit from daily controller medicines that help prevent problems.

A similar drug, racepinephrine (brand names Asthmanefrin® and S2®), is available as an inhaled solution over-the-counter. Like epinephrine, it does not last as long and can have more side effects. It is approved for use only with mild asthma in adults and children 4 years and older.

If you need to use a bronchodilator regularly or are not getting relief of your symptoms, you need to seek medical care. Quick relief medicines treat symptoms, but not the airway problems that cause the symptoms in the first place. Even people with mild asthma can have a severe flare-up that can be life threatening.

What are possible risks or side effects of using quick relief bronchodilator medicines?

Any inhaled bronchodilator can cause side effects. Side effects are more likely to occur with higher doses or with more frequent use.

Inhaled epinephrine (Primatene Mist®) is more likely than beta-agonist medicines to cause:

- Increased blood pressure
- Increased heart rate. This may be more of a concern for people who have heart disease or hypertension (high blood pressure) and could even lead to a heart attack or stroke.
- Nervousness, sleeplessness, shakiness (tremor), and seizures.

Using inhaled epinephrine can also cause problems if you:

- Have certain health conditions
- Take certain medicines
- Eat or drink foods or beverages containing caffeine.

Check with your healthcare provider or pharmacist about whether it is safe for you to use inhaled epinephrine. They can also tell you about possible risks and side effects of other medicines you may be taking. Your pharmacist may recommend that you see your doctor to discuss the need for prescription asthma medicines.

Can asthma be controlled?

Yes, asthma CAN be controlled. Work with your healthcare provider to create your Asthma Action Plan. See your healthcare provider at least once a year for your asthma check-up. During your checkup, you will review your overall asthma control, solve any problems with your treatment, discuss how you can avoid future symptoms, problems, and have a better quality of life.

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Rx Summary and Action Steps

- ✓ Quick relief bronchodilators can give quick but not lasting relief of intense symptoms of asthma like cough or wheezing.
 - ✓ Make sure you know how to use your inhaler or nebulizer correctly.
 - ✓ Asthma can be controlled. You should get help to avoid symptoms that can affect your quality of life.
-
- ✓ Seek emergency care if you are having distress and difficulty breathing or are not getting better in 20 minutes after using a quick relief bronchodilator.
 - ✓ See your healthcare provider right away if:
 - Your asthma symptoms are getting worse,
 - You need more to use a quick relief bronchodilator for more than 24 hours for an asthma flare-up every 4-6 hours (day and night), or have more than two asthma attacks in a week. These may be signs that your asthma is getting worse.
 - ✓ Talk to your healthcare provider if you have symptoms that are affecting your quality of life, such as:
 - You are not able to do your normal daily activities because of your asthma, and/or
 - You have symptoms of asthma regularly (every week or several nights a month)
 - You have had repeated asthma attacks or have had to go to an urgent care or emergency room or stayed in the hospital because of asthma.

Healthcare Provider's Contact Number:

Resources

American Thoracic Society (ATS)

<http://www.thoracic.org>

- Asthma
- Asthma and Exercise
- Breathlessness

National Asthma Education Prevention Program (NAEPP)

https://www.nhlbi.nih.gov/files/docs/public/lung/asthma_actplan.pdf

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