

B R E A T H E
PENNSYLVANIA

Fresh Air

A newsletter for Breathe PA's supporters and friends

Symptoms of COPD:

- Shortness of breath while doing everyday activities that were typically done with ease
- Excess sputum production
- Frequent/and constant cough, which can be referred to as a "smoker's cough"
- Wheezing
- Feeling breathless/or unable to take a deep breath

From Executive Director John P. Rupp:

November marks COPD Awareness month. Raising awareness around COPD as well as educating patients with COPD is near and dear to our mission of helping Western Pennsylvanians breathe better and live healthier.

Currently, COPD is the third-leading cause of death in the United States. COPD affects approximately 24 million people in the U.S. and it has been reported that approximately 6% of Pennsylvanians are living with a COPD diagnosis. Nearly half of people suspected of having COPD are undiagnosed.

COPD is a chronic disease, but can be managed through medication compliance and pulmonary rehabilitation if caught early.

If you are living with a COPD diagnosis and are looking for more information and help in managing your disease, I encourage you to learn more about our direct lung one-on-one education program. Initial outcomes of our one-on-one education show that it helped respondents feel more equipped to talk with their doctors (88%), they felt they went to the hospital less (68%) and they had fewer doctor visits (47%). After the session, 84% felt "confident" in managing their condition. The education is provided by Director of Adult Lung Health and Programs, Marianne Drevna, BS, LRCP. Since July, Marianne has provided more than 170 free education sessions.

I also encourage you to take advantage of our cold weather masks. For decades we have been providing the masks, free of charge, to lung disease patients in our 10-county service area. Cold weather masks work to warm the cold air before you breathe it in. For some it can mean the difference between staying in and going out. You can call our office or visit our online store to place your order.

In closing, as a non-profit, we rely on donations and community support to make our one-on-one education and cold weather masks free to our service area. If you would like to help our organization, here are two ways:

- Spread the word about COPD. If you suspect a loved one or friend has symptoms associated with the disease, encourage them to see a pulmonologist.
- Make an unrestricted gift or give in memory/honor of a loved one! All donations go directly to our patient assistance program. Since July, we have provided more than \$50,000 in assistance to our service area.

Join us in our mission to help our community breathe better and live healthier this year!

Asthma Management Tips for Early Learning Practitioners: Early Warning Signs

By: Jeannie Simms, Senior Director of Asthma and Education Programs

Asthma is a chronic, inflammatory disease that can develop at any age. While there isn't a cure, it can be managed. Most people don't have audible wheezing, but there are symptoms to look for if you suspect a child is having an asthma attack.

It is rare to have an asthma attack and not have some warning. These early warning signs can be unique to each individual with asthma. They could include: dry cough and wheezing; feeling tired, not wanting to play, and moodiness; stuffy nose, watery eyes, sneezing, and an itchy throat; stomachache, headache, or ear pain; fast heartbeat; shortness of breath or fast breathing; and/or tight chest.

During an asthma attack, muscles tighten around the airways, walls inside swell, and there's excess mucus being produced.

If there is excess mucus, a child would cough to remove this, and it might cause a stomachache when swallowed. The muscles tightening around the airways might cause the sound of breathing to resemble a "wheeze" sound. However, most individuals with asthma don't have audible wheezing, they just cough.

All three airway changes could cause air to be trapped in the lungs so that the child will start to feel like their chest is tight and they are breathing faster. Because the airways are tightening, less air and oxygen is reaching the air sacs, causing the heart to beat faster as it tries to bring more oxygen into the body. Having less oxygen could cause a child to feel tired, moody and not interested in activity. If allergies factor in, then allergy symptoms could present as early warning signs, too.

If you are looking for an educational program that addresses asthma in the classroom, Breathe Pennsylvania offers a two- to three-hour asthma training for early learning practitioners. For more information, contact me at jsimms@breathepa.org.

Vaping during Pregnancy

By: Carla A. Conrad, MS-RRT-NPS, Program Coordinator & Director of Tobacco Cessation and Education Programs

Vaping, or the inhalation of vapor from an electronic cigarette (e-cigarette), is a controversial topic that advertises many positive health effects. Seen as a healthier alternative to smoking, vaping has been promoted as a replacement to tobacco cigarettes. There are polarizing points of view that claim the extreme harms or harmlessness of e-cigarettes, yet, few of them discuss the effects of e-cigarette use during pregnancy. Should women be encouraged to quit smoking tobacco cigarettes and vape instead?

The harms of smoking tobacco cigarettes during pregnancy are well documented, from higher risk of miscarriage, preterm delivery, and low fetal birth weight. However, the harms of vaping during pregnancy are less clear given that they haven't been fully studied. Early studies suggest that e-cigarette vapors, regardless of nicotine content, can affect nervous system development of a fetus.

Many experts believe that since vaping products can contain nicotine, the addictive chemical in tobacco, exposure to the e-cigarette vapor can harm the fetus. Most notably, nicotine exposure can cause changes in the blood vessels, which the fetus relies on for blood, oxygen, and nutrients. It is believed that nicotine exposure increases a mother's risk of pre-eclampsia and decreases fetal growth. The American Pregnancy Association recommends that pregnant women avoid all nicotine products during pregnancy.

Should women be encouraged to quit smoking tobacco cigarettes and vape instead? No. Quitting smoking, and vaping, is the best thing that you can do for your child. It's never too late to quit. If you are pregnant, or thinking of becoming pregnant, talk with your doctor about quitting options.

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Centers for Disease Control. (2016). Smoking during pregnancy. Retrieved from https://www.cdc.gov/tobacco/basic_information/health_effects/pregnancy/

Wickstrom, R. (2007). Effects of nicotine during pregnancy: Human and experimental evidence. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2656811/>

Preparing for Old Man Winter

By: Marianne Drevna, BS, LRCP, Direct of Adult Lung Health and Programs

Well, the extremely hot summer we had this year is almost just a memory. Fall is, indeed, here with a cold Western Pennsylvania winter following closely. Keeping that in mind, those with chronic respiratory problems should be thinking of a few things:

- Get your flu shot now. Vaccines are readily available and you are certainly on the top of the list of those who benefit from them most.
- Get a pneumonia vaccine if yours has expired. Ask your doctor if you're up to date.
- Make sure to keep up with all your medications and always make sure you have enough for a few days in case inclement weather prevents you from going out to get them.
- If you don't have a rescue inhaler, get one. The cold weather affects many folks with chronic lung disease, so be prepared.
- Keep up with your pulmonary rehab regimen. Winter is no time to have your defenses down, and except for the very coldest days, there is no good excuse not to go.
- If you stopped pulmonary rehab for a while this is a great time to get back into the habit. The exercise will do you good and keep you healthier through the cold, dreary days (and all year round for that matter).
- It's not too early to call us for a cold weather mask. It will help warm the air you breathe in when you go to pulmonary rehab on those very frigid days.
- Make chicken soup. Its healing properties are for real and it tastes so good when it gets cooler outside. Make a big pot and put some in the freezer.
- I know it's too early to talk about the holidays, but do some shopping a little at a time to save yourself some stress.
- Stay warm and keep exercising. Before you know, it spring will be here.

What is ALPHA-1 Antitrypsin Deficiency?

By: Marianne Drevna, BS, LRCP, Direct of Adult Lung Health and Programs

Alpha-1 Antitrypsin Deficiency, commonly referred to as Alpha-1, is a genetic condition that can result in serious lung and/or liver disease at any age. People with Alpha-1 have received two abnormal alpha-1 antitrypsin genes, one from mom and one from dad.

The Alpha-1 antitrypsin (AAT) protein functions to protect the lungs from inflammation caused by infection or irritants like tobacco smoke. A decrease of AAT in the blood can lead to lung damage because the lungs lose their protection and begin to destroy themselves. The most common signs and symptoms related to the lungs are the same as those occurring in COPD: cough, shortness of breath, wheezing and year-round allergies.

About 1 in 2,500 Americans have Alpha-1, so early diagnosis is key to remaining healthy and involves only a simple blood test. Quitting smoking is a must, even with treatment. Because Alpha-1 symptoms are similar to those of COPD, the World Health Organization, American Thoracic Society and the European Respiratory Society recommend that everyone with COPD be tested for Alpha-1. About 1 of every 200 people tested will have positive test results.

Once diagnosed, treatment involves replacement therapy which uses AAT from healthy human donors to increase the AAT protein levels in the blood and lungs of Alphas with emphysema. It is given weekly via IV infusion and is considered to be a lifelong treatment. This treatment should be used in conjunction with quitting smoking, exercise, proper use of antibiotics and oxygen therapy if necessary.

The goals of therapy are to slow or stop the progression of lung destruction, but it can't restore lost lung function and is not considered a cure. However, those afflicted can continue to lead full lives depending on their individual condition. If you or a loved one have been diagnosed with COPD, talk to your pulmonologist about getting tested for Alpha-1. It might just change your life.



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Save the Date!

Tuberculosis Education Conference
March 24, 2017
University Club

Breathing in the 'Burgh COPD Cruise
June 16, 2017
Gateway Clipper Fleet

School Nurse Asthma Training Alert!

Breathe Pennsylvania and the University of Pittsburgh School of Nursing are collaborating to present a pediatric asthma training: **Current Asthma Classifications/ Treatment Guidelines and Breath Sounds Training**. The cost for this three-hour CEU training is \$10.00 per nurse. The training will help to define asthma best practice in school procedure and policy.

Please contact Jessica Schuman at schuman@breathepa.org for further details. Space is limited so set up your on-site training today!