Winter 2022-2023 Volume 17 No. 2

Addressing the needs of the Canadian COPD patient

Living with COPD

Chronic Obstructive Pulmonary Disease
www.copdcanada.info

Techniques to control your breathing

If you have chronic obstructive pulmonary disease, you have to work hard to breathe especially when you're exerting yourself. Pursing your lips can help you slow your breathing and make each breath more effective. When you have trouble breathing, you may become anxious which can then make it even harder for you to breathe, creating a vicious cycle. Consequently, you may avoid activities that make you feel short of breath. This can cause your muscles to weaken, leading to more shortness of breath.

Pursed-Lip Breathing (PLB) is the first line of defense used by most COPD'ers when trying to recover from shortness of breath. It involves breathing in through the nose and exhaling with the lips pursed as if you were going to whistle. How hard do you blow out? One guide is to use the same force that you would use to cool hot soup on a spoon. Blow hard enough to cool it but not hard enough to blow the soup off the spoon.

When pursed-lip breathing is done properly it creates a back pressure in the mouth and throat and this back pressure blows the airways open. Now that you can breathe in more easily, you have to concentrate and breathe out for at least two to four seconds if possible. This helps expel CO_2 and trapped air and you begin to breathe easier yet. After exhaling for two to four seconds or more, pause momentarily and then let the body inhale naturally. The reason for the pause is two-fold. First, it lets you know that you are regaining control of your breathing and it allows you to relax more easily. Secondly, you may find that if you consciously try to inhale right away, you may gasp.

When inhaling make sure you do not try to "top off" the air already in your lungs. "Topping-off" is when Continued on Page 6

Talking With Your Doctor

How well you and your doctor communicate with each other can be one of the most important components of getting good healthcare. Being prepared will help you ask the right questions about your chronic obstructive pulmonary disease and will help you make the most of your visit, whether it's in-person or online. Here are some things you can do to make the most of your appointment:

- Make a list of your concerns, any allergies and all the medicines, herbs, or vitamins you take
- Write down a description of COPD symptoms - when they started, what makes them better, what makes them worse, etc.
- Try to identify and be aware of any triggers that increase symptoms
- Ask a trusted friend or family member to be with you during the appointment. If it's an in-person appointment, check with your doctor's office first to ensure that you can bring someone along
- Take notes during your appointment
- If available, learn how to access your medical records, so you can keep track of test

Continued on Page 6

Ask Dr. Bourbeau

Jean Bourbeau is a respirologist and full professor in the Department of Medicine and Epidemiology and Biostatistics, McGill University, Montreal

Q I have mild COPD and I am on Advair, Spiriva Respimat, and use Ventolin as needed. I am quite active to try and keep my lungs and myself healthy. About once a month or so I get an "episode" where my upper chest feels like someone is tightening a rope under my breasts. I also get short of breath, lightheaded, quite bloated, and my ribs feel a bit sore there also. My oxygen levels are fine. My respirologist said he doesn't think it is COPD-related as the Ventolin doesn't help. I have googled and Continued on Page 2

Publication Mail Agreement No. 40016917

Ask Dr. Bourbeau

Continued from Page 1

have seen costochondritis and dyspnea come up. It says there is nothing to do but bend, lean, and use pursed lip breathing etc. I wonder if at times like that, I could use some oxygen and if you think that would help?

A Unfortunately, oxygen will not help. Just with the information you are providing, without having seen you, it is not possible to commit to a diagnosis. I would refer you back to your respirologist.

Q Are the symptoms of lung cancer like the symptoms of COPD?

A Very often lung cancer will not present with any symptoms but will be discovered on a chest X-ray or CT scan of the chest. Some symptoms can be the same such as dyspnea, cough; other symptoms are different such as hemoptysis, pain, weight loss. If you have a change in your symptoms and have COPD, you should consult your treating physician.

Q I have severely moderate COPD and along with my regular medications take 5 mg of prednisone in the mornings. This helps me and the flare ups are few and far between. My question is will taking prednisone hurt me in the long run? I am 71, weigh 230 lbs. and am 5'10".

A Prednisone side effects are more likely to occur with larger doses or long-term therapy. However, even at a small dose like 5 mg, abruptly stopping any corticosteroid treatment can be associated with symptoms of adrenal insufficiency and can be life-threatening. It is always a balance between the benefit versus the potential adverse effects. I am sure that your treating physician has considered other alternatives before deciding that this was the only and best treatment for you. If it is not already been done, you should ask your treating physician to refer you to a respirologist.

Q Should I take Vitamin D for my COPD?

A No, there is no benefit taking a supplement of Vitamin D for your COPD unless you have long term use of systemic corticosteroids, or you have a condition called osteopenia/osteoporosis.

Q I suspect that I have COPD. I'm a former smoker. What are typical questions that my doctor may ask me, what tests/treatments will I go through?

A The only way to find out if you have COPD is to have a lung function test. The simplest test is the flow rate or spirometry. Ask your doctor for a spirometry test.

Q How can you tell if I have Alpha 1 Antitrypsin (AAT) deficiency? Is there a cure?

A The only way is to test for the blood level of A1AT. This is a simple blood test that can be done in most hospitals. Depending on the result, other tests might be needed to assess if you have the inherited genetic disorder.

Dr. Jean Bourbeau is director of the Center for Innovative Medicine (CIM) of the Research Institute of the McGill University Health Centre (MUHC) and director of the Pulmonary Rehabilitation Unit. He is the past president of the Canadian Thoracic Society (CTS) and is a member of the scientifitic committee of GOLD.

We invite your questions. Please mail questions to: Ask Dr. Bourbeau 555 Burnhamthorpe Rd., Suite 306, Toronto, Ont. M9C 2Y3—or you can e-mail questions to: AskCOPDCanada@gmail.com. General inquiries: COPD Canada Tel: 416–465–6995 E-mail: exec.copdcanada@gmail.com

Canada Post Canadian Publications Mail Sales Product Agreement Number 40016917
Please forward all correspondence to: Chronicle Information Resources Ltd., 555 Burnhamthorpe Road, Ste 306, Toronto, Ont. M9C 2Y3 *Living with COPD* is published for COPD Canada by Chronicle Information Resources Ltd.

Pulse: News about COPD

High-dose flu vaccine promising for mortality benefits in older adults

Barcelona/A Danish feasibility study that tested a high-dose quadrivalent influenza vaccine versus a standard dose hinted at morbidity and mortality benefits, researchers reported in the DANFLU-1 study. There was a 48.9% reduction in the risk of all-cause mortality and a 64% reduction in the incidence of hospitalization for influenza or pneumonia for high-dose versus standard-dose vaccination. Also, hospitalization for cardiorespiratory complaints—a combination of any cardiovascular or respiratory illnesses—was reduced by 12% with the high-dose vaccine, according to Tor Biering-Sørensen, MD, PhD, MPH, of the University of Copenhagen. Biering-Sørensen noted that he would use the high dose for his patients now because "we already know that the high dose protects at least 25 per cent greater than the standard dose against influenza."

https://tinyurl.com/44kcx5ar

Emphysema often present before abnormal spirometry, particularly in Black men

Chicago/Emphysema is often present before spirometry findings become abnormal, with disproportionate rates seen in Black men, according to new findings published in Annals of Internal Medicine. "According to this observational study of Black and white adults in the United States, a substantial proportion of middle-aged adults with 'normal' spirometry findings based on race-specific equations have emphysema on CT. This is disproportionately seen among Black men," Gabrielle Y. Liu, MD, internist in the division of pulmonary and critical care medicine at Northwestern University Feinberg School of Medicine, and colleagues wrote. "This is also true when race-neutral equations are used to determine FEV1 per cent predicted; however, the use of race-neutral measures attenuates the racial disparity in emphysema prevalence among those with an FEV1 between 80% and 120% of predicted. The increased rates of emphysema among Black men persist after further adjustment for age and smoking. The researchers concluded that visual emphysema should be included in definitions of 'early COPD' and CT imaging should be incorporated into the evaluation of those with suspected impaired respiratory health and normal spirometry findings."

https://tinyurl.com/yvu9hvtm

Pulse: News about COPD

The link between environmental toxins and cognitive disorders

Bundoora, Australia/The term environmental toxins may conjure images of nuclear plants and other industrial machinery that may seem irrelevant to the day-to-day lives of patients with lung problems. However, humans often come into contact with environmental toxins through cars, cigarettes, or certain makeup items, among other products. Emerging research suggests that some toxins may lead to cognitive impairments and the development of brain health issues among patients. Lung disease patients should be aware of things they consume or come into contact with that may pose dangerous risks. The negative effects of cigarette smoke on the lungs and pulmonary function are common knowledge. But brain health is also at stake when patients are exposed to cigarette smoke and e-cigarette vapor. According to a study published by *Frontiers in Molecular Neuroscience*, cigarette smoke exposure has a direct influence on memory retention.

https://tinyurl.com/37rabr7

Pulmonary rehab after COPD hospitalization results in net cost savings

Durham, N.C./Pulmonary rehabilitation after hospitalization for COPD resulted in net cost savings and improvement in quality-adjusted life expectancy, according to an economic evaluation published in *JAMA Network Open*. "Despite consistent evidence of benefits in both randomized clinical trials and large observational studies, uptake of pulmonary rehabilitation remains low," Christopher L. Mosher, MD, MHS, critical care specialist in the division of pulmonary, allergy and critical care medicine at Duke University Medical Center and Duke Clinical Research Institute in Durham, N.C. and colleagues wrote. Researchers performed an economic evaluation to estimate the cost-effectiveness of pulmonary rehabilitation participation compared with no pulmonary rehab after hospitalization for COPD in the U.S. From a societal perspective, the base case microsimulation demonstrated a net cost savings of US$5,721 per patient and an improved quality-adjusted life expectancy of 0.53 years after pulmonary rehabilitation. Among all 1,000 samples, pulmonary rehabilitation resulted in net cost savings and improved quality-adjusted life expectancy in a probabilistic sensitivity analysis.

https://tinyurl.com/5x8a257b

Influenza remains a significant burden

The Canadian National Advisory Committee on Immunization recommends that people over 65 years of age should get a high-dose flu vaccine. Older people's immune systems can wane over time and therefore a larger dose of vaccine can help ensure an adequate immune response.

The risk of death from influenza has declined over time, but globally, hundreds of thousands of people still die from the disease each year. During flu pandemics, when influenza strains evolved substantially, the death toll was even higher. But the risk of dying from influenza has declined substantially over time from improvements in sanitation, healthcare, and vaccination.

People born in 1940 had around one-third of the risk of dying from influenza as those born in 1900—even when they reached the same age. This decline continued, and those born in 1980 have a risk half that of those born in 1940. Yet, influenza still remains a significant burden around the world, because of an aging population and, in many countries, a lack of access to healthcare and sanitation.

Despite being a well-understood disease, it can be hard to count the number of deaths from influenza for several reasons. One problem is that the symptoms of influenza look similar to other infections, such as respiratory syncytial virus (RSV) and rhinovirus. In many countries, only a fraction of patients with an "influenza-like illness" are tested to confirm whether they were infected by the virus. This means many—or, in some countries, most—infections might be missed. Another issue is that influenza can lead to death in a number of indirect ways. It can cause death through respiratory complications such as pneumonia, but also from cardiovascular complications such as heart attacks and strokes, or serious infections. This is especially true for the elderly and people who have chronic health conditions. Without accounting for these deaths, we would underestimate the number of flu deaths. To work around this, researchers estimate the burden of influenza using other methods. They can estimate the number of excess deaths that occur during flu seasons, and use routine surveillance data and mortality records, to estimate how many of these deaths are caused by the flu.

The annual mortality caused by seasonal influenza was estimated by the Global Pandemic Mortality Project II using data obtained between 2002 and 2011. They estimated that, during this period, seasonal influenza caused between 294,000 and 518,000 deaths each year globally. These estimates focus on deaths of people who had respiratory disease. This means they miss some flu deaths, as some people may die from cardiovascular complications of the flu without having respiratory disease.

The estimates of flu mortality shown as a rate per 100,000 people in Europe indicate a rate of deaths from the flu was 30.8 per 100,000 each year among those aged over 65 years. This is more than three times the risk from traffic accidents, which kill nine per 100,000, in the same age group. In low-income countries, these estimates tend to be less certain, due to lower levels of testing for influenza and limited mortality records. But flu is estimated to be more deadly in countries in South America, Africa, and South Asia than in Europe and North America. For example, Indonesia has more than twice the influenza death rate of Canada. These disparities are at least partly due to poverty, poorer underlying health, and less access to healthcare.

"The risk of death from influenza has declined over time, but globally, hundreds of thousands of people still die from the disease each year."

For more information: https://tinyurl.com/ar4jd8c3

Why learn pursed-lip breathing?

Breathing continued from page 1

you inhale once and then inhale again before exhaling. This will cause you to use your auxiliary breathing muscles in your shoulders and neck and will also cause "air-stacking" in your lungs. This will in turn cause you to expend more energy and use up more oxygen. Also, by pausing after exhaling, the lungs have a little more time to exchange gases (CO and CO_2).

There are no known significant risks associated with pursed-lip breathing, although you should stop if you start to feel light-headed. You should discuss pursed-lip breathing with your doctor to be sure it's right for you. Pursed-lip breathing may provide short-term relief of some types of dyspnea, but it won't treat the underlying cause.

Diaphragm Breathing uses a large muscle separating your lungs from your abdomen—the diaphragm. Your diaphragm can work hard and never get tired. Some people breathe using their chest muscles instead of their diaphragm. This takes extra effort and can cause fatigue and tension.

Test yourself to see whether you breathe correctly through your diaphragm:

A) Sit upright and relax your shoulders

B) Rest one hand on your chest and the other on your stomach

C) Breathe in deeply through your nose and pay attention to the movement of your hands

If you use your diaphragm to breathe, the hand on your stomach will move. If you use your chest muscles to breathe, the hand on your chest will move. Try both ways of breathing and feel the difference. If you are a chest breather, practice diaphragmatic breathing for a few moments several times a day, and soon it will become automatic. If your neck and shoulder muscles are constantly sore after being short of breath, then you are a chest breather and you have to learn to diaphragm breathe.

Let your doctor know if you're having shortness of breath. If you're having shortness of breath for no apparent reason, or you're having chest pain or pressure, nausea, or fainting along with shortness of breath, seek immediate medical help.

Most of the pulmonary rehab programs available provide exceptionally good instruction regarding how to breathe. They also have excellent exercise programs. Exercising regularly and pulmonary rehab can help all people living with the burdens of Chronic Obstructive Pulmonary Disease.

My COPD checklist

Talking continued from page 1

results, diagnoses, treatments plans, and medicines

- Ask your doctor how best to communicate with them (phone, text, email, Zoom)
- Make sure you understand your diagnosis and any prescribed treatments. If you don't understand your doctor's responses, ask questions until you do understand
- Ask your doctor for written instructions if you need them. Find out where else you can go for further information if your condition is too complicated to review during an in-person consultation

Improving the quality of your healthcare can be an effort. An easy way to improve care for yourself or a loved one is to ask questions to help you understand your condition. Evaluate your options. If there are numerous tests involved, here are some helpful questions:

- What is the test for?
- How many times will I have to do these tests?
- When will I get the results?
- What are the possible complications?

When being prescribed new medicines or other treatments, here are some questions you should consider:

- Why do I need this treatment?
- Are there any alternatives?
- Are there any side effects that I should be aware of?
- Will this medicine interact with medicines that I'm already taking?

One way you can make sure you get good quality healthcare is to be proactive. Patients who ask questions and make sure they understand the answers tend to get more timely, accurate diagnoses and have better outcomes. Remember, you are your best advocate.

To help you keep track of what to ask when meeting with your healthcare provider we have inserted a simple-to-use tool.

If the insert is missing, you can download a copy of the checklist as a single page or in business card format. Go to: http://www.copdcanada.info/3.html

COPD Canada Facebook

Join our COPD Patient Support Group

https://www.facebook.com/COPDCanada/groups

Join Today: COPD Canada's Facebook Support Group is a gated community where members can communicate and share information with others going through the challenges of living with chronic obstructive pulmonary disease. **Membership is free-of-charge**, but you must ask to join the group. Once approved, you will be able to interact openly or confidentially with other members of the COPD Support Group

For more information contact: exec.copdcanada@gmail.com

COPD people

Paddy O'Brien

Paddy grew up in Port Colborne, Ont., down in the Niagara Peninsula. His dad was a math and French teacher so the family was able to spend most summers during his childhood at the family cottage near Pembroke, Ont. Summer get-togethers up at the lake are still a big part of Paddy's life. He's married with three sons and five grandchildren. His wife Rosalee worked in a long term nursing home before she retired. Paddy worked in information technology most of his life as a computer systems analyst. He was involved in the warehouse and logistics management systems for major retailers like Hudson's Bay. He's now semi-retired but understands the importance of keeping physically active and is a member of an old-timer's non-contact shinny hockey league. "It's a great way to spend some time with friends while getting lots of exercise." There are about 84 hockey players in the league, and most have health issues. Paddy also enjoys the after-skate beer with the guys, a well-deserved treat and a nice way to cap off the event. He believes the group activity has a positive effect on his mental state. Paddy was diagnosed with COPD 10 years ago.

How do you manage your breathing while playing hockey?

You have to push yourself through the first few shifts. It's really tough. I don't know what happens but it seems to get easier as the game progresses.

Do you use a rescue inhaler before the game?

I have it on the bench with me but don't normally need to use it.

Do you do any other exercising?

I try to go to the gym every other day, and use the local recreation centres.

Can you describe how you thought you had COPD? Were you a smoker?

I smoked for about 25 years.

Did you use anything to help you quit smoking?

I just quit cold turkey. It was most difficult when I had a coffee or a drink. That doesn't happen now. Other people smoking around me now bothers me.

What prompted you to go to the doctor about your breathing?

I was working in downtown Toronto near city hall. At lunch, I would go for walks and noticed that I was wheezing and was very out of breath. While going up the stairs I had real difficulty breathing. I saw my doctor shortly after that experience who diagnosed my COPD

Was the diagnosis confirmed by spirometry?

It was. My doctor was right in sending me for the tests.

While working in warehouse management were you exposed to airborne particulates, such as dust from the boxes and shelves?

I think breathing in all that dust and dirt didn't help.

What kind of medicine do you take for your COPD?

I'm on three different inhalers. Two regular, daily inhalers and the rescue inhaler.

Do you have any hobbies or other interests?

I run the weekly hockey shinny year-round and enjoyed a lot of volunteer work in the past. I was the founding chairman of the board of directors with Wellfort Community Health Centre. As well, I was the chairman of the board of directors with Peel Senior Link. I also received the 10-year service award from the City of Brampton for my volunteerism, which I'm very proud of.

Do you have any other health issues?

I've had cancer for over 10 years (CTCL). I've been dealing with a non-Hodgkin's lymphoma. During one of my exams they also discovered that I have prostate cancer.

What are they doing for that?

It's a relatively new procedure (brachytherapy). It's a type of internal radiation treatment via inserting needles directly into the prostate and emitting radiation, followed by external radiation treatments. It's very precise procedure, and non-invasive. Happily, both cancers are in remission.

Do you have a favourite smell or food?

I love my wife's cabbage rolls.

Are you handy in the kitchen?

I make a pretty good chili. Now is the time of year when a good bowl of hot chili is really appreciated.

PRORESP Inc.

Community Respiratory Therapy

Helping you breathe, to live the life you love.

www.proresp.com