



ILLUSTRATION BY HEFF O'REILLY



# Love With careful management, some people with lung disease can live symptom-free Your Lungs

By Rick Overwater

**T**omorrow morning, Shirley Thomson departs for Cuba. She can't wait to go. But unlike most vacationers headed for the Edmonton airport, Thomson is packing a few extra items to ensure her trip goes off without a hitch.

"I've got all my antibiotics with me in case I get sick," says Thomson. "I have a prescription on hand that'll take care of any respiratory infections. I have all my inhalers, I have medical insurance and I have my doctor's card and cellphone number. So I'm not too worried."

Thomson is prepared for a reason: her first sun-filled vacation didn't turn out as she'd hoped. "Going down to the Dominican Republic last September was a real eye-opener for me because in that heat, I ended up catching pneumonia right away," recalls Thomson.

Fear of pneumonia has forced her to be wary of one of her favourite pleasures. "I can't sit in my hot tub in the winter or I'll catch pneumonia," she says. "But I can sit in it in the summer as long as there's no cool breeze."

## Coping with COPD

Thomson has a chronic (long term) lung condition called bilateral bronchiectasis. It is one of many variations of Chronic Obstructive Pulmonary Disease (COPD), a cumbersome-

named affliction caused by damaged airways or lungs, resulting in laboured breathing.

It's a serious condition, but increasing numbers of people with COPD are, like Thomson, able to enjoy a high quality of life with careful management. Others, such as Edna Perks of Grande Prairie, are more severely debilitated by the disease. "I use (tanked) oxygen all the time now," she says. "There are times when I'm just too tired to even cook dinner. But you make adjustments. You have to adapt or you'll drive yourself crazy."

COPD will be the world's third leading cause of death in a few years, following heart disease and cancer. And unlike heart disease, which has seen a 60% drop in mortality rates over the last 40 to 50 years, the mortality rate for COPD has risen by 150%.

"We attribute [the increase] to the prevalence of smoking. While smoking rates are decreasing now, it takes smokers 15 or 20 years to develop COPD," says Dr. Warren Ramesh, a consultant respirologist at Edmonton's Royal Alexandra Hospital. "So what we did 20 years ago is what we're seeing now."

As the number of smokers decreases, Ramesh says doctors expect the prevalence of COPD to decrease with it. COPD is also more likely to strike the elderly, a group typically facing the most risk for life threatening illnesses.

If the term "COPD" seems new, it's maybe because people are more familiar with conditions that fall under the COPD umbrella, like bronchitis and emphysema.

One sign of COPD is long bouts of coughing or throat clearing that occur almost daily for a period of months or years and slowly worsen. Other symptoms can include shortness of breath and excessive production of mucous (phlegm).

Not all COPD cases will show these symptoms. Emphysema, for example, often won't trigger coughing, though the condition causes the alveoli (the millions of tiny air sacs in the lungs) to become severely damaged. Nor are all COPD cases smoking related; bronchitis can be triggered by bacterial or viral infections. In Thomson's case, her condition is hereditary. "I was born with the problem," says Thomson. "My mother and grandmother had it. They ended up having part of their lung removed. I had the same surgery at 20. My mother died at 56."

Fortunately, significant progress on the treatment and diagnosis of COPD has been made since those days. Thomson's mother lived in the Northwest Territories, where easy access to facilities that conduct lung breathing tests, a primary method of detection, wasn't as readily available as it is today.

Medications like bronchodilators, which help

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open up the body’s breathing tubes, are more abundant. Inhaled corticosteroids, which can help with inflammation and mucous production, now exist. So does a medication called an anticholinergic, which helps dry mucous so there is less coughing and swelling inside the lungs. Caritas offers a six-week Breathe Easy program to COPD sufferers to teach them the best ways to maximize their oxygen, safe and healthy ways to exercise, healthy diets and stress management. Another major breakthrough – a lung transplant – may seem drastic, but is becoming an increasingly common alternative if other treatments aren’t helping.

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Edna Perks is currently in Edmonton attending a course to prepare her for a lung transplant due to her COPD. Referred to the transplant program last year, she went through vigorous testing to confirm her eligibility. She now spends the better part of her days at the University of Alberta Hospital training to improve her physical fitness to ensure she is in the best shape possible for when her turn comes. “It’s hard work,” she says. “I only have about 25% of my lung function, but I am getting stronger.”

But the waiting time for transplants is considerable, as the recipients greatly outnumber the donors. Prevention, as the old adage goes, is still the best cure.

So how can you prevent COPD?

“The number one way to prevent COPD is to stop – and never start – smoking,” answers Ramesh.

Medications like bronchodilators can keep the airways open to prevent further damage. Staying up-to-date on vaccinations can also make a big difference.

“When you produce a lot of mucous, the bac-

teria can cause an acute infection in addition to conditions like bronchitis,” explains Ramesh, “and to prevent that we suggest a pneumonia vaccination and also a flu vaccination.”

### Controlling Asthma

Surprisingly, given its contribution to the world’s mortality rate, COPD is not the most common lung condition. Asthma holds that dubious distinction.

“It’s estimated that around 10% of the world’s population has asthma,” says Ramesh, and that number has tripled since 1980. “It’s probably because people are more aware and there’s more diagnosis. I also think it’s more common because asthma is strongly associated with allergies and environmental irritants, sometimes called occupational irritants.”

People in certain occupations – including dry walling, carpentry and painting – have a higher susceptibility to the disease. Asthma can also be hereditary.

Asthma is characterized by chronic inflammation of the airways with increased swelling around the breathing tubes, typically accompanied by lots of mucous. As well, the muscles surrounding the breathing tubes can go into spasm, leading to coughing. There are numerous warning signs, including chest tightness, wheezing or shortness of breath.

“If you’re short of breath climbing stairs or walking up a hill, or you have a prolonged cough that lasts for weeks, it could be a sign of asthma,” says Ramesh. “In some people it’s just a nighttime symptom; they wake up with a coughing episode. And if you get recurrent bronchitis, that could be a sign too.”

Triggers for asthma attacks include exposure to cold weather, tobacco smoke and allergens such as cats and dust.

Asthma is manageable and does not threaten life expectancy; in fact, studies show that 75%

of patients can live with normal lung function and no visible symptoms. The irony is that 75% of asthma cases are not controlled. People tend to stop treatment when they feel better, even though it’s a chronic illness that requires long-term therapy.

“Patients shortchange themselves, saying ‘if I have asthma, I’m going to have symptoms,’” says Ramesh. “They go to the emergency room maybe once a year and say, ‘That’s normal for me.’ It’s not. People think they’ve grown out of asthma if they don’t show symptoms. You never grow out of asthma.”

The consequences can be severe. “I’ve seen people who’ve never smoked but have had asthma for years, and irreversible obstructions have formed in the breathing tubes,” Ramesh says. “They can barely get their clothes off or take a shower because they get too short of breath.”

Shirley Thomson knows what’s involved in the asthma patient’s daily routine. She also takes medication daily and carries an inhaler. One of her sons has asthma, and she knows too well how it goes with kids.

“They don’t want to carry those inhalers for one thing. Whereas me, inhalers are in my house, in my car, they’re everywhere,” she says. “My son doesn’t want to go to the doctor and he doesn’t like carrying his inhaler.”

Inhaled corticosteroids and bronchodilators are now the primary weapons for combating asthma. The arsenal of tools available today is considerable, and doctors aim for their patients to become completely symptom-free. “There’s a myth that the word ‘steroid’ is bad for you,” says Ramesh. “It would be if it were an anabolic steroid. But the inhaled corticosteroid is very safe.”

### Preventing Pneumonia

A more well known lung condition, coming in third behind asthma and COPD respectively, is pneumonia. In some cases, you can catch a fun-



gal or “atypical” variation of pneumonia, but generally it’s considered a viral or bacterial infection of the lungs. “Among all the infectious diseases – HIV, meningitis, etcetera – pneumonia is the number-one killer because it’s so common,” says Ramesh.

Patients with COPD like Thomson and Perks are more likely to catch pneumonia than other people. It’s also more likely to affect those with chronic renal conditions, severe acid reflux, alcoholism and compromised immune systems.

“With my COPD, I catch pneumonia easily and I try to be really careful to avoid getting sick,” Perks says. “But you can’t live your life in a sterile bubble.”

Ramesh says if you have a cough, large amounts of phlegm, fever, chills, chest pain “and just feel awful,” you may have pneumonia. Doctors usually diagnose the disease by a physical examination or chest X-ray and often prescribe antibiotics for treatment. Antibiotic-resistant pneumonias, while more common than they used to be, are still very rare and new drugs are being developed all the time.

Once again, nothing beats prevention. Smoking, a major villain in all things respiratory, should be avoided. Vaccinations at regular intervals as prescribed by your doctor can also be a major factor in the prevention of pneumonia, as can breathing exercises.

### Living with Lung Cancer

Few diseases are as infamous as lung cancer, and it probably comes as no surprise that it ranks in the top four on the list of common lung afflictions, right behind pneumonia. Like COPD, smoking is the major culprit, with 80% to 90% of all lung cancers related to smoking. And as with COPD, the number of occurrences is increasing; the spike follows the peak in smoking rates of 20 years ago.

Other factors that contribute to lung cancer

include family history and occupational exposure to cancer-causing materials. “The major occupational risk is asbestos exposure,” says Ramesh. “Again, we are seeing the results of what we did 20 to 30 years ago. Unfortunately, workers were not only exposed, their children were too. Parents would bring it home on their clothes and their kids would inhale it.”

Most of the time, lung cancer shows few to no symptoms until the later stages. “Lungs do not have pain fibres, so you can have a tumour growing and you won’t feel anything,” cautions Ramesh. “By the time we diagnose the cancer it’s usually spread.”

That’s unsettling news, but it’s important to note that a smoke-free history is an excellent defence, as is regular exercise. If you currently smoke or used to smoke, or if there is cancer in your family history, Ramesh recommends an annual chest X-ray.

“If it’s caught in the early stages, surgery is a potential cure,” he says.

Today, there are more treatments for lung conditions than ever before, and more people like Thomson are dealing with it and getting on with their lives.

“I would tell people to just stay positive, seek out help, don’t give up, and take your medication,” she says.

If you’re not sure your family doctor or local clinic is steering you in the right direction, or if you would like more information, ask for a referral to a respiratory specialist. “Any medi-center will give you a referral if you ask,” Thomson says. “Just seek medical attention as soon as you get sick and don’t let it go on too long.”

Ramesh agrees. Thanks to improvements in treatment options, prevention and awareness, he expects to see significant changes. “If you put everything together,” he says, “we are going to see the risk of dying from lung disease go down just like heart disease.” **YH**

### The air in here

Our society is more fixated on air pollution than ever before. However, most people are looking outside of their own houses, not in. Few realize indoor air pollution can cause health problems, especially for people with lung diseases. Canadians spend 90% of their time indoors, making indoor air quality an important health concern.

The main sources of indoor air pollutants are either biological or chemical. Biological pollutants originate from living things, or are themselves living things. Common sources include pets, mattresses, bathrooms, damp or flooded basements, appliances such as humidifiers, dehumidifiers and air conditioners, carpets and furniture.

Chemical pollutants can be gases, such as carbon monoxide or nitrogen dioxide, or particles, such as soot. Common sources of chemical pollutants include oil and gas appliances, second-hand tobacco smoke, paints, scents, pesticides and household products, including air cleaners and air fresheners.

Whether you have asthma, COPD, a suppressed immune system or are fit and healthy, it’s a good idea to review the air quality of your home. The Canadian Lung Association offers a Healthy Home Audit at [www.lung.ca/\\_resources/healthy\\_home\\_audit.pdf](http://www.lung.ca/_resources/healthy_home_audit.pdf)

Source: The Canadian Lung Association  
[www.lung.ca](http://www.lung.ca)

### Resources

#### The Canadian Lung Association

[www.lung.ca](http://www.lung.ca)

#### The Global Initiative for Chronic Obstructive Lung Disease (GOLD)

[www.goldcopd.org](http://www.goldcopd.org)

#### The Lung Association (Alberta)

[www.ab.lung.ca](http://www.ab.lung.ca)

#### Centre for Lung Health (Edmonton)

(780) 482-8951

#### Northern Alberta Lung Function

Breathing Tests (780) 421-8495

#### Smokers’ Help Line (AADAC)

Counsellors are available to advise you between 8 a.m. and 8 p.m., seven days a week. (866) 332-2322