Approximately 16% of people in Canada between the ages of 45 and 85 are affected by chronic cough.

Managing Chronic Cough

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Coughing is normal.

It's your body's way of keeping things like germs or dust or out of your throat and lungs. It also helps clear extra mucus from your airways.

Coughing is often a symptom of a cold, flu or allergies. Acid reflux or reflux of non-acid contents of your stomach can also cause you to cough.

An **acute cough** is one that lasts less than three weeks and goes away on its own. A **sub-acute cough** lasts more than three weeks, but less than eight weeks. This type of cough is also usually caused by an infection. It may go away by itself, however

Canadian Lung Association BREATHE

This document is for informational purposes only and not intended as medical advice.

Acute cough: less than 3 weeks

Sub-acute cough: 3 to 8 weeks

Chronic cough: 8 weeks or more

respiratory infections should be assessed by your healthcare provider and you may require treatment to get rid of your cough.

A cough lasting eight weeks or more is considered a **chronic cough**. Chronic cough can be caused by many different things. It's not always the sign of a serious health issue. It is estimated that chronic cough affects about 16% of Canadians between the ages of 45 and 85¹

About chronic cough

The most common causes of chronic cough are respiratory infection, asthma or postnasal drip. Tobacco use can cause a chronic cough in smokers. Chronic cough can also be caused by gastroesophageal reflux disease (GERD) or it can be a side effect of certain medications.

A chronic cough can affect you physically and socially and can disrupt your life. Finding the cause of your chronic cough will help your healthcare team recommend the best treatment for you. Even if the cause of your cough isn't clear, your healthcare team can provide you with different options that will help you manage your cough. There are also things that you can do on your own to keep your cough from disrupting your life.

Living with chronic cough

Chronic cough can have a significant affect on your day-to-day life. It can cause physical symptoms and it can affect you emotionally, including affecting your relationships and social life.

Physical effects of chronic cough

- Scratchy or irritated throat
- Feeling breathless or unable to catch your breath
- Wheezing
- Fatigue (weakness, tiredness) or exhaustion
- Chest pain, broken ribs, hernia due to force of the cough
- Trouble sleeping
- Problems with speech
- Gagging or vomiting
- Dizziness, feeling lightheaded or fainting
- Wetting yourself with cough
- Change in your voice

^{1.} I. Satia, M. Wahab, E. Kum, H. Kim, P. Lin, A. Kaplan, P. Hernandez, J. Bourbeau, L. P. Boulet & S. K. Field (2021) Chronic cough: Investigations, management, current and future treatments, Canadian Journal of Respiratory, Critical Care, and Sleep Medicine, 5:6, 404-416,DOI:10.1080/24745332.2021.1979904

QUESTIONS?

Call the Canadian Lung Association Health's Information Line at 1-866-717-2673 to speak to a certified respiratory educator.

Social and emotional effects of chronic cough

Chronic cough does not only cause physical symptoms. It can interfere with your life and have social and emotional consequences.

For example, it can make you anxious or scared that you have a serious health problem. There can be stigma associated with chronic cough, especially following the COVID-19 pandemic. People may think you have a contagious infection or disease and avoid being near you.

People may comment on your cough, which can be embarrassing. You may worry that people think you have a contagious disease or that you are a heavy smoker. You may feel isolated and lonely because you're worried that your cough bothers your family or friends. This can cause you to become lonely and isolated, which may lead to depression or other mental health issues.

Chronic cough can have a significant affect on your day-to-day life, both physically and emotionally.

When to see a healthcare provider

Even if your cough has not lasted more than eight weeks, you still may need to see a healthcare provider.

If you're not sure, ask yourself the following questions. If you answer yes to any of them, you should see someone on your healthcare team.

- Are you coughing up blood?
- Are you short of breath?
- Has your cough changed over time?
- Are you losing weight without trying?
- Are you coughing up phlegm?
- Do you have a fever?
- Do you currently smoke?
- Did you smoke in the past?
- Are you living with asthma or COPD or other respiratory conditions?
- Is your cough causing abdominal pain?
- Is your cough causing incontinence or leakage of stool?





Causes of chronic cough

There are only a few things that cause most chronic coughs: postnasal drip, GERD, asthma, infections like chronic bronchitis and medications called ACE inhibitors. Smoking and smoking-related lung conditions are also common causes in smokers.

Infection

Chronic infection of your airways, called chronic bronchitis, can cause chronic cough for some people. There are other, less common infections that can cause chronic cough, for example tuberculosis (TB) or whooping cough (pertussis). Both children and adults can get whooping cough.

Asthma

When you have asthma, things like certain chemicals or scents or cold air can cause you to cough. Asthma can also make it more likely that you will get an infection like a cold or flu. Taking regular medication to control your asthma can prevent the cough in most cases.

Postnasal drip (PND)

Postnasal drip happens when extra mucus from your nose drips down the back of your throat. This can cause you to cough. PND is usually a symptom of allergies or an infection like a cold.

Smoking

People who smoke may have a "smoker's cough". This is your body trying to get rid of the chemicals in your lungs and airways after long-term use of tobacco.

Even if you smoke, a chronic cough is not normal. It may be a sign of chronic obstructive pulmonary disease. Quitting smoking will improve your lung health and help you get rid of your cough.

If you need help to quit smoking or are worried about your cough caused by smoking, there are supports available to you. Speak with your pharmacist or other healthcare provider about how you can quit smoking.

Chronic obstruction pulmonary disease (COPD)

COPD is a lung disease associated with smoking. Symptoms of COPD include breathlessness and chronic cough. Quitting smoking and treatment for COPD can help improve chronic cough. There are supports available to you. Speak with your pharmacist or other healthcare provider about how you can quit smoking.

Angiotensin-converting enzyme (ACE inhibitors)



ACE inhibitors prescribed for high blood pressure or

heart failure can cause coughing for some people. There are also other types of medications known to cause chronic cough.

Your healthcare team will ask you about what medications you are taking. Changing your medication can stop the cough. Discuss your medications with your physician or pharmacist to find a different medication that will control your condition without causing cough.

Cough hypersensitivity syndrome (CHS)

Not everyone with asthma or who is a smoker experiences chronic cough. Chronic cough can also be experienced by people with no obvious illness or infection.

Cough hypersensitivity syndrome describes various cough-related conditions or unexplained cough. CHS is a new concept in healthcare, and its cause is not fully understood. It is thought that the nerves that trigger the body's urge to cough are overly sensitive to certain triggers. These triggers could be things like perfume, cold air, exercise, stress, singing or talking.

People with CHS often feel the urge to cough, like a sensation of irritation or itching in the throat before they cough.

Finding the cause of your cough

Before your healthcare provider can treat your chronic cough, they will try to find out what is causing it.

Health and lifestyle questions

Your healthcare provider will likely begin by asking you questions about your health and lifestyle. It is a good idea to prepare for your appointment by reviewing a list of possible questions your provider could ask you. For a list of possible questions, see Working with your healthcare team: Preparing for your appointment.

Physical exam and testing

Your healthcare provider will also perform a physical exam including listen to your lungs and order some tests to help find the cause of your cough. They will likely order a chest x-ray. They may also order a lung function test (spirometry) to measure how well your lungs are working.

Chest x-ray

A chest x-ray is a two-dimensional image of your lungs. Chest x-rays are helpful to rule out more serious but rare causes of chronic cough, like pneumonia, tuberculosis (TB) or lung cancer.

Spirometry

Spirometry is a kind of pulmonary function test. It is the most common test to measure how well your lungs are working.

You will be asked to blow into a mouthpiece that is attached to a small device called a spirometer. A spirometer will tell you how much and how fast you can move air in and out of your lungs and if there is something blocking your airway. This test can be used to diagnose COPD or asthma.

Further testing

It can be hard for a healthcare provider to diagnose the cause of a chronic cough, especially if they rule out the most common causes.

It is possible your cough is related to a disease or condition not related to your airway or lungs. Your healthcare provider may refer to you an ear, nose, throat specialist (ENT), or someone who specializes in treating conditions of the stomach or esophagus. They may refer you for more testing, like a CT scan or endoscopy.

You may need to try several different medications before your healthcare team finds the right medication for you.

Treating the cause of your cough

Treating the cause of your chronic cough can help reduce or get rid of your cough. Your healthcare team will recommend the best treatment for you depending on its cause.

The first medication recommended by your healthcare team may not successfully treat your cough. You may need to try several different medications before your healthcare team finds the right medication for you. It is also important, no matter the cause of your cough, to identify what triggers your cough and avoid these triggers as much as possible.

If your cough is caused by an infection

You may receive antibiotics if a bacterial infection is causing your cough. Antibiotics do not work against viral infections. Getting vaccinated against infections is a good way to prevent flu, COVID-19 and other common causes of lingering coughs.

If your cough is caused by asthma or COPD

You will be given inhalers to take if your cough is due to COPD or asthma. It is important to take them daily or as directed to treat the cause of the cough.

If your cough is caused by postnasal drip (PND)

You may be asked to take antihistamine (allergy) pills if your PND is caused by allergies. Decongestants (pills or spray) can help, however they should only be used for a few days. Nasal sprays with corticosteroids or ipratropium bromide can be helpful to treat PND. Some people also find nasal rinses with saline helpful.

If your cough is caused by the medication you're taking

You may be asked to change your blood pressure medication if your healthcare team suspects this is what is causing the cough.

If your cough is caused by GERD

It is often possible to manage GERD by changing your diet or eating habits. If this doesn't work, you may be prescribed a medication called a proton pump inhibitor. PPIs work by reducing the amount of acid your stomach produces. There are six PPIs available in Canada: omeprazole (Losec), esomeprazole (Nexium), lansoprazole (Prevacid), pantoprazole (Pantoloc), rabeprazole (Pariet) and dexlansoprazole (Dexilant).

If your cough is getting in the way of you living as you would like, speak to your healthcare team.



Controlling your cough

If your cough is getting in the way of you living as you would like, speak to your healthcare team. It is still possible for you to get relief from chronic cough even if your healthcare team is not sure of its cause.

Prescription medications

Your healthcare team will discuss the pros and cons of different medications and they will work with you to choose the best option for you. Often you will

be asked to take medication for a couple of months to see if there is any change in your cough. You may be asked "rate" your cough (for example, how often you are coughing, if your cough is interrupting your sleep). This will help you and your healthcare provider know if the medication is working.

Ipratropium. Ipratropium is used to relax the muscles around your airways so that you can breathe easier. Ipratropium bromide comes in an inhaler or puffer.

Amitriptyline. Amitriptyline is an antidepressant medication that is sometimes used for

chronic pain. Some research has shown that it can lessen chronic cough.

Morphine. Your healthcare team may give you a low dose of slow-release morphine if your cough is interfering with your daily life and other treatments have not helped.

Gabapentin, **pregabalin**. Gabapentin and pregabalin are antiseizure medications that have been shown to lessen the cough for some people.

Other treatments

Behaviour modification therapy. Behaviour modification therapy involves teaching people to have more control over their cough symptoms and includes education, strategies to suppress the cough, vocal hygiene training and counselling.

This type of treatment is often provided by speech and language therapists. The therapist will teach you ways to suppress your cough, using swallowing or relaxed breathing. They will also help you identify what causes you to cough and how you can avoid these triggers. They will also help you with any anxiety you feel because of your chronic cough.

Controlling your cough: What you can do

There are things you can do on your own to help control your cough and keep it from getting worse.

Quit smoking

If you smoke, the best thing you can do is quit. There is help available for you. Start with your healthcare team. There is also information available from our website lung.ca.

Avoid sources of smoke and other irritants

Smoke from tobacco, wood fire or other sources can irritate your lungs and cause you to cough. Make your home smoke free and avoid sources of smoke outside your home. Avoid environments where irritants such as smoke, dust, pollen or pollution may be present. For more information about how air quality can affect your lung health, see lung.ca

Drink fluids

Water or other fluids can help thin mucus and soothe your throat. Honey or lemon (or both) in hot water and tea is also soothing. Make sure the temperature of the fluid is not too hot to cause burns or hurt your mouth and throat.

Suck on cough drops or hard candy

Sucking on hard candy or cough drops can soothe your throat. Hard candy may work as well as cough drops, so choose whatever drops or candy you prefer. Medicated cough suppressant lozenges (cough drops) or expectorant (cough syrup) are not recommended for chronic cough and are not recommended for children under 14.



Keep yourself from getting sick

You should do what you can to keep yourself from getting infections that can make your cough worse.

- Ask your healthcare team about recommended vaccinations to prevent flu, COVID-19, pneumonia and respiratory syncytial virus (RSV).
- Wash your hands or use hand sanitizer.
- Avoid being around people who may be sick. If you do get sick, stay home so that you don't get worse.
- Consider wearing a mask if you are around large groups of people, may be around people who are sick or are sick yourself. Always remember to cover your cough and keep tissues on hand to cover your mouth when you cough.

Working with your healthcare team

Your healthcare team should include your primary care provider (family doctor or nurse practitioner) and your pharmacist. Other members of your healthcare team may include a



Respirologists

registered nurse or health professionals with a focus on lung health, like a respirologist, a respiratory therapist or a certified respiratory educator. It is also important for your support person or caregiver to be a member of your care team.

Your provider will ask you a list of questions as part of your physical exam. It's helpful to know some of the questions they may ask you before your visit so that you have time to consider your answers and don't forget any important details. Please see <u>Working with your</u> <u>healthcare team: Preparing for your</u> <u>appointment.</u>

Respirologists are medical doctors with additional education to specialize in the care and treatment of lung diseases and disorders.

Respiratory therapists

Respiratory therapists are health professionals who monitor, assess and treat patients who have trouble breathing. They often work in hospitals, but they can work in other areas like home care or as part of a primary care team.

Certified respiratory educators

Certified respiratory educators are healthcare professional (like nurses, pharmacists or occupational therapists) with additional training to teach patients about their respiratory conditions, like asthma or COPD.



Chronic cough in children

It is possible for a child to have a chronic cough. If a child has a cough that lasts more than four weeks, they may be diagnosed with a chronic cough.

Common causes of chronic cough in children

In children the most common causes of cough are asthma, bronchitis or postnasal drip.

Things that can also cause cough in children are environmental triggers, like pollution, smoke or allergens, something stuck in their airway, GERD or whooping cough.

Finding the cause of chronic cough in children

Your child's healthcare provider will start by asking you questions about your child's cough. You may be asked to describe your child's cough as "wet" (phlegmy) or "dry". Other questions will include when the cough happens, for example, does your child cough when eating or drinking?

Children may require different testing than is done for adults, depending on their age. For example, spirometry is not used for children under the age of six.

Your child may be tested for whooping cough. To check if your child has asthma, they may be given different inhalers to test.

Psychiatric or psychological causes of cough

Some children may not respond to any treatment that their healthcare provider recommends. In some cases, a child may have a "tic". Tics can be caused by conditions, like Tourette's syndrome, an anxiety disorder or obsessive-compulsive disorder (OCD). These are involuntary muscle spasms that your child cannot control.

There is also something called a "habit cough" or a psychogenic cough. Like a tic cough, this cough has no obvious cause and does not respond to usual treatments, but it is not considered a tic. If their healthcare provider suspects your child may have a tic or habit cough, they will refer you to someone who can evaluate and treat your child.

It is also possible for an adult to have a tic cough or a habit cough.