



Shortness of Breath

By: The Canadian Virtual Hospice Team

What is shortness of breath?

“Air hunger”

The medical term for shortness of breath is *dyspnea*. This has been defined as “an uncomfortable awareness of breathing.” It’s also often referred to as *air hunger*.

People who are short of breath feel that they can’t get enough air. Their breathing is usually faster than usual, but it might be normal or even slower. It can feel difficult or painful and the experience is usually frightening.

Are they short of breath?

Shortness of breath is a *feeling someone has rather than something we see* in them. We can’t tell if a person is short of breath simply by looking at them. If someone can’t tell us how they’re feeling, we may guess they are feeling short of breath if we see they’re working hard to breathe and appear distressed.

- A person who is breathing quickly, or who seems to be working hard to get enough breath, will usually tell you they feel short of breath.
- Sometimes a person appears to be breathing comfortably, but they’ll describe feeling short of breath.
- Sometimes the person appears to be breathing quickly or with difficulty – but they’ll tell you they feel quite comfortable.

TIP:

The only way to know for sure if someone is feeling short of breath is to ask them (if they’re able to respond).

Causes of shortness of breath

How the respiratory (breathing) system works

Our body’s *respiratory system* does the job of breathing. This system allows us to take in the oxygen that our bodies need and breathe out the waste gas (carbon dioxide) that we don’t need. When we breathe, a process happens inside each lung: oxygen enters the bloodstream, and carbon dioxide leaves the bloodstream and the body. Then the red blood cells in the bloodstream deliver the oxygen throughout the body.

Muscle strength is important for our breathing system to work well. The chest uses muscles to breathe air in and to blow it out. The *diaphragm* is a large muscle that plays a major role in breathing.

Causes of breathlessness

Almost everyone has experienced shortness of breath after activities like walking or climbing stairs. Some people, however, have an uncomfortable feeling of being out of breath simply talking or eating, or even when they’re resting.

This type of breathlessness can be caused by:

- General overall physical weakness that lessens the energy and strength available for the basic activity of breathing.
- Blockage of the airways.
- Lung problems such as pneumonia, emphysema, asthma, a tumour, or the side effects of chemotherapy and radiation treatment that can damage the lungs.
- Various medical problems such as heart issues, neurological disorders, or anemia.
- Anxiety.
 - This may be the main problem or a significant condition contributing to feeling that the person can't get enough air.

General weakness

When we're physically weak, we have less energy and strength for the work of breathing. The chest muscles and diaphragm weaken with illness along with the rest of the body.

Blockage of the airways

Tumours and swelling may reduce the flow of air through the airways. Sometimes airways may be blocked by mucous or secretions.

Anemia (Low red blood count)

Oxygen is an essential element of the respiratory (breathing) process. Hemoglobin is the major protein in red blood cells that carries oxygen from the lungs to the rest of the body.

- When our hemoglobin is low (also known as anemia), we have fewer "carriers" to move the oxygen through the body.
- The body recognizes the need for more oxygen and triggers the signal to breathe more.

Lung problems

Various conditions can affect lung tissue. These can make it difficult for the lungs to play their part in breathing. They include:

- Fluid build-up.
- Tumours.
- Infection such as pneumonia.
- Side effects of cancer treatment such as radiation therapy or chemotherapy
 - For example, these treatments may cause scarring of the lung tissue (pulmonary fibrosis).

Other medical problems

People with a history of heart problems or other lung problems, such as emphysema or asthma, may have more trouble with shortness of breath.

Anxiety

Shortness of breath and anxiety can feed off one another. Anxious feelings can make people feel short of breath. Feeling short of breath can make people feel more anxious. Treatment for shortness of breath may include treatment for anxiety to help break this cycle.

Shortness of breath and emotions

Shortness of breath can be frightening

People who have severe episodes of shortness of breath may say they feel like they're dying.

- Shortness of breath can be extremely frightening, and they can become very anxious.
- After experiencing an episode, they often worry about this happening again, and perhaps even worsening toward end of life.

Family members and friends can be very upset watching someone struggle for breath.

Talk with your healthcare provider

These feelings are common and understandable. It's important to talk with the healthcare provider to learn:

- What can be done to help the person feel more in control of these episodes.
- What the caregiver can do to help someone who is short of breath.

Assessing and diagnosing

To find out what's causing shortness of breath, the healthcare provider will probably ask you some questions, do a physical exam and may run some tests. This will help them decide how best to treat your condition.

TIP:

Keep track of your shortness of breath in a [daily symptom diary](#) and share this with your healthcare provider. This information will help them to help you.

Questions

- How severe is the shortness of breath?
 - Mild, moderate, or severe?
 - Use a rating scale from 0 to 10. Zero means no difficulty breathing and 10 the worst possible shortness of breath.
- What does it feel like? What words describe it?
 - Hard to breathe? Can't catch a breath? Heavy feeling?
 - Quick breathing? Slow breathing?
 - Tight? Scary? Congested? Painful?
- When did it start?
 - Did it come on suddenly or gradually?
- Do you feel short of breath when you're resting or only when you're active?
- What makes it better?
 - Certain positions? Rest?
 - Not talking?
 - Trying to relax?
 - Having someone else in the room?
 - Certain medications? Oxygen?
- What makes it worse?
 - Certain positions?
 - Movement? Certain activities?
 - Talking?
 - Lying flat in bed?
 - Feeling anxious?
- Have you had shortness of breath before?
 - When?
 - What happened then?
 - What, if anything, helped?
- What medications are you taking for shortness of breath?
 - When do you take them?
 - How long have you been taking them?
 - Are there any side effects?

- Are they helpful?
- Do you do anything else to help when you're short of breath, such as breathing exercises or relaxation exercises?
- How does it affect your daily life?
 - Does it stop you from taking part in your regular activities?
- How do you feel if you're having a bad episode?
- Are you concerned about what will happen if your breathing gets worse?

Physical exam

This typically includes examining your chest and listening to your heart and lungs with a stethoscope.

Your healthcare provider may wish to do further examination depending on their assessment.

Tests

Tests that might be recommended will depend on the assessment of your healthcare provider and their discussion with you and your family. Some possibilities are:

- Chest X-rays.
- Measuring the levels of oxygen and carbon dioxide in the blood.

Medications and other treatment

There are various ways to treat shortness of breath. They typically involve:

- Taking steps to lessen the feeling of "being hungry for air."
- Treating the problem that is causing the shortness of breath, if possible.

These two approaches usually happen at the same time.

Treating the shortness of breath

The main treatments for managing the shortness of breath itself are:

- Medications such as opioids.
- Medications for anxiety and restlessness.
- Oxygen therapy.
- Modifying activity.

Opioids

- Opioids such as morphine, hydromorphone, and fentanyl are the group of drugs that appears to be most effective in helping shortness of breath.
- People who are receiving palliative care support and experiencing shortness of breath are often already taking opioids to control pain. In that case, increasing the dose may be enough to reduce the "hunger for air."
- Some people are concerned they'll become addicted if they take opioids. This is very unlikely when these drugs:
 - Are used in palliative care under the supervision of an experienced healthcare provider.
 - Target a specific problem such as shortness of breath or pain.
- Many healthcare providers are concerned that prescribing opioids to a person with breathing problems will worsen the condition. They're concerned the opioids will weaken the person's signals to breathe.
 - Studies clearly show that cautious and supervised use of opioids in people with advanced lung disease improves shortness of breath and is safe.

To learn more: go to [Common concerns about opioid use](#).

Other medication

The healthcare provider may recommend medication to help with anxiety and restlessness. The medication they consider will depend on circumstances and discussions with you and your family.

Oxygen therapy

Oxygen may help some people with the feeling that they're not getting enough air. This is sometimes provided to a patient receiving palliative care support, who is short of breath – particularly if they have low levels of oxygen in their blood.

Oxygen can be given in various ways, including face mask and nasal prongs. The approach your healthcare provider recommends will depend on your particular situation.

At home, oxygen can be delivered by:

- A portable oxygen tank.
- An oxygen concentrator.

Depending on circumstances, oxygen can't always be provided. Note that even if it isn't available, people can still be made comfortable with opioids. As the opioid doses are increased, they may be sleepier – nonetheless, they can be comfortable. This side effect tends to wear off after a few days.

Modifying activity

These include practices such as:

- Finding ways to save energy – for example, sitting to put on shoes and socks.
- Finding comfortable positions.
- Practising relaxation techniques.
- Using a fan or opening a window for fresh air.

Treating the underlying cause

When the patient wishes, and when it's medically possible, the most effective way to reduce shortness of breath may be to treat its underlying cause. This can be done, for example, by:

- Treating an infection.
- Providing a blood transfusion for anemia.
- Directing radiation therapy at a tumour that's blocking an airway.
- Adjusting medication that is managing chronic lung and heart problems until the person feels better.

Sometimes the cause isn't treated. Some reasons the cause might not be treated are:

- It might not be possible:
 - Especially in severe illness.
 - In the chosen care setting.
 - If death is very near.
- You and your healthcare provider may feel the tests and treatments will be too tiring or difficult.

Complementary therapies

Many people find complementary therapies helpful. These may include:

- Acupuncture.
- Breathing and relaxation exercises.
- Distraction.
- Massage.
- Mindfulness meditation.

- Music therapy.

Before trying a complementary therapy:

- Talk with your healthcare provider first in case they have concerns about a certain therapy and your particular health circumstances. For example:
 - Some herbal remedies may affect how well your prescription medications work.
 - Heat therapies are best avoided with certain disorders, such as reduced ability of the skin to feel hot temperatures (risk of burns).
- Consider experimenting with the different approaches until a helpful one is found.
 - A therapy that works for one person might not work for another.

What you can do

When you are living with illness

Living with serious illness can be physically, mentally, spiritually, and emotionally challenging. Being short of breath can make you feel anxious – and feeling anxious can increase shortness of breath. In this section, you'll find suggestions that might help you to manage these stressful times.

Talk with your healthcare provider

- Tell them what you're experiencing.
- Show them your [daily symptom diary](#).
- Look at ways to improve your breathing and to prevent and treat anxiety together. Your healthcare provider may recommend:
 - Practical tips to help you breathe more comfortably.
 - Medication to lessen your anxiety.
 - Relaxation or breathing techniques.

TIP:

Keep track of your shortness of breath in a [daily symptom diary](#). Sharing this information with your healthcare provider will help them to help you.

Plan ahead

If you know that certain activities always leave you short of breath:

- Let your healthcare provider know.
- Take medication before the activity as guided by your healthcare provider.

Keep yourself comfortable

- Sit upright.
 - In bed. Use pillows under your arms and behind your back and head.
 - In a reclining chair with a footrest that swings out.
 - In a hospital bed. Raise the bed to a more upright position.
- Keep rooms comfortable with plenty of fresh air.
 - Open a window.
 - Keep a fan on low speed nearby.
 - Keep the room cool with low humidity.
- If you have an obstruction in one lung, lie on the blocked side.
 - This may let more air into the better working lung.
- Change sheets and blankets more frequently if they're damp with sweat.

- Budget your energy.
 - Save your energy and breathing for activities that are necessary or important to you.
 - Plan for rest periods in between.
 - Find others to help you with physically tiring activities if you wish.
- Take medication (such as opioids) before activities you know will make you short of breath.
 - Ask your healthcare provider about this.
- Avoid cigarette smoke.
 - Never smoke or light a match in a room where oxygen is being delivered – you may start a fire!
- Avoid allergens that may make your shortness of breath worse.
- Use lip balm on dry lips.
 - Remember: if you're receiving oxygen, never use petroleum-based products due to the potential risk of fire.
 - To *learn more* about [oxygen safety](#) and what to use instead, go to Oxygen Safety.
- Rinse and spit water to make your dry mouth feel better.

Find support

Many people find it helpful to connect with others. These are some suggestions to consider.

- Talk with someone you trust, like a friend or family member. Sometimes just talking with someone can help you to feel better.
- Ask the healthcare provider to refer you to a counsellor such as a psychologist or social worker. They can offer:
 - Counselling and emotional support.
 - Education.
 - Practical skills to help you manage your symptoms.
- Talk with a [spiritual care](#) specialist.
- Join a support group.
 - If you are able, consider, joining a support group where you may meet people with the same illness and concerns.
- Find information online.
 - Canadian Virtual Hospice has information on many topics related to serious illness and palliative care.
- Join online discussion forums such as:
 - [Canadian Virtual Hospice Discussion Forums](#).
 - Cancer Chat Canada.
- Learn more about [Programs and Services](#) in your area.

When someone you care about is living with illness

It can be difficult to watch someone important to you face a serious illness. Helping this person with symptoms such as shortness of breath, pain, nausea, and vomiting can be exhausting. It can also lead to feelings of isolation when others around you don't appreciate the challenge of caring for someone with these symptoms. The following suggestions might help you through this difficult time.

Learn about shortness of breath

It's not always easy to tell if someone is feeling short of breath, since this is something people

It's not always easy to tell if someone is feeling short of breath, since this is *something people experience*, not *something we can see* in others.

- A person who is breathing quickly will usually say they feel short of breath.
- A person who seems to be working hard at breathing will usually say they feel short of breath.
- However, sometimes people who seem to be breathing easily will say they feel short of breath.
- There are also times when people appear to be breathing quickly or with difficulty – but they'll say they feel quite comfortable.

TIP:

The only way to know for sure if someone is feeling short of breath is to ask.

Stay calm

Although it may be difficult in the moment, it's very important to try to provide calm comfort to someone who's having an episode of severe shortness of breath. Your calm presence may help improve their breathing.

Learn about breathing changes near death

Breathing commonly changes in someone's final hours or days of life. Since they're no longer awake, they can't tell you how they're feeling. They may seem to be struggling to breathe, but are they in distress?

- As people become too weak to take strong, deep breaths, their breathing typically becomes fast and shallow.
- They may appear to be working hard to breathe.
- Sometimes there are very long pauses between breaths.
- This doesn't necessarily mean they're feeling short of breath.
- Someone who's unconscious is unlikely to experience air hunger.
- If their face appears calm, they're probably breathing comfortably.
- If there's any doubt, the healthcare provider will assess and may recommend an extra dose of medication that can help ease shortness of breath.
- To learn more, go to [Final weeks and days: What to expect](#)

Find support

Many people find it helpful to connect with others. These are some suggestions to consider.

- Talk with someone you trust. Sometimes just talking with a friend or family member can help you to feel better.
- Ask the healthcare provider to refer you to a counsellor such as a psychologist or social worker. They can offer:
 - Counselling and emotional support.
 - Education.
 - Practical suggestions to help with stress.
- Talk with a spiritual care specialist.
- Ask about a support group for caregivers.
- Find information online.
 - Canadian Virtual Hospice has information on many topics related to serious illness and palliative care.
- Join online discussion forums such as:
 - [Canadian Virtual Hospice Discussion Forums.](#)
 - [Cancer Chat Canada.](#)
- Learn more about [Programs and Services](#) in your area.

Try complementary therapies

- Various therapies such as relaxation techniques, meditation and yoga can be helpful to manage stress.

Take time for yourself

- Choose an activity or something you enjoy. It might be reading, praying, listening to music, watching sports – or something else.
- Regular exercise is important to manage stress. What physical activities do you enjoy? Walking? Biking? Something else?

Respecting choices

You might disagree with the choices someone makes about treatments and how they live with their illness. Perhaps you feel their choices are unsafe, might cause harm, or risk losing an opportunity to get better. This can be frustrating and upsetting. It's okay to tell this person, respectfully, how you feel about their choices and how they affect you – but remember, everyone has the right to make their own decisions.

If you're concerned this person is no longer able to make good choices, or that their choices may be putting others at risk, speak to the healthcare provider.

Content reviewed January 2023