



## PATIENT & CAREGIVER EDUCATION

# Shortness of Breath (Dyspnea)

This information explains how to relieve shortness of breath.

At times, you may have a hard time breathing and feel winded. This is called shortness of breath, or dyspnea. Shortness of breath can be caused by:

- Lung damage from cancer or cancer treatments.
- Blood clots in your lungs (pulmonary embolism).
- Fluid around your heart or lungs.
- Lung infection (pneumonia).
- Asthma or emphysema.
- Heart damage (congestive heart failure).
- Anemia (low number of red blood cells in your body).

Shortness of breath can be temporary or permanent, depending on the cause.

## Relieving Your Shortness of Breath

The best way to relieve shortness of breath is to treat the cause. But, this may not always be possible. Your doctor and nurse will work with you to figure out the best ways to improve your breathing. Below are other ways to help relieve the

symptoms.

## General tips

- Try using a small, handheld fan to blow air at your face if you start to feel winded. This is an immediate way to relieve shortness of breath.
- In your daily activities, do only as much activity as you can without becoming uncomfortable. If you feel winded, stop and rest until your breathing goes back to how it was when you started. Then, start the activity again, if you can.

## Oxygen

Every cell in your body needs oxygen. If you have too little oxygen in your blood, you may feel short of breath. Your doctor or nurse can measure the amount of oxygen in your blood with a small device that's placed on your finger called a pulse oximeter.

If your blood doesn't have enough oxygen, breathing in extra oxygen can help you feel better. You can get extra oxygen in 2 ways:

- With a concentrator. A concentrator is a small machine that takes oxygen from the air and gives it to you through a thin, flexible tube that rests under your nose.
- Through a prefilled, portable oxygen tank. You can take the tank with you wherever you go. Once the tank runs out of oxygen, it can be refilled. A respiratory or home care company can supply oxygen for you at home, if needed.

## Medication

Your doctor may also prescribe medication for your shortness of breath, depending on the cause. You can take these medications by breathing them in, orally (by swallowing them), or intravenously (through a vein).

- If you have asthma, emphysema, or chronic bronchitis, your doctor may prescribe a nebulizer or an inhaler. These are 2 devices that dispense medication as a fine mist that you breathe in. Your nurse will teach you how to use the nebulizer or the inhaler.
- If there's a blood clot in your lung, your doctor may prescribe a medication to thin your blood (an anticoagulant). This medication may be a pill or an injection (shot). Your doctor will prescribe blood tests and explain the precautions you must take when you're taking these medications.
- If you have pneumonia, your doctor may prescribe antibiotics to treat it.
- If there's too much fluid around your heart or in your lungs, your doctor may prescribe medications such as diuretics (water pills) or diuretic injections to get rid of the fluid.

Other medications that can help improve breathing include:

- Corticosteroids such as prednisone (Deltasone®) or methylprednisolone (Medrol®)

- Pain medications such as morphine sulfate (Avinza<sup>®</sup> or Kadian<sup>®</sup>)

Your doctor will talk with you about which of these medications is best for you.

## Breathing Exercises

Your nurse can show you how to take deep, slow breaths to help relieve your shortness of breath. You can do this using your diaphragm, which is the muscle that separates your chest and abdominal cavity (see Figure 1). This type of breathing is called diaphragmatic breathing.

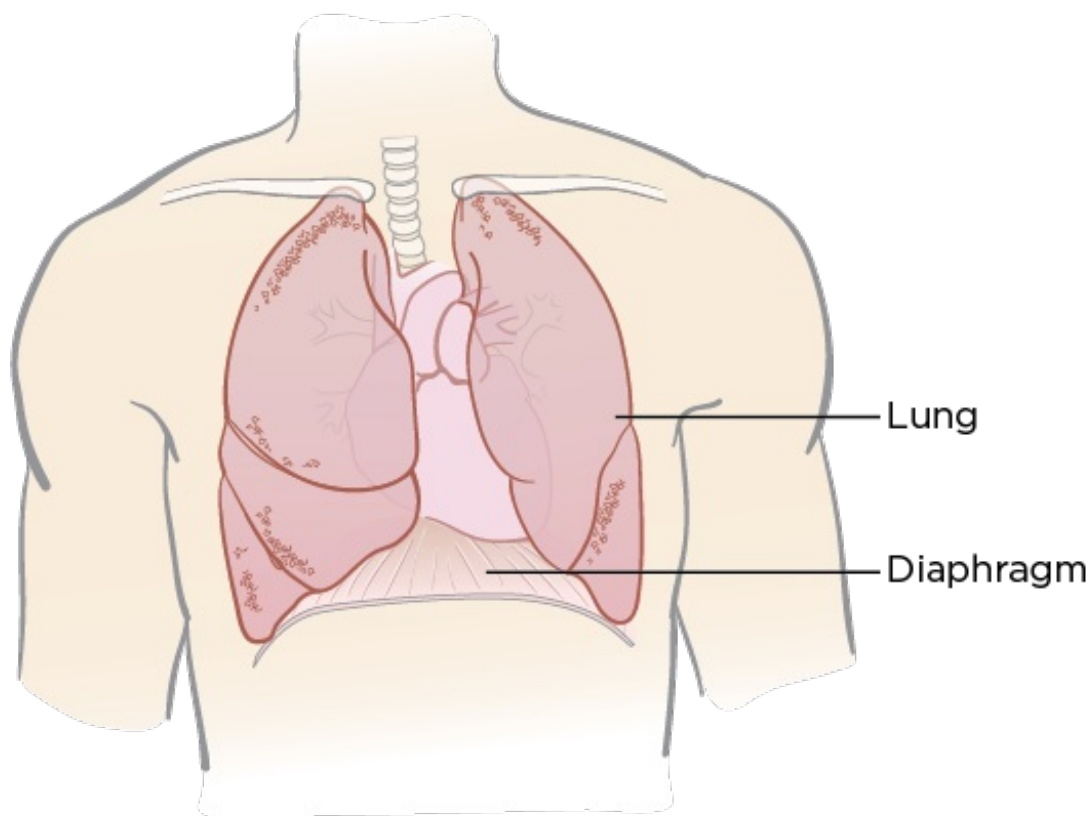


Figure 1. Your diaphragm

---

Try to relax while doing your breathing exercises. Release any tension in your muscles. This can allow your abdomen (belly),

ribs, and lungs to expand.

Here are some other breathing exercises to help relieve your shortness of breath.

### **Deep breathing 4-8-8**

This is an exercise that improves air movement in and out of your lungs. This helps to increase the amount of oxygen in your whole body.

1. Breathe in through your nose for 4 counts.
2. Hold your breath for 8 counts.
3. Breathe out through pursed lips (like when you're whistling) for 8 counts.
4. Repeat 4 times.

### **Chest wall stretch**

This exercise helps the muscles in your chest wall be more flexible.

1. Breathe in through your nose for 4 counts. As you're breathing in, raise your arms straight in front of you, over your head.
2. Breathe out through pursed lips. As you're breathing out, turn your palms away from you and lower your arms down to your sides.
3. Repeat 4 times.

### **Quick sniffles**

This exercise can help strengthen your diaphragm.

1. Close your mouth.
2. Breathe in and out of your nose quickly, for 15 to 30 seconds.
3. Try to do this exercise several times, until you reach 60 seconds.

## **Walking and breathing**

These tips will help you breathe easier while you're walking.

- While walking on a flat surface, keep your mouth closed and breathe in and out of your nose.
- While walking on an incline (hill), breathe in through your nose and breathe out through pursed lips.
- While climbing stairs, breathe out through pursed lips with each step.

## **Recovering from an episode of shortness of breath (from coughing or physical activity)**

1. Tilt your chin down to your chest.
2. Breathe out through your lips in short bursts 10 times. Take short breaths in between, if you need to.
3. When your neck muscles feel less stressed, breathe in through your nose.
4. Breathe out through pursed lips 3 times. Take breaths in between.

5. Breathe in through your nose for 4 counts.
6. Breathe out through your open mouth, making an “ah” sound, for 8 counts.
7. Repeat 3 times.

## **Other Ways to Improve Breathing**

Acupuncture and acupressure can help some people feel less short of breath. Your nurse can refer you to our Integrative Medicine Service for these treatments.

If you're taking medication or using oxygen, keep taking them along with having acupuncture. Don't stop taking any prescribed medication without speaking to your doctor first.

## **Managing Anxiety**

Shortness of breath can be scary. Some people say they start to feel anxious when they're short of breath. But, anxiety can cause your breathing to become even more difficult.

The breathing exercises in this resource can help you relax. But, you may want to learn other ways to help you manage your anxiety. Speak with your doctor about any anxiety you're having. They may be able to prescribe anti-anxiety medications, such as alprazolam (Xanax<sup>®</sup>) or lorazepam (Ativan<sup>®</sup>), to help.

Our Integrative Medicine Service also offers relaxation programs that may be helpful for you.

# Call Your Doctor or Nurse If You Have:

- Shortness of breath that isn't relieved by:
  - Using extra oxygen
  - Taking breathing medications
  - Doing breathing exercises

If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit [www.mskcc.org/pe](http://www.mskcc.org/pe) to search our virtual library.

---

Shortness of Breath (Dyspnea) - Last updated on February 4, 2019  
©2020 Memorial Sloan Kettering Cancer Center