# **Chronic Obstructive Pulmonary Disease (COPD)**

#### WATCH THE VIDEO ONLINE!

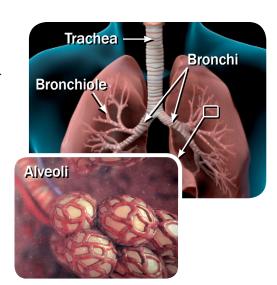
www.healthjourneysupport.com/respiratory/copd

**Chronic obstructive pulmonary disease**, or COPD, may result in the gradual loss of your ability to breathe effectively.

## **How Your Lungs Work**

Normally, as you inhale, air moves freely through your trachea, or windpipe, then through large tubes called bronchi, smaller tubes called bronchioles, and finally into tiny sacs called alveoli.

Small blood vessels called capillaries surround your alveoli.

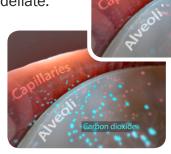


Oxygen from the air you breathe passes into your capillaries, then carbon dioxide from your body passes out of your capillaries into your alveoli so that your lungs can get rid of it when you exhale.

Normally, your airways and alveoli are flexible and springy. When you inhale, each air sac inflates like a small balloon. And when you exhale, the sacs deflate.

#### **Causes of COPD**

- Smoking
- Air pollution
- · Chemical fumes
- Dust



## **How COPD Affects Your Lungs**

If you have COPD, you may have the two main conditions that make up the disease – emphysema and chronic bronchitis.

In emphysema, your airways and air sacs lose their flexibility, making it harder for them to expand and contract.

Emphysema destroys some of your air sac walls, leading to fewer, larger sacs that provide less area to absorb oxygen from the air you breathe.



**Chronic bronchitis** 

**Emphysema** 

### Symptoms of emphysema:

- Wheezing
- · Shortness of breath
- Tightness in your chest

With chronic bronchitis, damage inside your airways causes the lining to swell, thicken, and make mucus. You may develop a persistent cough as your body attempts to get rid of the extra mucus.

### Symptoms of chronic bronchitis:

- · Cough that may produce mucus
- Shortness of breath
- Frequent respiratory infections

# **Preventing COPD**

- Never smoke
- · Stop smoking
- Limit exposure to chemicals, fumes, and dust



# **Living With COPD**

#### **Treatment for COPD**

The damage done to your lungs by COPD cannot be reversed, and there is no cure for the disease. However, treatment can slow the progress of your disease and help you feel better.

The most common COPD treatments are:

- Quitting smoking
- Inhaled medicines
- Antibiotics
- Oxygen
- Surgery

#### Medicines

COPD can be treated with medicines such as:

- Bronchodilators, which open your airways so that you can get more air
- Corticosteroids, which reduce swelling in your airways
- Antibiotics, which treat bacterial infections in your lungs



- Take your COPD medicine exactly as your doctor has instructed.
- Do not stop taking your medicine or change the amount you take without first talking to your doctor.

Inhalers and nebulizers are two types of bronchodilators.

You may use a quick relief inhaler when you are short of breath and need immediate help. A long-term relief inhaler is used every day to help you breathe better.

#### **Oxygen Therapy**

If you have been given oxygen to use at home, use it exactly how your doctor has instructed you. Always have a back-up supply within reach.

#### Surgery

COPD can be treated with surgery such as bullectomy or lung volume reduction to remove non-functioning air sacs.

#### **Avoid Lung Irritants**

STOP SMOKING. Avoid smoke fumes inside and outside your home.

Avoid other irritants like dust, air pollution, and strong odors.

#### Diet

With COPD, your muscles may have to work harder to help you breathe.

Try to eat foods that are full of nutrients.

It may be harder to breathe when your stomach is full. Eat smaller meals more often. Try to eat small meals 6 times a day.

Avoid drinking a lot of liquid before or during your meals so that you do not feel as full.

### **Activity**

When you have COPD, it is important to stay active. Ask your doctor about the types of exercise you should do.

Walking builds your strength and endurance. Slowly increase the distance you walk.

Riding a stationary bike can also be good exercise. Slowly increase the distance you ride.



## **Respiratory Health Series**

Before you exercise or do an activity, practice pursed-lip breathing.

Practice pursed-lip breathing:

- Step 1: Breathe in (inhale) deeply through your nose.
- Step 2: With your lips puckered, slowly breath out (exhale) through your mouth.
- Step 3: Repeat steps 1 and 2.

Use this type of breathing whenever you need more air.

## **Preventing Illness**

Having COPD increases your risk of getting sick.

Ways to reduce your risk:

- Wash your hands frequently.
- Cover your mouth when you cough.
- Avoid crowds and especially people who are sick.
- Get a flu shot every year.
- You may need a pneumococcal vaccine to prevent infections like pneumonia.

## **Doctor Visits**

Go to all of your follow-up and regular appointments with your health care providers.

Besides your primary care provider, you may work with a:

- Respiratory therapist
- Pulmonologist (lung doctor)
- Physical therapist
- Smoking cessation counselor

### **Contact Your Health Care Provider**

#### Call your doctor if:

- You have questions about living with COPD
- · You are having a harder time breathing
- You are using your quick relief inhaler more often
- Your cough gets worse
- You are coughing up mucus that is dark yellow, green, or contains blood
- You have headaches more often
- You are dizzy, sleepy, or confused
- You have a fever and chills
- You have swelling in your legs or ankles
- Your fingertips, nails, or lips look blue

#### Call 911 if:

- You are feeling discomfort, pressure, or pain in your chest that lasts for more than a few minutes or keeps returning or feel any discomfort in your upper body
- You cannot breathe
- You feel like you will pass out

The information in this handout has been created and peer reviewed by graduate-level medical illustrators, followed by reviews from medical subject experts, either physicians or PhDs on the Nucleus Medical Review Board, to ensure medical accuracy and audience level appropriateness.

The handout is intended to supplement the information you receive from your healthcare provider and should never be considered personal medical advice. Always contact your healthcare provider with health questions and concerns.

