



## **WHAT TO EXPECT: YOUR GUIDE TO COPD**

Your Care. Our Commitment.

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## WHAT IS COPD?

COPD stands for chronic obstructive pulmonary disease. It is a condition that keeps your lungs from working normally. The airways in your lungs are blocked and it causes shortness of breath that can get in the way of your daily life. You can learn ways to improve your breathing and health to control your illness. This booklet will help you understand what you can do to feel better.

The term COPD is used to describe two different diseases — emphysema and chronic bronchitis.



## EMPHYSEMA

The air sacs (alveoli) are damaged and lose their ability to stretch. Over time, the air sacs lose their clustered shape and never go back to normal size. When you breathe out, the air gets trapped in the sacs. The trapped air makes it harder to breathe and difficult for fresh air (oxygen) to come in and enter the blood vessels.



## CHRONIC BRONCHITIS

The airways (bronchial tubes) become swollen and inflamed and produce large amounts of mucus. The mucus and swollen tissues can make breathing difficult, because the airways become narrow or closed. The airways can become easily infected because it is hard to get rid of the extra mucus.

## WHEN TO SEEK HELP

Call your health care provider right away if you have:

- Trouble breathing or catching your breath.
- Trouble doing everyday efforts because of your breathing.
- An increased need for your rescue inhaler, or short acting drug to help breathing.
- Flu-like signs of sickness or fever of 101.0° F or greater.
- More sputum, or change in sputum color.
- A change in your ability to cough up sputum.
- Swelling of your belly, legs, or ankles.
- Feeling of “no strength” or feeling sleepy more often.
- An increase in the need for oxygen.

**Call 911 or an ambulance right away if you have:**

- New chest, shoulder, jaw, or arm pain, or you believe your life is in urgent danger.
- Intense shortness of breath not eased with your rescue inhaler or short-acting inhalator treatment.

**Keep the following near the phone for easy access:**

- Health care provider(s) phone number(s).
- List of your current medications and doses.
- List of any allergies you may have.
- Confusion, or have less awareness of your surroundings.

**SIGNS AND SYMPTOMS OF COPD**

- Feeling tired and not having much energy.
- Unable to do normal activities.
- Shortness of breath during activities, such as climbing stairs and walking uphill.
- Chronic cough and sputum production.
- Producing more sputum, a change in the color of the sputum, or seeing blood.
- Wheezing.

**CAUSES OF COPD**

The most common cause of COPD is cigarette smoking. Other causes may include:

- Second-hand smoke.
- Work-related dusts and chemicals (fumes, irritants, vapors) and things in the environment.
- Indoor air pollution from fuels used for cooking and heating in homes that are poorly ventilated.
- Childhood respiratory infections may be linked with decreased lung function and increased likelihood of breathing problems in adulthood.
- Alpha-1 antitrypsin deficiency (a genetic disorder).

**COPD TREATMENT**

COPD is a chronic or long-term condition. Your health care provider will tell you how you can best live with COPD. Treatment involves medication, regular doctor visits, good nutrition,

conserving energy, controlling stress, breathing techniques, and managing acute flare-ups (exacerbations). What you do makes a big difference in how well you live with COPD. The following are important to managing COPD:

- Quit smoking and avoid irritants.
- Take your medicine as directed by your health care provider.
- Get flu and pneumonia shots and avoid sick people.
- Exercise regularly and follow good nutrition habits.
- Conserve your energy and control your stress.
- Control your breathing by practicing breathing techniques.

**COPD TREATMENT PLAN**

There is much to learn about how to manage COPD and it's hard to remember everything. This booklet is yours to keep at home. Take your time as you read through each section and ask your doctor about any questions or concerns. By taking the following steps, you can help control COPD.



**QUIT SMOKING AND AVOID IRRITANTS**

If you have not already quit smoking, do so now. Quitting smoking is the best way to keep COPD from getting worse. The chemicals in cigarette smoke damage lung tissue and irritate the airways. The airways make more mucous to try to clean the chemical particles away. This makes it easier for the lungs to become infected.

**What happens when you quit smoking?**

- Your blood will have more oxygen.
- Smoker's cough goes away.
- Your lungs will work better.
- Breathing becomes easier.
- You have more energy.
- Your medications will work better.

**Suggestions for Quitting**

- Ask your health care provider for help. Medication may be needed.
- Get support and encouragement. Counseling and a smoking cessation program can be helpful.
- Ask your health care provider for a copy of the UPMC quit smoking self help book - *Journey to a Smoke-Free Life!*
- Call UPMC Referral Services toll-free at **1-800-533-UPMC (1-800-533-8762)**, or call the PA Quit Line toll-free at **1-800-QUIT-NOW (1-800-784-8669)**.



**Irritants and Allergens**

Other substances besides smoke can affect the lungs. It is important to stay away from irritants (substances that have particles that bother the airways). Allergens are substances that cause inflammation in the lungs. Below is a list of things to avoid:

- Avoid fumes, smoke, and strong odors.
- Avoid aerosol sprays.
- Stay indoors when air pollution levels are high.
- Avoid using bleach or ammonia for cleaning.
- Fix dampness problems in your home that can cause mold.
- Cover your mouth and nose when going out in very cold or windy weather.
- Wear a mask while doing tasks like dusting, vacuuming, sweeping, and yard work.
- Avoid outdoor activities when pollen levels are high.
- Avoid animal dander and wash your hands after handling pets.

## UNDERSTANDING YOUR MEDICATIONS

There are several types of medications used to treat COPD. Medications don't cure COPD, but they do help keep it under control. Be sure to take these medications as prescribed by your doctor. Remember to always carry your rescue inhaler with you.

Many people use several inhalers at a time. You may wonder which inhaler you should use first. Keep in mind that bronchodilators work faster than inhaled steroids. Use bronchodilators first because these fast-acting inhalers open your airways quickly. Use the inhaled steroids last, so then they can go deeper into your lungs.

The general rules are:

- First, use your fastest-acting bronchodilator, for example, albuterol.
- Next, use any other bronchodilators prescribed for your regular use, for example, Atrovent®.
- Last, use your steroid inhaler.

### BRONCHODILATORS

These medications open and relax airways. Bronchodilators help clear mucus and prevent wheezing. There are short-acting and long-acting bronchodilators.

*Examples of short-acting bronchodilators are albuterol, Atrovent®, Ventolin®, Pro-Air®, Proventil®, Combivent®, Duoneb®, and Xopenex®.*

#### Side effects of short-acting bronchodilators

- Nervousness
- Trembling or shakiness
- Dry mouth and throat
- Increased blood pressure
- Fast heart rate
- Insomnia

Long-acting bronchodilators are not used for quick relief of shortness of breath. They take effect more slowly and work longer than short-acting medication.

*Examples of long-acting bronchodilators are Spiriva® (taken only once per day), Serevent®, and Foradil®.*

#### Side effects of long-acting bronchodilators

- Headache
- Nervousness/trembling
- Dry mouth and throat

### OTHER BRONCHODILATORS

#### Methylxanthines

These medications are taken as pills. They open the airways by relaxing tight muscles. They may be useful if symptoms happen during sleep. These medications are also long-acting.

*Examples of these medications are theophylline, Uniphyll®, Theo-24®, Theolair®, Theochron®, and Slo-bid®.*

#### Special instructions for methylxanthines

Your doctor may order a blood test to check the theophylline level in your blood. This may be ordered with a change in the dose or routinely once or twice a year.

#### Side effects of methylxanthines

- Nervousness
- Headache
- Nausea/trembling
- Insomnia
- Irregular heartbeat

### CORTICOSTEROIDS (ANTI-INFLAMMATORIES)

#### Oral Corticosteroids

These medications also are called steroids or glucocorticoids. They reduce inflammation and swelling in the airways. They also reduce mucus production and make your airways less sensitive to irritants and allergens.

*Examples of oral corticosteroids are Prednisone® and methylprednisolone (Medrol®). These are pill form.*

#### Special instructions for corticosteroids

Steroids are meant to work over a period of time to reduce swelling. They need to be used regularly to make a difference.

- Always take with food or milk.
- Do not stop abruptly.
- Follow schedule to decrease medication dose as prescribed.
- Tell your doctor if you have diabetes, high blood pressure, or stomach ulcers.
- Tell your doctor if you have stomach pain, vomiting, or black stools while on steroids.

#### Side effects of corticosteroids

- Insomnia
- Mood changes
- Increased blood sugar
- Weight gain
- Swelling or puffiness, especially of the face
- Increased appetite
- Stomach upset or ulcers

### INHALED STEROIDS (ANTI-INFLAMMATORIES)

These medications work the same way as oral steroids. Of all the types of steroids, inhaled steroids usually cause the fewest side effects, because very little enters your blood stream. Most of the inhaled steroid goes to your lungs where you need it.

*Examples of these are QVAR®, Pulmicort®, Flovent®, Aerobid®, Azmacort®, Symbicort®, and Advair®.*

#### Special instructions for inhaled steroids

- Rinse mouth and spit after use.
- Do not use for fast relief of shortness of breath.

#### Side effects of inhaled steroids

- Oral thrush (yeast infection of the mouth)
- Sore tongue
- Hoarseness



## ANTIBIOTICS

Bacterial infections of the lungs, such as pneumonia and acute bronchitis, can be serious for people with COPD. These infections can cause people with COPD to be hospitalized.

*Examples of these medications include Biaxin®, Zithromax®, Levaquin®, Augmentin®, Cipro®, amoxicillin, erythromycin, Ceftin®, and doxycycline.*

### Antibiotics for people with COPD:

- Kill bacteria which cause the infection.
- Are not useful for viral infections, such as the cold and flu.

### Special instructions for antibiotics

- Finish the entire prescription even if you feel better. Stopping antibiotics too soon can cause another infection and/or cause some of the bacteria to survive.

### Side effects of antibiotics

- Nausea
- Skin rash
- Diarrhea
- Stomach cramping
- Vaginal yeast infection
- Still seeing signs of infection after completing entire course of antibiotic



## AVOIDING INFECTION

The following tips can help prevent you from getting ill:

- Wash your hands often to prevent the spread of germs, and keep your hands away from your face.
- Use hand sanitizer between washings, especially when touching things in public that other people have touched.
- Avoid people who have colds or the flu.
- Avoid crowds during flu season.

If you aren't able to get a flu vaccine, make sure you get treatment as early as you can if you begin to feel flu symptoms.

People with COPD can become very ill during flu season. The flu also can increase your chances of getting pneumonia. Flu and pneumonia vaccines are not the same. Flu shots are given yearly, beginning at the end of September or early October. Pneumonia vaccines can be given at any time of the year. Pneumonia vaccines are recommended if you have been diagnosed with COPD, are a smoker, are on long-term oral steroids, or are older than 65. It can be given at any time of the year. Both of these should be discussed with your health care provider.

## USING YOUR INHALER

Many COPD medications are taken using a device called an inhaler. The inhaler gives you a measured dose of medication into your lungs. It is important to use the inhaler correctly. There are different types of inhalers and each of them may be used a little differently. Ask your health care provider to show you how to use and care for your inhaler.

### Metered-dose inhaler (MDI)

1. Take off the cap and shake the inhaler well.
2. Take a deep breath, then breathe out normally.
3. Put the inhaler mouthpiece in your mouth and close your lips tightly around it. You also can hold the inhaler about one to two inches from your open mouth.

4. Begin inhaling slowly through your mouth, while at the same time pressing down once on the canister to draw the medication into your lungs.
5. Take the inhaler out of your mouth and hold your breath for 4 to 10 seconds. Then slowly breathe out. If your dose is 2 puffs, wait at least 1 minute (1 to 5 minutes for short-acting bronchodilators). Again, shake the inhaler well before taking the second puff.
6. Afterward, rinse your mouth, gargle with water, and spit it out.
7. Clean the plastic case and cap by rinsing thoroughly with warm water once a week. Allow to air dry before reusing.

### Metered-dose inhaler with spacer

1. Take off the cap, shake the inhaler, and attach inhaler to the spacer.
2. Sit up straight and breathe out normally. Put the mouthpiece of the spacer between your teeth and close your lips tightly around it to make a tight seal.



3. Press down on the inhaler. This puts one puff of medicine into the spacer.
4. Slowly breathe in through your mouth as deeply as possible. This should take 3 to 5 seconds.
5. Take the spacer out of your mouth and hold your breath for 10 seconds. Then slowly breathe out. Wait at least 1 minute before taking the next puff.
6. Wait at least 1 minute before taking the next puff and repeat steps 1 to 5.
7. Afterward, rinse your mouth, gargle with water, and spit it out.
8. Clean the plastic case and cap by rinsing thoroughly with warm water once a week. Allow to air dry before reusing.

### Keeping track of your medication

Inhalers contain a certain amount of medication. It is important to know how many puffs your inhaler contains. Keep track of how many puffs you use. Make sure you have a new inhaler ready when your old one is close to being done.

If you use your inhaler once in a while, make sure you keep track of your puffs and the expiration date on the medication. Reorder when you have 2 to 3 days' worth left, or 2 to 3 days before the expiration date.

If you use your inhaler more than once daily, divide the number of daily puffs ordered into the total number of puffs in the inhaler. This will let you know how many days it will last. Mark the date on the calendar that the inhaler will run out.

### Turbuhaler® and Twisthaler® (dry powder inhaler)

A Turbuhaler or Twisthaler is a plastic device containing dry powdered medication. This type of inhaler is breath activated. This means when you inhale, the inhaler automatically releases the medication. If you use it properly, the inhaler can deliver medication deep into your lungs.

### How to use a Turbuhaler or Twisthaler<sup>1,2</sup>

1. Unscrew the cover and remove it.
2. Holding the inhaler upright, turn the colored wheel one way and back the other way until it clicks. It's now loaded with a new dose.
3. Breathe out normally.
4. Put the mouthpiece between your lips and tilt your head back slightly.
5. Breathe in deeply and forcefully.
6. Hold your breath for 10 seconds, or as long as you can.
7. Remove the inhaler from your mouth, and breathe out.
8. If you need another dose, repeat steps 3 to 5.
9. If the medicine you are taking contains a corticosteroid, rinse your mouth out and gargle with water after you use it, then spit the water out. This helps prevent side effects, such as a yeast infection (thrush) in your mouth, and hoarseness in your throat.

### How to tell when the Turbuhaler or Twisthaler is empty

The inhaler is empty and should be thrown out when the zero, or a red line, is in the center of the dose-counting window. Start using a new inhaler. Reorder when you have 2 to 3 days' worth left, or 2 to 3 days before the expiration date.

### How to care for your Turbuhaler or Twisthaler

Clean the mouthpiece 2 or 3 times a week using a dry cloth. Wipe away any particles that have gathered on the mouthpiece. Never wash the mouthpiece.



### Diskus®

A Diskus is a dry-powder inhaler that holds 60 doses. It features a built-in counter, so that you always know how many doses you have left in it.

### How to use a Diskus<sup>3</sup>

Take the Diskus out of the foil wrapper. Once the foil wrapper is opened, the Diskus must be used within two months.

1. Hold the Diskus level with one hand.
2. Place the thumb of the other hand on the thumb grip.
3. Push your thumb away from you until the Diskus clicks. This will open the Diskus so you can see the mouthpiece.
4. Hold the Diskus level and slide the lever away from you until the Diskus clicks. This will load the medication. Keep the Diskus level so you don't lose the medication. Hold the Diskus level and away from your mouth and gently breathe out. Never exhale into a Diskus.
5. Seal your lips around the mouthpiece.
6. Inhale quickly and deeply with a long, full breath.
7. Hold your breath for up to 10 seconds. This allows the medication time to go into the airways.
8. Hold the Diskus away from your mouth and exhale. Never exhale into the Diskus. Then seal your lips around the Diskus again and take another deep breath in.
9. Remove the Diskus and breathe normally.
10. Close the Diskus by placing your thumb on the thumb grip. Pull your thumb toward you until the Diskus clicks. The mouthpiece will be hidden and the lever will be reset.
11. Rinse your mouth out with water and spit the water out (don't swallow it). Rinsing your mouth can cut down on some side effects, such as a white coating on your tongue (a yeast infection called thrush), or a sore throat.

### How to tell when the Diskus is empty

The Diskus has a dose indicator on the top of the device. Numbers on the dose indicator show how many doses are left in the Diskus. When there

are five doses left in the Diskus the numbers on the dose indicator will turn red. This means the Diskus is almost empty. Reorder when you have 2 to 3 days' worth left, or 2 to 3 days before the expiration date. When the red number is at 0 the Diskus is empty. Start using a new Diskus.

### How to care for your Diskus

Keep the Diskus closed when not in use. Keep the Diskus dry. The Diskus does not need to be cleaned routinely. If the mouthpiece is dirty, wipe it with a dry cloth.

### HandiHaler®

A HandiHaler is an egg-shaped dry-powder inhaler that requires puncture of a capsule to deliver the medication. The capsule is not meant to be swallowed.



### How to use a HandiHaler<sup>4</sup>

1. Remove a capsule from the blister package of medicine. Take the capsule out of the package right before you're going to use it.
2. Open the lid of the HandiHaler.
3. Open the mouthpiece.
4. Put the capsule in the hole.
5. Close the mouthpiece. Make sure you hear a click, so you know it's closed the right way.
6. Hold the HandiHaler upright with the mouthpiece facing up.
7. Sit up with your back straight.
8. Press the big green button on the side of the HandiHaler one time. This pokes holes in the capsule to let the medicine out.
9. Exhale as much as you can.
10. Then bring the HandiHaler to your mouth, seal your lips around the mouthpiece.
11. Breathe in slowly and deeply from the HandiHaler mouthpiece, until your lungs are full.
12. As you're breathing in, you should notice that the HandiHaler is vibrating. This is supposed to happen. It shows that you're taking it the right way.
13. Take the HandiHaler out of your mouth and hold your breath for as long as you can (10 seconds or longer, if you can).
14. Hold the HandiHaler away from your mouth and exhale. Never exhale into the HandiHaler. Then seal your lips around the HandiHaler again and take another deep breath in.
15. Take the HandiHaler out of your mouth and throw away the capsule.
16. Hold your breath for up to 10 seconds. This allows the medication time to deposit in the airways.
17. Breathe out normally.
18. Throw away the capsule and wash your hands thoroughly.

<sup>1</sup> "Symbicort® Turbuhaler Is Easy to Use." Symbicort Turbuhaler Is Easy to Use. N.p., Apr. 2012. Web. 06 Feb. 2013.

<sup>2</sup> "Asmanex® Twisthaler Patient Product Information." Merck & Co. Inc., Jan. 2013. Web. 6 Feb. 2013.

<sup>3</sup> "How to Use Advair® Diskus." Using Advair Diskus 250/50 for COPD Management. GlaxoKlineSmith, n.d. Web. 06 Feb. 2013.

<sup>4</sup> "Using Spiriva® HandiHaler® (Tiotropium Bromide Inhalation Powder)." Using Spiriva®. Boehringer Ingelheim Pharmaceuticals, Inc., n.d. Web. 06 Feb. 2013.

### How to care for your Handihaler

A HandiHaler is a dry-powder inhaler that holds 30 doses. Reorder when you have 2 to 3 capsules left or 2 to 3 days before the expiration date.

### Nebulizers

A nebulizer is a machine that allows you to breathe in medication in the form of a mist. This medication is breathed in slowly through a mouthpiece. There are different types of nebulizers. If you are ordered a nebulizer, your health care provider will show you how to use it. Follow the instructions that come with your nebulizer.

### How to care for your nebulizer

- It is very important to clean the nebulizer medication cup, lid, and mouthpiece with hot soapy water, and rinse thoroughly after each use. Let these parts air dry after cleaning. Follow the instructions that come with your nebulizer.
- Do not leave liquid medicine in the nebulizer cup between uses.

**If you have any questions about any of your medications, contact your health care provider.**



## EXERCISE AND NUTRITION

Exercise is an important part of treatment. COPD makes the lungs and heart work harder. Ask your health care provider to give you instructions for an exercise program that is best for you. Aerobic exercise, such as walking on flat ground or riding a stationary bike, is important for increasing your energy and improving your ability to do daily activities.

- Pulmonary rehabilitation can help control or reduce shortness of breath and help increase your ability to exercise. Pulmonary rehabilitation offers exercise, education, and breathing retraining. This can help you stay out of the hospital. Ask your doctor if a pulmonary rehabilitation program could help you.
- Eating well and maintaining a healthy weight gives you more energy. Gaining or losing weight without trying may mean that you need to make changes in your diet.
- Eat meals that include foods from all the food groups. A dietitian or your doctor can help you develop a healthy meal plan.
- If you are short of breath while eating, try to eat smaller meals more often throughout the day, and chew slowly with your mouth closed to avoid swallowing air. Your doctor may order vitamins and/or supplements to help you get the nutrition you need.
- Buy and make foods when you have more energy.
- Avoid gas-producing foods and carbonated drinks.
- Cook foods in large amounts and store in the freezer. This will allow for faster meal preparation on days when you may be tired.

## CONSERVING YOUR ENERGY AND CONTROLLING STRESS

Taking your time and planning your daily tasks can help you to conserve energy and do more without getting short of breath. If prescribed, use oxygen as instructed by your doctor.

- Use a shower chair if needed. Also, use your oxygen when you shower if you have been told to do so.
- Sit while doing activities, such as getting dressed, or cooking.
- Take rests after meals for at least 30 minutes.
- Do one task at a time and rest before starting another task. Do the part of each task that needs more effort while exhaling. For example, climbing stairs: inhale as you step on the first stair. Exhale through pursed lips (see *Pursed-lip breathing* below) for the next 3 to 4 stairs. Repeat until you reach the top of the staircase.
- Plan your day so you have periods of rest mixed with periods of activity.
- Avoid bending and lifting as much as possible. If you have to bend or lift, remember to do the bending or lifting while exhaling during pursed-lip breathing.
- Avoid vacuuming, if possible.
- Use a cart with wheels to move groceries, laundry, and other items around the house.
- Learn to relax. Stress leads to anxiety, which can cause shortness of breath. Use relaxation techniques, such as meditation, prayer, pursed lip breathing, diaphragmatic (belly) breathing, listening to music, or whatever works for you.



## COPING WITH SHORTNESS OF BREATH

When you are short of breath, your breathing muscles get tense. This makes it hard to take a deep breath. This may cause you to become anxious about not getting enough air. You may start to breathe faster, and become even more short of breath. You can avoid this problem by practicing the following breathing techniques.

### Pursed-lip breathing

This type of breathing helps you to relax and get more oxygen into your lungs. You can do this anytime you feel short of breath.

- Relax your neck and shoulder muscles. Breathe in slowly through your nose for a count of 2.
- Pucker your lips like you are going to whistle or blow out a candle. Breathe out slowly and gently through your lips for a count of 4. Always breathe out twice as long as you breathe in.

### Breathing exercises

#### Diaphragmatic breathing (belly breathing)

This kind of “belly” breathing helps your diaphragm move. (The diaphragm is the dome-shaped muscle at the bottom of your lungs.) The movement lets you take more air into your lungs and makes breathing easier. Follow these steps:

- If you can, lie on your back with your knees bent. Put a pillow under your head. (After you do this exercise for some time, you can try it while sitting in a chair.)
- Put the palm of one hand on your belly. Put the palm of your other hand on your chest.
- Breathe in slowly through your nose. Your belly should push out against your hand. Your chest should not move.
- Tighten your belly muscles. Breathe out slowly through your mouth. Keep your lips pursed. You should feel your belly go down. Start by doing this exercise for 5 to 10 minutes, 3 or 4 times a day. You can slowly increase the amount of time you do this.

## Techniques for clearing mucus

### Huff cough

This technique makes it easier to get rid of mucus in the lungs. Repeat this cycle 2 to 4 times. Spit out the mucus as it comes up and check it for changes in color, amount, and thickness. Let your doctor know of any changes.

- Take in a slow deep breath through the nose and briefly hold this breath.
- Breathe out through an open mouth making a “huff” sound in your throat, as if you were going to fog a pair of glasses. Breathe out in this way until all the air is out of your lungs.
- If you hear wheezing, try to not breathe out as hard.



## OXYGEN THERAPY AND SAFETY

Many people with COPD will eventually need supplemental oxygen. If your lungs aren't getting enough oxygen to your blood, your doctor may prescribe home oxygen therapy. You will be referred to a medical equipment company that will set up the oxygen and teach you how to use it.

Your doctor will prescribe the type of oxygen device, the flow rate, and how and when to use it. You should think of oxygen as a medicine. Use it as your doctor prescribes. You need to wear the oxygen as prescribed even when you feel fine. Talk to your doctor about changes in your oxygen prescription.

**Warning: Oxygen can be a fire hazard. It makes fires burn hotter and faster. Reduce your chance of fire when using oxygen by following these safety rules:**

- Never smoke or be within five feet of an open flame while using oxygen.
- Do not use aerosol sprays near the oxygen source.
- Do not use oxygen while cooking with gas.

### Other Oxygen Safety Tips

- Do not change the oxygen setting unless told by your health care provider.
- Do not use vapor rubs, petroleum jelly, or oil-based lotions.
- Do not place liquid oxygen on its side, the liquid inside the canister may evaporate.
- Treat your oxygen as you would any other medication, take it only as prescribed.

## OXYGEN TYPES

With any oxygen device, you can use 50 feet of tubing to move easily around your home. Be careful not to get caught or trip on the tubing. Prescribed oxygen is inhaled through a lightweight tube, with two prongs that fit into your nose. This is called a nasal cannula.

### The Most Common Types Of Oxygen Devices Are:

#### Liquid

Liquid oxygen is the most portable type. This system is the easiest method for people with an active lifestyle. The device you carry weighs only about seven pounds and allows you to move easily. You keep a base tank at home that must be refilled every 7 to 10 days. You fill the portable tank from the base tank as needed. How long the portable tank lasts depends on its size and the amount of oxygen you use (measured in liters per minute). You must learn to plan ahead. **You cannot let your portable tank become empty when you are away from the base tank.**

#### Compressed gas

This type of oxygen is compressed into a cylinder and stored as a gas. The cylinders come in different sizes and must be replaced when they are almost empty. When you leave the house, there are smaller, portable cylinders of oxygen (“take-out” gas) to carry with you. **You must plan ahead for how long the oxygen in your portable cylinder will last.** Your home oxygen company will help you to figure out how much you need. In most cases, these cylinders cannot be refilled at home. They must be replaced. Be sure to store and safely secure all compressed oxygen cylinders.

## Concentrator

This device stays in your home. It pulls oxygen from the air, concentrates it, and stores it. There is no need to have tanks refilled. Concentrators run on electricity and may increase your electric bill. **Keep a compressed oxygen cylinder at home as a back-up in case of a power outage.**

## TRAVELING

Don't let your need for oxygen stop you from traveling. You can travel by air, car, bus, train, or boat when you plan ahead. Your doctor and home oxygen company can help you to arrange for travel. Before taking a plane trip, it's very important to talk to your doctor about extra oxygen for your flight. Special arrangements with the airline will be necessary. You also need to give notice ahead of time for travel by bus, train, or cruise ship to arrange for oxygen with the carrier. You may need to get a prescription from your doctor. Request seating in a no-smoking area. For travel by car, do not allow smoking in the car.



## SUPPORT AND RESOURCES

The more you know about COPD, the more control you will have over your life. There are many resources available to help you and your family learn about COPD. Pulmonary rehabilitation and support groups are a few of these resources.

### American Lung Association

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

Toll-free **1-800-586-4872**

### National Heart, Lung, and Blood Institute

[www.nhlbi.nih.gov](http://www.nhlbi.nih.gov)

### U.S. COPD Coalition

[www.uscopd.com](http://www.uscopd.com)

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

### Pulmonary Rehabilitation

UPMC Hamot.....**814-868-7581**

UPMC Horizon-Greenville .....**724-589-6281**

UPMC McKeesport .....**412-664-3010**

UPMC Passavant .....**724-720-5930**

UPMC Presbyterian .....**412-647-7035**

UPMC Shadyside .....**412-623-1684**

## STOP-SMOKING RESOURCES

UPMC Referral Services:

**1-800-533-UPMC (8762)**

or **412-647-UPMC (8762)**

PA Quit Line: **1-800-QUIT-NOW**

**(1-800-784-8669)**

## SMOKE-FREE ENVIRONMENT

To protect our patients, visitors, and staff from the harmful effects of second-hand smoke, smoking is not permitted anywhere on UPMC property. All UPMC hospitals, facilities, and grounds, including parking lots, garages, and other outdoor locations, such as UPMC-owned sidewalks, are smoke-free. UPMC has no designated smoking areas. If you choose to smoke, you cannot do so on the UPMC campus. A patient who smokes does so against our advice and assumes the risk for any problems as a result of smoking. For information about smoking and how to quit, access the patient education materials on UPMC's website at <http://patienteducation.upmc.com> (select Smoking). If you're interested in "Becoming a Quitter" call UPMC Referral Services at **1-800-533-UPMC (8762)**, **412-647-UPMC (8762)** or the PA Quit Smoking line at **1-800-QUIT-NOW (1-800-784-8669)** or visit [www.1800quitnow.org](http://www.1800quitnow.org).



The material contained in this guide is meant to provide information, not to replace your health care provider's orders. Use this guide with your health care provider's treatment plan. Questions or concerns should be directed to your health care provider. No guarantee is offered that this information is complete or appropriate for all COPD patients. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any mechanical or electrical means, photocopying, recording, or otherwise, without prior written permission of the copyright holder. All rights reserved.

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