

Your

# COPD

Workbook



for  
easier  
breathing

# Good health guidelines for people with chronic obstructive pulmonary disease (COPD)



**Flu Vaccine** People with COPD are more likely to get the flu. Your flu symptoms will be worse and will require longer to get over than someone without COPD. Make sure that you have your flu shot once a year (usually in October or November).



**Pneumonia Vaccine** Pneumonia can be a serious problem for people with COPD. Fluid builds up in your lungs, making it more difficult to breathe. A pneumonia vaccination is given one time, but should be repeated if you are older than 65 and five years or more have passed since your vaccination.



**Spirometry** This is a simple lung function test done in a doctor's office or in a hospital. You will blow out hard and fast into a tube attached to a machine or computer. Your Percent Predicted Normal of the Forced Expiratory Volume in the first second ( $FEV_1$ ) is an important number to know. Ask the clinician to write down the pre and post percentage predicted normal numbers for you. With these numbers, the doctor can determine the stage of your COPD. This test should be done once a year or as suggested by your doctor.



**Action Plan** As long as you have COPD, you must control it. You need to work with your doctor and health care providers to help you develop a written plan and a list of things to do when your symptoms change or worsen. Ask your doctor or clinician to review and update this plan at least once a year, or more often when your treatment changes.



**Nutritional Assessment** COPD causes your muscles to work harder to breathe, which means you burn more energy. Being underweight leads to weaker muscles, and being overweight puts a strain on your breathing muscles, both of which add to difficulty breathing. Good nutrition and maintaining a normal body weight are important for people with COPD. Your doctor may refer you for a nutritional assessment if you are too thin or too heavy.



**Exercise** It is important to keep your lungs in strong condition to help you maintain a normal activity level. Talk to your doctor about exercises you can do.



**Pulmonary Education Programs** Sometimes people with COPD have many symptoms and are not able to live an active life. Your doctor may recommend a pulmonary education program that will teach you how to exercise safely, adapt your home environment and get the best outcome from your breathing therapies.



**Don't Smoke** Smoking is the single largest contributor to lung disease and other serious diseases. It is never too late to quit smoking. Ask your doctor to help you find the best way to stop smoking.

# Table Of Contents

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## **Introduction: Basic facts about your COPD**

*Understanding your COPD* . . . . . 2

*Basic facts about your lungs  
and COPD* . . . . . 3

*Working with your doctor to control  
your COPD* . . . . . 5

*Using the worksheets in the following  
eight sections* . . . . . 6

## **SECTION ONE**

*Understanding COPD signs and  
symptoms and what they mean* . . . . . 7

## **SECTION TWO**

*Understanding your COPD  
warning signs* . . . . . 11

## **SECTION THREE**

*Identifying environmental  
irritants* . . . . . 14

## **SECTION FOUR**

*Understanding your COPD  
medication* . . . . . 16

## **SECTION FIVE**

*Understanding different coughing and  
breathing techniques* . . . . . 20

## **SECTION SIX**

*Understanding the importance of  
exercising* . . . . . 22

## **SECTION SEVEN**

*Getting help to quit smoking* . . . . . 24

## **SECTION EIGHT**

*Additional information* . . . . . 25

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*The information contained in this material is not intended to be a substitute for medical care or advice provided by a doctor. American Healthways assumes no responsibility for any circumstance arising out of the use, misuse, interpretation or application of any of this information. Always consult your doctor for appropriate examinations, treatment and care recommendations. If you have any questions about this information, call your doctor.*

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# Understanding your COPD

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Your COPD IQ: Take this test to see how well you understand COPD. Then read through the following section and take the test again.

See Page 30 for a more detailed explanation of answers.

|  | TRUE | FALSE |
|--|------|-------|
| 1. COPD is caused by smoking in more than nine out of ten cases.           |      |       |
| 2. People with COPD can do little to change the course of the disease.     |      |       |
| 3. A good eating habit for COPD patients is to eat three big meals a day.  |      |       |
| 4. People with COPD should avoid exercise of any kind.                     |      |       |
| 5. It is too late to stop smoking if you already have COPD.                |      |       |
| 6. Medicines taken by mouth or injection are most effective to treat COPD. |      |       |
| 7. Breathing medicines work better when a nebulizer is used.               |      |       |
| 8. Chest X rays are the only sure way to diagnose and check on COPD.       |      |       |
| 9. People with COPD should get a flu shot every year.                      |      |       |
| 10. People using oxygen should use as much as they can.                    |      |       |

(See page 30 for a more detailed explanation.)

Question 1 – True; Question 2 – False; Question 3 – False; Question 4 – False; Question 5 – False;  
Question 6 – False; Question 7 – False; Question 8 – False; Question 9 – True; Question 10 – False

# Basic facts about your lungs and COPD

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## What is COPD?

Chronic Obstructive Pulmonary Disease or COPD is a condition that affects the lungs. COPD is a term that includes asthmatic bronchitis, chronic bronchitis and emphysema.

COPD makes it difficult to breathe “used” air out of the lungs, which means that there is less room for “clean” air to enter into the lungs. This causes oxygen to enter your bloodstream more slowly and does not allow all of the used air (carbon dioxide) to leave your bloodstream as it normally would.

### *Asthmatic bronchitis and chronic bronchitis*

These occur when your large airways, called bronchi, are inflamed and swollen. When the linings of the airways are swollen, they produce large amounts of mucus to help soothe the swelling. The large amounts of mucus lead to excessive phlegm that causes persistent and heavy coughing.

In addition to the swelling, coughing and mucus production, the muscles that surround your airways may tighten or spasm (called bronchospasm). The tightening of the airways causes the air passages to narrow so that the used air leaves your lungs slowly and clean air enters more slowly.

The first symptom of chronic bronchitis is a persistent cough with phlegm production. This can be followed with some wheezing or shortness of breath during mild or moderate exertion such as bathing or walking up a single flight of stairs. Frequent chest colds (one to two times a year) are also a symptom of chronic bronchitis.

### *Emphysema*

In emphysema, damage occurs at the very end of the lungs, in areas called the alveoli. Alveoli are tiny but very important air sacs where clean air moves into the bloodstream and used air moves out of it. In normal lungs, the alveoli look a lot like small grape clusters. However, with emphysema, these tiny air sacs become damaged and are eventually destroyed. Once they are destroyed, they can never go back to normal.

Shortness of breath is the main symptom of emphysema. At first you may only feel short of breath with heavy exercise; later on, though, you may notice it with mild to moderate exercise. Many people who have emphysema also have chronic bronchitis, which makes it even more difficult to breathe.

# Basic facts about your lungs and COPD

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## **Causes**

COPD is caused mainly by cigarette smoking; however, other irritants such as air pollution and occupational exposures can contribute to COPD. Heredity can also contribute to a rare form of emphysema called alpha 1- antitrypsin deficiency. People with a family history of emphysema onset in their 30s or

40s may want to have a blood test to check their levels of alpha 1- antitrypsin.

COPD can become worse with frequent colds or infections in the nose, sinus, throat or chest.

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## **As long as you have COPD, you must control it**

Your COPD will never go away, but as long as you have it, you must control it. You should work with your doctor and health care providers to develop a plan to keep your lungs conditioned and to use your medication in a way that keeps your symptoms under control and helps you feel less short of breath.

# Working with your doctor to control your COPD

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1. Take your medication as prescribed by your doctor, even when you feel fine. It may be helpful for you and your doctor to fill out the medicine plan worksheet on pages 18 and 19 to help you keep track of what medicines to take and how often.
2. Follow the exercise or lung strengthening suggestions that your doctor gives you. You will feel better if you keep your lungs in a strong condition.
3. Keep the air around you clean. Stay away from irritants that can cause you difficulty breathing. Know what things to avoid.
4. Know your symptoms and what they mean. Know what to do if your shortness of breath or coughing gets worse and what actions you need to take to keep from having to go to the emergency room.
5. See your doctor on a regular basis, if you have a chest cold or feel one coming on, or if the sputum you cough up increases in amount, changes in color, has a bad odor or is streaked with blood. Always discuss any concerns about your condition with your doctor.
6. Get your flu vaccine each fall and make sure that you have had a pneumonia vaccine.
7. Quit smoking.

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**This workbook is designed to help you understand your COPD and to learn how to manage it effectively.**

In the following eight sections, there are worksheets for you to use with your doctor to plan your treatment and help you learn the skills you need to manage your COPD.

Before filling out the worksheets, you may want to make extra blank copies for future use.

Use the worksheets to keep track of changes in your symptoms, your shortness of breath and your activity levels.

Take the worksheets with you to every doctor's appointment for your COPD.

# Using the worksheets in the following eight sections

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## ***1. Understanding COPD signs and symptoms and what they mean.***

It is important for you to be able to recognize different signs and symptoms and to know what they mean. By filling out and using the Signs and Symptoms worksheet on pages 8 and 10, you will be able to keep track of any changes in your symptoms.

## ***2. Understanding warning signs of COPD.***

It is important that you watch for warning signs that may make your shortness of breath worse. Work with your doctor to fill out the Action Plan for a COPD flare-up on page 13.

## ***3. Identifying environmental irritants.***

COPD is characterized by swollen and sensitive airways. Knowing what irritants bother your airways will allow you to avoid things that can make your breathing worse. Fill out the Finding Your COPD Irritants worksheet on page 15 and discuss them with your doctor and your family.

## ***4. Understanding your COPD medication.***

Knowing how your medicines work and how to use them the right way will help you control your symptoms and avoid side effects. Work with your doctor or clinician to help you correctly identify your medications, how they work and when to take them. Fill out the Medication Worksheets on pages 18 and 19 with the help of your doctor or clinician.

## ***5. Understanding different coughing and breathing techniques.***

People with COPD are not able to use their breathing muscles effectively. As the damage caused by smoking gets worse, it takes greater effort and more energy to breathe. It is also important to clear the mucus out of your airways by using a controlled type of coughing technique.

## ***6. Understanding the importance of exercising.***

The muscles in your chest must stay strong for you to feel less short of breath. Remaining physically active will help you feel better. Discuss with your doctor what type of exercise you should be getting and use the Exercise Plan Worksheet on page 23.

## ***7. Getting help to quit smoking.***

If you still smoke, you must quit. It is never too late to quit, and there are many new types of therapies to help you. Discuss these with your doctor and let him or her know that you are ready to quit.

## ***8. Additional information.***

Medical history worksheet, tests and procedure worksheet and nutritional information are provided to help you better manage your COPD.

# Understanding COPD signs and symptoms and what they mean

## Understanding your COPD signs and symptoms

People with COPD may have a mixture of chronic bronchitis and emphysema. Shortness of breath, or breathlessness, is an important symptom to recognize in COPD. Many people measure how well their COPD is controlled by how short of breath they feel (See the VAS scale on page 9).

The amount of breathlessness you have tells you how hard your lungs are working. An increase in your breathlessness can indicate that you are developing a chest infection and that you need to speak with your doctor promptly to avoid a COPD flare-up (also known as an exacerbation).

People whose main problem is chronic bronchitis usually have a cough and produce varying amounts of phlegm for many years before they begin to notice that they are short of breath. They may start to notice some shortness of breath with normal daily activities such as bathing or walking up one or two flights of stairs.

People whose main problem is emphysema usually have shortness of breath and develop a cough with phlegm production during a respiratory infection or in the later stages of the illness. If the amount of phlegm that you are producing increases, changes color, becomes thicker or begins to smell bad, call your doctor. This can indicate that you are getting a chest infection.

A low-grade fever may also indicate that you are getting an infection. Make sure to contact your doctor if you have a low-grade fever.

**It is not normal to have shortness of breath with mild exertion**



# Understanding COPD signs and symptoms and what they mean

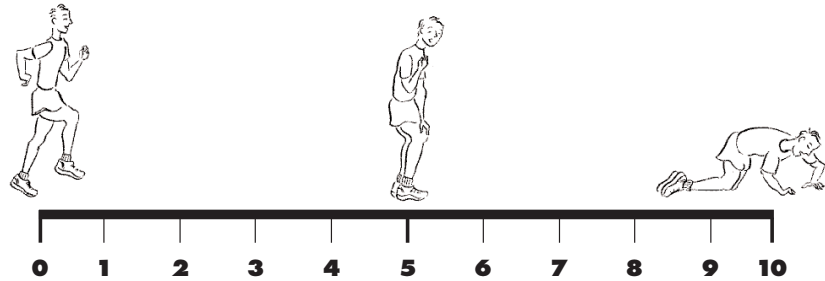
## 1 SECTION

### The VAS Visual Aid Scale

This tool was developed as a visual aid to help you keep track of how short of breath you become when you do certain things.

At least once a week, write down the WORST shortness of breath you felt on the Visual Aid Scale (VAS) worksheet on page 10.

Include the date, the number from the scale that corresponds with your shortness of breath, the activity that caused you to feel short of breath and what you did to relieve the feeling (rested, took medicine, took oxygen, etc.).





# Understanding your COPD warning signs

## Warning signs

It is important that you and your family recognize when your COPD is worsening. Discuss an action plan with your doctor. This is a list of actions to take when your COPD flares up or when you start to have certain symptoms (an exacerbation). It is important to know what to do so you can avoid an emergency situation.

|   |  |
|---|--|
| <p><b>Go to the emergency room or call 911 immediately if the following symptoms occur:</b></p> | <ul style="list-style-type: none"><li>• Rapid increase in shortness of breath</li><li>• Feeling drowsy or losing alertness</li><li>• Breathless when at rest with no relief</li><li>• Breathing faster than 25 times a minute</li><li>• Pulse rate faster than 110 beats per minute</li><li>• Nail beds and lips are blue (only if not normally blue)</li><li>• Using shoulder or neck muscles to breathe</li></ul>  |
| <p><b>Call your doctor immediately if the following symptoms occur:</b></p>                     | <ul style="list-style-type: none"><li>• Worsening shortness of breath</li><li>• Increased coughing that produces mucus</li><li>• Change in mucus color, thickness or odor, or mucus that is blood-streaked</li><li>• Ankles, feet or legs swelling in both legs</li><li>• New or worse wheezing</li><li>• Loss of energy or progressive weakness</li><li>• Working harder to breathe or struggling to breathe</li><li>• Feelings of depression or hopelessness</li><li>• Faster breathing or pulse rate</li><li>• Fever</li><li>• Cannot cough mucus out</li></ul> |

# Understanding your COPD warning signs

## Managing attacks of shortness of breath

When something happens that makes you feel that you are gasping for air, you must check POSITION, BREATHING and RELAXATION.

**YOU CAN CONTROL YOUR BREATHING. TRY NOT TO PANIC. TAKE THE TIME NECESSARY TO CATCH YOUR BREATH. INSTRUCT YOUR FAMILY MEMBERS TO HELP YOU PRACTICE THIS TECHNIQUE.**

*1. Position* – Get in a position that helps your breathing muscles work most efficiently. Sit, leaning slightly forward with your arms resting on a table or on your lap. If you are standing and have no place to sit down, lean against a wall.

*2. Breathing* – Get your breathing under control. Start by breathing through pursed lips (see Section 5). Gradually breathe out for longer and longer periods. As this gets easier, slow your breathing down even more. Remember, breathe in through the nose and out through your mouth, through pursed lips. Breathe out to a count that is twice as long as your breath in.

*3. Relaxation* – As you begin to get your breathing under control, consciously relax all the muscles not involved in breathing. Drop your shoulders down, let your arms go limp. Close your eyes if this helps. Remember to relax. Once your breathing is under control, resume your activity at a slower pace.

If you have mucus, spend some time on the proper coughing techniques to help clear it out. There may be times that you will need to take your inhaled medication to help control some of your shortness of breath.

**CAUTION:** Prolonged shortness of breath may be a sign that something else is wrong. If you cannot get your breathing under control, or if your shortness of breath is worse than usual, contact your doctor immediately.

*4. Action Plan* – Make sure that you and your doctor or clinician fill out the Action Plan for COPD flare-ups. Update this every year or more often if your treatment changes. This will help you to know what to do when you have a flare-up.



# Identifying environmental irritants

## Understanding what irritates your lungs

Knowing what bothers your COPD and irritates your lungs will allow you to avoid things that make your breathing worse. Fill out the Finding Your Irritants worksheet on page 15 and discuss these with your doctor and family.

When you have COPD, your airways are always swollen and more sensitive to things that can cause irritation. Your airways react to irritation by swelling and producing mucus. This leads to additional narrowing of the breathing tubes and an increased feeling of shortness of breath.

### *Irritating your lungs*

Smoke, dust and fumes dry the linings of your airways. To relieve the dryness, your lungs make extra mucus.

The gases in smoke paralyze the cilia (little sweepers) in your airways that help clean out foreign particles and mucus.

### *What to do*

Some of the easiest ways that you can prevent your COPD from becoming worse are to:

Stop smoking. Talk to your doctor or clinician about ways to quit smoking. There are many new smoking cessation aids available.

Don't allow smoking in your home or around you. Tell your friends, coworkers and family that, because of your lung condition, you cannot be exposed to secondhand smoke.

Be careful when using hairspray, perfumes, cooking sprays or any other type of aerosol. Make sure the room you are in is well ventilated. Once you spray the aerosol, leave the room or area where the aerosol was sprayed. Try not to inhale any of the sprayed aerosol.

Be careful of dust, wind and cold or humid weather. All of these things can irritate your airways and make you cough or make your breathing more difficult. If you must go out in this type of weather, limit the time you are out or keep a light handkerchief over your nose and mouth (only if this does not make it more difficult to breathe).

Be careful of air pollution. Check the air pollution level before going outside. High levels of air pollution can make your breathing more difficult.

# Identifying environmental irritants

| FINDING YOUR IRRITANTS WORKSHEET   |     |    |
|--|-----|----|
| Answer all these questions   | YES | NO |
| I start to cough, have difficulty breathing or get a headache when I am around:          |     |    |
| Strong odors (perfume, colognes, hairspray, nail polish, cleaning supplies, etc.)        |     |    |
| Smoke (cigarette, open fire, bar-b-que)  |     |    |
| Fumes (car exhaust, gasoline, cleaning supplies)   |     |    |
| Animals  |     |    |
|  |     |    |
| <b>Food</b>  |     |    |
| I often get heartburn  |     |    |
| I suffer from food or acid backing up from my stomach into my food pipe                  |     |    |
| I can only eat small meals   |     |    |
| I get a bloated feeling after eating certain foods                                       |     |    |
| List:  |     |    |
|  |     |    |
| <b>Weather</b>   |     |    |
| I feel more short of breath when I go outside and the weather is (circle all that apply) |     |    |
| Cold              Hot/Humid              Windy              Stormy                       |     |    |
| When there are changes in the barometric pressure or air pollution                       |     |    |
|  |     |    |
| <b>Others</b>  |     |    |
|  |     |    |
|  |     |    |
|  |     |    |
|  |     |    |
|  |     |    |
|  |     |    |
|  |     |    |
|  |     |    |
|  |     |    |
|  |     |    |

# Understanding your COPD medication

## COPD Medicines










Several kinds of medicines may be used to treat COPD. Ask your doctor or clinician to help you fill out the worksheet on pages 18 and 19.

Work with your doctor to understand your medicines and how to use them correctly. Ask your doctor or nurse to help

you identify the medicines in each group that you use.

This table is designed to help you understand why you are taking a certain medication, how it works and if there are any possible side effects.

Medications can be separated into several categories:

| CLASS   | HOW IT WORKS  | HOW IT'S TAKEN   | SIDE EFFECTS   |
|---|---|--|--|
| <b>Beta agonists - Inhaled</b><br>(Alupent, Foradil, Proventil, Ventolin, Brethaire, Serevent, Maxair, Isuprel)   | Causes airways to relax and open further. Can be short-acting for fast relief OR can be long-acting with slow relief. |   | <ul style="list-style-type: none"> <li>• Rapid heartbeat</li> <li>• Nervousness and restlessness</li> <li>• Dryness of mouth and throat</li> </ul> <p><i>Note: Foradil and Serevent work too slowly to relieve breathlessness in an emergency.</i></p> |
| <b>Anticholinergic Medications - Inhaled</b><br>(Atrovent Inhaler, Spiriva)   | Causes airways to relax and open further. Acts best when used on a regular basis. Not for fast relief.                |   | <ul style="list-style-type: none"> <li>• Nervousness</li> <li>• Nausea</li> <li>• Upset stomach</li> <li>• Cough</li> <li>• Dry mouth</li> <li>• Headache</li> </ul>   |
| <b>Beta agonists - Oral</b><br>(Brethine, Ventolin, Proventil, Volmax, Alupent)   | Causes airways to relax and open further.   |    | <ul style="list-style-type: none"> <li>• Rapid heartbeat</li> <li>• Nervousness and restlessness</li> <li>• Shaking or tremors of the hands</li> </ul>   |
| <b>Anti-inflammatories</b><br><b>STEROIDS —</b><br><b>Oral:</b> (Prednisone, Decadron, Cortisone, Hydrocortisone, Medrol)<br><b>Inhaled:</b> (Azmecort, Flovent, Pulmicort, QVAR) | Steroids help reduce inflammation of airways, and they also dilate the airways. They help only some people with COPD. |    | Oral steroid side effects include: <ul style="list-style-type: none"> <li>• Hoarseness</li> <li>• Cough</li> <li>• Sore throat</li> <li>• Osteoporosis</li> </ul>  |
| <b>Theophylline-like drugs - Oral</b><br>(Theophylline, Aminophylline, Slophylin, Theo-Dur, Slo-Bid, Theo-24, Constant-T)   | Causes airways to relax and open further. Helps the diaphragm work better.  |    | <ul style="list-style-type: none"> <li>• Upset stomach</li> <li>• Nausea and vomiting</li> <li>• Nervousness and restlessness</li> </ul> <p><i>Note: Blood levels need to be checked from time to time.</i></p>  |

# Understanding your COPD medication

## Medicine Caution

When you have COPD, knowing what medications NOT to take is often as important as knowing which ones you should take.

You should always tell your doctor if you are taking any other medications, especially those listed below. These should only be used under the direction of your doctor.

| CLASS  | RISKS  |
|--|--|
| Over-the-counter cold and sinus medicines          | Don't take any over-the-counter medicines unless you ask your doctor first. Medicines containing cough suppressants (such as dextromethorphan or codeine) will lead to your lungs clogging with mucus. Antihistamines will let mucus thicken too much to cough up. |
| Sleeping pills, tranquilizers and narcotics        | These medicines may depress or slow down your breathing and lead to low levels of oxygen in your bloodstream.  |
| Aspirin or anti-inflammatories used as painkillers | Aspirin or nonsteroidal anti-inflammatories (NSAIDs) such as ibuprofen or naproxen may cause breathing difficulties in some people.<br><br>Discuss alternatives, like acetaminophen, with your doctor.   |

**4**  
SECTION

# Understanding your COPD medication

| Medicine type                         | Medicine name | How to use and maximum per day |
|---------------------------------------|---------------|--------------------------------|
| Anticholinergic                       |               |                                |
| Inhaled adrenergics<br>(Short-acting) |               |                                |
| Inhaled adrenergics<br>(Long-acting)  |               |                                |
| Oral steroids                         |               |                                |
| Inhaled steroids                      |               |                                |
| Methylxanthines<br>(Theophylline)     |               |                                |
| Combination drugs                     |               |                                |
| Other                                 |               |                                |

# Understanding your COPD medication

| Medicine type      | Medicine name | How to use and maximum per day |
|--------------------|---------------|--------------------------------|
| Antibiotics        |               |                                |
| Cough suppressants |               |                                |
| Others             |               |                                |
|                    |               |                                |
|                    |               |                                |
|                    |               |                                |
|                    |               |                                |
|                    |               |                                |

# Understanding different coughing and breathing techniques

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## **Skill:** **Clean Your Lungs**

Clearing the mucus from your airways will help you breathe more easily and decrease the chance of a lung infection. Using a controlled coughing technique will help you effectively remove the mucus from your lungs.

### *Coughing*

Coughing spells can make you feel tired, frightened and short of breath. When your airways get clogged with mucus, you have the urge to cough. For the mucus to move, your cough must have a strong force of air behind it.

### **Huff Cough Technique**

1. Sit with your head slightly forward, feet on the floor.
2. Breathe in deeply and slowly.
3. Hold your breath for a few seconds.
4. Cough twice, saying the word “huff” softly. The first time is to loosen mucus; the second is to bring it up.
5. Breathe in by sniffing gently.
6. Get rid of the mucus in a strong tissue or paper towel. Swallowing mucus can upset your stomach.

### *Chest Physio-Therapy (CPT)*

Some people may need more help to clear their lungs. Let your doctor know if you are having difficulty getting the phlegm out of your airways. Your doctor, respiratory therapist or physical therapist can provide you with special directions on how to drain mucus out of your lungs.

### *Breathing*

Normal breathing begins with the contraction of the diaphragm and other muscles within the chest. People with advanced stages of COPD are not able to use their breathing muscles effectively and must use greater effort to breathe.

# Understanding different coughing and breathing techniques

The following are some breathing techniques that may help you breathe easier.

## **Pursed-Lip Breathing**

This technique helps keep the airways from collapsing when you exhale.

1. Inhale through your nose if you can. Breathing through your nose helps to warm, filter and moisten the air you inhale.
2. Pucker or purse your lips as if you were whistling or blowing out a candle.
3. Control the rate that you exhale. Exhale gently and slowly.
4. Exhale for at least twice as long as it took to inhale. For example, if you inhaled for three seconds, exhale for six. Slowly count to yourself as you exhale.
5. Practice this type of breathing throughout the day.
6. Use this breathing technique during times of stress or breathing difficulty.

## **Expanding the Lower Chest**

This technique helps your diaphragm expand better to more easily get clean air into your lungs.

1. Sit down on a chair with your feet on the floor.
2. Place your hands on your sides, at the level of the lower ribs.
3. Breathe in slowly through your nose and try to push your hands out with your lower chest.
4. Exhale through pursed lips, letting your hands move back in. Practice for ten breaths and then relax.

This exercise can also be done while lying on your side with one arm above your head. This helps you to expand one side of your chest at a time.

1. Lie on your right side with your right hand on your lower left chest, almost as if you were going to pat your stomach, but your hand is positioned over the lower left chest.
2. Place your left arm over your head.
3. Now breathe in and try to push your right hand out with the left side of your chest. Practice ten times on each side.

# 6 SECTION

## Understanding the importance of exercising

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Talk to your doctor before beginning any type of exercise routine.

Exercise will help you feel less short of breath and will strengthen your lungs so that they can work better and use less energy.

Because shortness of breath is so unpleasant, many people with COPD stop doing some activities. But lack of activity causes muscles to weaken, and weak muscles need more oxygen to work.

A program of regular exercise can help keep your muscles strong so that it will be easier to breathe. Talk to your doctor or clinician about what kind of exercise you can start with and write it on the exercise plan worksheet on page 23.

Once your doctor has decided on the best exercise program for you, we can send you worksheets with exercise tips.

# Understanding the importance of exercising

## Exercise Plan Worksheet

Dyspnea (VAS): \_\_\_\_\_ Target Heart Rate: \_\_\_\_\_

| Type of exercise   | How | When | What to check and when to stop |
|--|-----|------|--------------------------------|
| Warm-up/Cool-down  |     |      |                                |
| Stretching and Range of Motion: increase the mobility of your muscles and joints.  |     |      |                                |
| Muscle Toning and Strength: make your muscles more efficient and stronger (i.e. arm curls with small weights).                                     |     |      |                                |
| Endurance-building: increase the length of time you can exercise without becoming too short of breath (i.e. stationary biking, walking, swimming). |     |      |                                |
| Other  |     |      |                                |

**It's never too late to  
stop smoking**

Every year, three million smokers give up cigarettes. With the right attitude, preparation and knowledge, you can be one of them. The biggest step is deciding to quit.

Once you stop smoking, your body goes to work to clean out the smoke and dirt from your airways. Your body can't repair the damage, but no further damage will be done. It will now be important to start conditioning your lungs through exercise to keep them strong.

After a few days of excessive coughing to clean out your lungs, your cough will lessen and disappear. With your airways more open, you will be able to breathe easier. Your lungs will also put more oxygen into your blood and you'll feel less tired than when you smoked.

Strengthening your lungs will help them to fight infections. Your blood circulation and your sense of smell and taste will improve.

**Why do you smoke?**

Smokers give several general reasons for smoking:

*Stimulation*

*Handling the cigarette*

*Relaxation*

*Help with tension*

*Cravings*

*Habit*

Why do you smoke? Start a journal and write down the reasons you smoke.

**Make a decision to quit.**

Write down a quit date.

Tell your doctor and family.

Set an appointment with your doctor to get some smoking cessation aids.

Ask your doctor about any smoking cessation programs.

**Make a change**

In preparing to quit, begin to change your smoking pattern to make smoking less pleasant.

**Think positive**

Project a positive attitude. See yourself smoke-free. Tell yourself that you can do it this time. Remember that most former smokers quit once, then quit again and then quit again. Don't give up trying; you will succeed.

# Additional information

| QUICKVIEW                |                       |
|--------------------------|-----------------------|
| Drug and other allergies | Medic Alert ID        |
| Insurance company        | Policy or plan number |
| Emergency contact        | Phone numbers         |

| HISTORY   |                 |                                |                             |
|---|-----------------|--------------------------------|-----------------------------|
| Name: _____   |                 |                                |                             |
| When you started smoking: _____ Number of cigarettes per day: _____ |                 |                                |                             |
| Weight: _____ For how long: _____                                   |                 |                                |                             |
| Year  | Health problems | Hospital admissions and reason | Surgery or other procedures |
|   |                 |                                |                             |
|   |                 |                                |                             |
|   |                 |                                |                             |
|   |                 |                                |                             |
|   |                 |                                |                             |
|   |                 |                                |                             |

**COPD tests and procedures*****Lung function tests***

Pulmonary function tests (PFTs) provide a lot of useful information about your lungs. Your test results are compared to levels considered healthy for your age, height, weight, gender and ethnic group.

Spirometry is necessary to diagnose COPD, to monitor your response to treatment and to tell how severe your disease is.

While breathing through a tube connected to a recording machine, you take a deep breath in and blow it out as quickly and completely as possible. The results are recorded and analyzed. This test can be performed before and after you take medication to relax your airways (bronchodilators).

***Spirometry - Your lung numbers***

Your doctor will perform these tests at least once a year, or more often if your condition changes or if you are trying new treatments:

- The amount of air that you can completely and forcibly exhale (FVC - Forced Vital Capacity)
- The amount of air that you can force out in one second (Forced Expiratory Volume - FEV<sub>1</sub>)

***Determining if you need extra oxygen:***

***Arterial Blood Gas (ABG):*** An ABG is done from a sample of your blood that is analyzed by a special machine that records the amount of carbon dioxide (waste gas) and oxygen in your blood. This test can determine whether or not you need extra oxygen.

***Pulse Oximetry:*** This test is performed by placing a special light clip on your finger, earlobe or forehead. The pulse oximeter uses light waves to indirectly measure the amount of oxygen in your blood. Done without the use of needles, pulse oximetry can be performed at rest, while you are walking or even overnight while you sleep.



**Understanding your  
COPD nutrition**

A healthy diet and normal body weight are important if you suffer from COPD.

Being too heavy puts extra strain on your heart and lungs to provide more oxygen. Also, extra fat in your abdomen crowds your diaphragm, making it hard for your lungs to expand.

Being too thin means that your muscles, including the respiratory muscles, are weakened. Your body's ability to fight infections is also reduced.

***Diet Basics***

If you are overweight or underweight, a nutritionist can help you plan your diet to achieve normal weight.

**Fluid:** Drink at least eight cups of water or caffeine-free fluid daily. Fluid keeps mucus thin and keeps a healthy amount of water in your body.

**Protein:** Eat six ounces of protein per day and drink two cups of milk to provide an adequate amount of high-value protein.

**Calcium:** Found in milk and cheese, calcium is especially important for women and for people who are on steroid medication.

**Caffeine:** Limit beverages containing caffeine, such as tea, coffee and soft drinks. Caffeine causes the body to lose water and will thicken mucus.

# Additional information

## Eating Tips

1. Eat three small meals and three snacks a day. This will keep you from becoming too full. Too much food at once swells the stomach and crowds the diaphragm.
2. Eat bigger meals earlier in the day.
3. Avoid lying down after meals.
4. Cook when you are feeling most energetic. Make extra portions and freeze leftovers for easy frozen dinners.
5. Limit carbonated beverages and gas-forming vegetables like those listed below if you are prone to gas. These may make your stomach swell and limit your breathing.
6. Rest before eating.
7. If you become short of breath while eating, choose softer foods that are easier to chew.
8. Eat a variety of foods to ensure that you are getting adequate vitamins and minerals.

| GAS-FORMING FOODS                   |             |             |          |
|-------------------------------------|-------------|-------------|----------|
| apples, raw                         | broccoli    | melons      | radishes |
| asparagus                           | cabbage     | onions, raw | turnips  |
| beans (pintos, kidney, black, navy) | cauliflower | peas        |          |
|                                     | corn        | peppers     |          |

**Answers to COPD IQ Quiz on page 2****Question 1 - True**

Before cigarette smoking became common, COPD was almost unknown. Some people who smoke are more vulnerable to the toxins in smoke that attack the elastic tissues in the lungs. Almost everyone who has smoked 30 cigarettes or more per day for 30 years will develop COPD.

A small minority of people – less than one in ten – have a genetic condition that causes COPD. Their chances of developing COPD are very high, and certain if they also smoke.

**Question 2 - False**

Although there is very little that can be done to undo the damage to your lungs, there are many simple things you can do to make your lungs work their best. We will be working with you so that you can do more, have more energy and are less troubled by shortness of breath and chest infections.

**Question 3 - False**

Good nutrition is very important if you have COPD. Breathing is hard work and requires a lot of energy. Meals that are too large and difficult to digest can fill up your stomach too much and make breathing more difficult. Eating smaller meals, spaced through the day, and avoiding gas-forming foods

are the first steps you can take to make sure you eat properly and stay comfortable.

**Question 4 - False**

Because COPD makes you breathless with physical activity, you may tend to do less. Muscles that exercise too little use more oxygen than fit ones, and tiredness increases. A structured exercise program approved by your physician is an important part of breathing and living well.

**Question 5 - False**

Nothing could be further from the truth! Quitting smoking today will not undo the damage in your lungs but will stop further damage. Your lungs will age at a normal rate for people of your age who have never smoked. It could mean 15 extra years of normal activity if you stop today – even if you are already older than 60.

**Question 6 - False**

Inhaling medicines puts them right where they need to work – in your lungs. It also means that less of the medication is absorbed in your bloodstream, which can cause side effects like trembling, nervousness and heart palpitations.

**Question 7 - False**

Nebulizers need higher doses of medicines to achieve the same effect as aerosol inhalers. They

are also more difficult to care for and can't be carried around easily.

**Question 8 - False**

Although chest X rays may be necessary from time to time, simple spirometry (lung function tests) that measures how much you can breathe out in one second is the only way to check how well your lungs are working.

**Question 9 - True**

People with COPD are at higher risk of serious complications when they get the flu.

**Question 10 - False**

Using too much (or too little) oxygen can have side effects. Too much oxygen can cause the blood vessels in your lungs to go into spasm and prevent enough oxygen from getting into circulation. Always follow your doctor's instructions exactly when you are on oxygen therapy.



