

Chronic Obstructive Pulmonary Disease (COPD)

**TAKE HOME GUIDE FOR
EFFECTIVE MANAGEMENT**



**MAURY REGIONAL
MEDICAL CENTER**



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Chronic Obstructive Pulmonary Disease

What is it?

Chronic Obstructive Pulmonary Disease (COPD) is a slow, progressive lung disease that leads to damaged airways, leading to shortness of breath and increased coughing. The openings of the airways are smaller. Less air enters the lungs because the walls of the airways get thick and swollen forming mucus that causes you to cough. The tiny air sacs cannot empty and your lungs feel very full. COPD also makes the heart pump harder to push blood through smaller blood vessels in the lungs.

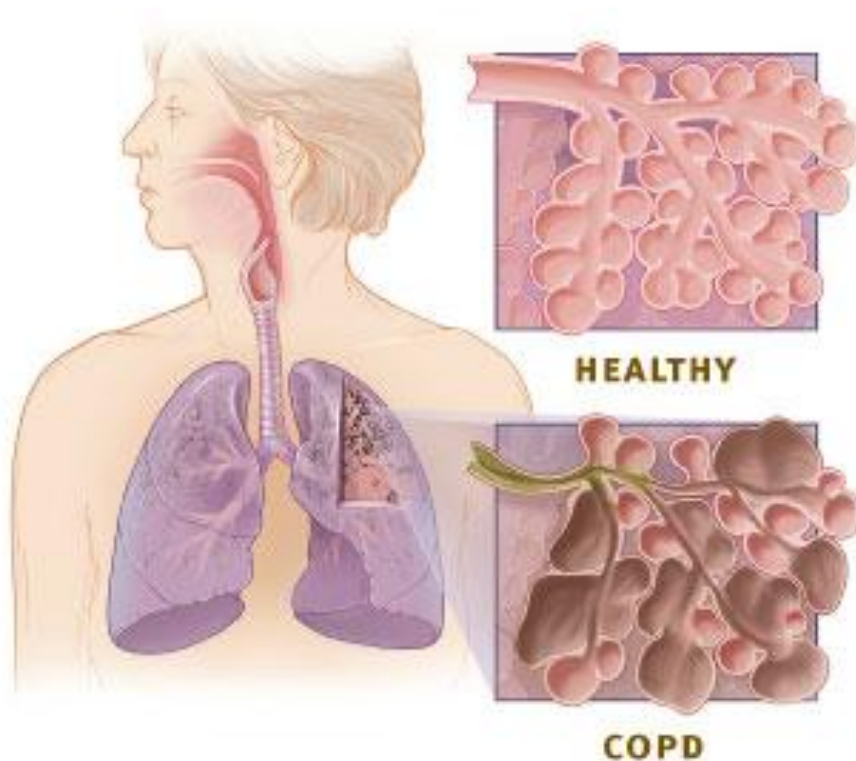
In healthy people, each airway is clear and open. Air is inhaled through the mouth and nose and passes through the throat to the trachea. The trachea divides into the right and left bronchi and then divides again and again like the branches of a tree. The smallest airways end in very small air sacs. From these air sacs the blood picks up oxygen and carries it to the rest of the body.

COPD includes three respiratory diseases - emphysema, chronic bronchitis and asthma.

Emphysema - damage to your lungs causing air to get trapped and making it harder for oxygen to get into the blood.

Chronic bronchitis - the airways produce too much mucus, which leads to a chronic cough and more chance for respiratory infections.

Asthma - a chronic inflammatory illness in which your airways swell and tighten. As a result, less air can travel to your lungs and it becomes harder to breathe. An asthma attack usually occurs after exposure to a trigger, such as activity, allergens, or irritants.



What Causes COPD?



Smoking



Long term exposure to industrial pollutants



Long term exposure to indoor or outdoor air pollution



Scarred or damaged lung tissue



Symptoms of COPD

 Difficulty breathing

 Shortness of breath

 Wheezing

 Excess mucus

 Coughing

 Weakness and exhaustion

 Unexplained weight loss



What Treatments Will I Need?

There is a lot that can be done to slow the progression and decrease the symptoms of COPD, but COPD can't be completely cured. An important part of treatment is taking care of other things that can irritate your lungs and decrease symptoms of COPD. Treatment also includes lifestyle changes and medication. Here are some important things you can do.



Smoking - Quitting smoking is the best way to slow the progression of COPD.



Air Pollution - Avoid all types.



Diet - Eating a variety of healthy foods can help you fight infections, prevent illness, and give you more energy.



Exercise - Can help your body use oxygen more efficiently and strengthen muscles.

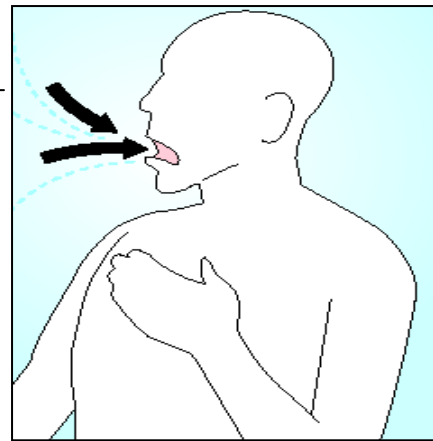
What To Look For

If you have been short of breath, you know the feeling. People have described it as being "hungry for air." It can be hard to breathe and even painful.

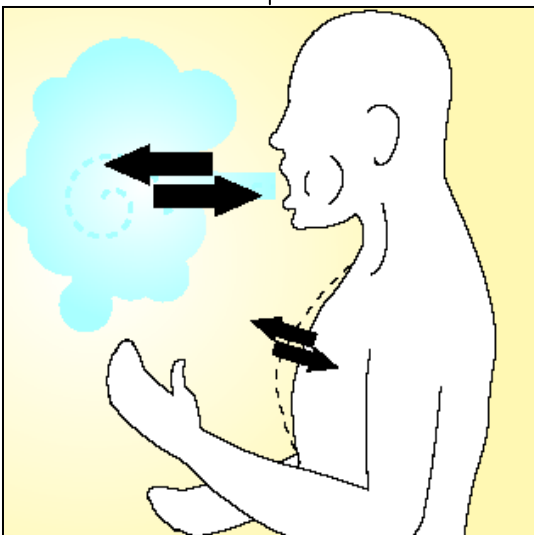
You can usually tell when you are feeling short of breath.

When a person is short of breath, he/she may:

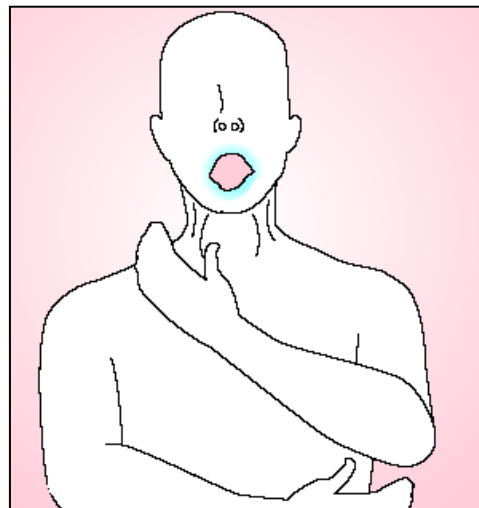
- Gasp for air
- Take short, quick breaths



- Breathe through the mouth
- Look anxious or afraid
- Feel like he or she is choking or smothering



- Turn blue around the mouth and lips
- Have flared nostrils



What To Do If You Are Short of Breath

If you are feeling very short of breath:

1. Sit down in a chair facing a table or desk.
2. Put a few pillows on the table or desk. (You might want to keep a few pillows nearby in case you need them.)
3. Fold your arms, put them on the pillows and relax onto the pillows.
4. Focus on relaxing your shoulders and arms.
5. Stay in this position until you feel your breathing slow down and get easier.



Pursed-Lip Breathing

Pursed-lip breathing is a way to help move air into and out of the lungs. It will help lessen shortness of breath.

1. Relax your neck and shoulder muscles.
Inhale slowly through your nose for at least 2 counts.



Inhale 1 - 2

2. Pucker your lips as if to blow out a candle.
Exhale slowly and gently through your pursed lips for at least twice as long as you inhaled.



Exhale 1-2-3-4

Diaphragmatic Breathing

Diaphragmatic breathing is a way to use one big muscle to breathe instead of many muscles, so you'll use less energy.

1. **Sit or lie** on your back so you feel at ease. Inhale slowly through your nose. Count to 2. As you inhale, your stomach should move out/up.



Inhale 1 - 2
Stomach pushed out









2. Breathe out through pursed lips. Count to 4. As you exhale, you should feel your stomach move in/down.



Exhale 1-2-3-4
Stomach sucked in

Quit Smoking



-  Set a target date for quitting and stick to it.
-  Make a list of all your reasons for quitting.
-  Throw out or put away ashtrays, lighters, and matches.
-  Discuss with your health care provider about physical and emotional reactions to quitting.
-  Involve others by telling family and friends or join a self-help group.
-  Consider nicotine replacement therapy. It can help curb your cravings for nicotine. Talk to your health care provider about which therapy may be right for you.
-  Avoid being around smokers.
-  Try substitutes such as carrot sticks, fruit, or sugarless gum.

Infection Prevention

A respiratory infection can be more serious for you than someone who doesn't have lung disease. You may get sick easier, may be sick longer and may even need to go to the hospital. It is important to take precautions to reduce your chances of getting sick.

- Wash your hands often
- Use hand sanitizer between washings
- Get vaccinated (always check with your physician first)
 - Get a flu shot every year
 - Get a pneumonia vaccination
- Take care of your teeth and gums
- Stay away from germs
 - Avoid sick people
 - Avoid crowds
 - Keep inhalers and spacers clean
- See your physician at the first signs of infection

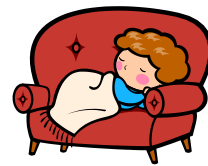


Signs and Symptoms of Infection

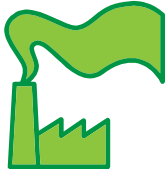
Watch for any changes in your health. This way you can spot an infection early and start treatment right away.

Warning signs for an infection may include:

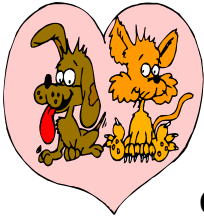
- Increased shortness of breath, coughing, or wheezing
- Mucus that has increased in amount or is thicker
- Mucus that has changed color, is bloody, or has an odor
- Sore throat
- Fever, chills, or night sweats
- Muscle aches, pains, or headaches
- Chest tightness that does not go away with your normal medications
- Feeling more tired than usual



Avoid Stress To Your Lungs



Air Pollution - Avoid smog, power plants, oil refineries, pollen and walking outside if traffic is heavy.



Pets - Dander and feathers can cause breathing problems for some people. Discuss with your health care provider regarding pets and how to live with them.



Smoke and Fire - Do not use a fireplace. Use an exhaust fan while cooking to control fumes.



Aerosol sprays, perfumes, chemicals - Use roll-on or solid deodorants; do not wear perfumes; use unscented detergents.



Dust - Don't use the vacuum because it stirs up dust. Ask a family member to do it for you and leave the room. Use wet mops or damp cloths to dust.

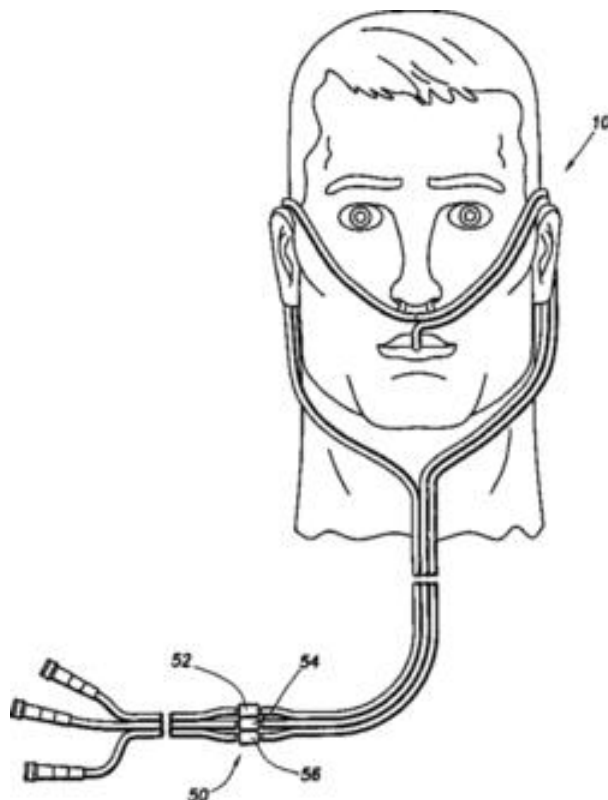


Extreme Temperatures and Humidity - Makes the body work harder to maintain its normal temperature.

Oxygen Therapy At Home


Your doctor may prescribe oxygen if your lungs are not getting enough oxygen to your blood. Breathing prescribed oxygen increases the amount of oxygen in the blood, which usually reduces shortness of breath and other symptoms.


Oxygen is not addictive and causes no side effects when used as prescribed. Some people may need to use oxygen 24 hours a day, while others may only need oxygen during exercise or sleep. Home oxygen can help promote your independence and make it easier and safer for you to complete daily living activities.





Oxygen Safety


Oxygen is a safe gas as long as it is used properly. It is very important to follow precautions so that you and your family are safe when you are using your oxygen.


 Avoid open flames or heat sources such as lighters, candles, cigarettes, gas/electric heaters, and stoves.


 Do not store your oxygen system near any heat sources or open flames.

 Do not smoke or allow others to smoke around you.


 Do not change the oxygen flow rate on your own. Please notify your health care provider if you feel you are not getting enough oxygen.

 Be sure to have a functioning smoke detector and fire extinguisher in your home at all times.

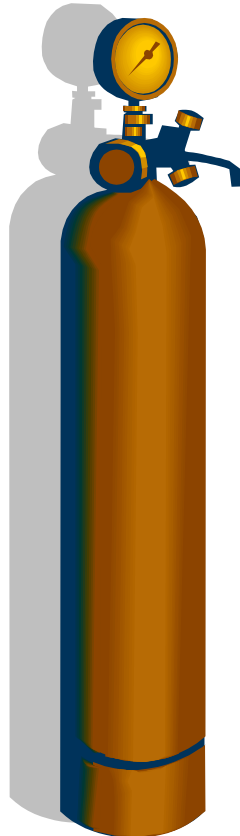
 Keep the oxygen system clean and dust-free.

 Avoid using lotions or creams containing petroleum, grease or oils because these substances can be flammable.








 Store your oxygen equipment upright and secure.

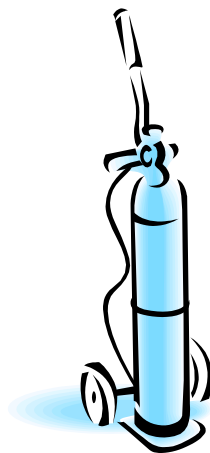
 Notify your electric company if you are using an oxygen concentrator system, so they can make your house a priority during a power outage.

 Always have backup tanks available, and know how to use them.



Traveling with COPD

-  Have a full prescription of your medicines. Keep your medicines in carry-on bags. Have a copy of your prescriptions.
-  Wear a medical ID bracelet.
-  Use hand sanitizer often.
-  Keep your rescue inhaler close by.
-  Stretch your arms and legs often.
-  Get a portable nebulizer (if needed).
-  Ask your doctor what to do in case of an infection.



Traveling with Oxygen

Traveling with oxygen takes planning. Contact your doctor for a copy of your prescriptions and any other paperwork you may need. Call your medical supplier for any oxygen or supplies needed for your trip or destination. Contact your travel company about restrictions or requirements.

- No smoking in any vehicle carrying oxygen.
- Do not leave an oxygen tank in a hot car or trunk. Crack windows open so air can circulate.
- Secure oxygen tanks in an upright position.
- Tell your travel carrier about your oxygen needs well in advance. There may be restrictions or requirements.
- Arrange for oxygen to be delivered at your destination.
- Be prepared to provide a letter from your doctor, a copy of your oxygen prescription and any other paperwork that is requested.



What Medicines Will I Need To Take?

Many different medications are used to treat COPD. Each type works differently on your body.

Bronchodilators relax and open up your airways making it easier for you to breathe. Each bronchodilator is different based on the chemical make up, how fast it works and how long it lasts.

Steroids are used to reduce swelling in your airways.

Antibiotics are used to fight respiratory infections.

Diuretics are used to get rid of extra fluid in your body.

Potassium Supplements are used to replace potassium that may be lost by taking a diuretic.

Mucolytics are used to thin the mucus.

How to Get the Most from Your Medicines

Take your medicines exactly as prescribed.

- Take your medicines every day in order for them to be effective.
- In some cases, your doctor may start you on one drug and then add another later.
- Do not stop taking any drug or change the dose unless the doctor tells you to do so.
- If you don't know when or how to take each medicine, ask your doctor, nurse, or pharmacist.

Watch for side effects.

- All medicines have side effects.
- Ask your doctor what side effects may occur with the medicines you are taking.
- Report any unusual side effects as soon as they occur.

Keep your appointments.

- Visit your doctor regularly so that the effect of the medicines you are taking can be monitored.

Give it time.


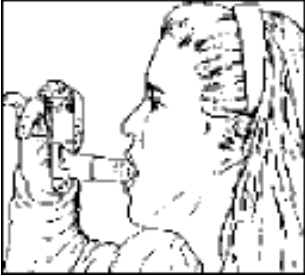

- Some medicines take effect after several weeks.
- Ask your doctor how long it will take before you can expect to see any benefit.

Using Your Metered-Dose Inhaler

An inhaler consists of a pressurized canister of medicine and a mouthpiece. Pressing down on the inhaler releases a mist of medicine that you breathe into your lungs. It is important to use your inhaler correctly to receive the right amount of medicine.

- Remove cap, hold inhaler upright, shake.
- Tilt head back slightly and breathe out.
- Press down on the inhaler to release the medicine as you start to breathe.
- Breathe in slowly for 3 to 5 seconds.
- Hold your breath for 10 seconds.
- Repeat puff if directed. Wait 1 minute between puffs.

Methods of Inhaler Use

<p>Open mouth. Hold inhaler 1 to 2 inches.</p>	
<p>Use spacer attached to the inhaler. Hold with lips.</p>	
<p>Hold inhaler in your mouth.</p>	

These instructions are for a meter-dose inhaler only. Inhaled dry powders are used differently. To use a dry powder inhaler, close your mouth tightly around the mouthpiece of the inhaler and breathe in quickly. Talk to your doctor if you have any questions about your medicines or inhalers.

Nebulizers

Nebulizers are another way to deliver medicines. If your doctor prescribes this, you will be referred to a medical company. The company will set it up then show you how to use it and clean it.

A nebulizer changes liquid medicine into a fine mist. The medicine is inhaled through a mouthpiece or mask. It will take several minutes to deliver the medicine.

It is important to clean your nebulizer equipment. If you don't, germs will collect on the nebulizer and you could get an infection. Follow the cleaning instructions that come with your nebulizer.



Using a Nebulizer
with a Mouthpiece



Exercising Safely with COPD

Always check with your health care provider before starting an exercise program. With COPD, you expend extra energy just to breathe. If you can use your energy more efficiently for breathing, you will have more energy left for performing routine activities during the day.

Exercise can:

- Improve your circulation
- Improve your COPD symptoms
- Build energy levels and increase endurance
- Improve sleep
- Lower blood pressure
- Help reduce body fat
- Help reduce stress, tension, anxiety, and depression



General Tips for Exercising

- Warm up before exercising
- Set attainable goals
- Vary your activities & do something daily
- Choose activities you enjoy
- Exercise with a friend
- Take time to cool down
- Stop if you experience a problem
- Set your own pace
- Reward yourself
- Drink plenty of water to replenish fluids

Pulmonary Rehabilitation



Pulmonary Rehab is for patients with COPD - emphysema and chronic bronchitis, asthma, lung cancer, sarcoidosis, cystic fibrosis, pulmonary fibrosis, and other pulmonary illnesses.



Goals of Pulmonary Rehab are to reduce your symptoms, increase energy levels, increase activity, decrease hospital stays and to improve your overall quality of life.



Education and exercise are used to achieve the Pulmonary Rehab goals.



Most insurance companies cover Pulmonary Rehab.



Talk to your doctor about starting Pulmonary Rehab and if he/she thinks it is the right choice for you.



Call your Pulmonologist or the Pulmonary Rehab team at 931-380-4094 for more information.



Conserving Your Energy

Plan periods of rest; at least one every day. Avoid working long days. Rest between recreation and leisure activities.

Conserve your energy. Using less energy with daily tasks can help you have more energy to do more activities during the day.

- Plan ahead
- Prioritize your efforts
- Position yourself
- Pace yourself

Here are some energy-conserving tips:

- Simplify your tasks and set realistic goals.
- Plan your activities ahead of time. Space out your activities. Pace yourself.
- Rest before and after activities.
- Stop and rest if you become tired during an activity.
- Rest 20-30 minutes after each meal.
- Get a good night's sleep.
- Do all grooming while sitting.
- Use devices and tools that assist you such as a walker, shower chair, and long-handled tools for dressing.
- Ask for help. Divide tasks among family and friends.

Visualization

Try visualization to help you relax:

1. Get comfortable and take a few slow, deep breaths.
2. Imagine a place that relaxes and calms you - a quiet beach or a spot in the woods.
3. Stay focused on that place and relax your muscles. Feel tension leave your body.



Dietary Tips for the COPD Patient

For people with COPD, eating should be treated as important as breathing. A well-nourished body helps you fight infections and may help prevent illness. A proper diet will not cure your disease, but it will make you feel better.

The American Association for Respiratory Care has gathered nutrition tips for the COPD patient. These are general guidelines only; your physician or dietitian is your best source of information on your diet.

- Eat foods from each basic food group; fruits and vegetables, dairy products, cereals and grains, and proteins.
- Limit your salt intake. Too much salt can cause you to retain fluids that may interfere with breathing.
- Limit your intake of caffeine. Caffeine may interfere with some of your medications and make you nervous.
- Drink fluids to stay hydrated which help your secretions thin.

- Avoid foods that produce gas or make you feel bloated. The best process to use in eliminating foods from your diet is trial and error.
- Try to eat your main meal early. This way you will have lots of energy for the day ahead.
- Choose foods that are easy to prepare and try to rest before eating so you can enjoy your meal.
- Avoid foods that supply little or no nutritional value.
- Try eating six small meals a day instead of three large ones. This will keep you from filling up your stomach, causing shortness of breath.
- Try to eat in a relaxed atmosphere. Make your meals attractive and enjoyable.
- If you are using oxygen, be sure to wear your cannula while eating and after meals too. Eating and digestion require energy. This causes your body to use more oxygen.

REFERENCES:

What you can do about lung disease called COPD by Global Initiative for COPD. (National Heart, Lung, Blood Institute)

American Association for Respiratory Care

www.aarc.org

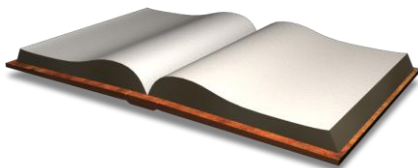
Department of Health and Human Services

American Lung Association

800-586-4872

www.lungusa.org

National Institute of Health





Lungs for Life: COPD Support Group

The Lungs for Life: COPD Support Group meets quarterly at 2 p.m. at Maury Regional Medical Center. Meetings are held in Private Dining Room 1, located on the medical center's ground floor.

The goal of Lungs for Life is to increase awareness and self-management of COPD. Those affected by the disease can benefit from support, while learning how to better control symptoms and minimize further lung damage.

Speakers vary with each program focusing on a topic of interest to those affected by COPD.

For meeting dates and more information about the Lungs for Life: COPD Support Group, call 931.380.4094 or visit mauryregional.com.

Primary Doctor/Phone # _____

Lung Doctor/Phone # _____

Disease Management Nurse 931-381-1111, Ext. 1151

Pulmonary Rehabilitation Department 931-380-4094

Respiratory Department 931-380-4029

Oxygen Supplier # _____

Notes/Questions



When to Get Emergency Help

You should get emergency help if:

- you find that it is hard to talk or walk
- your heart is beating very fast or irregularly
- your lips or fingernails are gray or blue
- your breathing is fast and hard, even when you are using your medicines



Daily Weight & Blood Pressure Log



Date	Weight	Blood Pressure	Date	Weight	Blood Pressure

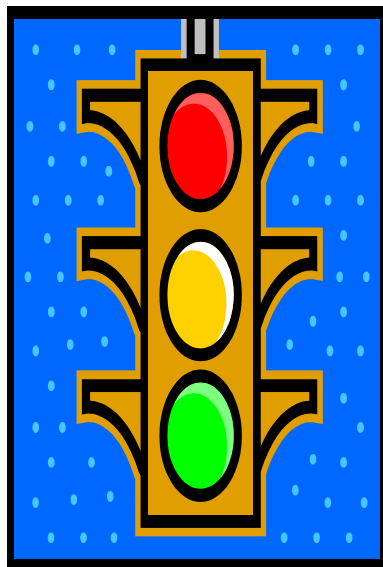
My job every day is to:

- Weigh myself
- Take my medicine
- Check my blood pressure
- Follow my diet
- Think positive thoughts

Call my Doctor if I have any of the following:

- Difficulty breathing, or chest pain
- Getting more fatigued
- Increased swelling
- Weight gain (2-3 lbs in a day, 5 or more lbs in a week)
- Frequent coughing

Patient Action Plan for COPD Management



Green Zone: All Clear

- No shortness of breath
- No coughing
- No chest pain
- No change in your activity level
- No new symptoms

Green Zone Means:

- Your symptoms are under control
- Continue taking your medications as ordered
- Wear your oxygen as ordered
- Continue avoiding environmental triggers and extremes
- Maintain good nutrition
- Keep all physician appointments

Yellow Zone: Caution

If you have any of the following signs and symptoms:

- Increased cough
- Increased sputum production
- Increase in shortness of breath with activity or increased fatigue
- Need to sit in a chair to sleep
- Increase in the number of pillows needed
- Anything else unusual that bothers you
- Abdominal bloating or swelling in hands or feet
- Increased use of nebulizer or inhaler

Yellow Zone Means:

- Your symptoms may indicate that you need a medication adjustment
- If you need quick relief medications most days, you may need an adjustment of your medications

Call your physician

Red Zone: Medical Alert

- Unrelieved shortness of breath or shortness of breath at rest
- Unrelieved chest pain – Call 911
- Wheezing or chest tightness at rest
- Need to sit in a chair to sleep
- Confusion or change in mental status

GO TO ER - CALL 911

Red Zone Means:

This indicates that you need to be evaluated by a physician right away.

Physician: _____

Number: _____