COPD: What you need to know.



Patient Education Book

This booklet is designed to serve as a guide for you and your family when you have been admitted to the hospital with COPD. You as the patient, your family, the hospital staff and your doctor are all an important part of the healthcare team. Learning about COPD and the information in the booklet will assist you in understanding and managing your care while you are in the hospital and after discharge.



Resources:

Healthpark 270-688-5433

<u>Centers for Disease Control</u> and Prevention CDC.gov

American Lung Association Lung.org

<u>COPD Foundation</u> COPDFoundation.org

Additional Resources can be found on page 20 of this patient guide.

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Managing COPD at home

Use this guide to check your COPD (chronic obstructive pulmonary disease) signs and symptoms.

| | Green Zone | Yellow Zone | Red Zone |
|-------------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | You are in control. | Take action today. Call: | Take action now! Call: |
| | | () () () () () () () () () () () () () (| () () () () () () () () () () () () () (|
| How is my cough? | Cough is normal for me. | Cough is worse than normal. More or thicker mucus than usual. Mucus looks yellow, green or gray. | My cough isn't going away. Coughing up blood. |
| Is my medicine working? | My normal dose is working. | I need to use my inhaler or nebulizer more often. | I need to use my inhaler or nebulizer a lot more often today. |
| How is my breathing? | Breathing is normal for me. | Trouble breathing when I eat, talk or move. | Trouble breathing at rest. |
| How is my energy? | I can do my usual activities | Too tired to do most of my usual activities. | I can't do any of my usual activities. |
| How am I sleeping? | Sleep is normal for me. | Trouble sleeping. My symptoms woke me up. | I can't sleep because of difficulty breathing. |
| Do I have a fever? | No fever. | Fever between 100°F to 101.4°F. | I have chills or a fever of 101.5°F or higher. |
| Do I need to call 911? | | | Yes, call 911 if: Severe shortness of breath at rest. I have unusual chest pain that doesn't go away with rest. My lips or nails are turning blue. I'm sleepy or confused. |

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My action plan for managing COPD at home

People with COPD can have an enjoyable life. Use these steps to help manage your COPD every day

- 1. Use the Stoplight Tool to check my symptoms every day
- 2. Take my medicine and use my inhalers
- 3. Wear oxygen as ordered by my doctor
- 4. Be active every day
- 5. See my doctor or nurse regularly
- 6. Know when to take action and have a plan for getting help

What would you like to work on next week?

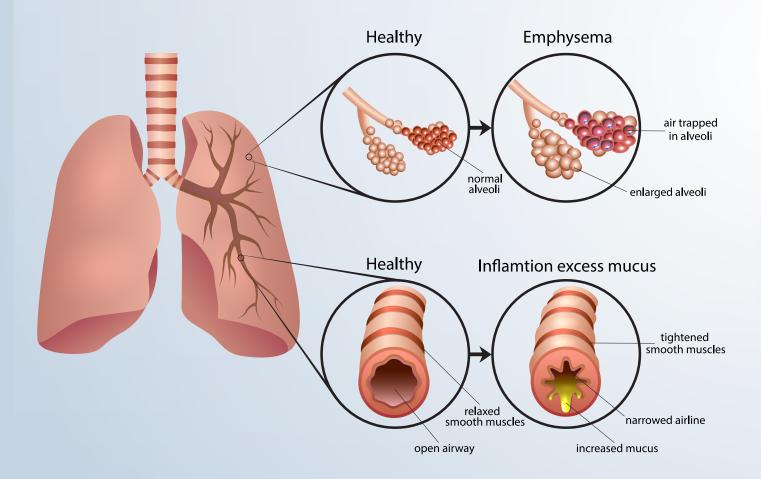
Your care team will work with you to set goals so you can stick to your plan.

What is COPD?

Chronic – on-going, progressively or gradually gets worse over time Obstructive – blockage of air moving through the lungs Pulmonary – damage is located in the lungs Disease – condition that requires medical diagnosis and treatment

COPD can include these conditions:

- **Emphysema** condition where the alveoli, or air sacs in the lungs that exchange oxygen and carbon dioxide, become damaged and do not expand properly. Sometimes air will be trapped in these sacs, so the lungs can get stretched out and can make people feel short of breath.
- Chronic bronchitis condition where the lining inside of the lungs is inflamed and irritated.
 Often times, people with chronic bronchitis will also have more mucus due to damage to the cilia (hair-like fibers), which help to move mucus out of lungs.



Risk factors

- Smoking or history of smoking (biggest risk factor)
- Exposure to pollution
- Exposure to second-hand smoke
- Working in an area with chemicals, dust, fumes and pollen without appropriate protective equipment
- Alpha-1 deficiency (rare, genetic factor)
- History of respiratory conditions in childhood, such as asthma

Chronic symptoms of COPD:

- Shortness of breath
- Wheezing
- Chest tightness
- Chronic cough
- Being tired or getting tired easily
- Frequent colds/flu infections
- Excessive mucus

How does the doctor know I have COPD?

COPD requires a medical diagnosis from a physician. Your doctor may:

- Ask questions about your medical and personal history
- Use a stethoscope to listen to your lung sounds
- Pulmonary function test (PFT)
- Chest X-ray or CT scan
- Arterial blood gas (Measures the amount of oxygen and carbon dioxide that is in your arteries)
- Alpha-1 antitrypsin deficiency testing

What is an exacerbation?

An exacerbation, or a flare up, is a sudden worsening of symptoms. It is generally caused by an infection in the lungs or other illness such as a cold or the flu. Exacerbations can also be brought on because of issues with other conditions, such as having too much fluid because of heart failure.

Signs and symptoms of an exacerbation include:

- Making noises while breathing (high pitch, rattling, etc.)
- Breathing fast or irregularly
- Worsening cough
- Increase or change in mucus- may be thicker or have change in color (yellow, green, gray)
- Changes in skin color or nail color- may be gray, pale or blue
- Having trouble sleeping due to trouble breathing
- Having trouble talking due to being unable to catch breath
- Not having enough energy to do usual activities
- Fever
- Swelling of the ankles/legs
- Unusual pain
- Confusion or being more tired than normal



If you have any of these symptoms, you need to contact your physician or member of your healthcare team.

How severe is my COPD?

Your pulmonologist (lung doctor) will use the information below to tell you how severe your COPD is.

- GOLD Stage: describes the severity of airflow limitation (how difficult it is to get air out). Airflow limitation is determined by pulmonary function tests.
- Exacerbation rate: patients who have frequent exacerbations have a higher risk of needing to go to the hospital for their breathing difficulties.
- How short of breath you get with activity will also be considered. Patients who are short of breath without any movement often have more severe disease.

If you are unsure of which stage of COPD you have, talk with your provider.



Treatments

Oxygen therapy

Oxygen therapy gives the body extra oxygen through tubing that sits right inside your nose. This is comfortable to wear, provides comfort and helps to decrease anxiety related to the body not getting enough oxygen.

You will have a personalized test to determine how much and how often you need to use oxygen therapy. It can be portable to allow you to enjoy activities outside of the home. Ask your doctor if you qualify for home oxygen.

Positive airway pressure device

This is a machine that you wear over your mouth and nose. It has settings that affect the pressures in the lungs, which help to make it easier to take bigger and deeper breaths. This comes in different forms (BiPAP or non-invasive ventilation therapy).

Inhalers

- **Bronchodilators** work to increase the size of airways by opening passages and allowing muscles to relax. Will allow you to take bigger/deeper breaths. This can be long-acting (used on a regular basis) or short-acting (rescue inhalers only used when needed).
- Inhaled corticosteroids help to reduce the inflammation in the airway and open them up to allow more air to travel through the lungs.
- Combination inhalers combination of more than one bronchodilator that are used to get better effects.



General tips for using an inhaler

Always wash hands before and after using your inhaler.

Always rinse your mouth and spit after taking medications, especially steroid inhalers.

Know when your medicine is going to expire.

Steroids

Help to decrease mucus production and swelling which, in turn, makes it easier to breathe. These can be taken in pill form or given in an IV during an exacerbation.

Phosphodiesterase-4 inhibitor

A pill called Daliresp (Roflumilast) that helps people with severe COPD.

Antibiotics

Used only if a bacterial infection is noted.

Procedures

There are surgical and non-surgical treatments for some patients with very severe COPD and emphysema. Talk to your pulmonologist (lung doctor) to see if endobronchial valves are right for you.

Pulmonary rehab

Pulmonary rehabilitation is a life-changing **treatment** for the recovery and management of COPD. It can play a critical role in improving the quality and length of life. The goal is to stabilize, slow, or even reverse the progression of COPD.

What is pulmonary rehabilitation?

• An individualized, outpatient therapy program that incorporates physical activity and information related to nutrition, stress management, smoking cessation and other health-related areas

Owensboro Health Heart and Lung Rehabilitation

Tips for Managing Your COPD Medications

- Take your medicine bottles with you to all doctor appointments and to the hospital.
- Take all your medications as directed by your doctor.
- Take the right amount of medications at the same time each day. A pill organizer or a written schedule may help you to remember when to take your medicine.
- Make sure you have enough of all your medicines. Do not run out or try to make a month's supply last longer.
- Carry a list of your medicines in your wallet or purse. Use the Universal Medication Form.
- Tell your doctor and pharmacist about all medicines you take, including over-the-counter medicines, home remedies, herbals, vitamins and prescribed medications.
- If you miss a dose, do not take it with the next dose.
- If you cannot take your medicines for any reason, call your doctor immediately.
- Clarify any questions about your medicines with your doctor, nurse or pharmacist.
- Do not take any over-the-counter medicines, herbals or home remedies without asking your doctor or pharmacist. They may interfere with your prescribed medicine.
- Get your medicine from only one pharmacy.



Always take your medicine bottles with you to all doctor appointments and to the hospital.

Smoking cessation

Smoking cessation is one of the most important actions you can take so that your lungs will not be irritated and can start to work better

Smoking has many negative effects on the body including:

- Strain on the heart
- Decrease in blood flow to all parts of the body
- Increased risk of respiratory (lung) infections
- Inflammation in lungs/scar tissue, making it harder to breath and causing chronic cough with increase in mucus
- Risk of cancers
- Increased risk for heart attack or stroke

If you smoke or drink alcohol, you need to



If you have problems stopping, talk with your doctor.

Ask about the Freedom From Smoking class at the Healthpark or call 270-688-3263 or 270-688-3291.

Contact a Tobacco Treatment Specialist at 270-417-7564.

Online Resources

FreedomFromSmoking.org | OwensboroHealth.org/Freedom | SmokeFree.gov

Nutrition

Weight maintenance

The primary nutrition goal for people with COPD is to minimize unintentional weight loss. Maintaining a healthy, normal body weight helps preserve muscle mass that is essential to staying well.

Protein

One important factor in maintaining weight is ensuring adequate protein intake. Protein is an essential building block for repairing tissues and maintaining muscle mass. Good sources of protein-rich foods to incorporate into the diet include meat, poultry, fish, seafood and eggs.

Carbohydrates

Carbohydrates are the body's main source of energy. Carbohydrates also provide fiber, which is necessary for maintaining a healthy intestinal tract. Good sources of healthy carbohydrates include fruits, vegetables and whole grains.

Fat

Consuming unsaturated fat is another way to provide your body with the fuel needed to maintain a healthy weight. Unsaturated fat sources include liquid vegetable oils, nuts and seeds, olives, avocado and fish.

Micronutrients

Micronutrients is a general term for the vitamins and minerals found in food that the body needs to perform its daily functions. Antioxidants, a class of micronutrients, can help to repair and prevent damage in the tissues. These can be found in dark colored fruits and vegetables like berries and leafy greens. Eating a variety of fruits and vegetables will maximize the number of micronutrients available to the body



Activity

It is important to stay active and get exercise regularly, but you do not want to do too much and wear yourself out. Things to consider:

- Plan activities ahead of time if you are able
- Give yourself plenty of time so that you will not be rushed
- Try to avoid doing activities in the extreme hot or cold
- Sometimes it is better to do activities/exercise in short periods of time, more frequently
- Talk with your doctor to see if pulmonary rehabilitation is a good option for you

If you experience one of the following symptoms during activities **STOP AND REST**:

| Any Change in Your Breathing (shortness of breath) | Cough | Chest Discomfort |
|-------------------------------------------------------|-----------|--------------------------------------------------|
| Pain | Dizziness | Fast Heartbeat (flutter, skips, palpitations) |
| Extreme Weakness or Tiredness | | |

If symptoms are severe or do not go away after resting, call your doctor or go to the emergency room.

Don't exercise beyond your outlined recommendations. Remember, "More is not always better".

Energy Conservation and Work Simplification Techniques

- 1. Pace yourself. Spread difficult activities throughout the day or week. Don't plan too much.
- 2. Plan ahead. Obtain needed items prior to activity and keep within reach.
- 3. Prioritize what is important to you and ask for help for other tasks.
- 4. Modify how you do something. Sit instead of stand, break activity into smaller tasks.
- 5. Adapt activity to avoid bending or reaching. Slide items instead of carrying them.
- 6. Maintain good posture. This decreases the strain on your muscles and makes breathing easier.
- 7. Take short breaks during tasks instead of "pushing through." Your total rest time will be shorter than if you don't wait until you are exhausted to rest.

Anxiety/depression/stress

Mental health is just as important as physical health; they connect and affect our overall well-being. Many people who have COPD also suffer from anxiety and/or depression. Often times, this is caused from many different factors, including:

- Physical disability
- Requiring oxygen therapy (affects activity)
- Getting short of breath with activity, leading people to be less active and/or home bound
- Anxiety related to low oxygen levels and/or being short of breath

Anxiety and depression can affect willingness to participate in the healthcare plan and can worsen COPD. Steps you can take:

- Talk with your doctor
- Join our support group called Better Breathers Club
- Call 911 and/or seek medical emergency treatment if you have thoughts of wanting to harm yourself or others around you

Better Breathers Club

Meets on the first Wednesday of every month from Noon - 1 p.m. 1006 Ford Avenue, Owensboro, KY 42301 | 270-688-5155



Infection prevention

Vaccines: It is important to get flu, pneumonia and covid-19 vaccinations regularly. Talk with your doctor or other healthcare provider about the right plan for you!

Wash your hands regularly Try not to touch eyes, nose, mouth Eat a healthy diet

Washing hands with soap removes germs and prevents illnesses and spread of infections to others.

Patients with COPD are at a high risk for pneumonia. Take the following steps to decrease your risk:

- Complete deep-breathing exercises on a regular basis
- Practice coughing to move secretions in lungs
- Use your flutter valve device if you have one. If you do not, ask a member of your healthcare team to determine if you are appropriate for one
- Wash your hands regularly
- Take all medications as prescribed (if prescribed antibiotics, take until all gone, even if you feel better)

Things you need to know before you go home

These are **things you need to know before you go home**. It is very important you get all of these items checked off. Everyone involved in your care at Owensboro Health will work with you to do this before you go home.

- □ I understand the information that was given to me about my health condition
- □ I have a pulse oximeter to measure my oxygen levels at home
- I understand and agree to record my vitals at home and call my doctor if I have any concerns or changes
- □ I know what to do if my symptoms get worse by using the stoplight tool on page 2
- □ I know what my medications do and why I need to take them
- □ I have a way to get my prescriptions filled today
- I understand that I need to let my doctor know if I am not able to get the inhaler prescribed for me
- □ I know what number I need to call if I need help to stop smoking
- □ I know that I need to go see my doctor after I leave the hospital
- □ I understand the importance of preventing infections
- □ I know the signs of infection to look for and when to seek medical attention
- □ I have a referral to one or more services (home health, pulmonary rehab, palliative care, etc)
- □ I know my provider's name: _
- □ I know my provider's phone number: _



Questions for Your Doctor

Going to your doctor can be overwhelming at times and can make you nervous. You may forget what you want to ask and/or forget what your doctor tells you.

| Questions for my doctor: |
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Medication Log

| Medication Name | Dose (Strength of Medication) | Reason for use/purpose | Route/how to take the mediation | Frequency/ how often | Doctor who prescribed the mediation |
|----------------------|--------------------------------------------|-------------------------------------|---------------------------------------|------------------------------|-------------------------------------------|
| EXAMPLE Albuterol | 90mcg | Wheezing, shortness of breath | Inhaler | Every 4-6 hours as needed | Dr. Muzoora |
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Daily Vitals Log

| Date | Time | Heart Rate | Blood Pressure | Temp | Oxygen Saturation | Weight | Comments |
|------|------|---------------|-------------------|------|----------------------|--------|----------|
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Additional Resources

Owensboro Health Regional Hospital (OHRH) 270-417-2000

> OHRH Emergency Department 270-417-5911

OHRH Case Management Department 270-417-4600

> OH Home Care 270-688-2182

Healthpark 270-688-5433

OH Pulmonology 270-417-7515 Owensboro Health Muhlenberg Community Hospital (OHMCH) 270-338-8000

OHMCH Emergency Department 270-338-8332

OHMCH Case Management Department 270-338-8554

OHMCH Home Care 270-754-9340

The Coal Miner's Clinic/Smoking Cessation 270-338-8300

Owensboro Health Twin Lakes Medical Center (OHTLMC) 270-259-9400

OHTLMC Emergency Department 270-259-9501

OHTLMC Case Management Department 270-259-9555

Owensboro Health Medical Group Specialty Clinic Pulmonology and Sleep Medicine 270-200-4536

Transportation

If you have trouble with getting to your doctor's appointments, check with you insurance to see if your plan includes transportation benefits!

GRITS (Daviess, Hancock, Henderson, McLean, Ohio, Union and Webster Co.) 270-686-1651 or 800-816-3511

GRITS (Hardin, Grayson, Breckinridge, Larue, Nelson, Marion and Meade Co.) 270-982-8220 or 844-870-4646

PACS (Muhlenberg and Todd Co.) 270-931-5119 or 270-931-5118

Executive Taxi Service: 270-926-8000

CKCATS (Grayson Co.): 270-692-2136 or 800-242-8225

Hospice/Palliative Care:

Hospice and Palliative Care of Western Kentucky: 270-926-7565

Hosparus: 270-737-6300

References:

American Lung Association

Freedom from Smoking FreedomFromSmoking.org OwensboroHealth/Freedom

> Quit Now Kentucky QuitNowKentucky.org

> > Smoke Free SmokeFree.gov

Academy of Nutrition and Dietetics EatRight.org

Owensboro Health Website OwensboroHealth.org/Nutrition





OwensboroHealth.org/COPD