

Managing COPD: A Family Affair

Loved ones suffering from COPD often need the support of family and friends, especially during a flare up or final stages. Comfort Keepers of Anoka and White Bear Lake have compiled seniorspecific information and resources that can be a valuable tool as the disease progresses.

Comfort Keepers June 2020 ck732mktg@comfortkeepers.com

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Introduction

Are you or a senior loved one experiencing breathing issues? Have you been diagnosed with COPD? Are you looking for ways to improve quality of life and deal with the symptoms or progression of the disease? Comfort Keepers has compiled information on local resources, tools to address living with the disease, slowing the progression and general knowledge on COPD to help families and seniors dealing with the disease.

Comfort Keepers has been a leading provider of in-home senior care services in the North Metro Twin Cities for over 13 years. During this time, our dedicated staff has acquired extensive knowledge in senior care, disease care, senior health and wellness, safety, and more.

The goal of Comfort Keepers is to support seniors as they age by helping them maintain the best quality of life possible. By educating seniors and their families, looking at options for care, and other important factors, we strive to help seniors bring joy to each day of their lives as well as plan for the future.

About The Authors.

Tom Berard and Sam Aisawa have over 20 years of experience in the Senior Care Industry. Both have worked with seniors and their families to help them experience the highest quality of life possible in their golden years.



Tom and Sam come from different backgrounds on their way to helping seniors. Tom has both a business and an engineering degree and has devoted time and energy to developing solutions to improve people's lives. He has received certification in the Society for Senior Advisors Tom believes in strong mentorship and coaching to lead his team so they can continue to bring together passionate like-minded individuals that can improve the quality of life in the place seniors call home.

Sam started with Comfort Keepers part-time as a caregiver and after completing a degree in Health Information Technology, joined our administrative team full-time. Sam's commitment to seniors shines through all of her work. She is a strong lifetime learner and enjoys understanding and implementing new methods and technologies to help seniors and families improve their lives on a daily basis.



"Joy does not simply happen to us. We have to choose joy and keep choosing it every day. "

Henri Nouwen

- CHAPTER 1 -

Stages of COPD

Understanding the different stages of COPD can be crucial to managing the disease. Here you will find information on testing for the disease and diagnosis.

The Stages of COPD

Chronic obstructive pulmonary disease is a slowly progressive disease so it is not unusual for the initial signs and symptoms to be a bit different from those in the late stages of the disease. There are many ways to evaluate or stage chronic obstructive pulmonary disease, often based on symptoms.



The most significant symptom of chronic obstructive pulmonary disease is breathlessness, termed shortness of breath (dyspnea). Early on, this symptom may occur occasionally with exertion and eventually may progress to breathlessness while doing a simple task such as standing up or walking to the bathroom. Some people may develop wheezing (a whistling or hissing sound while breathing). Signs and symptoms of the chronic obstructive pulmonary disease include:

- Cough, with usually colorless sputum in small amounts
- Acute chest discomfort
- Shortness of breath (usually occurs in patients aged 60 and over)
- Wheezing (especially during exertion)

As the disease progresses from mild to moderate, symptoms often increase in severity:

- Respiratory distress with simple activities like walking up a few stairs]
- Rapid breathing (tachypnea)
- Bluish discoloration of the skin (cyanosis)
- Use of accessory respiratory muscles
- Swelling of extremities (peripheral edema)
- Over-inflated lungs (hyperinflation)

- Wheezing with minimal exertion
- Coarse crackles (lung sounds usually with inspiration)
- Prolonged exhalations (expiration)
- Diffuse breath sounds
- Elevated jugular venous pulse

The Four Stages of COPD

One way to stage chronic obstructive pulmonary disease is the Global Initiative for Chronic Obstructive Lung Disease program (GOLD). The staging is based on the results of a pulmonary function test. Specifically, the forced expiratory volume (how much air one can exhale forcibly) in one second (FEV1) of a standard predicted value is measured, based on the individual patient's physical parameters. The staging of chronic obstructive pulmonary disease by this method is as follows:

- Stage I is FEV1 of equal or more than 80% of the predicted value
- Stage II is FEV1 of 50% to 79% of the predicted value
- Stage III is FEV1 of 30% to 49% of the predicted value
- Stage IV is FEV1 of less than 30% of predicted value or an FEV1 less than 50% of predicted value plus respiratory failure

Other staging methods are similar but are based on the severity of the shortness of breath symptom that is sometimes subjective. The above staging is measurable objectively, providing the patient is putting forth their best effort.

Based on your stage and how you are handling your symptoms, you may need help coping with the issues surrounding COPD. COPD may impact your ability to do some of the things you have enjoyed or it may make it more difficult to do these things. Weather conditions that trap air pollutants may cause flare-ups or make your condition worse. Overall, if you start to see things get worse and you are progressing through the stages, follow your doctor's advice.

For additional information on COPD, check out our website!

Resources

Medical News Today Mayo Clinic Medicine Net National Institute on Health American Lung Association Lung Health Institute - CHAPTER 2 -

Emphysema

Smoking is the largest single factor causing COPD. How does it impact your lungs and cause progression of the disease.

COPD and Emphysema

Emphysema is a lung condition that causes shortness of breath. In people with emphysema, the air sacs in the lungs (alveoli) are damaged. Over time, the inner walls of the air sacs weaken and rupture – creating larger air spaces instead of many small ones. Emphysema is a type of COPD.

Emphysema

COPD or chronic obstructive pulmonary disease is an overarching term that can include many different diseases of the lungs such as bronchiectasis, chronic bronchitis, and emphysema. COPD interferes with normal breathing and is usually permanent and progressive.

In terms of emphysema, your lungs are damaged beyond repair. Emphysema can affect either the walls between the air sacs in your lungs or the air sacs themselves. This results in fewer and larger air sacs rather than the many small air sacs that your lungs are supposed to have. Emphysema is typically caused by smoking however other causes can be air pollutants, second-hand smoke,



chemicals, dust, or other lung irritants. In regard to smoking, it is a preventable disease. Other irritants that cause emphysema are generally from long term exposure. In rare cases, people with COPD have a defect in their DNA, the code that tells your body how to work properly. This defect is called "alpha-1 antitrypsin deficiency," or AAT deficiency. When you have this, your lungs don't have enough of a protein needed to protect them from damage.

Some emphysema can be brought on by work-related irritants. Things like welding smoke can bring on COPD. Here is a list of irritants and occupations that may have a higher prevalence of COPD as a result of exposures. People that have asthma or suffer from bronchitis may want to avoid jobs that would encounter these irritants.

There are three types of emphysema; centriacinar, panacinar, paraseptal. Centriacinar emphysema affects the alveoli and airways in the central acinus, destroying the alveoli in the walls of the respiratory bronchioles and alveolar ducts Panacinar emphysema affects the whole acinus. Paraseptal emphysema is believed to be the basic lesion of pulmonary bullous disease. Simply stated all of these lead to a loss of elasticity in the lungs and permanent enlargement of the air spaces called alveoli.

Detection and Phases of Emphysema

Emphysema is generally found in those less than 40 years old, and more frequently found in those of Scandinavian descent, commonly developing during years 30-50. Disturbingly the disease tends to express no signs and symptoms until 50% of lung function is lost, as a result of the airway obstructions beginning in the smaller airways. Only 1% of cases of emphysema are thought to be due to the deficiency of the alpha1-antitrypsin enzyme. Of course, once the symptoms appear the damage is irreversible. Patients diagnosed with emphysema may complain of difficult/labored breathing and reduced exercise capacity as their predominant symptom.

If your doctor suspects emphysema he likely will send you to a doctor specializing in lungs called a Pulmonologist. The Pulmonologist generally will order a CT scan to get a direct cross-sectional image of your lungs. This will give them a good understanding of how severe your lungs have been impacted. If appropriate they will then conduct a pulmonary function test. Pulmonary function tests (PFTs) are noninvasive tests that show how well the lungs are working. The tests measure lung volume, capacity, rates of flow, and gas exchange. This information can help your healthcare provider diagnose and decide the treatment of certain lung disorders. During the test, they likely will test the patient's reaction to bronchodilators which helps them understand the relationship between permanent damage (COPD) and other issues like asthma.

There are two common measurement systems for COPD--The GOLD System and the BODE index. The GOLD system measures your breathing air volume--from the PFT test (FEV1) as compared to normal predicted breathing and designates your breathing into one of four COPD stages are: Stage 1 or Mild (80% of normal)

Stage 2 or Moderate (50-80%)

Stage 3 or Severe (30-50%) emphysema

Stage 4 or Very severe, (less than 30%), end-stage, severe or end-stage emphysema

The BODE index attempts to place your COPD into one of four survival stages based on body mass, airflow obstruction, shortness of breath, and exercise capacity by a point system.

Talk to your doctor to discuss these staging systems and how they may relate to your individual problem and treatment. We also have blogs on Pulmonary Rehabilitation and Exercise to discuss with your doctor.

Fore more information related to COPD, check out our website!

Sources: Mayo Clinic Johns Hopkins Physiopedia Medicine.Net - CHAPTER 3 -

Bronchitis and Pneumonia

Chronic diseases like bronchitis and pneumonia often are indicators or can lead to COPD. Here are ideas on limiting the impact of these diseases and slowing progression of COPD

Bronchitis and Pneumonia

Chronic obstructive pulmonary disease (COPD) is a collection of lung diseases that cause blocked airways and make breathing difficult. It can result in serious complications.



COPD and Bronchitis

Quite often when people get sick with an upper respiratory illness it can spread to the lungs and become bronchitis. **Bronchitis** is an inflammation of the bronchial tubes, the airways that carry air to your lungs. It causes a cough that often brings up mucus. It can also cause shortness of breath, wheezing, a low fever, and chest tightness. There are two main types of **bronchitis**: acute and chronic. Acute bronchitis in healthy adults quite often will clear up by itself. According to the Mayo Clinic, if it lasts longer than 3 weeks you need to see your doctor. They also suggest seeing your doctor if the following symptoms occur.

- prevents you from sleeping
- Is accompanied by fever higher than 100.4 F (38 C)
- Produces discolored mucus
- Produces blood
- Is associated with wheezing or shortness of breath

Left untreated, acute bronchitis can turn into chronic bronchitis which is a form of COPD. Emphysema and **chronic bronchitis** are both long-term and progressive lung conditions. Because many people have both emphysema and **chronic bronchitis**, the umbrella term **COPD** is often used during diagnosis. Both conditions have similar symptoms and are typically associated with smoking.

Healthy people that develop bronchitis on a regular basis need to take the condition seriously and work with their doctor to get it treated before it becomes a chronic condition. Even healthy, non-smoking people can develop COPD if they don't watch for conditions that lead to it and have a genetic predisposition. Bronchitis can turn into pneumonia if left untreated and major complications may develop.

COPD and Pneumonia

If you have COPD, you're at a higher risk of developing pneumonia than those without COPD. People with COPD exacerbation and pneumonia are more likely to have serious complications in the hospital than those who have a COPD exacerbation without pneumonia. Early detection of pneumonia in people with COPD is important. An early diagnosis usually results in better outcomes and fewer complications. The sooner you get treatment and get symptoms under control, the less likely you'll damage your lungs.

Pneumonia is an infection in one or both lungs. The infection causes inflammation in the air sacs in your lungs, which are called alveoli. The alveoli fill with fluid or pus, making it difficult to breathe. Pus is different than mucus as mucus is normal, slippery, mostly clear, and a stringy fluid substance produced by many lining tissues in the body. It is essential for body function and acts as a protective and moisturizing layer to keep critical organs from drying out. Mucus also acts as a trap for irritants like dust, smoke, or bacteria. Pus is a whitish-yellow, yellow, or brownyellow protein-rich fluid called liquor puris that accumulates at the site of an infection. It consists of a buildup of dead, white blood cells that form when the body's immune system responds to the infection. This is why the color of what you might be coughing up is of interest to your doctor as it may indicate you have an infection. Pneumonia symptoms can be mild to life-threatening. They can include:

- coughing that may produce phlegm (mucus)
- fever
- sweating or chills
- shortness of breath that happens while doing normal activities or even while resting
- chest pain that's worse when you breathe or cough
- feelings of tiredness or fatigue
- loss of appetite
- nausea or vomiting
- headaches

The most prevalent forms of pneumonia are bacterial and viral. Viral pneumonia cannot be treated with antibiotics, however, doctors may prescribe an antiviral medication that can reduce or shorten the impact of pneumonia. Oral antibiotics can treat most cases of bacterial pneumonia. Always take your entire course of antibiotics, even if you begin to feel better. Not doing so can prevent the infection from clearing, and it may be harder to treat in the future. If your symptoms are very severe or you have other health problems, you may need to be hospitalized. At the hospital, doctors can keep track of your heart rate, temperature, and breathing.

Hospital treatment may include:

- Intravenous antibiotics injected into a vein
- Respiratory therapy, which involves delivering specific medications directly into the lungs or teaching you to perform breathing exercises to maximize your oxygenation
- Oxygen therapy to maintain oxygen levels in your bloodstream (received through a nasal tube, face mask, or ventilator, depending on severity)

Avoiding or Reducing Complications of Pneumonia and Bronchitis Both bronchitis and pneumonia can start from a simple cold, the flu or other virus. It's truly the complications of these events that lead to severe issues for COPD sufferers. Methods to prevent this from happening include:

- Wash your hands regularly for at least 20 seconds
- Don't touch your face
- Get plenty of rest
- Get an annual flu shot as soon as they are available
- Get a pneumococcal vaccine for pneumonia--discuss which one with your doctor
- Use medications as prescribed from your doctor
- Exercise and eat a healthy diet
- Avoid air pollution and smoking

If you do get pneumonia or bronchitis, check with your doctor before taking cough medicine and make sure to drink plenty of water. By doing these simple things, the effects of pneumonia and bronchitis will hopefully be less and lessen the impact on your COPD.

For more information and resources regarding COPD, check out our website!

References: Aging.com

Mayo Clinic

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COPD and Exercise

Quite often COPD sufferers will stop exercising because of breathing difficulties. Exercising can both improve quality of life and slow the progression of the disease. Here are some common sense approaches to getting your groove on with exercise.

COPD and Exercise

Chronic obstructive pulmonary disease (COPD) is a collection of lung diseases that cause blocked airways and make breathing difficult. It can result in serious complications



Exercise

Some people with COPD do not exercise as it can be very fatiguing, especially at first. Exercising may seem like a challenge when you have trouble breathing from COPD. However, regular physical activity can actually strengthen your respiratory muscles, improve your circulation, facilitate more efficient oxygen use, and decrease your COPD symptoms. You should always check with your doctor before starting any exercise program but even with COPD, you can experience beneficial results. Here is a resource guide for exercise from the COPD foundation.

Why Exercise with COPD?

Regular exercise has many benefits. Exercise, especially aerobic exercise, can:

- Improve your circulation and help the body better use oxygen
- Improve your COPD symptoms
- Build energy levels so you can do more activities without becoming tired or short of breath
- Strengthen your heart and cardiovascular system
- Increase endurance
- Lower blood pressure
- Improve muscle tone and strength; improve balance and joint flexibility
- Strengthen bones
- Help reduce body fat and help you reach a healthy weight
- Help reduce stress, tension, anxiety, and depression
- Boost self-image and self-esteem; make you look fit and feel healthy
- Improve sleep
- Make you feel more relaxed and rested

The Cleveland Clinic has a blog that discusses the parameters of a program and proper things to think about like moderation of your program and when to exercise. Click here for the entire blog.

Recommended Exercises

The American Lung Association recommends three basic types of exercise:

- 1. **Stretching** relaxes you and improves your flexibility. It's also a good way to warm up before and cool down after exercising. Practice holding a gentle stretch for 10 to 30 seconds, slowly breathing in and out. Repeat this a few times.
- 2. **Aerobic** exercise is good for your heart and lungs and allows you to use oxygen more efficiently. Walking, biking, and swimming are great examples of aerobic exercise. Try and do this type of exercise for about half an hour a few times a week.
- 3. **Resistance** training makes all your muscles stronger, including the ones that help you breathe. It usually involves weights or resistance bands, but you don't need to go to a gym to do resistance training. Ask your doctor or respiratory therapist to show you some exercises you can do at home. To get stronger, do these exercises three to four times a week.

Pulmonary Rehabilitation can be a great way to stay active and learn how to exercise with COPD. This program consists of education and exercise classes that teach you about your lungs and your disease, and how to exercise and be more active with less shortness of breath. The classes take place in a group setting, giving you the chance to meet others with your condition while both giving and receiving support. Suffering from COPD makes exercise more difficult but it is still a very important part of keeping as healthy and vibrant as possible. Having COPD also makes it more important to check with your doctor before starting an exercise program. Start gradually and increase as you can.

More Exercise Ideas for COPD Sufferers

Just about anyone with COPD can exercise in one form or another. Here are some ideas that will help you get started. Once you do start you will likely find you are feeling stronger, improving your balance, and gradually able to add more things to each exercise or more things to do!

- Walking is a wonderful way to improve your endurance. We all have to get from point A to B so getting out of the house and doing it, whether at a mall or walking down the block, helps with a number of things. Muscle strength, balance, and heart all benefit. When you feel like doing more, go a few extra yards, or another 5 minutes.
- Biking either in a spin class or road cycling around the neighborhood is another good form of exercise. Group cycle offers a chance to talk with others and raise your spirit while outdoor cycling gets you into nature.
- Arm curls can increase your muscle strength for day to day activities like getting the milk out of the refrigerator--yes you need the calcium--and strong muscles use less oxygen than weak ones! Use light weights and increase the reps to 10-15 without difficulty before you increase the weight.
- Leg Extensions are another great exercise as we have large muscles in our thighs that, when strengthened, help us in many daily activities. Slowly just standing on the floor raise one leg to your chest, breathing in and lowering slowly while breathing out. Rotate to the other leg. When 10-15 reps of this becomes easy go back to the stairs, go up one to two steps, while putting one leg behind and out in the air raise and lower yourself, when you are tired change to the other leg. This will both improve balance and leg strength and remember, hold that rail!

- Breathing Exercises--To exercise the diaphragm, lie down with your knees bent or sit in an easy chair -- one hand on your chest, one below your rib cage. Slowly inhale through your nose so that your stomach raises one hand. Exhale with pursed lips and tighten your stomach. The hand on your chest should not move. Do this for 5 to 10 minutes, three or four times a day. To practice breathing correctly during all of your exercises by inhaling through your nose with your mouth closed. This warms and filters the air. Exhale through your mouth for twice as long as your inhale. Don't pant. That keeps your lungs from getting all the air out.
- Other ideas for people with mild COPD would include jogging, kayaking, rowing, water aerobics, or skating. By starting before your COPD worsens you may be able to slow down its progression.

When Not to Exercise

According to Web MD give yourself a day off if your COPD symptoms are acting up: wheezing, coughing up more fluids than usual, or are unusually short of breath. You may want to talk to your doctor. Call for help right away for shortness of breath that doesn't improve, fast or irregular heartbeat, and feeling dizzy or lightheaded. With any exercise routine, most experts recommend you take one day to let your body recover.

If all of this seems a bit too much you may want to consider starting with a Pulmonary Rehabilitation group under medical supervision. Once you are comfortable you can be out enjoying exercise and more time with friends and family in short order!

For more information on COPD and strategies to manage the disease, check out our website!

Resources: Cleveland Clinic American Lung Association WebMD - CHAPTER 5 -

COPD Nutrition and Medication

Like so many other diseases proper nutrition can play a key role in managing COPD. The body needs proteins and nutrients to maintain the muscle that starts to break down as the disease progresses. Some use of natural remedies have long been associated with good results for COPD sufferers. Proper nutrition and utilizing the correct medications are key to good management.

COPD Nutrition and Medications

Chronic Obstructive Lung Disease (COPD) is characterized by airflow limitation that is usually progressive, partly reversible, and associated with an enhanced chronic inflammatory response in the airways and the lungs to outside irritants. People with COPD often actually have to labor harder to breathe which causes muscles to work harder, burning more calories that can lead to muscle wasting. The majority of the patients with severe COPD are lean, and frequently in a malnourished or undernourished state, referred to as "pulmonary cachexia syndrome" (PCS), which is characterized by loss of fat-free body mass causing muscle wasting. Some medications specifically for COPD may also play a role in losing muscle mass. Supplements may be helpful for these people when the progression of the disease is severe, however practicing proper nutrition in the earlier stages of the disease, along with exercise and following your doctor's recommendations, may delay or eliminate muscle loss issues.

COPD and Nutrition

Many people do not get enough protein in their diet. COPD patients who are exercising as part of their pulmonary rehabilitation plan need to make sure they are eating correctly and particularly being sure to get enough protein. Doctors and nutritionists often recommend milk, eggs, cheese, meat, fish, poultry, nuts, and beans as good protein sources. Along with being very careful to maintain a healthy weight--one that is not too far underweight or overweight--as you have to have enough muscle mass to handle the extra workload from exercising with COPD. In a review by the National Library of Medicine, A study in 2003 demonstrated a significant improvement in pulmonary function in COPD patients with a high-fat, low carbohydrate diet as compared with the traditional high carbohydrate diet. Fruits and vegetable intake has been found beneficial in chronic and acute respiratory conditions as they contain antioxidants, minerals, vitamins, flavonoids, phytochemicals, and fiber. Some great examples include berries, olive oil, and legumes. Omega-3 polyunsaturated fatty acids have been shown to have an antiinflammatory effect and may be of benefit in a chronic inflammatory condition like COPD and also in malnourished patients. You can get Omega 3 in a variety of foods.

- Fish and other seafood (especially cold-water fatty fish, such as salmon, mackerel, tuna, herring, and sardines)
- Nuts and seeds (such as flaxseed, chia seeds, and walnuts)
- Plant oils (such as flaxseed oil, soybean oil, and canola oil)
- Fortified foods (such as certain brands of eggs, yogurt, juices, milk, and soy beverages.

According to the website, Everyday Health, you should also eat frequent smaller meals, rather than meals that make you feel bloated and might impact your breathing. For more ideas on the importance of eating healthy with COPD click here and learn how food impacts your breathing.

Natural Remedies

Because nutrition does play a large part in COPD, there may be some benefit from other natural substances. According to the Lung Health Institute, certain herbal remedies can be great natural treatments for COPD. If you're looking to supplement your COPD treatment plan, consider these herbal remedies:

- Eucalyptus-helps break up congestion and expel phlegm.
- Ginger-has many benefits, such as breaking down mucus, improving circulation to the lungs, and reducing inflammation. Try boiling chopped, fresh ginger in water, straining out the ginger, and drinking it with honey as a tea.
- Oregano-contains carvacrol and rosmarinic acid, which are natural decongestants and antihistamines. Try adding some fresh oregano to your meals for great flavor and health benefits.
- Peppermint-is an herb that contains menthol, which can promote the relaxation of the muscles in the respiratory tract.
- Ginseng-has been shown to give some people relief from COPD symptoms, including improvements in breathing and exercise tolerance.
- Turmeric–contains curcumin, which has the ability to improve a wide range of conditions and may have antiviral, anti-inflammatory and antioxidant effects.
- Melatonin-is typically known as a sleeping aid, but a study showed that melatonin helps reduce oxidative stress in people with COPD.
- Red Sage-has been found in certain studies to be an effective antioxidant and to help protect the lining of blood vessels from injury when oxygen is temporarily cut off and then resumed. For people who have low blood oxygen levels, red sage could offer some protection.

As with anything, check with your doctor before making dietary or supplemental changes.

COPD Medications



There are a wide variety of medications available for COPD sufferers. The medications generally can be classified into a few groups. One group is for immediate relief of an episode called bronchodilators--often thought of as inhalers. On the prevention and maintenance side are the anti-inflammatory drugs that can be inhaled or taken orally, for instance, Prednisone. Doctors also prescribe antibiotics for infections, or even with a low dose to prevent infections when they become chronic. When things become more severe, patients may require oxygen to be able to function on their own.

The list of medications available is long and how they interact with each person can be different. That's why it's very important to work with your doctor on what types of medications to take, how they should be taken, and when to seek out further medical advice. The real key to effectively managing the disease is taking the medications as recommended by your doctor. Missing doses of preventative drugs can create a need for more use of bronchodilators and even lead to inflammation and infection. According to the American Lung Association, staying on top of your medication use is a huge part of being successful living a life with fewer COPD flareups.

For additional resources related to CODP, check out our website!

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COPD Exacerbation--Flare-ups

Flare-ups tend to be part of a COPD sufferers world. Watching out for the causes, heading flare-ups before they become major are key to maintaining a healthier life for the COPD sufferers. What are the triggers to the flare ups? Anxiety? Smoke?

COPD Exacerbation

A person with chronic obstructive pulmonary disease (COPD) experiences longterm, progressive damage to their lungs. This affects airflow to the lungs. Doctors sometimes call this condition emphysema or chronic bronchitis--which are forms of COPD.



A person with COPD can experience a period when their symptoms are much worse than usual. This is known as an acute exacerbation or "flare-up" in layman's terms. They may need to seek medical help at a hospital.

The average person with COPD has between 0.85 and 1.3 exacerbations a year.

COPD exacerbations can be harmful because they can cause further damage to the lungs. If you've been diagnosed with COPD, preventing an exacerbation from occurring can help you live a healthier life and reduce the risk of death.

Things to Watch For

Self-awareness is important with COPD flare-ups. Only you can know how you feel on a typical day -- how your breathing feels and how much you cough. Pay close attention when things change.

One obvious sign of an oncoming flare-up is shortness of breath or "tightness" in your lungs. You feel like you can't get enough air. You might notice it during light physical activity or even when you are at rest.

Be aware of these indicators

- Noisy breathing. Your breath makes strange noises. Wheezing suggests mucus or pus is blocking your airways. Gurgling or rattling could mean fluid in your lungs.
- Irregular breathing. You feel like you have to use your chest muscles to breathe instead of your diaphragm. Your breathing becomes uneven. Sometimes your chest moves a lot faster; sometimes it's much slower.
- Worse coughing. It's more severe or you cough more often than usual. It could be dry or bring up yellow, green, or bloody phlegm. It gets worse when you lie down -- so much that you may have to sit in a chair to sleep.
- Changes in skin or nail color. You see a bluish tint around your lips or notice that your nails seem blue or purple. Your skin looks yellow or gray.
- Trouble sleeping and eating. You can't get to sleep, and you don't feel like eating.
- You can't talk. You're unable to get any words out. You have to use hand gestures to let someone know something is wrong with you. This is a late and dangerous sign of worsening breathing.
- Early-morning headaches. You start the day with a throbbing head because of a buildup of carbon dioxide in your blood.
- Swollen ankles or legs or belly pain. These symptoms are linked to problems with your heart or lungs.
- Fever. A higher temperature could be a sign of infection and an oncoming flare-up.

You should call your doctor at once if you or a loved one with COPD are showing symptoms of a flare-up.

Avoiding Triggers and Flare-Ups

Air quality is important both inside your home and while outside. Pay attention to triggers outside like air pollution or if you have allergies. A smartphone application like Accuweather can help track these things or a radio station that keeps people informed about these topics. The inside of your home is also important. Keep dust to a minimum and clean air moving in your home. You may want to invest in a good filtration system if you have a forced-air HVAC system. Some fans also come with HEPA filters to reduce pollen and dander in the air. Reduce or eliminate smoke in your home. Some medical professionals recommend the elimination of carpets, rugs, drapes, and other things that trap dust in the home. If you can't or won't eliminate them, you may want to have them cleaned more often. Some companies offer special charged water, steam, or chemicals that won't cause exacerbation--be sure to ask!

Ideas to Avoid Flare-ups

- Take care of yourself and try to avoid cold, flu and other infectious diseases.
- Take all your medications as directed.
- Eat right.
- Get enough sleep.
- Exercise.
- Stay away from people who are sick.
- Get your flu shot, and ask about getting a pneumonia shot.
- Wash your hands properly and often.
- Follow your COPD Action Plan.

COPD and Anxiety

People with COPD often struggle for breath. The brain reacts to this by sending signals of distress. These distress signals may trigger anxiety, which can lead to a panic attack in some people. Panic attacks and anxiety can also cause a person to have difficulty breathing or to change their normal breathing patterns. Due to this overlap of symptoms, a person with COPD often becomes trapped in a cycle in which the breathing difficulties of COPD trigger anxiety, which makes it even more difficult to breathe. People with COPD are often aware of the symptoms of a panic attack, as it is normal for the brain to send stress signals out during an episode of breathlessness.

Panic attacks can be dangerous for people with COPD because they can exacerbate breathing difficulties and make it even more challenging to get air from each breath, leading to worsening symptoms. There are many ways to identify a panic attack. A panic attack may:

- be sudden and intense
- come on without warning
- cause an irrational level of fear

According to the Mayo Clinic panic attacks typically include some of these signs or symptoms:

- Sense of impending doom or danger
- Fear of loss of control or death
- Rapid, pounding heart rate
- Sweating
- Trembling or shaking
- Shortness of breath or tightness in your throat
- Chills
- Hot flashes
- Nausea
- Abdominal cramping
- Chest pain
- Headache
- Dizziness, lightheadedness or faintness
- Numbness or tingling sensation
- The feeling of unreality or detachment

Coping and Strategies

Today more than ever there are a tremendous number of coping strategies you can discuss with your pulmonary health professional. They can range from meditation, breathing techniques, CBD oils, mental health therapy, natural therapies, and medications. Unchecked, these feelings of stress can lead to depression or the worsening of your COPD. According to the American Lung Association, coping with your emotions is an important part of caring for yourself or your loved one who is living with COPD. Support groups, like the Better Breathers Clubs, are wonderful because not only do they decrease isolation, which can lead to depression, but they make you feel a part of a community that really understands what you're going through. Support groups can create feelings of hopefulness and provide an opportunity for you to learn new coping skills. There is often a sharing of resources and ideas that you would not have access to in a typical social setting.

Altogether, this can make a great impact on one's mental health. It can feel uncomfortable at first, but if you stick with it, you can reap all of the benefits groups have to offer.

As you start to cope with the disease, start getting back to normal by doing those things you love--even if you have to do them slower or modify them somewhat. If you like to walk, find a place that has a bench to rest on at the midway point. Find a friend that will help you get out there but keep you in check if you start to go overboard. When dealing with depression, mental health experts agree that starting slow, even by creating a list of things to do and crossing them off when done, can help you on your way to feeling more accomplished. Once you start making headway you should start feeling good again about being able to live with COPD and staying as active as possible.

What To Do if You Have a Flare Up?

Ideally, you will have a flare-up action plan developed with your doctor in advance of something actually occurring. Follow the directions you have developed with your doctor immediately to help prevent the issue from becoming more serious. This can greatly reduce the chances of issues with your lungs becoming more serious. If you don't have an action plan already in place, call your doctor if you notice the signs of a flare-up. If you are following your plan, or don't have a plan, and things become more concerning, go to the hospital for treatment. Bring the information with you on what medications you are currently taking so they can consider this when they are determining how to best help you.

Check out our website for more information and resources on COPD!

Resources The Lung Association--Breathe WebMD Environmental Protection Agency Healthcentral.com - CHAPTER 7 -

COPD Pulmonary Rehabilitation

When COPD gets into the later stages or the progression is becoming very rapid rehabilitation may be ordered by your doctor.

Pulmonary Rehabilitation for COPD

Pulmonary Rehabilitation (PR) is a program of education and exercise to increase awareness about lungs and COPD. The goals of the program are to achieve exercise with less shortness of breath and increase the sufferer's knowledge to cope with living with the disease. The classes are generally offered in a group setting to get the chance to meet others with the condition, which provides an opportunity to give and receive peer support. The skills and knowledge learned in the program can help patients feel better and manage their chronic lung disease. They set a realistic goal of becoming stronger by increasing your exercise which will increase your level of fitness.

There are also online Apps for COPD that may help and not require the group setting. Apps like Beyond COPD or the COPD pocket consultant guide from the COPD foundation are specifically to help with control and living with the disease. The phone-based apps can help manage the condition as well as assist with exercise ideas but come up short when looking for group support. These Smartphone-based applications may not be as good but during times of illness or mandated shutdowns, it's an alternative to consider. Search for COPD Pulmonary Rehabilitation in your App store.

What Does the Program Look like?

People enter the COPD Pulmonary Rehabilitation programs at all COPD stages. Patients may be on oxygen or just not be able to complete daily tasks or get enough oxygen to exercise despite using their medication daily. When you start PR, your therapist will assess you. They may have you do a six-minute walk test while measuring the amount of oxygen in your blood. This will show the therapist how much oxygen you need during different types of exercise. Your therapist will guide you through the exercises and help you use your oxygen.

A variety of medical professionals are generally involved in this sort of program. The rehab team often includes doctors, nurses, physical therapists, respiratory therapists, exercise specialists, and dietitians. Together, these health professionals create a personal program to meet your specific needs. To help understand your progress the team may ask you to monitor your condition. This can include simple testing at home, like a peak flow meter and blood oxygen test, or newer technology that's being used for continual patient monitoring. For instance, a unit from Spry Health uses optical sensors to measure oxygen saturation in the blood, respiration rate, and heart rate then connects to a software platform that analyzes the data for early signs of an exacerbation. This FDA approved device can send information to a monitoring center that uses the information to determine if the patient needs to act on their changing medical condition. The clinical trials and research built up by companies that provide these devices allow for early detection of changes before the patient may even be aware anything is changing. It's the intention of these types of devices to greatly reduce the need for ER visits and make life more tolerable with COPD.

Pulmonary Rehab and Exercise

While there are several critical areas to think about when it comes to PR, exercise is a key component. Here's some more about these exercises, which may be one-onone with a trainer or in a group:

Lower body: Most rehab centers offer a set of exercises that center on leg workouts. They vary from simply walking on a treadmill or around a track to more intense stair climbing. Most of the proven benefits of pulmonary rehab are shown in studies of people doing leg exercises.

Upper body: The muscles in the upper body are important for breathing, as well as for daily activities. Arm and chest exercises might include turning a crank against resistance or just lifting your arms against gravity.

Breathing: Blowing through a mouthpiece against resistance may increase the strength of your breathing muscles. These exercises may be helpful for people with very weak breathing muscles.

Strength training: Most pulmonary rehab exercises focus on building endurance. Adding strength training, such as lifting weights, has been shown to be helpful as well.

Can Insurance Help?

The cost to patients for Pulmonary Rehabilitation depends on insurance coverage and the program you choose. Medicare covers pulmonary rehabilitation for COPD if you meet certain requirements. Medicare may also cover rehabilitation for other lung diseases, but that depends on where you live. The pulmonary rehabilitation program coordinator can tell you if you qualify and what the costs will be for the program designed for you.

Your doctor should be able to recommend a PR program for you. All of the major hospital systems in Minnesota have their own programs along with specialty clinics and transitional care units.

For more information and resources on COPD, check out our website!

Resources:

The COPD Foundation The American Lung Association Web MD Drug Topics Newscientist.com



To Learn More, Contact Us Today!

Do you have questions about care for yourself or a loved one? Comfort Keepers Care Coordinators are available to assist you with additional information and resources as well as home care options. Contact us today!

CONTACT US

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