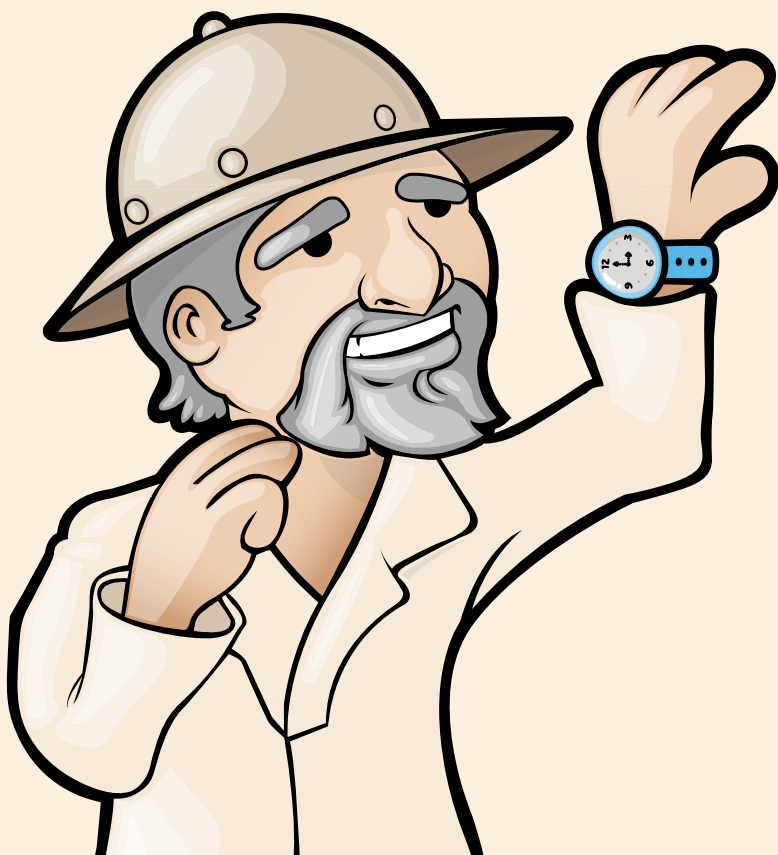
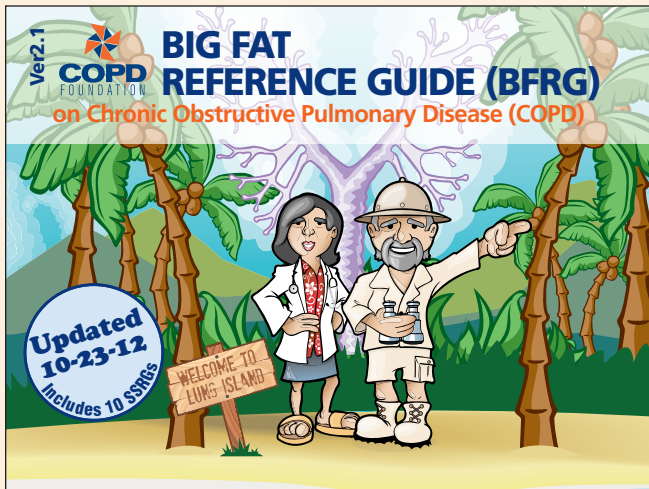


Recognizing and Treating Exacerbations





This “Slim Skinny Reference Guide: Recognizing and Treating Exacerbations” is part of the COPD Foundation’s *Slim Skinny Reference Guide*® series which has been taken from the *COPD Big Fat Reference Guide*®.

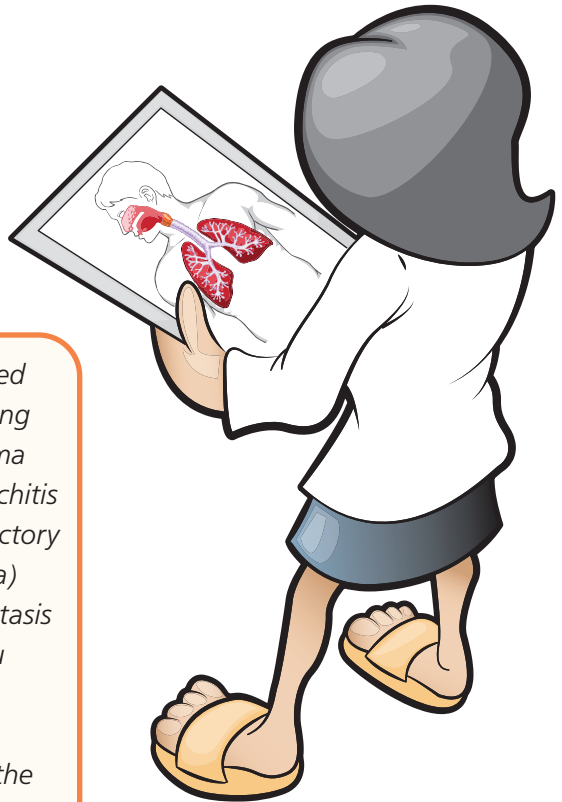
To access the complete *COPD Big Fat Reference Guide*®, visit www.copdbfrg.org.

The mission of the COPD Foundation is to develop and support programs which improve the quality of life through research, education, early diagnosis, and enhanced therapy for persons whose lives are impacted by Chronic Obstructive Pulmonary Disease (COPD).

What is an Exacerbation?

An important part of managing your lung disease, is knowing when your symptoms are changing. You can have no symptoms or unchanging symptoms for a long time. But then suddenly you could have new breathing problems. These flare-ups of your lung disease are **exacerbations** (x-saa-cer-bay-shun). These can be very serious. They even cause you to be in the hospital. Knowing what to do when you have one of these flare-ups is very important.

***COPD** is an umbrella term used to describe the progressive lung diseases including: emphysema (em-fa-see-ma), chronic bronchitis (kron-ick-brawn-kie-tis), refractory (re-frac-ta-ree) asthma (az-ma) and some forms of bronchiectasis (brawn-key-eck-tay-sis). If you have COPD you have trouble moving air in and out of your lungs because of damage to the airways and/or the air sacs.



Changes in Signs and Symptoms

The first step in coping with a flare-up or exacerbation is watching for changes in your symptoms. The quicker you know you are starting to have problems, the quicker you and your doctor can deal with it. Coughing, feeling breathless and having a lot of mucus is common for COPD patients. But being able to tell just a “bad day” from a serious exacerbation is important. Some things that might cause you to just have a “bad day” are: weather, barometric changes, emotions, allergies, higher altitude and using an empty inhaler. A true exacerbation or flare up is much worse than just a bad day.

Knowing When You are Having an Exacerbation

Warning signs that a flare-up is happening or about to happen are different for each person. You will know best when your breathing problems are getting worse. But sometimes, some signs of a problem will be noticed by your friends and family first. Make sure your friends and family are aware of the signs below. The most common signs and symptoms of a flare up or exacerbation are:

- You have more trouble breathing, even when resting
- You have more wheezing
- You are coughing more
- You are producing more mucus
- The mucus looks different. It may have changed color from clear to yellow or green. It may contain blood or may be thicker and sticky
- You have tightness in your chest
- Your hands and feet are swollen from fluid
- You are more forgetful, sleepy, confused and slurring your speech
- You are irritable. You have a change in your personality





In addition, an exacerbation may come with:

- An increased period of feeling tired and a long period of having no energy
- Fever
- Changes in the color of your skin—to a blue or ashen color. This may be seen in the fingertips or lips
- More morning headaches, dizzy spells and restlessness
- A need to increase your oxygen, if you are on oxygen
- Rapid breathing
- Rapid heart rate

Counting Your “Respirations” or Breathing Rate for One Minute:

- 1) Place your hand on your upper chest to feel it rise and fall. Each rise and fall counts as one “respiration.”
- 2) Look at your watch. Count the number of respirations in 30 seconds. Multiply this number by two.

IMPORTANT: Know your heart rate and rate of your breathing.

*As a person with COPD, it is important that you know what your heart rate and breathing rates are when you are feeling good. These are called your “**baseline**” rates.*

When you start to feel a flare-up coming on, take your heart rate and breathing rate. Compare these to the baseline rates.

Knowing if your breathing and heart rates have increased will help you talk to your doctor about your flare-up. Your doctor will use this information to help decide how to treat your exacerbation.

Counting Your Heart Rate for One Minute:

- 1) Find the heart beat or pulse in your neck. Put your index and middle finger to the side of your throat, under your chin. Don't press too hard. Don't rub.
- 2) Look at your watch. Count your heart beat for 6 seconds.
- 3) Add a "0" to that number. This equals the number of times your heart is beating each minute.

Note

A pulse oximeter (ox-sim-meh-ter) is a device which measures your heart rate and the amount of oxygen in your blood. It is placed on your finger.



What Causes a Flare-up or Exacerbation?

An infection in your lungs is almost always the cause of an exacerbation. These infections may be caused by viruses or bacteria. **Antibiotics** (an-tee-by-ah-ticks) are medicine that can be given for an infection caused by bacteria. These drugs do not help with infections caused by viruses.

But many times, when a person with COPD gets an infection from a virus, they also get a second infection from bacteria. This happens because the virus has caused more mucus to be made. And the virus has made the lungs irritated. Together, this causes more bacteria to grow in the lungs. This can lead to a bacterial infection.

So, antibiotics are almost always used to treat serious exacerbations.

Other causes of exacerbations include: sinus infections, indoor and outdoor air pollution, pulmonary edema and blood clots to the lungs.



You Can Reduce How Often You Have Exacerbations and How Serious They Are

You can not totally prevent exacerbations. But you can reduce how often you have them. And you can reduce how serious they are, if you work to stay as healthy as possible.

Tips for reducing exacerbations:

- Wash your hands often. This will help prevent infections.
- Avoid close contact with people who have colds or the flu.
- Get a flu and **pneumonia** (*new-moan-ya*) shot each year. This is a very important way to protect yourself.
- Help your lungs work their best by always taking your COPD medicines. These maintenance medicines that your doctor has prescribed for you can help reduce exacerbations. The Food and Drug Administration (FDA) has approved several drugs (inhaled bronchodilators and inhaled steroids) for this use.
- Use antibiotics quickly for infections or sinus problems.
- Use hand-held **spirometry** (*spee-rom-meh-tree*) to know easily how well your lungs are working (see box).

Hand-held Spirometry Devices:

- Measure how well your lungs are working.
- Measure how much air you can blow in 1 second.
- Are helpful in knowing when an exacerbation is starting.
- Are small and can fit in your pocket for easy travel.



Have a Plan for How to Treat Your Exacerbation

You and your doctor should create a written plan for dealing with very serious exacerbations. This plan may include adding to or changing the medicines you normally take. Your doctor may prescribe oral steroids for you during the flare up. You may need to take more of your medicines than you usually take. Or if you are not using an inhaled steroid, you may need to during the exacerbation. You may also need to be given oxygen.



If you have a written plan, you may be able to deal with your exacerbation at home. But there will be times when your flare up is so bad you will need to see your doctor. Or you may even need to go to the Emergency Room and you may be admitted to the hospital. Sometimes it can be hard to know when to contact your doctor or when to go to the hospital. **You should talk with your doctor about the guidelines below.**

Knowing when to call the doctor and when to go to the hospital:

- 1) If you do not have a written plan to follow (that your doctor has agreed to) you should call your doctor within 24 hours if you have one or more of the following:
 - Shortness of breath or wheezing that does not stop after using your inhaler
 - Change in color, smell, amount or thickness of the mucus you cough up
 - New or increased ankle swelling (that lasts even after a night of sleeping with your feet up)

- You wake up short of breath more than once a night
- You are very tired and this lasts more than one day
- You have a fever that lasts

2) Go directly to the Emergency Room or call 911 if you are having the following:

- Confusion, slurring of speech or sleepiness during a serious lung infection
- Loss of alertness or two or more of:
 - Increase in seriousness of symptoms, such as trouble breathing at rest
 - Struggling to use your upper chest or neck muscles to try to breathe
 - A large increase in how fast your heart is beating
 - A large increase in how fast you are breathing (your respirations)
- Any severe shortness of breath or chest pain or any other severe symptoms

Things NOT to do during an exacerbation

*Do not take extra doses of **theophylline** (thee-oh-fi-leen).*

*Do not take codeine or any type of cough **suppressant** (sue-press-ant).*

Do not use over-the-counter nasal sprays for more than three days.

Do not smoke.

Do not wait more than 24 hours to call your doctor, if your symptoms continue.



Many Types of Drugs Are Used to Treat Exacerbations:

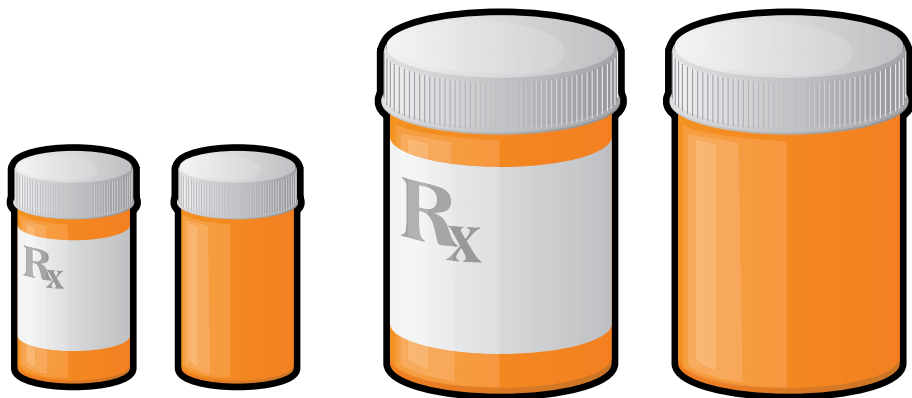
Drugs that help open up narrowed airways: **short-acting beta2-agonists, anticholinergic** (an-tee-cole-i-ner-jics) **bronchodilators** (brawn-coe-die-lay-ters), **theophylline**.

Drugs that prevent bronchospasms (when the muscles around the lungs' bronchial tubes tighten): **long-acting bronchodilators**.

Drugs to treat lung infections (these are usually given at the first sign of an infection): **antibiotics**.

Drugs that help you loosen and cough up mucus: **expectorants** (x-peck-tore-ants).

Drugs that reduce lung irritation and lessen your symptoms overall: **oral steroids**.



NOTES



Questions? Ask your PMD clinical staff.

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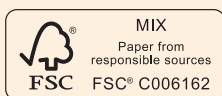
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