



Preventing and Managing COPD Exacerbations

by ANGELA FINLAY

COPD Exacerbations

If you have COPD, undoubtedly you've heard the term "exacerbation" – but what exactly does it mean? Why does it happen? And what can you do to prevent it from happening to you?

What Is a COPD Exacerbation?

First, it is important to understand what happens in the lungs when you have COPD.

In lungs that function normally, when you take a breath, the air goes into your lungs via the windpipes called the bronchial tubes. These bronchiole tubes branch into many smaller tubes called bronchioles, which end in tiny sacs called alveoli.

Capillaries flow to the alveoli. The alveoli have a big job – oxygen, and carbon dioxide exchange. Oxygen passes through the alveoli into the blood, and carbon dioxide moves from the carbon dioxide into the alveoli.

Healthy lungs and alveoli are elastic and stretchy. This allows the lungs to fill like a balloon during inhalation, and deflate during exhalation.

When you have COPD, a few things have happened to the lungs. The airways and alveoli have lost elasticity, the airways have become inflamed, and more mucus is being produced, which can cause "clogs" in the lungs.

A COPD exacerbation is basically the symptoms of COPD, intensified. Your breathing gets worse, and it can happen very quickly.

COPD Exacerbation Symptoms

- Coughing that is increased from your baseline.
- Wheezing that is increased from your baseline.
- Shortness of breath that is increased from your baseline, or breathing that is more shallow and/or rapid.
- An increase in the amount of mucus production.
- A change in the color or quality of your baseline mucus – for example, mucus that is thicker, or changes to green or brown.
- Development of a fever.
- Development of confusion or sleepiness (although if you developed this symptom, changes are your loved ones would notice!)
- Swelling in your lower extremities.

Why Does a COPD Exacerbation Occur?

A COPD exacerbation may occur for a number of reasons. One of the most common COPD exacerbation causes is due to infection.

For example, if you developed an upper respiratory infection, pneumonia, or influenza, your chance of a COPD exacerbation increases. It is also worth noting that because you *have* COPD, you are at an increased likelihood of developing these types of infections in the first place.

Other common triggers for a COPD exacerbation include allergenic triggers, such as exposure to pollens or grasses, air pollution, exposure to smoke, and not taking COPD medications as prescribed.

It is extremely important to take medications as prescribed for this reason – if you are having a hard time affording your medications, please seek assistance or discuss changing your medications to a more affordable regimen.

This is why it is important to make certain lifestyle changes to help improve COPD symptoms significantly.

How to Prevent COPD Exacerbations

There are plenty of ways to avoid COPD exacerbations – and taking your medications as prescribed tops the list.

Equally important is preventing illness. There are numerous ways to do this:

- Probably the most important thing to do is frequent handwashing – wash your hands frequently for 20 seconds with hand soap and warm water. Alternately, you can use hand sanitizer.
- Getting immunizations as recommended by your physician is also suggested – for example, get the flu shot each year, and a pneumococcal vaccine when recommended can prevent (or at least cause these illnesses to not be as bad!) you from getting them.
- Avoid touching your mouth, nose, and eyes, especially when you're in public places – this can prevent germs from getting into your lungs.

Other things that you can do may not prevent infection, *per se*, but they can help your wellbeing. For example, getting eight hours of sleep is recommended. Drinking plenty of water can keep your mucus from thickening, which can cause issues.

It is also important to keep all appointments with your physician. It can seem like a nuisance to see your doctor when you're feeling well, but it is crucial!

What to Do If You Suspect You Have an Exacerbation...

First, it is important to know the symptoms of a COPD exacerbation. If you know the symptoms of a COPD exacerbation, you can act quickly so that the exacerbation doesn't become life-threatening.

At the first sign of an exacerbation, contact your physician. Stay calm and discuss your symptoms with your physician. She will let you know if you can come in for an office visit and treat your exacerbation at home, or if you should present to your local emergency department.

If your doctor recommends going to an emergency department, do not drive yourself. If you can't breathe, you are not safe to drive. Ask your physician if you can have a family member drive you or if you should call 911 for EMS transport.

If you have doubts, you should contact 911 immediately. EMS can begin to treat your breathing issues immediately, because they have medications, oxygen if you're not already on it, and other things that may be necessary to stabilize you, on the ambulance. They are most likely in contact with the emergency department physician en route to the department.

The Bottom Line...

As with any chronic condition, it is important to understand the pathophysiology of your condition fully. Understanding your health means that you will understand what is happening when your condition exacerbates.

When an exacerbation does strike, the quicker and more thoroughly you can treat it, the less damage your body will suffer. One excellent way to take control is with a COPD action plan.

Research has shown that creating (and adhering to) an action plan can significantly reduce recovery time after an exacerbation. Work with your doctor to develop a good plan, including specific, written instructions on medications to take, what to monitor, and when to contact your medical team.

Having COPD is frustrating, but owning your condition is important. Sometimes, with a chronic condition, we don't take care of ourselves, or we deny that we have these conditions, so that we ultimately suffer. By taking ownership of our conditions, and ultimately ourselves, we can live the best we can, in spite of our conditions.