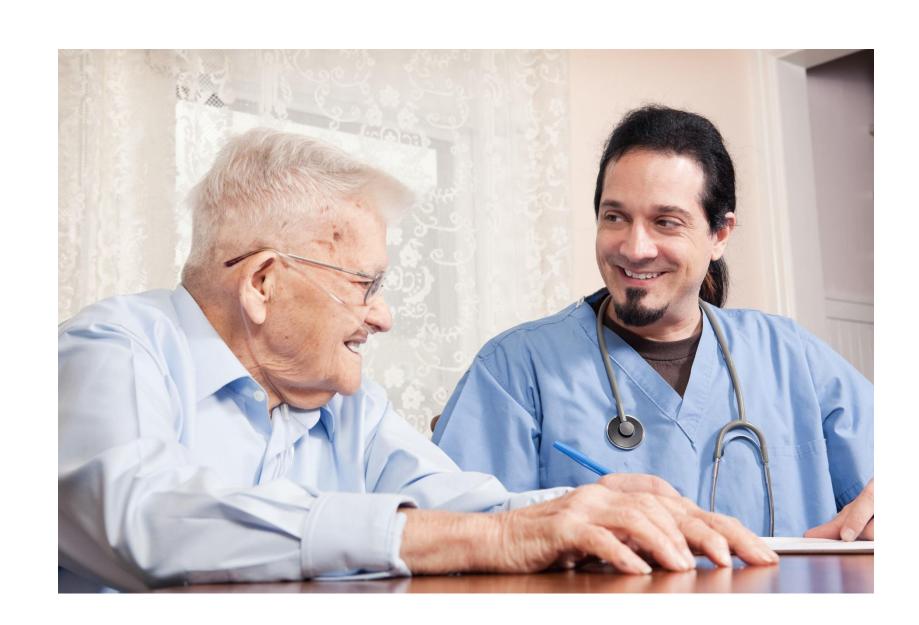


Chronic Obstructive Pulmonary Disease (COPD)

By the end of this lesson, you should understand:

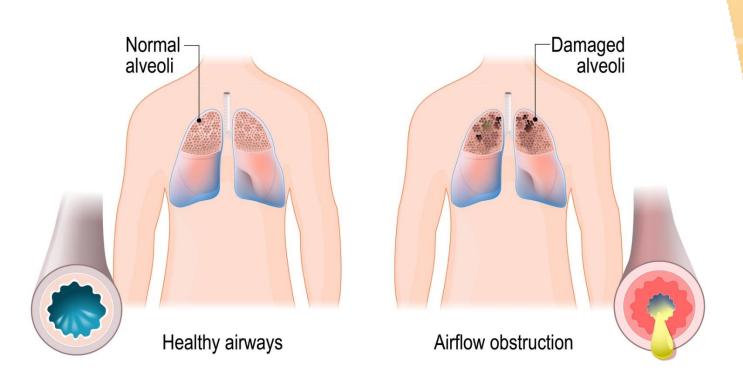
- What residents can physically do
- Exercise and mobility
- Oxygen therapy
- How to recognize warning signs of COPD



COPD Effects on the Lungs

When someone has COPD, it affects their lungs.

- The air sacs in the lungs (where oxygen passes from the lungs into the blood) lose their ability to inflate and deflate.
- As the air sacs break down, there may be less oxygen getting into the blood.
- The airways become thicker and narrower because of inflammation.
- The airways produce more mucus.



Common Symptoms of Residents with COPD:

- Constant cough, sometimes called a "smokers cough"
- Shortness of breath while doing normal daily activities like walking, bathing, cooking or cleaning.
- Inability to breath easily or take a deep breath.
- Excess mucus production, coughing up sputum or phlegm
- Wheezing



How to Recognize a Change in Someone's Breathing

- Coughing more than normal
- Cough may produce more mucus than normal
- Mucus may be a different color than normal.
 - √(Clear, white, thin mucus is normal)
 - ✓ Yellow or Green mucus is not normal and may indicate an infection.
- Fast breathing or difficulty breathing
- Noisy breathing, either a "wheezing" or "rattling" sound.
- Shortness of breath
 - ✓ When someone is "short of breath" it may be difficult to speak in full sentences.
 - ✓ Individuals that are "short of breath" may be less willing to participate in activities they enjoy.



Exercise and Activity

- While shortness of breath makes being active difficult, being inactive makes breathing issues worse.
- It is important that every patient with COPD gets up and out of bed every day.
- You can lose 20% to 30% of your muscle strength by one week of bed rest.
- Individuals with COPD should be encouraged to perform activities independently. Activities like bathing, dressing and eating should be encouraged.



Oxygen Therapy

Nasal Cannula: 1-6 Liters per minute



Nasal Cannula

Simple Mask: 6-8 Liters per minute



Simple Mask

Non-rebreather Mask: 15 Liter per minute



Non-rebreather Mask

- Concentrators: These help purify room air and deliver oxygen to the individual. The filters must be inspected daily and cleaned weekly to ensure the concentrator functions correctly. Dirty filters can result in the individual getting less oxygen then prescribed by the physician.
- Humidity: Individuals that complain of a dry or bloody nose may feel better with humidity. The addition of a humidifier bottle should be done for anyone with dryness or a liter flow of 3 or more.

Warning Signs for Residents

If your patient is showing any of these symptoms, report it to your nurse immediately:

- Cyanosis: Blue color around the lips or nail beds
- Fast breathing: Breathing faster than normal or greater than 30 breaths per minute.
- Difficulty Speaking: Unable to complete sentences or responding with one-word answers.
- Oxygen saturation: Lower than normal or less than 90%.
- Sleepy: Less responsive than normal.



COPD - Quiz

1. COPD is a disease that causes difficulty with breathing.

True False

2. Smoking is the leading cause of COPD.

True False

3. Residents with COPD should be encouraged to stay in bed or remain in their room.

True False

4. Exercise or activity is not important for individuals with COPD.

True False

5. Oxygen Concentrators must be inspected daily to ensure filters are clean and free of dust.

True False

Answers

- 1. True COPD causes difficulty breathing
- 2. True Smoking is the leading cause of COPD
- 3. **False** It is important for residents to get up out of bed every day.
- 4. **False** It is important for residents with COPD to perform activities independently such as bathing, dressing and eating.
- 5. **True** If oxygen concentrators are not checked daily and cleaned weekly, this could cause the patient to receive less oxygen than prescribed by the physician.

