**Definition:**
Chronic Obstructive Pulmonary Disease (COPD) is a slowly progressive airway disease that produces a decline in lung function. Airflow limitation, from loss of lung function, is associated with an abnormal inflammatory response of the lungs to noxious (unpleasant or irritants) particles or gases. Normal flow of air is blocked by excess mucus and inflammation (chronic bronchitis), by collapsed airways (emphysema), and/or by tightening of the muscles around airways (chronic bronchitis).

- The word **Chronic** means it won’t go away.
- The word **Obstructive** means partly blocked.
- The word **Pulmonary** means in the lungs.
- The word **Disease** means sickness.

COPD is caused by **long-term smoking** or breathing in dust fumes or harmful things. Symptoms can include shortness of breath, coughing, and wheezing.

**Risk Factors:**
- Cigarette smoking is the **major risk factor** for developing COPD
- ~90% of COPD patients have a smoking history; however, only 15% of smokers develop clinically significant COPD

**Common Medications and Treatment:**

**Medications:** Are central to the management of COPD symptoms

- Bronchodilators – open up airways
  - Short-acting: which is your quick acting medication to open up airways in about 15 minutes.
    - Albuterol, Levalbuterol, Maxair
  - Long acting: usually used once or twice a day
    - Salmeterol (Serevent)
    - Formoterol (Foradil aerolyzer)
    - Ipratropium bromide (Atrovent)
  - Methylxanthines
    - Theophylline, aminophylline
- Steroids – decreases inflammation in airways and decrease mucous production
  - Pulmicort, AeroBid, Flovent, Azmacort, or oral tablets
- Combination of long-acting bronchodilators (which open up airways) and steroids (which reduce inflammation and mucous production)
  - Advair, Combivent, Symbicort
- Oxygen: will be prescribed by your primary care provider or pulmonologist based upon your blood oxygen level. Oxygen is flammable and no one should smoke in the same home where it is present.
When to Seek Medical Attention:
Red Flag Symptoms to call your PCP for
- Increased dyspnea
- Increased heart rate
- Increased respiratory rate
- Increased cough or change in sputum
- Use of accessory muscles to breath
- Peripheral edema
- Wheezing
- Fever
- Fatigue
- Chest tightness

Severe Acute Exacerbation identification: Emergent Situation
- Change in how you are thinking or remembering
- Dyspnea at rest
- Cyanosis
- Respiratory rate > 25/minute
- Heart rate > 110/minute
- Use of accessory muscles

What Else Can I Do To Help Manage This Condition?
- **Stop smoking.** Smoking makes it hard for the body to get oxygen and causes more damage to your lungs.
  - Avoid Second-hand smoking, too.
- **Drink enough water** and fluids to help loosen any thick phlegm, use a humidifier or use vaporizer.
- **Take your medicine** Bronchodilators-Know how to use inhalers the right way.
  - Always talk to doctor about using cough syrup or other over-the-counter medicines.
- **Get vaccines** that can help prevent other lung problems.
- **Learn breathing exercises.**
- **Eat healthy foods.** Get to a healthy weight.
- **Use home oxygen safely**
  - As told by the doctor.
  - If you become confused, very weak, or you feel faint or it is very hard to breathe or to catch your breath.
  - Your heart is beating faster than usual or skipping beats.
- **Keep up with physician visits and laboratory testing.**