

# Chronic Obstructive Pulmonary Disease (COPD)

Pathology- progressive pulmonary disease that causes chronic airflow obstruction.

Umbrella term.

For either

Emphysema or Chronic Bronchitis

## Diagnostic

Arterial blood gases (ABGs)

Chest X-ray

Pulmonary function test- spirometry

## Risk Factors

Smoking

Occupation exposure

Exposure to "secondhand" smoke

Infection

Air pollution

Genetic abnormalities- deficiency of Alpha-1 antitrypsin- (protects the lining of the lungs)

Asthma

Severe respiratory infection

## Emphysema aka Pink Puffers

Emphysema= think entrapped Air

The alveoli are damaged and enlarged which causes loss of lung elasticity.

Results in loss of lung tissue recoil and air trapping.

Weight loss appears very thin.

Hyperinflation of the lungs = barrel chest from air trapping.

Shortness of breath and severe dyspnea

# Chronic Bronchitis aka blue Bloaters

Bronchitis think Blue appearance

Bronchitis think a lot of mucus

Chronic productive cough and sputum production for > 3 months for 2 consecutive years.

Mucus secretion

Airway obstruction (inflammation)

Overweight or obese

Peripheral edema

Cyanosis (blue) from hypoxemia

Chronic cough rhonchi and wheezing.

## Nursing consideration and patient education

Oxygen therapy

Those without COPD healthy pt are stimulated to breathe due to increased  $CO_2$ .

COPD patients are stimulated to breathe due to decreased oxygen. If you give too much oxygen, they lose their "drive to breathe". Give oxygen with caution.

Preventing infection

Influenza vaccine and pneumococcal vaccine lowers chance of pneumonia.