

## Preconference Form

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Medical Diagnosis/Disease: COPD

### NCLEX IV (8): Physiological Integrity/Physiological Adaptation

#### Anatomy and Physiology

##### Normal Structures

- Lungs: Paired, spongy organs that are covered by pleural fluid
- upper respiratory tract consists of the nasal cavity, oral cavity, pharynx, and larynx
- lower respiratory tract consists of bronchi, bronchioles, alveoli, and alveolar ducts
- the alveolar ducts is the site of gas exchange, where the lungs oxygenate the blood which goes to the rest of the body
- gas exchange occurs through diffusion
- the respiratory tracts are protected by cilia and mucous which stops debris from entering the lungs
- surfactant stops the lungs from sticking, which help ease the processes of inspiration and expiration

#### Pathophysiology of Disease

- COPD is a disease state characterized by airflow limitation that is not fully reversible
- airflow limitation is progressive and associated with an abnormal inflammatory response of the lungs to noxious particles or gases and characterized by chronic inflammation throughout the airways
- the chronic airflow limitation is caused by both small airway inflammation and parenchymal destruction (emphysema)
- COPD can be either acute or chronic
- COPD is associated with an inflammatory response of the lungs to numerous debris and gases

### NCLEX IV (7): Reduction of Risk

#### Anticipated Diagnostics

##### Labs

- Arterial blood gas**
- Alpha-1 antitrypsin deficiency screen

##### Additional Diagnostics

- Pulse oximetry**
- Chest radiography**
- Spirometry

### NCLEX II (3): Health Promotion and Maintenance

#### Contributing Risk Factors

- Cigarette smoking or passive exposure to cigarette smoke**
- chronic occupational exposure to dust, chemicals, smoke, fumes, or air pollution
- a deficiency in the alpha-1 protein is a genetic condition that may predispose a person to developing COPD
- any process that effects lung development

#### Signs and Symptoms

- dyspnea**
- chronic cough
- chronic sputum production
- adventitious breath sounds**
- ankle edema

### NCLEX IV (7): Reduction of Risk

#### Possible Therapeutic Procedures

##### Non-surgical

- oxygen therapy**
- nebulizer
- CPAP/BIPAP

##### Surgical

- Lung volume reduction surgery (removes damaged lung tissue)
- Bullectomy (removes large air sacs called Bullae)

#### Prevention of Complications

- (What are some potential complications associated with this disease process)
- heart failure
  - pneumonia
  - acute respiratory failure
  - hypoxemia/hypoxia

### NCLEX IV (6): Pharmacological and Parenteral Therapies

#### Anticipated Medication Management

- prophylactic antibiotics**
- acetaminophen**
- NSAIDs
- bronchodilators

### NCLEX IV (5): Basic Care and Comfort

#### Non-Pharmacologic Care Measures

- coughing/deep breathing
- incentive spirometer**
- repositioning
- ambulation

### NCLEX III (4): Psychosocial/Holistic Care Needs

#### What stressors might a patient with this diagnosis be experiencing?

- anxiety/depression**
- lessened ability to participate in basic activities
- lack of caregiver support

### Client/Family Education

### NCLEX I (1): Safe and Effective Care Environment

List 3 potential teaching topics/areas

- proper use of the incentive spirometer
- recognize signs/symptoms of pneumonia
- smoking cessation

Multidisciplinary Team Involvement

(Which other disciplines do you expect to share in the care of this patient)

-respiratory therapist, physical therapist, physician, radiologist, case manager, psychiatrist, phlebotomist