

The Respiratory System

PATHOLOGIES

General Pathology

COPD (Cardiopulmonary disease)	Chronic. Bronchitis + emphysema= extreme difficulty breathing
Asthma	
Bronchiectasis	
Emphysema	
Smokers' respiratory syndrome (SRS)	Group of symptoms seen in smokers; cough, wheezing, vocal hoarseness, pharyngitis, difficulty breathing, easily susceptible to respiratory infections

Pathology of the URT

Allergic rhinitis	AKA- Definition:
Acute Respiratory Syndrome of Children and Infants	
croup	
Diphtheria	Acute infectious disease (contagious) of the throat and URT cause by Diphtheria bacteria, preventable through immunizations
Epistaxis	
Pertussis ("whooping cough")	
rhinorrhea	
Sinusitis	Inflamed sinuses; sinus infection
Upper Respiratory Infection (URI)	AKA-

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Pathology of the Pharynx/Larynx

Pharyngitis	
pharyngorrhagia	
pharyngorrhea	Discharge of mucus from the pharynx
laryngoplegia	
laryngospasm	Sudden spasmodic closure of the larynx that closes the airway

Pathology of the Pharynx/Larynx

aphonia	
dysphonia	
laryngitis	Inflammation of the larynx; voice loss caused by inflammation

Pathology of the Trachea & Bronchi

tracheitis	Inflammation of the trachea
tracheorrhagia	
Bronchitis	
bronchorrhagia	Bleeding from the bronchi
bronchorrhea	

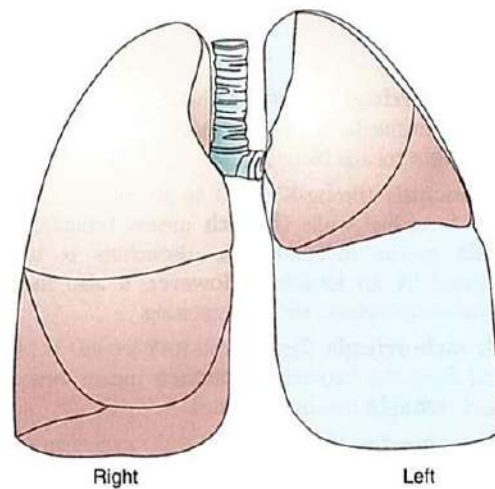
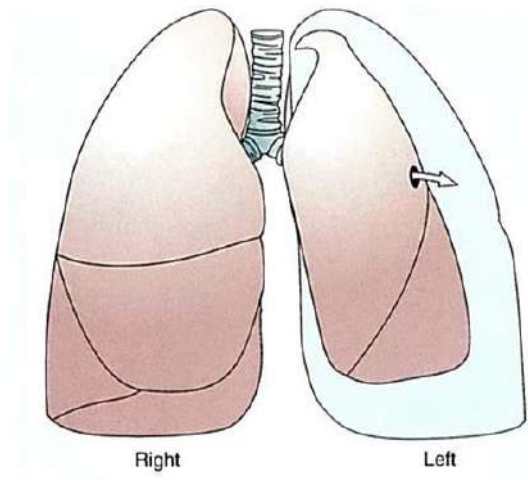
Diseases of the Pleural Cavity

- Pleurisy -
- Pleuralgia- pain in the pleura or side
- pneumothorax-

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Diseases of the Pleural Cavity continued

- **pleural effusion**- abnormal escape of fluid into the pleural cavity that prevents the lung from fully expanding.
- **empyema/pyothorax**-
- **hemothorax**- blood in the pleural cavity
- **hemoptysis**-



Label: _____

Diseases of the Lungs

- **pulmonary edema**-
- **Acute Respiratory Distress Syndrome (ARDS)**- lung failure resulting from pulmonary edema
- **atelectasis** (collapsed lung)-

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Diseases of the Lungs

- pneumorrhagia-
- tuberculosis-
 - o Multidrug resistant TB (MDR-TB)-
- Pneumonia-

Main causes of pneumonias are bacteria, viruses, fungi, or inhaled substances like chemicals or vomit.

MANY different kinds:

bacterial pneumonia *viral pneumonia* *lobar pneumonia* *bronchopneumonia*
double pneumonia *aspiration pneumonia* *mycoplasma pneumonia*
Pneumocystis carinii pneumonia

Environmental or Occupational Lung Diseases

Disease	AKA	Caused by:
pneumoconiosis	N/A	Abnormal condition caused by dust in the lungs developed over years of environmental or occupational contact
anthracosis		Caused by coal particles in the lungs
asbestosis	N/A	
byssinosis		Caused by cotton, flax, or hemp dust in the lungs
silicosis	Grinder's disease	

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- **Pulmonary fibrosis-** formation of scar tissue that replaces the alveolar walls and makes them stiff.
- **Idiopathic Pulmonary Fibrosis (IPF) -**
- **Cystic fibrosis-**

Breathing Disorders:

Draw the pattern
from pg 134

Eupnea		
Tachypnea		
Bradypnea		
Apnea		
Cheyne-Stokes		
Dyspnea	Aka: Difficult or labored breathing	
Hyperpnea	Abnormal increase in the depth and rate of the respiratory movements	
Hypopnea		
hyperventilation	Abnormally rapid deep breathing, resulting in decreased levels of carbon dioxide at the cellular level	

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Lack of Oxygen Disorders:

- **Airway obstruction -**
- **Anoxia** – absence or almost complete absence of oxygen from breathed in gases, arterial blood, or tissues; can cause irreversible brain damage
- **Asphyxia -**
- **asphyxiation-**
- **cyanosis-** BLUE skin caused by lack of adequate oxygen
- **hypoxia-**
- **respiratory failure-** occurs when O₂ in the blood become dangerously low!

Sudden Infant Death Syndrome (SIDS)

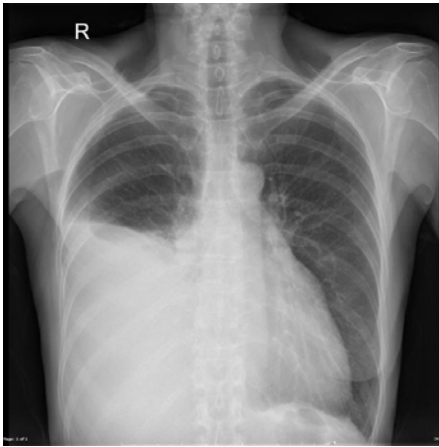
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DIAGNOSTIC PROCEDURES

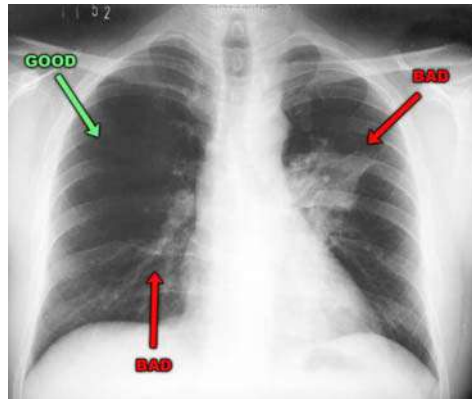
- **respiratory rate (RR)-**
 - **What is a normal rate? =**
- **pulmonary function tests (PFT's)-**
- **spirometry-** using a **spirometer** to record the volume of air inhaled or exhaled in PFT's
- **phlegm-** thick mucus secreted by respiratory passages. it is called **sputum** when it is ejected.
- **Bronchoscopy-**
- **Laryngoscopy-**
- **TB test (tuberculin skin test)-**
- **Chest x-rays-** can show pneumonia, lung tumors, pneumothorax, pleural effusion, tuberculosis, and emphysema

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a. pleural effusion



b. pneumonia



TREATMENTS

Medications:

- **bronchodilator**- used in asthma attacks to:
- **Bronchoconstrictor**- what do you think?

Nose and Throat:

- **septoplasty**- surgical reconstruction of the septum
- **sinusotomy**- incision into the sinus, to treat chronic sinusitis.
- **Functional endoscopic sinus surgery (FSS):**
- **Pharyngoplasty**-
- **Pharyngostomy**-
- **Pharyngotomy**-
- **Laryngectomy**-
- **Laryngoplasty**-
- **endotracheal intubation (intubating)**- passage of a tube through the nose or mouth into the trachea to establish an airway.

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Trachea and Bronchi:

- **tracheoplasty-**
- **tracheorrhaphy -**
- **tracheotomy-**
- **tracheostomy-** placing a tube into the trachea below a blockage to create an airway. It may be temporary or permanent. Resulting in an opening called a **stoma**.

→



Lungs, Pleura and Thorax:

- **pneumonectomy-**
- **lobectomy-**
- **pleurectomy-**
- **thoracentesis-** puncture of chest wall with needle to obtain fluid from pleural cavity for diagnostic purposes, to drain pleural effusions, or to re-expand a collapsed lung.
- **Thoracotomy -**
- **Thoracostomy -**

Respiratory Therapy:

- **supplemental oxygen-** i.e. nasal canula, or nonrebreather
- **Postural drainage-**
- **Ventilator-**
- **respirator-** for prolonged artificial respiration