

**Tuberculosis Video reflection:** Is caused by an infection called Mycobacterium tuberculosis and is a contagious bacterial infection. The kidneys, the bones and brain are affected and travel through the lymph nodes and bloodstream. I was today years old when I learned that this disease is one of the oldest diseases among humans. It is an airborne disease that affects those who are near the infected person. New forms are becoming resistant to antibiotics. Risk factors include anyone who is exposed to an infected person, working in certain areas where TB is widespread, and anywhere malnutrition is common. People who have weak immune systems can't fight the infection and stop the bacteria from growing and multiplying. There is a latent or inactive form of TB and that individual will not infect others. They can become contagious if their immune system weakens by having diabetes, and or cancer. TB can be fatal if left untreated.

**Emphysema & Bronchitis: COPD video reflection:** COPD is a chronic lung disease that hinders breathing by limiting lung airflow and becoming severe with time. It is the 4<sup>th</sup> leading cause of death ranked by the CDC. It is crazy to me to believe that around 24 million individuals are affected by COPD. It is so important to screen early when diagnosing before major lung function is lost. Air way obstruction could be caused by several things: Clogging of air passages due to mucus, inflammation or thickening of the walls or air passages, damaged alveolar walls, alveoli, and air passages losing their stretching ability. Emphysema has main damage occurring in the alveolar walls. The volume of air is decreased due to this damage. In chronic bronchitis the passages are clogged due to chronic inflammation, irritation and swelling therefore hindering breathing. Most cases of COPD are caused by inhaling pollutants. Smoking is the most common cause of COPD. COPD is a progressive disease. Signs and symptoms include persistent cough, dyspnea, frequent respiratory infections, tightness in the chest, wheezing and fatigue. Spirometry, CT scan or chest x-ray is what can be used to diagnose COPD. Treatment includes medications (bronchodilators, inhaled steroids) and changing lifestyle but the damage to the lungs is irreversible.

**Pneumonia Video reflection:** People who are more prone to have complications of pneumonia are newborn babies and children under 2, elderly people over the age of 65, regular smokers and those with already weakened immune systems. There are many ways to classify pneumonia based on the lungs infected and how a person acquired it. Bronchial pneumonia is inflammation of the bronchial tubes in which one or both lungs get patches. Lobar pneumonia in which one or more of the five main lobes of the lungs gets infected. HAP is when pneumonia is acquired in the hospital after admission. CAP is acquired from social surroundings and does not involve the hospital. VAP is developed when a patient is on a ventilator. Opportunistic pneumonia is caused because of a weakened immune system due to another medical condition. Aspiration pneumonia happens when inhaling liquids, foods, saliva, or vomit causing a bacterial infection in the lungs. Most common bacteria for causing pneumonia are streptococcus pneumoniae. Signs and symptoms differ in each patient depending on the infection and the state of health. Coughing with possible sputum, sweating, fever, chills, dyspnea, rate of breathing increased, and chest pain. Diagnosed by diagnostic testing, like chest x-ray and sputum culture.

**Chest Tubes Video reflection:** The purpose of the tube is to remove air or fluid to help re-expand or to drain fluid from around the heart after cardiac surgery. Pneumothorax, Pleural effusion, Hemothorax, empyema, chylothorax, and cardiac surgeries are the reasons patients might need chest tubes. There are wet and dry drainage systems with chest tubes. Nursing interventions include monitoring respiratory status, and the drainage system. The drainage system needs to be kept below the patient's chest. Make sure there are no kinks, and that it is draining properly. Monitor the drainage amount and color. If chest tube becomes dislodged place a sterile dressing over and tape 3 sides. If the system breaks insert tubing 1 inch into bottle of sterile water and get a new system by calling for help from other nurses. Do not milk, strip or clamp tubing and make sure to follow your hospital's policies and procedures. To assist the physician with removal of chest tube make sure to gather supplies, teach patient the Valsalva maneuver, premedicate for pain, position into semi-fowlers, monitor respiratory status, and obtain chest x-ray to assess the lung.