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CSON Module 3
Gas Exchange
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Reflection Paper

Many pieces and parts must work together for a person to achieve gas exchange. Gas exchange is defined as the diffusion of gases from an area of higher concentration to an area of lower concentration, especially the exchange of oxygen and carbon dioxide between an organism and its environment. In the human body, gas exchange mainly happens in the lungs. When we breathe, the air that is inhaled fills our lungs and travels to the lungs' alveoli (air sacs). Once at the alveoli, oxygen is taken into the blood, and carbon dioxide is taken from the blood and expelled out when we exhale. In the four videos we watched, it was interesting to see how susceptible the respiratory system is and how easily gas exchange can be altered.

I thought that these videos were very enlightening. For example, in the first video about tuberculosis, I learned that tuberculosis is the leading cause of infection and death in adults, especially in third-world countries. I know here in the United States, we do not talk or hear about tuberculosis very much, so this statistic surprised me. I also did not realize that once you have TB, you will also have it or at least a latent/dormant form. I have always been under the impression that TB is like a bad flu where you have it for a week or two, get treatment, and it goes away. I do not know where this assumption came from, but I'm glad to see the truth now, and I'm grateful for the knowledge I've retained from watching this video.

The next video I watched was about COPD. I have always known that COPD stood for Chronic Obstructive Pulmonary Disease. However, I did not understand that this term was used like an umbrella to describe Emphysema and Chronic Bronchitis. I learned in this video that Emphysema is one type of COPD, and it causes damage to the alveolar walls. Whereas Chronic Bronchitis is the second type of COPD, which causes the alveoli to be clogged. This was a fascinating topic for me since my uncle has COPD and has been a lifelong smoker. I do not know what type of COPD he has; however, I have seen how difficult it is to live with this disease and how unwilling many people are to stop smoking, even if it means living a longer, healthier life.

When I watched this video, I was surprised by how much information I knew about Pneumonia. Today, this video has much more meaning to me because I am watching my grandpa fight to overcome Pneumonia. This disease process is tough to watch someone you love struggle with. I cannot go into great detail about what I have seen or learned not only from this video but from personal experience because I know my computer would be covered in tears by the end, so I want to say I am grateful to have this knowledge in the future.

Finally, the video on chest tubes was very interesting to me. I have seen several people with chest tubes, and I have always wondered how they work. I did not realize that the tube is placed in the pleural space, not in the lungs. I guess that is an assumption made by many people. However, it makes sense why we want it to be in the pleural space instead of the lungs. I also did not realize that there are two different chest tubes: wet and dry suction. All in all, I believe that these four videos have genuinely helped me understand more about these disease processes, and I know that I will be able to use this knowledge going forward in my career.