**Task 3: Lung Diseases and Treatments**

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**Emphysema**

Diagram

Description automatically generatedEmphysema is a complication within one’s lungs, leaving the individual with shortness of breath. People with this condition have deteriorating alveoli that are unable to function properly through the actions of breathing out. Therefore, making it difficult to breath in any new air. This condition is usually caused by the inhalation of destructive ‘fumes’ over a long period of time. Some examples of these include (but aren’t limited to are): pollution within the air, fumes from a chemical source, inhaling marijuana smoke. However, the most common/main cause of Emphysema is due to smoking cigarettes extensively for an extended amount of time. When first contracting the disease, you may be unable to tell that you have it due to the mild symptoms you may be experiencing. Yet, when your condition progresses into a worsened state some of the symptoms are things like a very wet cough, tightness within the chest region, regularly coughing (often leaving you trying to catch your breath afterwards). Once enduring these symptoms many will often find themselves consulting with a doctor. From this the doctor is then able to provide a diagnosis which will then lead to ongoing treatment practices. Unfortunately, there is no cure for Emphysema but there are many treatments to help manage the effects of the condition. A few of the management techniques include:

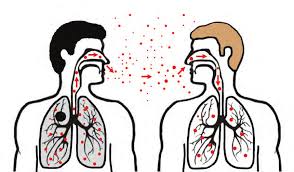
* Quitting smoking - this reduces the amount of toxins going into the lungs, therefore slowing down the ongoing damage to the lungs.
* Medicated remedies such as antibiotics - this option is usually only used in severe cases; it can help the patient to breathe easier.
* Starting to move the body more (exercise) - the effect of this treatment is able to strengthen one’s tolerance to moving around, eventually enabling them to breathe easier when being active.
* Oxygen Treatment - this is when an individual requires oxygen to replace what they have lost due to their condition. This essentially just aids in their breathing.

The processes mentioned above are only a few out of many methods to assist the effects from the disease. In contrast, there are many ways in which an individual is able to prevent or decrease their chances of ending up with Emphysema. These are things like being cautionary when surrounded by second-hand smoke, wearing a mask when coming into contact with toxic fumes and dust. Another way to prevent Emphysema is to avoid taking up smoking. By doing all of these things, your chances of contracting Emphysema are drastically decreased compared to someone who does not take these precautionary measures.

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**Tuberculosis**

Tuberculosis (also referred to as TB) is an illness that has a major effect on your lungs, it can leave you with chronic chest pain and a painful cough etc. There are two forms of Tuberculosis, these are known as Latent TB and Active TB. Latent TB refers to the presence of the illness in your system, however unable to have an effect on you as it is not ‘active’ therefore being defended against its symptoms. Although, it could become a complication at any given moment. Active TB is when the Tuberculosis is in your body **and** it is able to have an effect on you. It is contagious between one person to another as its content spreads throughout the air. For example, if an individual was to sneeze near you, without covering their nose/mouth and you somehow inhaled those bacterial particles, you would be at a high risk of contracting the illness. You can see how the transmission occurs in the diagram on the right-hand side of the page. The cause of TB to an individual is due to the transference of the disease from one person who has TB to the other person who does not. There are many symptoms that may lead you to think that you Tuberculosis. Some of these include:

* A cough that lasts more than 3 weeks.
* Chest pain.
* Coughing up blood.
* Feeling tired all the time.
* Night sweats.
* Chills.
* Fever.
* Loss of appetite.
* Weight loss.

These symptoms were pulled directly from **(WebMD, 2020)**

Once acknowledging these symptoms, a doctor’s diagnosis is now necessary. Ways in which a doctor is able to diagnose you with TB is through a blood test or a skin test. If provided with positive results, further testing is then required to determine whether the illness is Latent or Active. These are ways in which a doctor is then able to determine any abnormalities within the lungs. Many treatments are on offer to help cure Tuberculosis, unless you are affected with drug-resistant TB. These treatments are usually in the form of an oral medication. All of the medications help to fight off the illness until it is completely gone. There are a few ways that the spread of Tuberculosis can be prevented, these are listed below:

* If you are diagnosed with the disease, limit physical contact with other individuals.
* Ensure a mask is to be worn, provided you have active TB.
* There are vaccines on offer to protect yourself against the disease, these vaccines build your immunity toward TB.
* Tuberculosis can be found in clusters in a range of countries, this means avoiding the populated areas to decrease your personal risk.

**References**

* Emphysema - Symptoms and causes. (2021). Retrieved 24 March 2021, from <https://www.mayoclinic.org/diseases-conditions/emphysema/symptoms-causes/syc-20355555>
* Topics, H. (2021). Emphysema | Emphysema Symptoms | Emphysema Treatment | MedlinePlus. Retrieved 24 March 2021, from <https://medlineplus.gov/emphysema.html>
* Emphysema | betterhealth.vic.gov.au. (2021). Retrieved 24 March 2021, from <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/emphysema#treatment-for-emphysema>
* Emphysema Treatment Options: Inhalants, Oxygen, and More. (2021). Retrieved 24 March 2021, from <https://www.healthline.com/health/copd/emphysema-treatment-options#oxygen>
* Ba, & Social Distancing, Q. (2021). Tuberculosis (TB). Retrieved 24 March 2021, from <https://www.webmd.com/lung/understanding-tuberculosis-basics>
* Tuberculosis - Symptoms and causes. (2021). Retrieved 24 March 2021, from <https://www.mayoclinic.org/diseases-conditions/tuberculosis/symptoms-causes/syc-20351250>
* Diagnosing and Treating Tuberculosis. (2021). Retrieved 24 March 2021, from <https://www.lung.org/lung-health-diseases/lung-disease-lookup/tuberculosis/treating-and-managing>