

***Human Biology ATAR – Task 3: Extended Response***

***Lung diseases and treatments (7.5%)***

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| --- | --- | --- | --- |
| Name: Hanief Soemali | | | |
| Time allowed: 1 Lessons | | | |
| **Section** | Your Mark | Marks available | Percentage |
| **Section 1:**  Report |  | 10 | 18.5% |
| **Section 2**:  Validation Test |  | 44 | 81.5% |
|  |  | **54** | **100%** |

**Declaration of Authenticity**

* I (Student Name) Hanief Soemali declare that this work is my own and I have not plagiarised from any source.

Signature: Hanief Soemali  
  
Date: 28/4/23

**Lung disease and treatments**

You are to choose **one** lung disease from List A and **one** disease from List B to research and find information about the named aspects of each disease. You will then complete an in-class validation assessment on your research without notes.

DISEASES

|  |  |
| --- | --- |
| **LIST A** | **LIST B** |
| Chronic bronchitis | Pneumonia |
| Emphysema | Pleurisy |
| Cystic fibrosis | Tuberculosis |

Check list:

* Cause, or main causes
* Symptoms and diagnosis
* Current treatments…how they work and what they do
* Prevention

Write the names of the diseases you have chosen here:

Disease A: Emphysema

Disease B: Pleurisy

**Marks Table**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Report** | **Cause** | **Symptoms** | **Treatments** | **Prevention** | **Marks** | Your mark |
| **Disease A** | 1 | 1 | 1 | 1 | 5 |  |
| **Disease B** | 1 | 1 | 1 | 1 | 5 |  |

This sheet is to be the cover page of your report.

***Lung diseases and the Cause and treatment***

**Disease A: Emphysema**

**Causes:**

Emphysema is a lung disease that severely damages the lungs alveoli and weakens the Rupture and air sacs. Emphysema is caused by smoking cigarettes, Tobacco and even Marijuana, inhalation of air pollution by carbon dioxide emissions, chemical fumes and dust. This develops Pneumothorax or known as a ‘collapsed lung’ which is likely to be life-threatening, it also creates serious heart problems which increases stress and pressure throughout the arteries which then the heart expands and weakens which causes many complications in life and makes everyday tasks a lot harder.

**Symptoms:**

When diagnosed with Emphysema it will develop gradually and the person will not receive any pain during the early stages with Emphysema, but overtime it will gradually worsen and will show the following symptoms:

**Shortness of breath:** You will not be able to complete any tasks and will become exhausted very easily.

**Fatigue:** You will feel tired and sleepless all the time.

**Barrel-shaped chest:** It will enlarge the ribcage in order to accommodate the lungs.

**Cyanosis:** A blue fade and tinge to the skin due to the lack of oxygen entering the body.

These are one of the major symptoms of emphysema as wheezing and continuous coughing. Any of the following symptoms, you will need to consult a doctor.

**Treatments:**

There is no current cure for Emphysema, but it is able to be treated in order for to prevent from being diagnosed with Emphysema. This includes:

* Rehabilitation programs for the pulmonary system and lungs.
* Proper oxygen treatment if required.
* Taking medication such as antibiotics.

To know if you are being diagnosed with Emphysema, immediately consult a doctor and it will be tested by using CT scans, X-ray scans around the chest and breathing tests.

**Prevention:**

There is no current cure for Emphysema, but it is able to be treated in order for to not be diagnosed with Emphysema. This includes:

* Immediately stop smoking completely as soon as possible.
* Avoiding major air pollution and poor quality in the environment.

Remember that basic hygiene can also be helpful by staying away from sick people and maintaining good hygiene.

**Diseases B: Pleurisy**

**Causes:**

Pleurisy is a lung disease that causes inflammation that covers the lungs. It is caused by a viral infection such as flu and also bacterial infection such as Pneumonia. This develops conditions such as blood clot which blocks the flow of blood into the lungs. There are also conditions that causes Pleurisy such as fungal infection, Lung cancer, Tuberculosis, Rib fracture and inherited diseases such as sickle cell diseases and medications especially recreational drug use.

**Symptoms:**

When diagnosed with Pleurisy. Symptoms will start to develop such as:

**Chest pain:** Hard to breathe deeply, cough and sneeze.

**Shortness of breath:** You will stumble a complication of trying to breathe in and out.

**Cough and Fever:** It can occur only in some cases.

Consult a doctor immediately if these following symptoms happens repeated on daily basis.

**Treatments:**

The treatment for Pleurisy can be treated but is really not necessary. Pleurisy will often resolve over times without any professional treatment but antibiotics like non-steroidal anti-inflammatory drugs (NSAIDs) and medicine can help resolve it too.

**Prevention:**

To prevent the Pleurisy disease, having basic hygiene can prevent the disease even by just washing your hands before eating and after using the bathroom, but the following list can also prevent the disease by:

* Avoid having contact with people who is sick and have a serious respiratory condition.
* Avoid having contact around Asbestos materials especially during construction or demolition.

Having a regular doctor check can also make you more aware to stay away from the disease or to have a pre-caution check so you can act faster and remove the disease without making it persist to more pain.

**Sources Used:**

1. <https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/emphysema>
2. <https://www.mayoclinic.org/diseases-conditions/emphysema/symptoms-causes/syc-20355555>
3. <https://www.nhsinform.scot/illnesses-and-conditions/lungs-and-airways/pleurisy#:~:text=What%20causes%20pleurisy%3F,pulmonary%20embolism)%20or%20lung%20cancer>.
4. <https://www.mayoclinic.org/diseases-conditions/pleurisy/symptoms-causes/syc-20351863>