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**DEPERTMENT:** ANATOMY.

**MATRIC NUMBER:** 18/MHS01/254.

ASSIGNMENT.

Covid-19 is the on-going viral pandemic in the world and the reason you are at home. Discuss the anatomical implication of this virus on the respiratory system of human.

ANSWER.

Covid-19 is caused by the virus SARS-COV-2 {severe acute respiratory syndrome corona virus 2}. The virus enters the body generally through the mouth or nose {close contact to the face}. From there the virus makes its way down into the air sacs in the lungs known as the alveoli. The virus then uses its spike proteins to take-over cells from the original cells of the alveoli. The virus then makes copies of itself and kills the cells of the alveoli in the process of replicating, new virus then infect neighbouring cells in the alveolus. The process of hijacking cells to reproduce causes inflammation in the lungs, which triggers an immune response. This immune response mounts a defence which causes cell death, as more cells die lung tissue is damaged and can stiffen. This makes pumping oxygen to the other vital organs much harder for the heart. As this process unfolds, fluids accumulate in the alveoli which causes a dry cough and makes breathing hard, which are the major symptoms of covid-19. When the virus keeps replicating the immune system keeps trying to fight of the inflammation which damages the cell of the alveoli more causing the alveoli to collapse and because the alveoli is where exchange of oxygen and carbon dioxide occurs {breathing}, the person wont be able to breathe by his/herself and would need help breathing using a ventilator. The virus mostly attacks the elderly, individuals with lung disease, respiratory issues {asthma}, smokers are also liable to die from the disease.