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ELECTRICAL ENGINEERING

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COVID 19

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. In December 2019 in Wuhan, China, and has resulted in an ongoing pandemic. The first confirmed case has been traced back to 17 November 2019. Traces of the virus have been found in wastewater that was collected from Milan and Turin, Italy, on 18 December 2019. As of 26 June 2020, more than 9.6 million cases have been reported across 188 countries and territories, resulting in more than 489,000 deaths. More than 4.8 million people have recovered.

COVID-19 spreads primarily when people are in close contact and one person inhales small droplets produced by an infected person (symptomatic or not) coughing, sneezing, talking, or singing. The WHO recommends 1 metre of social distance or 2 metres of social distance. People can transmit the virus without showing symptoms, but it is unclear how often this happens. People can become infected by touching a contaminated surface and then touching the face but on the surfaces the amount of active virus decreases over time until it can no longer cause infection, and surfaces are thought not to be the main way the virus spreads. In June 2020 a research was done to identify how the virus can enter the human body, after the research they discovered that after talking, coughing, sneezing the generated droplets may remain airborne.

COVID-19 is a disease which causes symptoms like fever, cough, loss of appetite, fatigue, shortness of breath, sputum production, and muscle and joint pains. Symptoms such as vomiting, and diarrhoea. Less common symptoms include sneezing, runny nose, sore throat, and skin lesions. Some cases in China initially presented with only chest tightness and palpitations. People are most infectious when they show symptoms, but may be infectious for up to two days before symptoms the

appears. They remain infectious an estimated seven to twelve days in moderate cases and an average of two weeks in severe cases. The Covid 19 affect the lungs because the virus accesses host cells via the enzyme angiotensin-converting enzyme 2 (ACE2), which is most abundant in type II alveolar cells of the lungs

The WHO has published several testing protocols for the disease. The standard method of testing is real-time reverse transcription polymerase chain reaction. The test is typically done on respiratory samples obtained by a nasopharyngeal swab, however, a nasal swab or sputum sample may also be used. Results are generally available within a few hours to two days. Blood tests can be used, but these require two blood samples taken two weeks apart, and results have little immediate value. Chinese scientists were able to isolate a strain of the coronavirus and publish the genetic sequence so laboratories across the world could independently develop polymerase chain reaction (PCR) tests to detect infection by the virus.

Covid 19 can be prevented by staying at home, avoiding crowded places, keeping distance from others, washing hands with soap and water often and for at least 20 seconds, practising good respiratory hygiene, and avoiding touching the eyes, nose, or mouth with unwashed hands . The government in every country also close every border and created an isolation centre for people affected with the virus for treatment. The government also inform everybody to wear nose mask and hand gloves.

In conclusion, Covid 19 is very dangerous which affect the lungs and by following the instruction given to us by the government we can avoid the virus and stay safe.