



## **What is COVID-19?**

COVID-19 is caused by the new coronavirus strain; SARS-CoV-2 first identified in 2019. Coronaviruses are a form of virus that causes disease among humans and animals. Some coronaviruses that affect animals can develop to cause disease in human beings. There are many forms of coronaviruses. Some forms of coronaviruses that cause illness in humans are the SARS-CoV; that cause severe acute respiratory syndrome, MERS CoV, that cause middle east respiratory syndrome etc.

COVID-19 is a communicable disease. It can spread from one person to another. They spread through droplets (coughing, sneezing, talking etc.) and minute virus particles. When a person comes in close contact to an infected person, there is a risk of their nose, mouth and eyes being exposed to droplets. Hence, large crowds in closed spaces poses an extremely high risk of transmission; because with little ventilation and close contact, the droplets tend to linger around. Although some have mild infection, others with comorbidities and low immunity can have a more severe infection.

### **Symptoms include:**

- fever,
- cough,
- loss of smell and taste,
- sore throat etc.
- Other symptoms include, headache,
- body pains,
- fatigue,
- diarrhea,
- nausea/vomiting etc.

## **COVID-19 Diagnosis**

COVID-19 can be diagnosed with a laboratory test. The incubation period is 2-14 days; although some can be asymptomatic. RT-PCR (Reverse Transcription- Polymerase Chain Reaction) is the gold standard in diagnosing COVID-19. The test is used for detecting the presence of genetic material for any pathogen; such as a virus. The sample is collected from the nose or throat where the virus gathers. The sample is then chemically treated in order to get only the RNA material and leave out the others. This RNA material will be the person's own and if infected, the virus's. Next, using the process of reverse transcription, the RNA is turned to DNA. Then there is an addition of complementary DNA strands to specific parts of viral transcribed DNA. Hence, if virus is present, then these complementary DNA strands attach themselves to the virus DNA. Some DNA fragments are added to create DNA strands, others are used for adding markers; which are later used to detect the virus. This is then added to the RT-PCR machine; which creates identical copies of the small portions of viral DNA that has been targeted. This cycle is then repeated. During this process, the markers in the DNA, produce a fluorescent light. If this fluorescent light exceeds a certain level, it confirms the presence of the virus.

## **Precautions**

- Wearing a mask in public places
- Maintaining social distance
- Maintaining hygiene- washing hands, using alcohol-based hand sanitizers
- Staying home
- Avoiding crowded places
- Avoiding public gatherings (weddings, parties, funerals etc.)
- Getting vaccinated
- To prevent transmission, quarantining oneself is essential
- Delaying non-essential travel
- Covering with elbow

## **COVID-19 Vaccines**

When vaccine is injected, it helps the body in developing antibodies, that help fight the coronavirus.

Vaccines can protect a person from developing severe infection. It is safe to get vaccinated.

Vaccination can help us in our fight against COVID-19. Vaccines can save lives.

## **Myths about COVID-19 Vaccine**

- Once you get vaccinated you can stop taking precautions.
- You can get COVID-19 from the vaccines
- Vaccine causes infertility
- Vaccines are dangerous
- I've got COVID-19 before, so I don't have to take the vaccine
- It is dangerous to take the vaccine if you are pregnant
- Vaccine alters or changes your DNA.
- COVID-19 vaccines were developed too fast and hence are not safe.

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