

2019 Novel Coronavirus (2019-nCoV)

April 27, 2020

Context: Outbreak of the corona pandemic throughout the world

- This virus gets its family name from a telltale series of spikes – tens or even hundreds of them – that circle its bloblike core like a crown, or corona.
- The clinical name for this novel coronavirus is actually SARS-CoV-2. It stands for severe acute respiratory syndrome coronavirus 2.
- It originated from a family of other viruses that cause respiratory diseases like severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS).
- Coronaviruses (CoVs), enveloped positive-sense RNA viruses, are characterized by club-like spikes that project from their surface, an unusually large RNA genome, and a unique replication strategy.
- If a person contracts the virus, the result is the disease called COVID-19. Being a respiratory virus, it's transmitted through respiratory droplets.
- Person-to-person contact is thought to be the main method of transmission for the SARS-CoV-2 virus
- Experts do believe it's possible that someone with a novel coronavirus infection could transmit it to others even if they don't show any symptoms, or have such mild symptoms that they don't really know they're sick, a person who has contracted the virus is most contagious when they're showing symptoms – and that's when they're the most likely to transmit the virus
- But someone may be able to pass on the virus even before they start to show symptoms of the disease itself. The symptoms may take anywhere from 2 to 14 days to show up after exposure to the virus.

- COVID-19 causes symptoms that are similar to those of other types of respiratory illnesses. Typical symptoms of COVID-19 include: Fever, cough, shortness of breath
- **Measures to be taken**
 - The WHO suggests staying at least 3 feet away from people who may be sick.
 - Washing hands frequently with soap and water for at least 20 seconds every time.
 - Use alcohol-based hand sanitizer that's at least 60 percent alcohol
 - Avoid touching face as it can easily transmit the virus from your hands to mouth, nose, or eyes without even realizing it.
 - Social distancing and social isolation
- Because the novel coronavirus is a new strain, it's unfamiliar to our immune systems. And there's not yet a vaccine for it
- The test involved in the detection is PCR test . PCR tests are used to directly detect the presence of an antigen, rather than the presence of the body's immune response, or antibodies. By detecting viral RNA, which will be present in the body before antibodies form or symptoms of the disease are present, the tests can tell whether or not someone has the virus very early on.'