#### What is COVID-19?

Corona Virus also known as Covid-19 is a deadly virus which is spread worldwide. It started in the city of Wuhan, China.

Most people infected with the COVID-19 virus experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness.

The best way to prevent and slow down transmission is by washing your hands or using an alcohol based rub frequently and not touching your face.

The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes, so it's important that you also practice respiratory etiquette (for example, by coughing into a flexed elbow).

At this time, there are no specific vaccines or treatments for COVID-19. However, there are many ongoing clinical trials evaluating potential treatments.

## Why is it known as COVID-19?

Viruses are named based on their genetic structure to facilitate the development of diagnostic tests, vaccines and medicines. Virologists and the wider scientific community do this work, so viruses are named by the International Committee on Taxonomy of Viruses (ICTV). COVID-19 which is a term for Corona virus started in 2019. It is actually not new to the world. It happened before in 2002 in UAE but people were soon cured by taking various precautions but its antidote is still not have been discovered.

#### What is it called a pandemic?

A pandemic is an outbreak is when an illness happens in unexpected high numbers. It may stay in one area or extend more widely. An outbreak can last days or years. Sometimes, experts consider a single case of a contagious disease to be an outbreak.

The World Health Organization (WHO) has described the novel coronavirus as a pandemic for the first time. This is because it has rapidly expanded across the globe in the months since it was first announced in China.

# A brief history on the origin of Corona

Scientists first identified a human coronavirus in 1965. Its symptom was common cold. Later that decade, researchers found a group of similar human and animal viruses and named them after their crown-like appearance.

Seven coronaviruses can infect humans. The one that causes SARS emerged in southern China in 2002 and quickly spread to 28 other countries. More than 8,000 people were infected by July 2003, and 774 died. A small outbreak in 2004 involved only four more cases. This coronavirus causes fever, headache, and respiratory problems such as cough and shortness of breath.

MERS started in Saudi Arabia in 2012. Almost all of the nearly 2,500 cases have been in people who live in or travel to the Middle East. This coronavirus is less contagious than its SARS cousin but more deadly, killing 858 people. It has the same respiratory symptoms but can also cause kidney failure

#### What is the 2019 corona virus?

In early 2020, a new virus began generating headlines all over the world because of the unprecedented speed of its transmission.

Its origins have been traced to a food market in Wuhan, China, in December 2019. From there, it's reached countries as distant as the United States and the Philippines.

The virus (officially named SARS-CoV-2) has been responsible for millions of infections globally, causing hundreds of thousands of deaths. The United States is the most affected country.

## <u>Genetic basis of Corona virus</u>

Coronaviruses are large, enveloped RNA viruses of both medical and veterinary importance. Interest in this viral family has intensified in the past few years as a result of the identification of a newly emerged coronavirus as the causative agent of severe acute respiratory syndrome (SARS). At the molecular level, employ a variety of unusual strategies coronaviruses to accomplish a complex program of gene expression. Coronavirus replication entails ribosome frameshifting during genome translation, the synthesis of both genomic and multiple sub genomic RNA species, and the assembly of progeny virions by a pathway that is unique among enveloped RNA viruses. Progress in the investigation of these processes has been enhanced by the development of reverse genetic systems, an advance that was heretofore obstructed by the enormous size of the coronavirus This review summarizes classical genome. both and contemporary discoveries in the study of the molecular biology of these infectious agents, with particular emphasis on the nature and recognition of viral receptors, viral RNA synthesis, and the molecular interactions governing virion assembly



## <u>Why has it grabbed so much</u> <u>attention?</u>

The world's headlines have been dominated by COVID-19 for about two months and as the virus continues to spread this wallto-wall coverage is likely to continue. At the time of writing, the US has banned travel from most of Europe and all six of CNN's top new stories focus on the virus, including headlines such as "Epidemiologist: This is just the tip of the iceberg" and "Bodies 'pile up' in morgue as Iran feels strain of coronavirus".

The World Health Organization (WHO) has aptly coined the term "infodemic" to describe the unconstrained spread of information. Could we even have reached a level of "information terrorism", where fearmongering – often only loosely based on facts – is terrifying readers, viewers and listeners across the globe?

This "infodemic" is a direct result of how information flows have changed over time. For most of our history, facts about events were relatively difficult for the public to access – buried in reports, press releases, interviews and academic articles. We relied on the media to collect facts and interpret them for us.

#### What are the symptoms?

Doctors are learning new things about this virus every day. So far, we know that COVID-19 may not initially cause any symptoms for some people. You may carry the virus for 2 days or up to 2 weeksTrusted Source before you notice symptoms.

Some common symptoms that have been specifically linked to COVID-19 include:

- $\checkmark$  shortness of breath
- $\checkmark$  having a cough that gets more severe over time
- $\checkmark$  a low-grade fever that gradually increases in temperature
- ✓ fatigue

#### Less common symptoms include:

- ✓ chills
- $\checkmark$  repeated shaking with chills
- $\checkmark$  sore throat
- ✓ headache
- $\checkmark$  muscle aches and pains
- $\checkmark$  loss of taste
- ✓ loss of smell

These symptoms may become more severe in some people.

Call emergency medical services if you or someone you care for have any of the following symptoms:

- $\checkmark$  trouble breathing
- $\checkmark$  blue lips or face
- $\checkmark$  persistent pain or pressure in the chest
- $\checkmark$  confusion
- ✓ excessive drowsiness

The Centers for Disease Control and Prevention (CDC) Trusted Source is still investigating the full list of symptoms.

#### <u>Precautions needed to be taken at</u> <u>home:</u>

- ✓ As much as possible, keep away from other people and pets in your home.
- ✓ Wear a cloth face covering (or face mask, if you have one) if they must be around other people. Cloth face coverings are for use only by people older than 2 years old who are not having trouble breathing. Do not leave a child alone while they're wearing a cloth face covering. To see how to put on and remove cloth face coverings and face masks, clean them, or make your own cloth face covering, check the CDC's guide.
- ✓ Cover coughs and sneezes with a tissue, throw the tissue away, and then wash their hands right away. Wash with soap and water for at least 20 seconds, or use alcohol-based hand sanitizer.
- ✓ If possible, stay in a bedroom and use a bathroom separate from other people in the home.
- ✓ Use separate dishes, glasses, cups, and eating utensils and not share these with other household members. After use, run them through the dishwasher or wash with very hot soapy water.
- ✓ Use separate bedding and towels and not share these with other household members.