



# Coronavirus Diseases: Prevention and Treatment

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## Abstract

The first coronavirus (infectious bronchitis virus) was quarantined in chicken embryos in 1937 with subsequent viral isolations in rodents, domestic animals, and humans. Coronaviruses are a family of viruses that can cause infections such as the severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). The seven coronaviruses are 229E, NL63, OC43, HKU1, MERS-CoV, SARS-CoV, SARS-CoV-2 that can infect people. There is currently no vaccine to prevent coronavirus disease also there no antiviral medication is suggested to treat COVID-19. The best way to inhibit infection is to avoid creature exposed to this virus.

**Keywords:** Corona viruses; Viral infection; COVID-19; MERS.

## 1. Introduction

Coronaviruses are a family of viruses that can cause infections such as the severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). In 2019, a new coronavirus was recognized as the cause of a disease outbreak in China. The virus is now identified as the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). T Cases of COVID-19 have been described in a growing number of countries, including the U.S. Public health groups, such as the World Health Organization (WHO) and the U.S., Centers for Disease Control and Prevention (CDC), are observing the situation and post updates on their websites. These groups have also issued recommendations for preventing and handling the illness. His syndrome it causes is called coronavirus disease 2019 (COVID-19) [1].

Among humans, coronavirus infections most often occur during the winter months and early mechanism. People regularly become ill with a cold due to a coronavirus and it may catch the identical one about 4 months later so coronavirus antibodies do not last for a long time. The antibodies for one strain of coronavirus may be unproductive against another one [2].

## 2. History

The first coronavirus (infectious bronchitis virus) was quarantined in chicken embryos in 1937 [3], with subsequent viral isolations in rodents, domestic animals, and humans. Scientists first found evidence of human coronaviruses (HCoV) in the 1960s in the noses of people with the common cold [1].

Coronaviruses are named for the crown-like spears on their surface. There are four chief sub-groupings of coronaviruses, well-known as alpha, beta, gamma, and delta.

Human coronaviruses were first recognized in the mid-1960s. The seven coronaviruses that can infect individuals are:

1. 229E (alpha coronavirus)
2. NL63 (alpha coronavirus)
3. OC43 (beta coronavirus)
4. HKU1 (beta coronavirus)
5. MERS-CoV (the beta coronavirus that causes Middle East Respiratory Syndrome, or MERS)
6. SARS-CoV (the beta coronavirus that causes severe acute respiratory syndrome, or SARS)
7. SARS-CoV-2 (the novel coronavirus that causes coronavirus disease 2019, or COVID-19)

People around the world commonly get diseased with human coronaviruses 229E, NL63, OC43, and HKU1 [4]. As a consequence, the number of coronaviruses predictable has increased rapidly of particular importance was the recent discovery of a new severe respiratory illness with renal failure (MERS) caused by a novel coronavirus (MERS-CoV) [5].

## 3. Symptoms of Human Coronaviruses

- runny nose
- sore throat

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- headache
- fever
- cough

Human coronaviruses can occasionally cause lower-respiratory tract illnesses, such as pneumonia or bronchitis. This is more common in people with cardiopulmonary disease, people with damaged immune systems, infants, and older adults [4].

## 4. Transmission of Coronaviruses

Common human coronaviruses usually spread from a diseased person to others through

- the air by coughing and sneezing
- adjacent personal contact, like touching or shaking hands
- touching an article or surface with the virus on it, then touching your mouth, nose, or eyes before washing your hands

In the United States, people usually get sick with common human coronaviruses in the fall and winter, but you can get sick at any time of the year. Young children are most likely to get infected, but people can have many infections in their lifetime [4].

## 5. Prevention

There is presently no vaccine to treat coronavirus disease 2019 (COVID-19). The best way to prevent sickness is to avoid being exposed to this virus. However, as a recap, CDC always recommends everyday defensive actions to help prevent the spread of respiratory diseases, including:

- Avoid close contact with people who are sick.
- Avoid touching your eyes, nose, and mouth.
- Stay home when you are sick.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- Clean and disinfect frequently touched objects and surfaces using a regular household cleaning spray or wipe.
- Follow CDC's recommendations for using a facemask.
- Wash your hands often with soap and water for at least 20 seconds, especially after going to the bathroom; before eating; and after blowing your nose, coughing, or sneezing [6].

## 6. Treatment

Currently, no antiviral medication is suggested to treat COVID-19. Treatment is focused at relieving symptoms and may include:

- Pain relievers
- Cough syrup or medication
- Rest
- Fluid intake

If your doctor thinks you can be treated at home, he or she may give you special instructions, such as to quarantine yourself as much as possible from family while you're ill and to stay home for a period of time [5].

## 7. Conclusion

The corona viruses can causes SARS and MERS. The seven type of corona virus that can infect people. It is communicated by air, close personal contact and touching an object or surface with the virus on it. There is currently no vaccine to treat coronavirus disease also there no antiviral medication is suggested to treat COVID-19 The best way to inhibit sickness is to avoid being exposed to this virus.

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**Figure-1.** Coronavirus

