

Review of the Novel Corona Virus

Koushik Barman¹, Ravi Varma², Dr. Gaurav Kumar Sharma³, Dr. Kaushal Kishore Chandrul⁴

¹Student, ²Guide, ³HOD, ⁴Principal,
^{1,2,3,4}Department of Pharmacy, Mewar University, Gangrar, Rajasthan, India

ABSTRACT

A novel coronavirus (CoV) is a new strain of coronavirus. The disease caused by the novel coronavirus first identified in Wuhan, China, has been named coronavirus disease 2019 (COVID-19) – ‘CO’ stands for corona, ‘VI’ for virus, and ‘D’ for disease. Formerly, this disease was referred to as ‘2019 novel coronavirus’ or ‘2019-nCoV.’ The COVID-19 virus is a new virus linked to the same family of viruses as Severe Acute Respiratory Syndrome (SARS) and some types of common cold.

KEYWORDS: Statistics, Symptoms, Covid 19 Testing, Types of test, Prevention, Treatment.

How to cite this paper: Koushik Barman | Ravi Varma | Dr. Gaurav Kumar Sharma | Dr. Kaushal Kishore Chandrul "Review of the Novel Corona Virus" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-5 | Issue-5, August 2021, pp.1494-1497, URL: www.ijtsrd.com/papers/ijtsrd45141.pdf



Copyright © 2021 by author (s) and International Journal of Trend in Scientific Research and Development Journal. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0>)



OVERVIEW

A novel coronavirus (CoV) is a new strain of coronavirus. The disease caused by the novel coronavirus first identified in Wuhan, China, has been named coronavirus disease 2019 (COVID-19) – ‘CO’ stands for corona, ‘VI’ for virus, and ‘D’ for disease.

Formerly, this disease was referred to as ‘2019 novel coronavirus’ or ‘2019-nCoV.’ The virus is transmitted through direct contact with respiratory droplets of an infected person (generated through coughing and sneezing), and touching surfaces

contaminated with the virus. The COVID-19 virus may survive on surfaces for several hours, but simple disinfectants can kill it. Symptoms can include fever, cough and shortness of breath. In more severe cases, infection

can cause pneumonia or breathing difficulties. More rarely, the disease can be fatal. After masks are worn, they must be used and disposed of properly to ensure their effectiveness and to avoid any increased risk of transmitting the virus.



Statistics

 India

Coronavirus Cases:

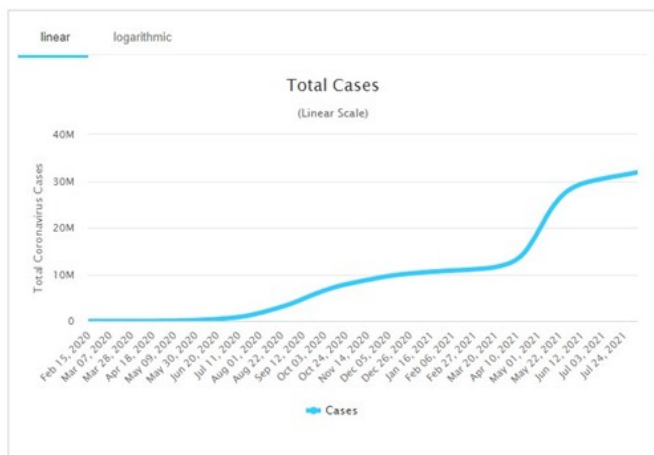
31,856,757

Deaths:

426,785

Recovered:

31,015,844



Symptoms

COVID-19 affects different people in different ways. Most infected people will develop mild to moderate illness and recover without hospitalization.

Most common symptoms:

- Fever
- Dry cough Tiredness

Other symptoms that are less common and may affect some patients include:

- Loss of taste or smell,
- Nasal congestion,
- Conjunctivitis (also known as red eyes)
- Sore throat,
- Headache,
- Muscle or joint pain,
- Different types of skin rash,
- Nausea or vomiting,
- Diarrheal,
- Chills or dizziness.

Symptoms of severe COVID-19 disease include:

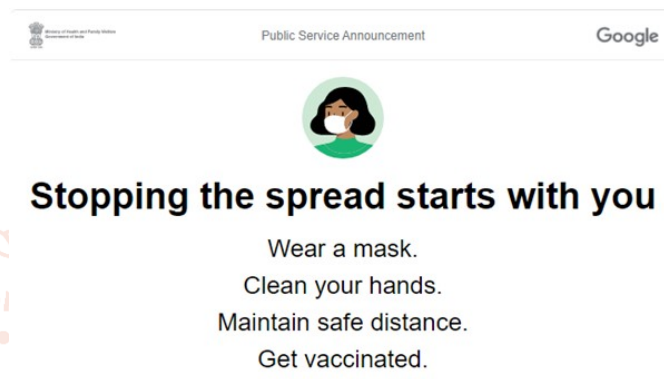
- Shortness of breath,
- Loss of appetite,
- Confusion,
- Persistent pain or pressure in the chest,
- High temperature (above 38 °C).

Other less common symptoms are:

- Irritability,
- Confusion,
- Reduced consciousness (sometimes associated with seizures),
- Anxiety,

- Depression,
- Sleep disorders,
- More severe and rare neurological complications such as strokes, brain inflammation, delirium and nerve damage.

People of all ages who experience fever and/or cough associated with difficulty breathing or shortness of breath, chest pain or pressure, or loss of speech or movement should seek medical care immediately. If possible, call your health care provider, hotline or health facility first, so you can be directed to the right clinic.



COVID-19 Testing

Protect yourself and others. Wear a mask, stay at least 6 feet from others, avoid crowds and poorly ventilated indoor spaces, and wash your hands often.

Types of tests

COVID-19 tests are available that can test for current infection or past infection.

- A viral test tells you if you have a current infection. Two types of viral tests can be used: nucleic acid amplification tests (NAATs) and antigen tests.
- An antibody test (also known as a serology test) might tell you if you had a past infection. Antibody tests should not be used to diagnose a current infection

Prevention

- Protect yourself and others around you by knowing the facts and taking appropriate precautions. Follow advice provided by your local health authority.
- To prevent the spread of COVID-19:
- Clean your hands often. Use soap and water, or an alcohol-based hand rub.
- Maintain a safe distance from anyone who is coughing or sneezing.
- Wear a mask when physical distancing is not possible.

- Don't touch your eyes, nose or mouth.
- Cover your nose and mouth with your bent elbow or a tissue when you cough or sneeze.
- Stay home if you feel unwell.
- If you have a fever, cough and difficulty breathing, seek medical attention.
- Calling in advance allows your healthcare provider to quickly direct you to the right health facility. This protects you, and prevents the spread of viruses and other infections.
- Masks
- Masks can help prevent the spread of the virus from the person wearing the mask to others. Masks alone do not protect against COVID-19, and should be combined with physical distancing and hand hygiene. Follow the advice provided by your local health authority.

What to do to keep yourself and others safe from COVID-19

- Maintain at least a 1-metre distance between yourself and others to reduce your risk of infection when they cough, sneeze or speak. Maintain an even greater distance between yourself and others when indoors. The further away, the better.
- Make wearing a mask a normal part of being around other people. The appropriate use, storage and cleaning or disposal are essential to make masks as effective as possible.
- Clean your hands before you put your mask on, as well as before and after you take it off, and after you touch it at any time.
- Make sure it covers both your nose, mouth and chin.
- When you take off a mask, store it in a clean plastic bag, and every day either wash it if it's a fabric mask, or dispose of a medical mask in a trash bin.
- Do not use masks with valves.

A. Variants in the United States

We are monitoring multiple variants; currently there are four notable variants in the United States:

B.1.1.7 (Alpha): This variant was first detected in the United States in December 2020. It was initially detected in the United Kingdom.

B.1.351 (Beta): This variant was first detected in the United States at the end of January 2021. It was initially detected in South Africa in December 2020.

P.1 (Gamma): This variant was first detected in the United States in January 2021. P.1 was initially identified in travelers from Brazil, who were tested during routine screening at an airport in Japan, in early January.

B.1.617.2 (Delta): This variant was first detected in the United States in March 2021. It was initially identified in India in December 2020.

These variants seem to spread more easily and quickly than other variants, which may lead to more cases of COVID-19. An increase in the number of cases will put more strain on healthcare resources, lead to more hospitalizations, and potentially more deaths.

So far, studies suggest that the current authorized vaccines work on the circulating variants. Scientists will continue to study these and other variants.

Treatments

Self-care

Asymptomatic cases, mild cases of COVID-19: Isolate yourself in a well ventilated room.

Use a triple layer medical mask, discard mask after 8 hours of use or earlier if they become wet or visibly soiled. In the event of a caregiver entering the room, both caregiver and patient may consider using N 95 mask.

Mask should be discarded only after disinfecting it with 1% Sodium Hypochlorite.





Take rest and drink a lot of fluids to maintain adequate hydration. Follow respiratory etiquettes at all times.

Frequent hand washing with soap and water for at least 40 seconds or clean with alcohol-based sanitizer.

Don't share personal items with other people in the household.

Ensure cleaning of surfaces in the room that are touched often (tabletops, doorknobs, handles, etc.) with 1% hypochlorite solution.

Monitor temperature daily.

Monitor oxygen saturation with a pulse oximeter daily.

Connect with the treating physician promptly if any deterioration of symptoms is noticed.

Instructions for caregivers:

Mask: The caregiver should wear a triple layer medical mask. N95 mask may be considered when in the same room with the ill person.

Hand hygiene: Hand hygiene must be ensured following contact with ill person or patient's immediate environment.

Exposure to patient/patient's environment: Avoid direct contact with body fluids of the patient, particularly oral or respiratory secretions. Use disposable gloves while handling the patient. Perform hand hygiene before and after removing gloves.

Patients must be in communication with a treating physician and promptly report in case of any worsening.

Continue the medications for other co-morbid illness after consulting the treating physician. Patients to follow symptomatic management for fever, running nose and cough, as warranted.

Patients may perform warm water gargles or take steam inhalation twice a day. When to seek immediate medical attention:

Difficulty in breathing

Dip in oxygen saturation ($SpO_2 < 94\%$ on room air)
Persistent pain/pressure in the chest
Mental confusion or inability to arouse

The Covid vaccine

COVID-19 is a bigger risk than vaccine side effects but there are safety nets in place to monitor the COVID-19 vaccines, and they are still working, as they should. The COVID-19 vaccines are proven overwhelmingly safe for most people

- Serum Institute of India. COVOVAX. Phase 1. This vaccine has reached Phase 3 trials. ...
- Zydus Cadila. ZyCoV-D. Phase 1. This vaccine has reached Phase 3 trials.
- Serum Institute of India. Covishield (Oxford/AstraZeneca formulation) Phase 1. Approved in 45 countries. ...
- Bharat Biotech. Covaxin. Phase 1. Approved in 9 countries

Conclusion

- India is now 6th largest confirmed cases of COVID-19 in the world.
- India has not reached the peak yet so as of now we cannot predict the approximate number of confirmed cases in India
- Recovery rate of India is also showing exponential behavior same as confirmed cases. But if cases increase beyond certain point then thing can go out of control which will affect the recovery rate.
- Gender information of most of the patients is not released by the government but whatever data is available shows number of infected males is more than that of females. This is may be due to more exposure/contact of males with outdoor world.
- Same as gender, age information is unavailable for most of the patients, but whatever data is available shows age and cases are normally distributed and 21-40 is the age bin which has been infected more

Reference

- [1] <https://www.google.co>
- [2] <https://www.who.int/>
- [3] <https://www.cdc.gov/c>
- [4] <https://www.unicef.org/>