

# COVID-19

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DR SWATI RAJAGOPAL

CONSULTANT- INFECTIOUS DISEASES

ASTER CMI HOSPITAL- BANGALORE



# Statistics : 3<sup>rd</sup> April 2020 : 19:22 hrs

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	Confirmed	Recovered	Death
<b>Worldwide</b>	<b>10,30,628</b>	<b>2,18,771</b>	<b>54,137</b>
<b>India</b>	<b>2,301</b>	<b>157</b>	<b>56</b>

# Introduction

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At the end of December 2019, Chinese public health authorities reported several cases of acute respiratory syndrome in Wuhan City, Hubei province, China. Chinese scientists soon identified a novel coronavirus as the main causative agent. The disease is now referred to as coronavirus disease 2019 (COVID-19), and the causative virus is called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It is a new strain of coronavirus that has not been previously identified in humans.

# Basic facts

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Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) is the name given to the 2019 novel coronavirus. COVID-19 is the name given to the disease associated with the virus. SARS-CoV-2 is a new strain of coronavirus that has not been previously identified in humans.

Coronaviruses are viruses that circulate among animals with some of them also known to infect humans. Bats are considered natural hosts of these viruses yet several other species of animals are also known to act as sources. For instance, Middle East Respiratory Syndrome Coronavirus (MERS-CoV) is transmitted to humans from camels, and Severe Acute Respiratory Syndrome Coronavirus-1 (SARS-CoV-1) is transmitted to humans from civet cats.

The concern about COVID-19 is that, unlike influenza, there is no vaccine and no specific treatment for the disease. It also appears to be more transmissible than seasonal influenza. As it is a new virus, nobody has prior immunity, which means that the entire human population is potentially susceptible to SARS-CoV-2 infection.

# Key facts

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While animals are believed to be the original source, the virus spread is now from person to person (human-to-human transmission). There is not enough epidemiological information at this time to determine how easily this virus spreads between people, but it is currently estimated that, on average, one infected person will infect between two and three other people.

The virus seems to be transmitted mainly via small respiratory droplets through sneezing, coughing, or when people interact with each other for some time in close proximity (usually less than one metre). These droplets can then be inhaled, or they can land on surfaces that others may come into contact with, who can then get infected when they touch their nose, mouth or eyes. The virus can survive on different surfaces from several hours (copper, cardboard) up to a few days (plastic and stainless steel). However, the amount of viable virus declines over time and may not always be present in sufficient numbers to cause infection.

The incubation period for COVID-19 (i.e. the time between exposure to the virus and onset of symptoms) is currently estimated to be between one and 14 days.

# Seasonality

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## Seasonality

The four coronaviruses that are endemic in human populations are responsible for 10–15% of common cold infections and display a marked winter seasonality in temperate climates, with a peak between December and April, but are hardly detected in the summer months.

The seasonality of coronaviruses might be driven, in part, by environmental conditions and host susceptibility, because coronaviruses are more stable under low and midrange relative humidity (20–50%) when the defence mechanisms of the airways are suppressed.

However, based on preliminary analyses of the COVID-19 outbreak in China and other countries, high reproductive numbers were observed not only in dry and cold districts but also in tropical districts with high absolute humidity, such as in Guangxi and Singapore.

There is no evidence to date that SARS-CoV-2 will display a marked winter seasonality, such as other human coronaviruses in the northern hemisphere, which emphasises the importance of implementing intervention measures such as isolation of infected individuals, workplace distancing, and school closures.

# Key facts

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## **When is a person infectious?**

The infectious period may begin one to two days before symptoms appear, but people are likely most infectious during the symptomatic period, even if symptoms are mild and very non-specific. The infectious period is now estimated to last for 7-12 days in moderate cases and up to two weeks on average in severe cases.

## **How severe is COVID-19 infection?**

Preliminary data from the EU/EEA (from the countries with available data) show that around 20-30% of diagnosed COVID-19 cases are hospitalised and 4% have severe illness. Hospitalisation rates are higher for those aged 60 years and above, and for those with other underlying health conditions.

# Key facts

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## **How are COVID-19 and influenza viruses similar?**

Firstly, COVID-19 and influenza viruses have a similar disease presentation. That is, they both cause respiratory disease, which presents as a wide range of illness from asymptomatic or mild through to severe disease and death. Secondly, both viruses are transmitted by contact, droplets and fomites. As a result, the same public health measures, such as hand hygiene and good respiratory etiquette (coughing into your elbow or into a tissue and immediately disposing of the tissue), are important actions all can take to prevent infection.

## **How are COVID-19 and influenza viruses different?**

The reproductive number – the number of secondary infections generated from one infected individual – is understood to be between 2 and 2.5 for COVID-19 virus, higher than for influenza.

For COVID-19, data to date suggest that 80% of infections are mild or asymptomatic, 15% are severe infection, requiring oxygen and 5% are critical infections, requiring ventilation. Those most at risk for severe influenza infection are children, pregnant women, elderly, those with underlying chronic medical conditions and those who are immunosuppressed. For COVID-19, our current understanding is that older age and underlying conditions increase the risk for severe infection. Mortality for COVID-19 appears higher than for influenza, especially seasonal influenza. The crude mortality ratio for COVID 19 (the number of reported deaths divided by the reported cases) is between 3-4%, the infection mortality rate (the number of reported deaths divided by the number of infections) will be lower. For seasonal influenza, mortality is usually well below 0.1%.

# Key facts

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## **What are the symptoms of COVID-19 infection**

Symptoms of COVID-19 vary in severity from having no symptoms at all (being asymptomatic) to having fever, cough, sore throat, general weakness and fatigue and muscular pain and in the most severe cases, severe pneumonia, acute respiratory distress syndrome, sepsis and septic shock, all potentially leading to death. Reports show that clinical deterioration can occur rapidly, often during the second week of disease.

## **Are some people more at risk than others?**

Elderly people above 70 years of age and those with underlying health conditions (e.g. hypertension, diabetes, cardiovascular disease, chronic respiratory disease and cancer) are considered to be more at risk of developing severe symptoms

# Key facts

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## **Are children also at risk of infection and what is their potential role in transmission?**

Children make up a very small proportion of reported COVID-19 cases, with about 1% of all cases reported being under 10 years, and 4% aged 10-19 years. Children appear as likely to be infected as adults, but they have a much lower risk than adults of developing symptoms or severe disease. There is still some uncertainty about the extent to which asymptomatic or mildly symptomatic children transmit disease.

## **Is there a treatment for the COVID-19 disease?**

There is no specific treatment or vaccine for this disease.

Healthcare providers are mostly using a symptomatic approach, meaning they treat the symptoms rather than target the virus, and provide supportive care (e.g. oxygen therapy, fluid management) for infected persons, which can be highly effective.

# Key facts

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## **How long does the virus survive in environment**

Recent publications have evaluated the survival of SARS-CoV-2 on different surfaces. The environmental stability of viable SARS-CoV-2 is up to 3 hours in the air post aerosolisation, up to 4 hours on copper, up to 24 hours on cardboard, and up to 2–3 days on plastic and stainless steel, albeit with significantly decreased titres.

## **Where can I get tested?**

If you are feeling ill with COVID-19 symptoms (such as fever, cough, difficulty breathing, muscle pain or general weakness),- contact your health care provider.

# COVID-19

Disease caused by the SARS-CoV-2 virus



## Novel coronavirus

Coronaviruses are viruses that **circulate among animals** but some of them are also known to affect humans.

The 2019 novel coronavirus was identified in China at the end of 2019 and is a new strain that has not previously been **seen in humans**.

## Symptoms

 **FEVER**

 **COUGH**

 **DIFFICULTY BREATHING**

 **MUSCLE PAIN**

 **TIREDNESS**



## Prevention

### When visiting affected areas

Avoid contact with sick people



Wash your hands with soap and water



If you develop cough, use a medical face mask



Wherever you travel apply general hygiene rules

## Transmission

VIA RESPIRATORY DROPLETS

**2–14** days  
estimated incubation period



# Prevention

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## **How can I avoid getting infected?**

The virus enters your body via your eyes, nose and/or mouth, so it is important to avoid touching your face with unwashed hands.

Washing of hands with soap and water for at least 20 seconds, or cleaning hands thoroughly with alcohol-based solutions, gels or tissues is recommended in all settings. It is also recommended to stay one metre or more away from people infected with COVID-19 who are showing symptoms, to reduce the risk of infection through respiratory droplets.

## **How can I avoid infecting others?**

Cough or sneeze into your elbow or use a tissue. If you use a tissue, dispose of it carefully after a single use

Wash your hands with soap and water for at least 20 seconds.

Stay one metre or more away from people to reduce the risk of spreading the virus through respiratory droplets.

If you feel unwell, stay at home. If you develop any symptoms suggestive of COVID-19, you should immediately call your healthcare provider for advice.

# Prevention

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## What is physical distancing and why and how should I do it?

Physical distancing aims to reduce physical contact between potentially infected people and healthy people, or between population groups with high rates of transmission and others with low or no level of transmission. The objective of this is to decrease or interrupt the spread of COVID-19.

Note that the term '**physical distancing**' means the same thing as the widely used term 'social distancing', but it more accurately describes what is intended, namely that people keep *physically* apart. Physical distancing measures might be implemented over an extended period and their success depends on ensuring that people maintain social contact – from a distance – with friends, family and colleagues. Internet-based communications and the phone are therefore key tools for ensuring a successful physical distancing strategy.

On a personal level, you can perform physical distancing measures by:

Voluntarily self-isolating if you know you have the virus that causes COVID-19, or if you have suggestive respiratory symptoms, or if you belong to a high-risk group (i.e. you are aged 70 years or more, or you have an underlying health condition).

# Guidelines- by MOHFW

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These measures can include:

The full or partial closure of educational institutions and workplaces;

Limiting the number of visitors and limiting the contact between the residents of confined settings, such as long-term care facilities and prisons;

Cancellation, prohibition and restriction of mass gatherings and smaller meetings;

Mandatory quarantine of buildings or residential areas;

Internal or external border closures;

Stay-at-home restrictions for entire regions or countries.

# Prevention

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## **What should I do if I develop symptoms?**

Do not panic : Consult your nearest health center- There are multiple clinics set up in private and government institutions across India : Testing can be done and advise will be given accordingly

## **Are face masks effective in protecting against COVID-19?**

If you are infected, the use of surgical face masks may reduce the risk of you infecting other people. On the other hand there is *no evidence* that face masks will effectively prevent you from becoming infected with the virus. In fact, it is possible that the use of face masks may even increase the risk of infection due to a false sense of security and increased contact between hands, mouth and eyes while wearing them. The inappropriate use of masks also may increase the risk of infection.

## **Am I protected against COVID-19 if I had the influenza vaccine this year?**

Influenza and the virus that causes COVID-19 are two very different viruses and the seasonal influenza vaccine will not protect against COVID-19.

# Prevention

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## **How long will this outbreak last? When will we see the peak?**

Any predictions about when the peak will come and how long the outbreak will last are purely speculative at this stage. As greater evidence emerges regarding the nature of the virus and the effectiveness of measures used to control the outbreak, predictions relating to the future course of COVID-19 will become more reliable.

## **Does hot weather prevent the virus spread ?**

We do not have scientific data : The virus appears to be transmitted even in hot environments suggesting that besides temperature- humidity and other environmental factors play a crucial role.

## **Do mosquitoes transmit the virus?**

The virus cannot be transmitted through bites.

# COVID-19



## How to minimise the spread of COVID-19?

Based on the current knowledge of COVID-19 and evidence available on other viral respiratory pathogens.

Simple measures can reduce the spread of the virus.

### 2 ENVIRONMENTAL MEASURES



Frequently clean used surfaces, clothes and objects



Minimise sharing objects



Ensure appropriate ventilation

### 1 PERSONAL PROTECTIVE MEASURES

Practice proper hand hygiene



Cough and sneeze into your elbow or a tissue. Throw it into a bin and wash your hands



Healthy people **do not** need to wear masks



Masks should be reserved for healthcare workers and those who care for ill persons at home.

### 3 SOCIAL DISTANCING MEASURES

Standing 1 metre away from a visibly symptomatic person



**Self-isolation** of individuals **with symptoms** of a respiratory infection is one of the most important measures for **reducing disease transmission** and limiting the spread of the virus in the community during an epidemic.

For travel advice or travel recommendations refer to official government advice.

# Covid 19 and Food

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## **1. What is the risk of COVID-19 infection from food products imported from affected areas?**

There has been no report of transmission of COVID-19 via food, and therefore there is no evidence that food items imported into India in accordance with the applicable animal and public health regulations pose a risk for the health of individuals in relation to COVID-19.

## **What is the risk of COVID-19 infection from animals or animal products imported from affected areas?**

There is no evidence that any of the animals or animal products authorised for entry into India pose a risk to the health of citizens as a result of the presence of COVID-19.

# COVID 19 and Pets

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## **What is the risk of COVID-19 infection from contact with pets and other animals in the EU?**

Current research links COVID-19 to certain types of bat as the original source, but does not exclude the involvement of other animals. Several types of coronaviruses can infect animals and can be transmitted to other animals and people. There is no evidence that companion animals (e.g. dogs or cats) pose a risk of infection to humans.

# Food Advise- COVID 19

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Proper nutrition and hydration are vital. People who eat a well-balanced diet tend to be healthier with stronger immune systems and lower risk of chronic illnesses and infectious diseases.

## **Eat fresh and unprocessed foods every day**

Eat fruits, vegetables, legumes (e.g. lentils, beans), nuts and whole grains (e.g. unprocessed maize, millet, oats, wheat, brown rice or starchy tubers or roots such as potato, yam, taro or /and foods from animal sources (e.g. meat, fish, eggs and milk).

## **Drink enough water every day**

Water is essential for life. It transports nutrients and compounds in blood, regulates your body temperature, gets rid of waste, and lubricates and cushions joints.

Drink 8–10 cups of water every day.

# Food advise

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## **Eat moderate amounts of fat and oil**

Consume unsaturated fats (e.g. found in fish, avocado, nuts, olive oil, soy, canola, sunflower and corn oils) rather than saturated fats (e.g. found in fatty meat, butter, palm and coconut oils, cream, cheese, ghee and lard).

Choose white meat (e.g. poultry) and fish, which are generally low in fat, rather than red meat.

Avoid processed meats because they are high in fat and salt.

Where possible, opt for low-fat or reduced-fat versions of milk and dairy products.

## **Eat less salt and sugar**

When cooking and preparing food, limit the amount of salt and high-sodium condiments (e.g. soy sauce and fish sauce).

Limit your daily salt intake to less than 5 g (approximately 1 teaspoon), and use iodized salt.

Avoid foods (e.g. snacks) that are high in salt and sugar.

# Food advise

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## **Avoid eating out-**

Including food – being ordered online [ if possible]

## **Ayurvedic- homeopathy**

There has to be a scientific evidence to be used in medical care

# Apartments – COVID 19

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## Measures taken by apartment complexes

1. Identify the list of suspectable population
2. List of health care providers of the apartment complex- identify the nearest hospital/ facility
3. Avoid gatherings including walks in common areas , avoid gatherings in clubs.Avoid using swimming pools and gym facilities
4. Only walking the Pet is allowed
5. Reduce the security staff in complexes- and ensure safety standards are maintained. { work in shifts]
6. All deliveries – to be collected at gates

# Apartments – COVID 19

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7. Use thermal screening check – before entering complex
8. Visitors not to attend- unless there is a medical need- Meeting outside complex.
9. To have the list of individuals who have travelled- overseas and within country in the last 1 month- Keep a list and they should inform if they fall sick .
10. Certain states : have used the quarantine stamp: Those individuals should adhere to government rules- and if they get to common areas the quarantine squad should be intimated.
11. Use of domestic help – subject to review and consideration.
12. Delivery of essentials outside the complex.
13. Help one and another- especially senior citizens
14. Do not stigmatise individuals with suspect COVID 19 or who have the infection or who have recovered. We help one another .Counselling and support
15. If someone is unwell- so not stay at home- You may pose a risk to your loved ones too- Get urself checked by a health care provider

# Apartments – COVID 19

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16. Instill Handwashing facility or advise people to use hand rub before entering apartment.

17. Sanitise common areas like railings and lifts. Avoid crowding in lifts

Below are the list of helpline numbers for COVID 19

**Central Helpline Number for corona-virus: - +91-11-23978046**

S. No	Name of the State	Helpline Nos.
1	Andhra Pradesh	0866-2410978
2	Arunachal Pradesh	9436055743
3	Assam	6913347770
4	Bihar	104
5	Chhattisgarh	104
6	Goa	104
7	Gujarat	104
8	Haryana	8558893911
9	Himachal Pradesh	104
10	Jharkhand	104
11	Karnataka	104
12	Kerala	0471-2552056
13	Madhya Pradesh	0755-2527177
14	Maharashtra	020-26127394
15	Manipur	3852411668
16	Meghalaya	108
17	Mizoram	102
18	Nagaland	7005539653
19	Odisha	9439994859
20	Punjab	104
21	Rajasthan	0141-2225624
22	Sikkim	104
23	Tamil Nadu	044-29510500
24	Telangana	104
25	Tripura	0381-2315879
26	Uttarakhand	104
27	Uttar Pradesh	18001805145
28	West Bengal	1800313444222, 03323412600,