



# **CORONAVIRUS DISEASE 2019 (COVID-19) ADVISORY**



**VALLABHBHAI PATEL CHEST INSTITUTE**

University of Delhi, Delhi

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Coronavirus disease 2019 (COVID-19) is a potentially severe acute respiratory infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus was identified as the cause of an outbreak of pneumonia of unknown cause in Wuhan City, Hubei Province, China, in December 2019. The clinical presentation is that of a respiratory infection with a symptom severity ranging from a mild common cold-like illness, to a severe viral pneumonia leading to acute respiratory distress syndrome that is potentially fatal.

The International Committee on Taxonomy of Viruses has confirmed SARS-CoV-2 as the name of the virus owing to the virus's genetic similarity to the SARS-CoV virus, but taking into account that there may be differences in disease spectrum and transmission. The World Health Organization has confirmed COVID-19 (a shortened version of coronavirus disease 2019) as the name of the disease that SARS-CoV-2 infection causes. Prior to this, the virus and/or disease was known by various names including novel coronavirus (2019-nCoV), 2019-nCoV, or variations on this.

### Case Definition for COVID-19

#### *Suspected case requiring diagnostic testing*

**Laboratory testing** for COVID-19 should be performed for suspected cases according to the following criteria, based on the updated WHO case definition:

- 1) a patient with acute respiratory tract infection (sudden onset of at least one of the following:

cough, fever, shortness of breath) AND with no other aetiology that fully explains the clinical presentation AND with a history of travel or residence in a country/area reporting local or community transmission\* during the 14 days prior to symptom onset;

OR

- 2) a patient with any acute respiratory illness AND having been in close contact with a confirmed or probable COVID-19 case in the last 14 days prior to onset of symptoms;

OR

- 3) A patient with severe acute respiratory infection (fever and at least one sign/symptom of respiratory disease (e.g., cough, fever, shortness breath)) AND requiring hospitalisation (SARI) AND with no other aetiology that fully explains the clinical presentation.

However, once local or community transmission has been reported in the country or area, all patients presenting with symptoms of acute respiratory infection in primary care or the accident and emergency department of a hospital (first contact with the healthcare system) will be considered as suspected cases.

### *Probable Case*

A suspected case for whom testing for virus causing COVID-19 is inconclusive (according to the test results reported by the laboratory) or for whom testing was positive on a pan-coronavirus assay.

### *Confirmed case*

A person with laboratory confirmation of virus causing COVID-19 infection, irrespective of clinical signs and symptoms

## *Close Contact*

Close contact of a probable or confirmed case is defined as:

- A person living in the same household as a COVID-19 case;
- A person having had direct physical contact with a COVID-19 case (e.g. shaking hands);
- A person having unprotected direct contact with infectious secretions of a COVID-19 case (e.g. being coughed on, touching used paper tissues with a bare hand);
- A person having had face-to-face contact with a COVID-19 case within 2 metres and > 15 minutes;
- A person who was in a closed environment (e.g. classroom, meeting room, hospital waiting room, etc.) with a COVID-19 case for 15 minutes or more and at a distance of less than 2 metres;
- A healthcare worker (HCW) or other person providing direct care for a COVID-19 case, or laboratory workers handling specimens from a COVID-19 case without recommended personal protective equipment (PPE) or with a possible breach of PPE;
- A contact in an aircraft sitting within two seats (in any direction) of the COVID-19 case, travel companions or persons providing care, and crew members serving in the section of the aircraft where the index case was seated (if severity of symptoms or movement of the case indicate more extensive exposure, passengers seated in the entire section or all passengers on the aircraft may be considered close contacts).

The epidemiological link may have occurred within a 14-day period before the onset of illness in the case under consideration.

## How Does COVID-19 Spread?

The virus that causes COVID-19 probably emerged from an animal source, but is now spreading from person to person. The virus is thought to spread mainly between people who are in close contact with one another (within about 6 feet) through respiratory droplets produced when an infected person coughs or sneezes. It also may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads.

(Source: CDC NCOV 19 Factsheet)

## How can I help to protect myself ?

- People can help protect themselves from respiratory illness with everyday preventive actions.
- Avoid close contact with people who are sick.
- Follow the culture of 'Namaste'
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Wash your hands often with soap and water for at least 20 seconds or Use an alcohol-based hand sanitizer.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- Clean and disinfect frequently touched objects and surfaces.

**Recommended type of personal protective equipment (PPE) to be used in the context of COVID-19 disease, according to the setting, personnel and type of activity**

Setting	Target personnel or patients	Activity	Type of PPE or procedure
<b>Healthcare facilities</b>			
<b>Inpatient facilities</b>			
Patient room	Healthcare workers	Providing direct care to COVID-19 patients.	Medical mask Gown Gloves Eye protection (goggles or face shield).
		Aerosol-generating procedures performed on COVID-19 patients.	Respirator N95 or FFP2 standard, or equivalent. Gown Gloves Eye protection Apron
	Cleaners	Entering the room of COVID-19 patients.	Medical mask Gown Heavy duty gloves Eye protection (if risk of splash from organic material or chemicals). Boots or closed work shoes
	Visitors <sup>b</sup>	Entering the room of a COVID-19 patient	Medical mask Gown Gloves
Other areas of patient transit (e.g., wards, corridors).	All staff, including healthcare workers.	Any activity that does not involve contact with COVID-19 patients.	No PPE required
Triage	Healthcare workers	Preliminary screening not involving direct contact <sup>c</sup>	Maintain spatial distance of at least 1 m. No PPE required
	Patients with respiratory symptoms.	Any	Maintain spatial distance of at least 1 m. Provide medical mask if tolerated by patient.
	Patients without respiratory symptoms.	Any	No PPE required
Laboratory	Lab technician	Manipulation of respiratory samples.	Medical mask Gown Gloves Eye protection (if risk of splash)
Administrative areas	All staff, including healthcare workers.	Administrative tasks that do not involve contact with COVID-19 patients.	No PPE required

<b>Outpatient facilities</b>			
Consultation room	Healthcare workers	Physical examination of patient with respiratory symptoms.	Medical mask Gown Gloves Eye protection
	Healthcare workers	Physical examination of patients without respiratory symptoms.	PPE according to standard precautions and risk assessment.
	Patients with respiratory symptoms.	Any	Provide medical mask if tolerated.
	Patients without respiratory symptoms.	Any	No PPE required
	Cleaners	After and between consultations with patients with respiratory symptoms.	Medical mask Gown Heavy duty gloves Eye protection (if risk of splash from organic material or chemicals). Boots or closed work shoes
Waiting room	Patients with respiratory symptoms.	Any	Provide medical mask if tolerated.  Immediately move the patient to an isolation room or separate area away from others; if this is not feasible, ensure spatial distance of at least 1 m from other patients.
	Patients without respiratory symptoms.	Any	No PPE required
Administrative areas	All staff, including healthcare workers.	Administrative tasks	No PPE required
Triage	Healthcare workers	Preliminary screening not involving direct contact <sup>c</sup>	Maintain spatial distance of at least 1 m. No PPE required
	Patients with respiratory symptoms.	Any	Maintain spatial distance of at least 1 m. Provide medical mask if tolerated.
	Patients without respiratory symptoms.	Any	No PPE required
<b>Community</b>			
Home	Patients with respiratory symptoms.	Any	Maintain spatial distance of at least 1 m. Provide medical mask if tolerated, except when sleeping.
	Caregiver	Entering the patient's room, but not providing direct care or assistance.	Medical mask
	Caregiver	Providing direct care or when handling stool, urine or waste from COVID-19 patient being cared for at home.	Gloves Medical mask Apron (if risk of splash)
	Healthcare workers	Providing direct care or assistance to a COVID-19 patient at home	Medical mask Gown Gloves Eye protection
Public areas (e.g., schools, shopping malls, train stations).	Individuals without respiratory symptoms	Any	No PPE required

<b>Points of entry</b>			
<b>Administrative areas</b>	<b>All staff</b>	<b>Any</b>	<b>No PPE required</b>
<b>Screening area</b>	<b>Staff</b>	<b>First screening (temperature measurement) not involving direct contact</b>	<b>Maintain spatial distance of at least 1 m. No PPE required</b>
	<b>Staff</b>	<b>Second screening (i.e., interviewing passengers with fever for clinical symptoms suggestive of COVID-19 disease and travel history).</b>	<b>Medical mask Gloves</b>
	<b>Cleaners</b>	<b>Cleaning the area where passengers with fever are being screened.</b>	<b>Medical mask Gown Heavy duty gloves Eye protection (if risk of splash from organic material or chemicals). Boots or closed work shoes</b>
<b>Temporary isolation area</b>	<b>Staff</b>	<b>Entering the isolation area, but not providing direct assistance.</b>	<b>Maintain spatial distance of at least 1 m. Medical mask Gloves</b>
	<b>Staff, healthcare workers</b>	<b>Assisting passenger being transported to a healthcare facility.</b>	<b>Medical mask Gown Gloves Eye protection</b>
	<b>Cleaners</b>	<b>Cleaning isolation area</b>	<b>Medical mask Gown Heavy duty gloves Eye protection (if risk of splash from organic material or chemicals). Boots or closed work shoes</b>
<b>Ambulance or transfer vehicle</b>	<b>Healthcare workers</b>	<b>Transporting suspected COVID-19 patients to the referral healthcare facility.</b>	<b>Medical mask Gowns Gloves Eye protection</b>
	<b>Driver</b>	<b>Involved only in driving the patient with suspected COVID-19 disease and the driver's compartment is separated from the COVID-19 patient.</b>	<b>Maintain spatial distance of at least 1 m. No PPE required</b>
		<b>Assisting with loading or unloading patient with suspected COVID-19 disease.</b>	<b>Medical mask Gowns Gloves Eye protection</b>
		<b>No direct contact with patient with suspected COVID-19, but no separation between driver's and patient's compartments.</b>	<b>Medical mask</b>
	<b>Patient with suspected COVID-19 disease.</b>	<b>Transport to the referral healthcare facility.</b>	<b>Medical mask if tolerated</b>
	<b>Cleaners</b>	<b>Cleaning after and between transport of patients with suspected COVID-19 disease to the referral healthcare facility.</b>	<b>Medical mask Gown Heavy duty gloves Eye protection (if risk of splash from organic material or chemicals). Boots or closed work shoes</b>



# CORONAVIRUS: THE FACTS

**1** Virus enters through the nose and mouth

**2** It then finds a 'host cell' in the respiratory system

**3** The host cell then bursts and infects other cells nearby



## SYMPTOMS



Runny nose



Cough



Sore throat



High temperature



## HOW IT SPREADS

Novel coronavirus first spread to humans from an animal – thought to be a snake – at the South China Seafood Wholesale Market.

The virus is transmitted between humans in droplets from coughing and sneezing and touching or shaking hands.



## HOW IT CAN KILL

Most victims of the virus die from complications including pneumonia and swelling in the lungs.

The virus also causes swelling in the respiratory system, which can make it hard for the lungs to pass oxygen into the bloodstream – leading to organ failure and death.

Severe pneumonia can kill people by causing them to 'drown' in the fluid flooding their lungs.

# HOW CORONAVIRUS CAN KILL

## SYMPTOMS

The coronavirus attacks cells in the respiratory system

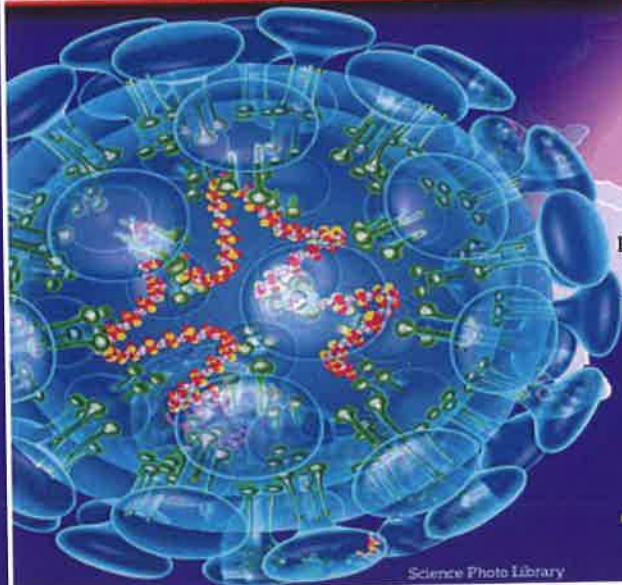
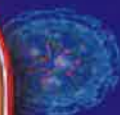
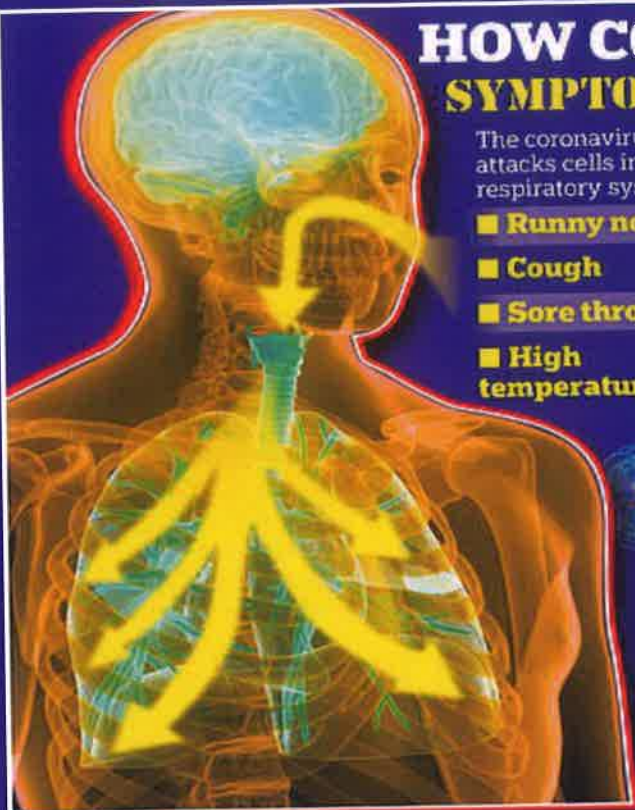
- Runny nose
- Cough
- Sore throat
- High temperature

## SPREAD

- Novel coronavirus first spread to humans from an animal – thought to be a snake – at the South China Seafood Wholesale Market.
- The virus is transmitted between humans in droplets from coughing and sneezing and touching or shaking hands.
- It enters humans through the nose and mouth, then finds a 'host cell' in the respiratory system, such as one in the nose. The host cell then bursts and other nearby cells in the body are infected with the virus.

## DEATH

- Most victims die from complications including pneumonia and from swelling in the lungs.
- Severe pneumonia can kill people by causing them to 'drown' in the fluid flooding their lungs.
- The virus also causes swelling in the respiratory system, which can make it hard for the lungs to pass oxygen into the bloodstream – leading to organ failure and death.

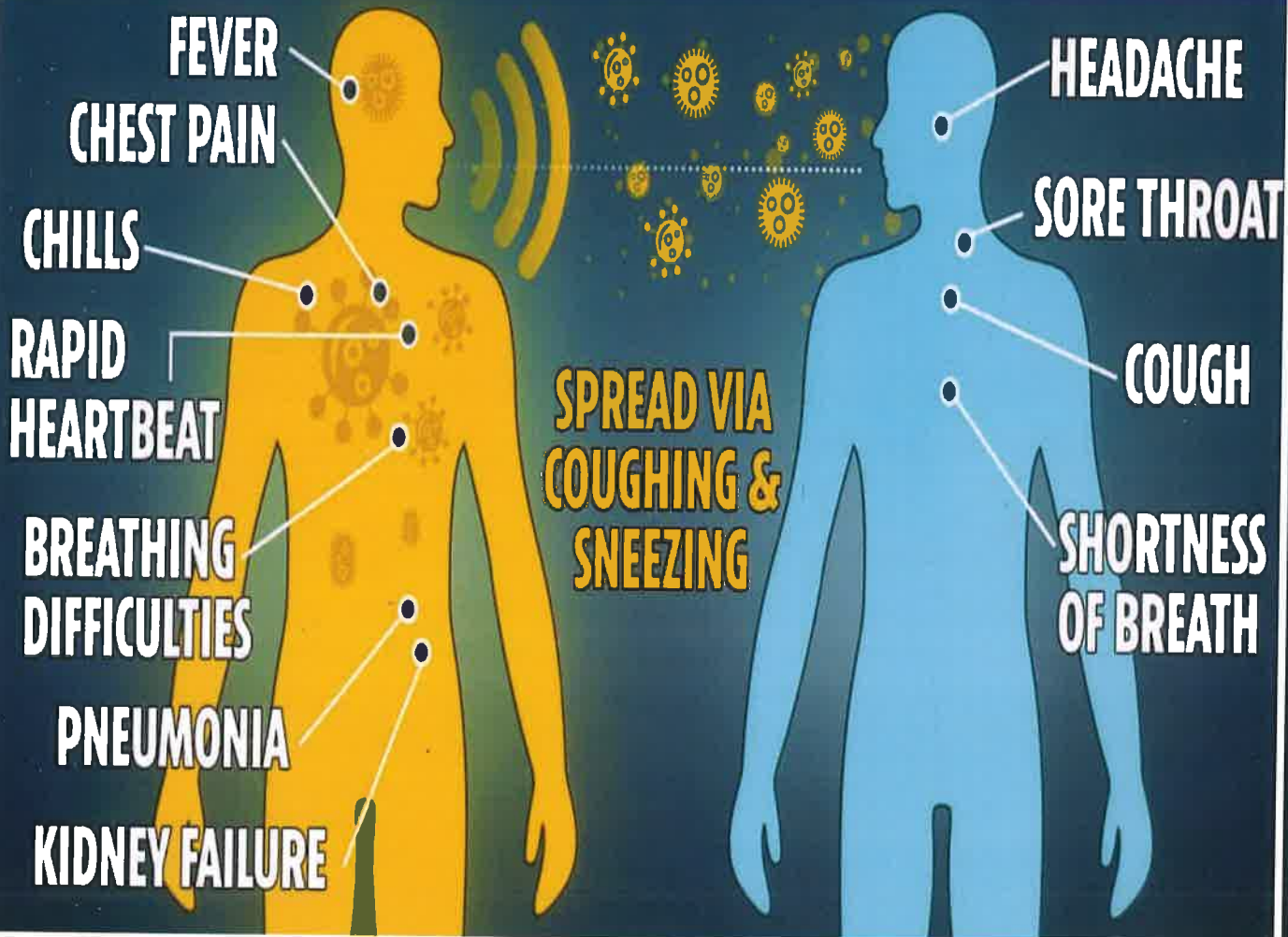


**AFFECTED AREAS**



# CHINA CORONAVIRUS

The symptoms of 2019-nCoV and how it spreads





**For further information:**

**+91-11-23978046**

**24 x 7 Union Health Ministry  
Call Centre / Helpline for any technical query on #nCov  
or email at [ncov2019@gmail.com](mailto:ncov2019@gmail.com)**