

## Administrative Divisions of China



## COVID-19 – The Basics

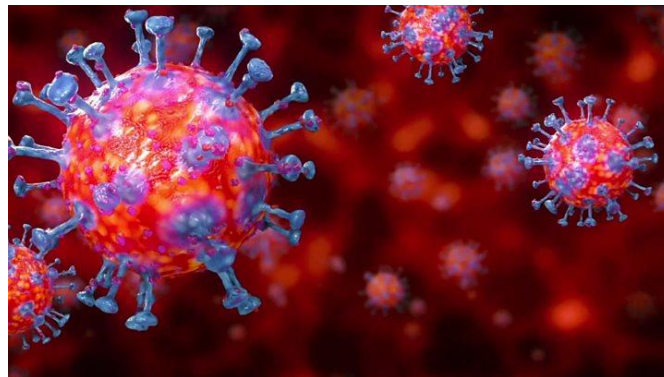
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April 2020



# COVID-19

Why is it called COVID-19?

- CO = Corona
- VI = Virus
- D = Disease
- 19 = Year the virus came about



# Coronavirus and (COVID-19)

## What You Need to Know

- In this course you will learn about:
  - What viruses are
  - What coronavirus is
  - How your immune system tackles viruses
  - How to reduce the risk of catching or passing on COVID-19
  - How to wash and sanitise your hands

# The Differences Between a Virus and Bacteria

- Coronavirus is a virus, and so behaves differently from bacteria. It is important to understand these differences

# Viruses

Viruses are microscopic particles that are **much smaller than bacteria**. Some are infectious agents which replicate inside the cells of living organisms including, bacteria, people, animals and plants. They cannot survive outside these organisms and **die off on most surfaces in a few days**. Some disease-causing viruses can pass from animals to people and people to animals.

Viruses can change (mutate) over time, so while it is possible to develop a vaccine for many viruses, these vaccines can become less effective over time.

**Viruses cannot be killed by antibiotics**. Specific anti-viral medication is required for each virus strain

# Bacteria

Bacteria are microscopic organisms which live in and around us

Some are very useful, such as the ones involved in human digestion and making cheese. Others are harmful, such as food poisoning bacteria.

Bacteria need food, warmth and time to multiply, and many of these can be killed by antibiotics.

# How Our Bodies Respond

The defence system used by your body to fight disease is called the immune system. It has many ways of battling diseases caused by viruses.

# Expelling the Infection

The immune system will often try to expel an infective agent from the immune system through:

- Creating mucus
- Coughing and sneezing
- Creating pus
- Vomiting
- Diarrhoea



# Fevers

Your immune system can also cause your body's temperature to rise. This is called a fever and is designed to kill an infective agent and prevent it from replicating or multiplying.

# Developing Immunity

When an organism's immune system defeats a virus, it can be left with immunity against that virus, meaning you cannot be infected again. However, this does not happen with all viruses.

# Weaker Immune Systems

While young adults in general have a strong immune system, some people have less effective immune systems than others. These include:

- The **very young**
- The **very old**
- People who are **already ill**
- **Expectant mothers**

These groups of people can suffer more serious symptoms when contracting a virus.

# What is Coronavirus?

Coronaviruses are a large group of pathogenic viruses that cause several respiratory diseases, including:

- The common cold
- SARS (Severe Acute Respiratory Disease)
- MERS (Middle East Respiratory Syndrome)
- COVID-19 (Corona Virus Disease 2019)

The newly discovered virus causing COVID-19 is SARS-CoV-2

# Origin

- COVID-19 originated in Wuhan, China around October 2019. The source of the virus seems to be related to the wet market in Wuhan.



# How Does it Spread?

COVID-19 is mainly spread by large respiratory droplets from an infected person **coughing** or **sneezing**. The risk is increased the closer you are to an infected person and the longer you are in contact.

Indirect transfer results from **touching a contaminated surface** and then touching your mouth, nose or eyes.

It is likely that a “carrier“, i.e, a person infected but showing no visible symptoms may spread the disease.

Spread is most likely when large numbers of people meet or where contaminated air is recirculated.

# Symptoms

The symptoms of COVID-19 range from mild to severe. The most common symptoms are:

- Fever
- Tiredness
- Dry, persistent cough
- Breathing difficulties
- Bad sore throat



In some cases diarrhoea has been reported as an early symptom

# Symptoms.. Continued

Symptoms usually appear 2 to 14 days after exposure to the virus, although cases with a longer incubation period have been reported occasionally.

Children are least likely to show symptoms or only have mild symptoms. Grandparents are recommended to limit contact with their grandchildren for this reason.



# How Dangerous is COVID-19?

Most people who are ill recover in two weeks although those with more serious symptoms are likely to take at least 6 weeks to recover.

Older people over 70 and those with underlying health conditions (heart disease, diabetes, high blood pressure, cancer and chronic lung disease) or people who are immunocompromised are likely to experience more serious symptoms and may develop viral pneumonia.

The average mortality rate is 3%, although the mortality rate for the over 80s is 15%, and 0.2% for those under 40.

# Treatment

COVID-19 is a virus, and so cannot be treated with antibiotics. And, because it is new there is currently **no vaccine**. As such, our best form of defence is to protect ourselves and to minimise exposure.



# How Can I Protect Myself?

Here are some simple tips to protect yourself and others from the virus.

These controls also apply to other respiratory infections including flu, the common cold and norovirus.

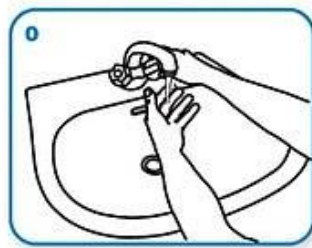
1. Wash Your Hands
2. Maintain Social Distancing
3. Protect Others From You
4. Stay Safe With Food
5. Other Precautions

# 1. Wash Your Hands

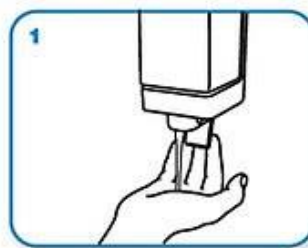
Strict hand hygiene is essential

Washing your hands regularly reduces the risk of transferring the virus to your nose or mouth.

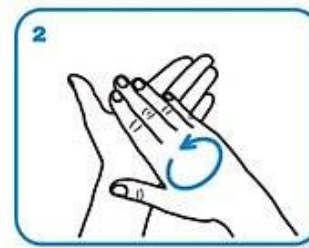
Your hands should be thoroughly washed using warm water and soap for at least 20-seconds, frequently throughout the day.



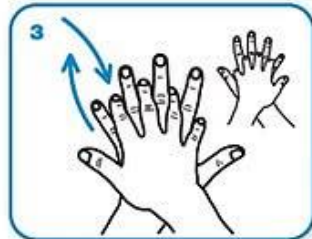
Wet hands with water



apply enough soap to cover all hand surfaces.



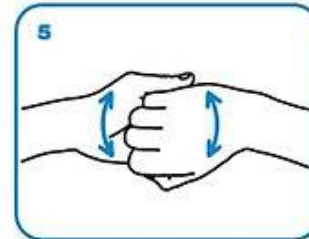
Rub hands palm to palm



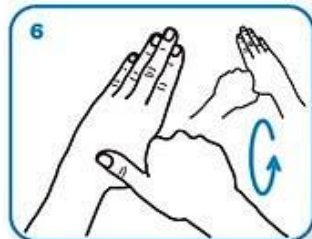
right palm over left dorsum with interlaced fingers and vice versa



palm to palm with fingers interlaced



backs of fingers to opposing palms with fingers interlocked



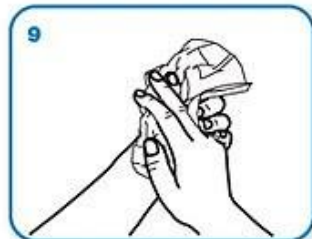
rotational rubbing of left thumb clasped in right palm and vice versa



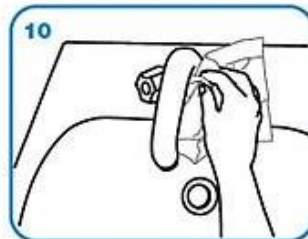
rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa.



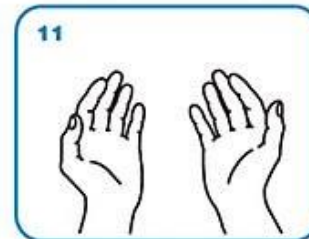
Rinse hands with water



dry thoroughly with a single use towel



use towel to turn off faucet



...and your hands are safe.

## 2. Maintain Social Distancing

The best way to prevent the spread is to **avoid contact** with other people. Also avoid:

- Public **transport** and all but essential **travel**
- Meetings and **events** with large numbers of people
- Social gatherings
- Shaking hands, hugging or kissing when meeting someone

**Limit group numbers to 2-people** and maintain a **separation of at least 2 metres**

### 3. Protect Others From You

It is always preferable to avoid contaminating the hands so, for example, **coughing or sneezing into the shoulder or inside of the elbow.**

However, if using a tissue, because of the presence of mucus, remember your hands and the tissue will be contaminated. Discard the tissue in the toilet or a foot-operated lined bin, wash your hands or use a 70% alcohol-based hand sanitiser.

### 3. Protect Others From You... Cont.

**Self-isolate at home for 14-days** if you have been in contact with a confirmed case, or have returned from a town or country that is deemed very high risk (because of many cases)

It is also recommended that those over 70 or with underlying conditions self-isolate for their own protection during an epidemic in the country in which they live



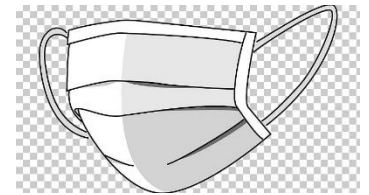
## 4. Stay Safe With Food

Although viruses do not multiply in food, it is not recommended to eat food which may have been contaminated by an infected person touching it or sneezing on it. For this reason:

- **Do not purchase unprotected, displayed, ready-to-eat food** such as bread, cakes and sweets that may have been contaminated by an infected person
- **Thoroughly wash fruits and vegetables**, and preferably purchase pre-packed
- Do not share food or utensils
- Try to **pay online or contactless** and avoid cash

# 5. Other Precautions

**Masks, gloves** and other personal protective equipment (PPE) are recommended for healthcare workers and people nursing infected friends or relatives



FFP3, FFP2 and N95 masks are most effective, but 3-ply surgical masks are recommended for those at lower risk, e.g., cleaners who have no patient contact. Masks must be well fitted and put on and taken off correctly. After removal and safe disposal of masks hands must be washed

## 5. Other Precautions.... Cont.

Ensure **good ventilation** indoors. Air-conditioning filters need to be clean and effective with regular servicing

Keep all hand-contact **surfaces clean and disinfected** throughout the day



# For More Information



**Centers for Disease  
Control and Prevention**  
National Center for  
Health Statistics





<https://www.anchor-hygiene-services.com>

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