



Covid-19: how is coronavirus spread?

We're learning more about the new coronavirus (SARS-CoV-2) every day. So what do we know about how it's being spread, and what steps can you take to protect yourself?

You should take action if:

- **You have been to mainland China, Thailand, Japan, Republic of Korea, Hong Kong, Taiwan, Singapore, Malaysia or Macau and have symptoms of cough or fever or shortness of breath within two weeks of returning;**

or

- **You have been in contact with someone with a confirmed case of coronavirus, or have been to Wuhan or Hubei province in the last two weeks, even if you feel entirely well.**

If either of the above applies to you:

- Stay indoors and avoid all possible contact with other people.
- Call the KEMH on 28000 and advise them of your recent travel or contact.
- Follow the advice given to you and do not leave your home until you have been given advice by a clinician.
- Do not use a taxi or public transport if you are advised to go to hospital.
- Do not visit the hospital/GP directly- always call for advice first. **Prevent transmission of the infection to others.**

The new coronavirus, SARS-CoV-2, is responsible for a new respiratory disease, Covid-19. Across the world there have been cases of Covid-19, mainly in China. New cases are being detected daily and the disease continues to spread worldwide.

So, do we all need to start wearing surgical masks and carrying hand sanitiser? We take a look at how SARS-CoV-2 spreads and what you can do to protect yourself.

Are the symptoms of Covid-19 different from colds or flu?

Doctors have now had a chance to study a large number of infected people to find out which symptoms are most common in SARS-CoV-2 infection and how you might tell them apart from other viruses that affect the airways, including colds and flu.

What this study tells us is that:

If you don't have a fever, you're unlikely to be infected (although a small number of people can be infected, and pass the virus on, without any noticeable symptoms).

Runny nose and sneezing are not typical features of SARS-CoV-2 infection.

The proportion of infected people with the following symptoms of SARS-CoV-2 infection is:

- Fever - 98%.
- Cough - 76%.
- Shortness of breath - 55%.
- Muscle ache or tiredness - 44%.
- Coughing up sputum - 28%.
- Headache - 8%.
- Coughing up blood - 5%.



How does Coronavirus Covid-19 spread?

We're not exactly sure how SARS-CoV-2 is spread; as the virus only appeared in December, there isn't enough evidence to explain exactly how it's transmitted. But this new virus is part of the coronavirus family which includes the common cold and SARS. So we can take what we know about those viruses and apply it to the new virus where relevant.

Similar viruses are spread by cough and sneeze droplets. The fact that some people have caught coronavirus from someone who had no symptoms suggests breathing in someone's cough or sneeze droplets directly isn't the only way to catch the virus.

That leaves the theory that the virus can be picked up from surfaces where it's landed. We're also not sure how long the virus survives outside the body. Most of the time, the amount of infectious virus on any contaminated surface will significantly reduce within a day, and even more within two days.

However, this depends on various factors such as the type of surface, exposure to sunlight, temperature and humidity and exposure to cleaning products. There's no doubt that regular hand washing is one of the best ways to protect yourself against a host of infections, including coronavirus.

There's no evidence that the virus is being passed on from post or packages from China.

How can I reduce my risk of catching the virus?

Sales of medical face masks are going into overdrive, but these masks are actually not very effective in preventing this virus. They are useful in clinical settings like hospitals but there isn't evidence that they are beneficial for widespread disease prevention. This is because the masks have to be worn correctly, changed frequently, removed correctly and disposed of safely to be effective.

So what can you do to reduce your risk of Covid-19?

- Carry tissues at all times and use them to cover your mouth and nose when you sneeze. Bin the tissue (preferably in a bin with a lid) and wash your hands or use hand sanitiser. If a tissue isn't available, cough or sneeze into your elbow rather than your hands.
- Wash your hands frequently and properly. This means using the World Health Organization recommended handwashing method, hot water and soap. If you can't wash your hands, use a hand sanitiser and wash your hands at the earliest opportunity.
- Avoid touching your face, especially your mouth, eyes and nose, with hands that haven't been washed.
- Avoid contact with people who are unwell.

When should you isolate yourself?

If you suspect that you have Covid-19, you should **not** attend your GP clinic or the hospital. You should stay indoors and call 28000 for advice if:

- You've been to mainland China, Thailand, Japan, Republic of Korea, Hong Kong, Taiwan, Singapore, Malaysia or Macau

And

- have symptoms of cough or fever or shortness of breath within two weeks of returning;

Or

- You have been in contact with someone with a confirmed case of coronavirus, even if you feel entirely well.



When you ring the hospital:

When you ring the hospital, inform them of your recent travel or contact with a confirmed case and any symptoms.

In some cases, this virus can progress to serious illness including pneumonia and severe breathing problems.

If you are asked to attend the hospital, follow all advice given to you by the clinical team and do not use public transport to get there.

You may not be asked to attend reception but another area and if this is the case please follow the advice.

If you have been asked to attend the KEMH for assessment you will be met by a member of the clinical team on arrival.

They will explain to you how you will be assessed and where this will be done.

If a clinician suspects coronavirus, they will organise for nose, throat and deeper respiratory samples to be tested in the UK.

You will be treated in isolation, you will not be allowed visitors and those treating you will wear protective gear to prevent them catching the virus.

Please note, if you are well enough to stay at home, you will be sent back to your house to self-isolate there and support will be provided via regular telephone follow-up sessions.

There is no treatment for SARS-CoV-2 but symptoms can often be managed. Many patients worldwide have been able to clear the virus and be discharged.

What is contact-tracing?

Each person with a confirmed case of coronavirus will be questioned in detail about their contact with other people and recent movements (such as transport or places they've visited). This is called contact-tracing. It's used by clinicians to establish possible further transmission of disease.

Those who have been in touch with a carrier of the virus are being contacted and some are being considered for self-isolation. This means that they will be asked to isolate themselves at home until it is clear that they aren't going to get ill, which may take up to two weeks.

Contact with a carrier is described as physical contact or spending fifteen minutes within 6 feet (2 metres) of them. For existing cases, this has so far included bar staff, people sitting nearby on a plane and a handful of GP practice patients.

If you are asked to self-isolate, you should remain at home and not go to work, school or public areas for 14 days. This means not leaving your house, including going to the shops to get food or taking children to school. Where possible, have friends, family members or delivery services carry out errands for you. Limit all contact with other people for two weeks, as this is the incubation period identified for the virus to date.

Protect others from getting sick

When coughing and sneezing **cover mouth and nose** with flexed elbow or tissue

Throw tissue into closed bin immediately after use

Clean hands with alcohol-based hand rub or soap and water after coughing or sneezing and when caring for the sick

World Health Organization

