

Patient information from BMJ

Last published: May 05, 2020

COVID-19 (coronavirus)

This leaflet is about the COVID-19 (coronavirus) outbreak that began in China in late 2019. The World Health Organization (WHO) has declared the outbreak a pandemic. This means that it has spread across the world.

This virus can cause a severe lung infection, and it can cause death. You can use our information to talk with your doctor if you are concerned about COVID-19.

What is COVID-19?

COVID-19 is a disease caused by a type of virus called a coronavirus. This is a common type of virus that affects both animals and humans. Coronaviruses often cause symptoms like those of the common cold. But sometimes they can cause more serious infections.

The coronavirus that causes COVID-19 is a new type of coronavirus. Most of the first people affected had links to a seafood and live animal market in Wuhan City, Hubei Province, China. This suggests that this new coronavirus might have developed as a combination of human and animal coronaviruses.

The virus has now spread to over 100 countries. The US, Spain, Italy, France, the UK, Germany and Turkey have reported the most cases.

How do people catch COVID-19?

COVID-19 is able to spread from person to person. The virus seems to spread when people cough or sneeze, and when people touch objects and surfaces that have the virus on them. The virus can survive for 24 hours on cardboard and for three days on stainless steel and plastic. Infected people can spread this virus even if they don't have any symptoms yet.

You are more likely to catch the infection if:

- you live in, or have travelled to, an area where COVID-19 has been reported
- you have been in close contact with someone who has COVID-19
- you are having treatment for cancer
- you are older
- you are male

What are the symptoms?

It's thought that people can have the virus for up to 14 days without having any symptoms. This time before symptoms develop is called the incubation period.

Most people who catch COVID-19 will have an illness like a bad cold or flu. Some people will have a more severe illness, like pneumonia. You're more likely to have a severe illness if you are older, if you smoke, or if you have certain other health problems. These include high blood pressure, diabetes, severe obesity, a weaker immune system, receiving an organ transplant, and diseases affecting the heart, lungs, liver or kidneys. Children seem to be infected less frequently than adults. Most children who catch COVID-19 have had close contact with an infected person.

The most common symptoms of COVID-19 are:

- fever
- coughing
- shortness of breath
- loss of sense of smell
- reduced sense of taste
- aches and pains
- feeling tired
- diarrhoea
- feeling nauseous or vomiting, and
- abdominal (tummy) pain.

Less common symptoms can include:

- loss of appetite
- coughing up a lot of phlegm
- sore throat
- confusion
- dizziness
- blocked or runny nose
- conjunctivitis (red or watery eyes)
- headache
- skin rashes, and
- coughing up blood.

COVID-19 can also cause sepsis. This is when the body's immune system reacts badly to an infection and attacks the body. It affects about 5 in 100 people with COVID-19. The symptoms of sepsis include:

- fever
- a fast heartbeat
- confusion
- not needing to urinate as much as usual, and
- mottled, patchy skin.

There have been reports of COVID-19 causing a severe illness in children, with a fever lasting more than five days, a rash, swollen glands in the neck, red fingers or toes and dry, cracked lips. This is very rare but if you have concerns about your child, it's very important to speak to a doctor as soon as possible.

As you can see, many of the less serious symptoms of COVID-19 are similar to those of a bad cold or flu. So it can be hard to diagnose COVID-19 without testing.

If your doctor thinks that you might have COVID-19, you might need some tests, such as collecting a sample from your nose or mouth, blood tests, a chest x-ray, or another type of scan of your chest called a CT (computed tomography) scan.

Some people who are seriously ill with COVID-19 can develop problems with their kidneys, liver, heart or brain. If this happens, you might need more tests and extra care.

Pregnant and breastfeeding women

We don't know for certain whether the virus can pass from a mother who is infected to her baby in the womb, or to a baby through breastfeeding. The symptoms of COVID-19 during pregnancy are the same as in people who are not pregnant. If you are pregnant and you develop symptoms, you should contact your doctor straight away. You might need regular ultrasound scans during your pregnancy if you have had COVID-19. And you and your baby might need extra monitoring during labour and after giving birth.

Some countries, such as the UK, recommend that pregnant women should follow strict social distancing measures.

Prevention

You can take measures to reduce your risk of catching the infection. These include:

- washing your hands often with soap and water for at least 20 seconds, especially after being in a public place. If soap and water are not available, use an alcohol-based hand sanitiser containing at least 60% alcohol
- avoiding touching your eyes, nose and mouth with unwashed hands
- cleaning and disinfecting frequently touched surfaces every day, including counter tops, phones, light switches, handles and door knobs
- avoid close contact with people who are sick. The recommended distance between people varies between countries. For example, 2 metres (6 feet) is recommended in the US and UK.

You should avoid all non-essential travel to the worst affected countries. Some countries have introduced complete travel bans. If you have to travel to a country or region that is badly affected, you are advised to:

- avoid close contact with anyone who has symptoms of a chest or throat infection, such as a fever or cough
- wash your hands often, especially after direct contact with people
- avoid eating raw or undercooked animal products
- avoid close contact with live or dead farm or wild animals.

You should follow any national or regional policies on social distancing. Depending on where you live, this may include:

- cancelling or limiting the size of public gatherings
- · not attending schools and universities
- not visiting cafes, bars, restaurants, and other businesses
- working from home if possible
- only leaving the house for essential journeys, for example to buy food or medicine
- not letting your pet interact with people and animals outside your household. At this time, there is no evidence that pets and other animals can spread COVID-19 but caution is advised. Cats can become infected with coronavirus after contact with people who have COVID-19. Scientists are carrying out research in this area.

If you become ill, you should:

- stay home and avoid contact with other people
- seek medical care right away. But call ahead to your doctor or emergency department and tell them about your symptoms
- not travel while you are unwell
- cover your mouth and nose with a tissue or your sleeve (not your hands) when coughing
 or sneezing, then put the tissue into the bin
- wash your hands often with soap and water for at least 20 seconds, especially after coughing, sneezing, blowing your nose or being in a public place. If soap and water are not available, use an alcohol-based hand sanitiser containing at least 60% alcohol
- limit contact with pets and other animals. At this time, there is no evidence that pets and other animals can spread COVID-19 but caution is advised. Cats can become infected with coronavirus after contact with people who have COVID-19.

Some people wear medical masks to try to protect themselves against the infection. Recommendations about wearing masks vary between countries. The World Health Organization recommends that you should wear a mask if you are a healthcare worker or if you are caring for someone with COVID-19 at home. If you choose to wear a mask, you should wash your hands with soap and water, or use an alcohol-based hand sanitiser, before putting on the mask. You will still need to wash your hands often and thoroughly while wearing the mask.

Travel restrictions and policies

Travel restrictions and other quarantine measures have been introduced to try to stop the spread of the virus. Many countries advise against all non-essential travel and many flights have been cancelled. Some countries have arranged for all their citizens to leave the worst affected areas and to be quarantined for about two weeks on their return. The US government has also suspended travel from many European countries for the time being. Travel advice is changing rapidly and you should check the latest advice from the government in your country before planning a trip.

Many countries have introduced other measures to try to slow down the spread of the virus. For example, people have been asked to work from home if possible, and some countries have closed schools and other public places.

What treatments work?

There is no cure for COVID-19. A vaccine is being developed, but it will be some time before it is available. Different medicines are being tested to see whether they can help patients with COVID-19. The research is in the early stages, so these medicines are normally only given as part of a clinical trial. In the US, a drug called remdesivir may be used in patients who have severe COVID-19.

Another treatment is being developed from the blood of people who have recovered from COVID-19. Their blood contains proteins called antibodies, which can stick to the virus that causes COVID-19 and help to fight the infection. This treatment is called convalescent plasma.

Hospital treatment

The treatment for someone with COVID-19 is the same as for pneumonia or any other serious viral chest infection.

If you are treated in hospital, the treatment will consist of:

- rest
- making sure you get plenty of fluids, possibly through an IV (intravenous) drip
- medication to lower fever and reduce pain, if needed
- oxygen, if you need it, and
- close monitoring.

You might also be given antibiotics to begin with, in case you have a bacterial infection. But if testing shows that you have a viral infection, the antibiotics will be stopped, as antibiotics don't work against viruses.

People with severe symptoms might be treated in an intensive care unit (ICU). If you need to be treated in intensive care, your treatment might also include:

a tube passed through your mouth to your windpipe, called an endotracheal tube, and

a ventilator to support your breathing.

Some people being treated in hospital might also need treatment for sepsis.

Home treatment

In most countries, people who are seriously ill would probably be isolated and treated in hospital.

But if someone has mild symptoms of suspected COVID-19, they can probably be looked after at home until they can be tested.

For example, in the UK, people who have symptoms are advised not to go to hospital right away, but to stay at home and contact their health authorities, and to follow their advice. This will help stop the spread of the virus.

The guidance for looking after them at home is as follows:

- They should be looked after in a well ventilated room by themselves, and should stay in that room as much as possible, so that they don't spread the infection.
- The number of people who look after the ill person should be limited to as few as possible.
- Ideally, anyone looking after the ill person should be in good health.
- If you wear a medical mask while looking after someone with symptoms, change it for a
 new one if it comes into contact with their bodily fluids.
- Wash your hands thoroughly after touching the ill person. You might want to wear disposable gloves, such as latex gloves.
- Dispose carefully of any tissues the person uses.
- Don't share anything like towels or bedclothes with the ill person.
- Carefully wash any plates, drinking glasses and cutlery after they use it.
- Regularly wipe and disinfect any surfaces the person touches regularly, such as bedside tables.
- Clean toilet and bathroom surfaces regularly.
- Clean all clothes, bedclothes, and towels used by the ill person at 60 to 90° C.
- The ill person should limit contact with pets and other animals. At this time, there is no evidence that pets and other animals can spread COVID-19 but caution is advised. Cats can become infected with coronavirus after contact with people who have COVID-19. Scientists are carrying out research in this area too.
- Keep taking any prescribed medications, unless your doctor recommends that you stop.

The advice might change as we find out more about this virus and how it spreads.

If you are looking after someone who might have COVID-19 at home, your whole household might need to stay in isolation for up to 14 days, to reduce the risk of passing on the infection. If you are not sure what to do, contact your doctor for advice.

What will happen?

It's not possible to say what will happen to someone infected with COVID-19. The outcome can vary. What we know so far is that:

- the infection is most likely to be serious in older people with existing long-term health problems. But most people with COVID-19 don't become seriously ill
- about 80 in 100 people with COVID-19 have a mild illness
- about 20 in 100 people develop more severe symptoms
- most people who become ill are middle aged and older. But some young adults have become very ill as well. Children seem much less likely than adults to become ill or to be badly affected, but some children do become very ill
- the virus affects men and women in roughly equal numbers, but men seem more likely to have severe symptoms
- over 3.5 million cases have been reported worldwide
- over 1 million people have already recovered
- over 240,000 people have died.

The best thing you can do is to follow the advice about travel restrictions, other prevention measures and about what to do if you feel ill. This will help to protect you and the people around you.

During the COVID-19 pandemic, doctors have noticed that fewer people are coming to hospital with serious illnesses like heart attacks or cancers. If you feel unwell, even if you don't think you have COVID-19, it is very important to get help. Hospitals are still open for other emergencies.

Looking after your mental health

It's normal to feel worried about coronavirus. This is an uncertain time and you might be feeling bored, lonely, anxious, frustrated or low. It's important to remember that, for most people, these feelings will pass. Here are some things that you can do to look after your mental health during the coronavirus pandemic:

- stay connected with friends and family
- talk about your worries
- carry on doing things you enjoy
- keep on getting support for your physical and mental health difficulties, if possible. Lots
 of healthcare providers are able to offer phone or video appointments.
- eat healthy meals and drink enough water
- exercise regularly
- try not to drink too much alcohol
- try to maintain a regular sleeping pattern

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