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 be a combination of human and animal coronaviruses.

The virus has now spread around the world. The US, India, Brazil, the UK and Russia are the countries with the most confirmed cases. The US, Brazil, India, Mexico, and Russia are the countries with the most deaths.

How do people catch COVID-19?

COVID-19 is able to spread from person to person, usually through the air. The virus spreads most easily when people cough or sneeze. It can also spread when people touch objects and surfaces that have the virus on them.

The virus can survive for up to 24 hours on cardboard and for up to 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 get 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
COVID-19 (coronavirus)

- you are having treatment for cancer
- you are older
- you are male
- you are obese (very overweight)
- you have chronic kidney disease.

Research in some countries, including the US, has found that people of black and Asian origin are more likely than white people to become infected and to have severe symptoms.

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.

Some people who get COVID-19 don’t get any symptoms at all. But many will have an illness like a bad cold or flu. Some people will have a more severe illness, like pneumonia.

About 80 in every 100 people with symptoms will have a mild or moderate illness, 15 in 100 people will have a severe illness and 5 in 100 people will have a very severe (critical) illness.

You’re more likely to have a severe illness if:

- you are older
- you live in a nursing home or care home
- you are male
- you are obese
- you are a smoker
- you have high blood pressure
- you have diabetes
- you have cardiovascular disease (a condition affecting your heart or your blood vessels: for example, heart attack, stroke, heart failure, angina)
- you have a long-lasting condition that affects your lungs, such as asthma or chronic obstructive pulmonary disease (COPD)
- you have non-alcoholic fatty liver disease
- you have cancer
- you have had an organ transplant
- you are recovering from surgery.

The most common symptoms of COVID-19 are:

- fever
- coughing
COVID-19 (coronavirus)

- shortness of breath
- loss of sense of smell, and
- reduced sense of taste

Less common symptoms can include:

- aches and pains
- feeling tired
- diarrhea
- feeling nauseous or vomiting
- abdominal (tummy) pain
- 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
- chilblaines, and
- coughing up blood.

Children seem to be infected less frequently than adults. Most children who get COVID-19 have had close contact with an infected person. So far, less than 5 in every 100 infections have been in children.

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, blood, heart, or brain. If this happens, you might need more tests and extra care.
COVID-19 (coronavirus)

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 right 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 the birth.

Some countries recommend that pregnant women should follow strict social distancing measures.

Prevention

You can take measures to reduce your risk of being infected with COVID-19. 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 sanitizer containing at least 60 percent 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.

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:

• canceling 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
COVID-19 (coronavirus)

- 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 after contact with people who have COVID-19. Scientists are doing 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 sanitizer containing at least 60 percent alcohol
- limit contact with pets and other animals.

Most experts and governments now strongly recommend them in some settings: for example, in indoor public areas, such as shops, and on public transportation.

The World Health Organization advises that you should wear a mask if you are a healthcare worker or if you are caring for someone with COVID-19 at home, or when social distancing is difficult.

If you choose to wear a mask, you should wash your hands with soap and water, or use an alcohol-based hand sanitizer, before putting on the mask. You will still need to wash your hands often and thoroughly while wearing the mask.

The chance of the infection spreading from food products or packaging shipped over a period of days or weeks is very small.

It is very unlikely that you can catch COVID-19 from food. But you should follow good hygiene and preparation practices when handling and eating raw fruit, leafy salads, and vegetables.

This means washing fresh produce to help to remove any contamination on the surface and peeling the outer layers or skins of certain fruits and vegetables.

Vitamin D

Vitamin D is important in keeping your immune system strong and preventing infections. We can't yet say for certain if it helps prevent COVID-19. But there is some evidence that it helps prevent chest infections.

Many people don't get enough vitamin D, especially in the winter months. This is because we get most of our vitamin D from sunlight on our skin. So some sun exposure on most days
COVID-19 (coronavirus)

is important. But remember: too much sun can cause skin cancer, so it's important to avoid burning.

You might want to think about whether you get enough vitamin D and whether a daily vitamin D supplement could help you. This is especially important in the winter months, and if you spend a long time indoors because of lockdown rules.

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 canceled.

Travel advice can change rapidly and you should check the latest advice where you live before planning a trip.

What treatments work?

There is no cure for COVID-19. Vaccination programs are under way, but it will take many months for most people to be vaccinated.

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.

A drug called remdesivir may be used in patients who have severe COVID-19. Remdesivir is a type of drug called an antiviral, which means that it is used to fight viruses. Other drugs are being studied to see if they might be useful.

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 the 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.
COVID-19 (coronavirus)

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 the hospital might also need treatment for sepsis.

**Home treatment**

People who are seriously ill will probably be isolated and treated in the hospital. But if someone has mild symptoms of suspected COVID-19, they can probably be looked after at home until they can be tested.

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 silverware 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 140° F.
- 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 doing research in this area.
- 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.

**Recovery and long-lasting symptoms**

Most people recover quickly from COVID-19. But about 10 in 100 people will have symptoms that last longer than 3 weeks. And some people’s symptoms will last for months. You might have heard the term “long covid” used to describe symptoms that go on for a long time.
These long-lasting symptoms are more likely to happen if your symptoms were severe to begin with. But they can happen to people of any age who have had the coronavirus. These symptoms can come and go, so that you have good and bad days.

The most common ongoing symptoms seem to be:

- coughing
- low-grade fever, and
- fatigue.

Other, less common ongoing symptoms can include:

- shortness of breath
- pain, including chest pain, headaches, or just general aches and pains
- rashes
- upset stomach
- problems with memory and concentration, and
- mental health problems, such as posttraumatic stress disorder (PTSD).

If you have severe ongoing symptoms, your doctor might suggest tests, such as blood and urine tests to look for infections, or x-rays.

It might be that these symptoms will ease or disappear given time and rest. But we don’t know enough about covid yet to be sure what is likely to happen.

If you have been treated in the hospital for severe COVID-19, your doctor should arrange for any ongoing treatment that you need. But even if you didn’t need hospital treatment, you can still have long-lasting symptoms. Talk to your doctor about what help might be available.

Mental health issues affect many people who have suffered with COVID-19. For example, many people struggle with stress, anxiety, and PTSD. If you feel that you need help, talk to your doctor, and to family and friends.

**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 or moderate illness
- about 20 in 100 people develop more severe symptoms
- about 263 million confirmed cases have been reported worldwide
- about 5.2 million people have died.
COVID-19 (coronavirus)

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 the 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.

If you usually do a lot of exercise, you should rest for at least two weeks after recovering from COVID-19 or testing positive for coronavirus. You should speak to your doctor about when you can start exercising again.

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: for example, by phone or via the internet
- talk about your worries
- carry on doing things you enjoy
- keep on getting support for your physical and mental health difficulties, if possible. Many healthcare providers 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.

The patient information from BMJ Best Practice from which this leaflet is derived is regularly updated. The most recent version of Best Practice can be found at bestpractice.bmj.com. This information is intended for use by health professionals. It is not a substitute for medical advice. It is strongly recommended that you independently verify any interpretation of this material and, if you have a medical problem, see your doctor.

Please see BMJ's full terms of use at: bmj.com/company/legal-information. BMJ does not make any representations, conditions, warranties or guarantees, whether express or implied, that this material is accurate, complete, up-to-date or fit for any particular purposes.

© BMJ Publishing Group Ltd 2021. All rights reserved.