

What is Covid-19 - the virus causing the illness that started in Wuhan?

It is a member of the coronavirus family that has never been encountered before. Like other coronaviruses, it has come from animals. Many of those initially infected either worked or frequently shopped in the Huanan seafood wholesale market in the centre of the Chinese city, which also sold live and newly slaughtered animals.

Have there been other coronaviruses?

New and troubling viruses usually originate in animal hosts. Ebola and flu are other examples, and severe acute respiratory syndrome (Sars) and Middle Eastern respiratory syndrome (Mers) are both caused by coronaviruses that came from animals. In 2002, Sars spread virtually unchecked to 37 countries, causing global panic, infecting more than 8,000 people and killing more than 750. Mers appears to be less easily passed from human to human, but has greater lethality, killing 35% of about 2,500 people who have been infected.

What are the symptoms caused by the Wuhan coronavirus?

The virus can cause [pneumonia](#). Those who have fallen ill are reported to suffer coughs, fever and breathing difficulties. In severe cases there can be organ failure. As this is viral pneumonia, antibiotics are of no use. The antiviral drugs we have against flu will not work. If people are admitted to hospital, they may get support for their lungs and other organs as well as fluids. Recovery will depend on the strength of their immune system. Many of those who have died were already in poor health.

Is the virus being transmitted from one person to another?

China's national health commission has confirmed human-to-human transmission, and there have been such transmissions elsewhere. As of 13 February there are now just under 60,000 confirmed cases and 1,380 deaths in mainland China. [A change in the way the metrics were calculated](#) has led to a large jump in the number of acknowledged cases.

There are cases in 28 other countries outside [China](#), with deaths recorded in one case in Hong Kong, and one case in Philippines. The number of people to have contracted the virus overall could be far higher, as people with mild symptoms may not have been detected.

There are nine cases of the virus in the UK. Four were located in Brighton, one in London. At Arrowe Park Hospital in Merseyside 83 people in quarantine were told they would be allowed to leave on Thursday after they all tested negative. Of the 1,750 tests carried out so far in the UK, more than 99% had been negative.

Why is this worse than normal influenza, and how worried are the experts?

We don't yet know how dangerous the new coronavirus is, and we won't know until more data comes in. The mortality rate is around 2%. However, this is likely to be an overestimate since many more people are likely to have been infected by the virus but not suffered severe enough symptoms to attend hospital, and so have not been counted. For comparison, seasonal flu typically has a mortality rate below 1% and is thought to cause about 400,000 deaths each year globally. Sars had a death rate of more than 10%.

Another key unknown, of which scientists should get a clearer idea in the coming weeks, is how contagious the coronavirus is. A crucial difference is that unlike flu, there is no vaccine for the new coronavirus, which means it is more difficult for vulnerable members of the population – elderly people or those with existing respiratory or immune problems – to protect themselves. Hand-washing and avoiding other people if you feel unwell are important. One sensible step is to get the flu vaccine, which will reduce the burden on health services if the outbreak turns into a wider epidemic.

Should I go to the doctor if I have a cough?

Anyone who has travelled to the UK from mainland China, Thailand, Japan, Republic of Korea, Hong Kong, Taiwan, Singapore, Malaysia or Macau in the last two weeks and is experiencing cough or fever or shortness of breath should stay indoors and call NHS 111, even if symptoms are mild, the NHS advises.

Is the outbreak a pandemic?

Health experts are starting to say it could become a pandemic, but right now it falls short of what the WHO would consider to be one. A pandemic, in WHO terms, is “the worldwide spread of a disease”. Coronavirus cases have been confirmed in about 25 countries outside China, but by no means in all 195 on the WHO's list. It is also not spreading within those countries at the moment, except in a very few cases. By far the majority are travellers who picked up the virus in China.

Should we panic?

No. The spread of the virus outside China is worrying but not an unexpected development. The WHO has declared the outbreak to be a public health emergency of international concern, and says there is a “window of opportunity” to halt the spread of the disease. The key issues are how transmissible this new coronavirus is between people and what proportion become severely ill and end up in hospital. Often viruses that spread easily tend to have a milder impact.

Healthcare workers could be at risk if they unexpectedly came across someone with respiratory symptoms who had travelled to an affected region. Generally, the coronavirus appears to be hitting older people hardest, with few cases in children.