



Questions and answers - novel corona virus September 2012

How many new cases have been reported to date?

This new coronavirus has been laboratory confirmed in only two cases globally to date: both occurred between July - September 2012.

The first case was confirmed in a patient in Saudi Arabia who has since died in Saudi Arabia.

The second case was confirmed in a patient from Qatar who had recently travelled to Saudi Arabia. This patient acquired their infection in the Middle East and had the infection diagnosed after travelling to London.

A further small number of possible cases are also being investigated.

What are coronaviruses?

Human coronaviruses were first identified in the mid 1960s and are named for the crown-like projections on the surface of the virus. They are a group of viruses causing respiratory infections in humans and animals. There are 3 main sub-groupings of coronaviruses, known as alpha, beta and gamma.

What type of coronavirus is this?

This is the first time this particular strain of coronavirus has been identified in the UK and only the second time in the world - in both cases the infection was acquired in the Middle East. The virus was identified by the Health Protection Agency's virus reference laboratories at Colindale. It is genetically the same as one recently isolated in a laboratory in Saudi Arabia, which was then confirmed and its genetic material sequenced in a laboratory in the Netherlands. As it has only been recently described, and this is only the second laboratory confirmed case, there is limited information on clinical impact, transmission and severity at this stage.

What are the main symptoms?

The virus has so far only been identified in two cases of acute, serious respiratory illness who presented with fever, cough, shortness of breath, and breathing difficulties. At this point it is not clear whether these cases are typical of infection with this virus or whether it could be circulating more widely, but causing a milder illness, and only very rarely causing a severe illness.

What is the treatment?

We do not have enough information yet to make specific treatment recommendations. However, acute respiratory support for those with severe symptoms and who have been hospitalised would be advised.

How do you catch this infection?

Coronaviruses are typically spread like other respiratory infections such as influenza. This infection is therefore likely to be passed from person to person when an infected person coughs or sneezes, though much is unknown at this stage.

How contagious is it?

Transmission appears to be very limited as, if it were very contagious, we would have expected to have seen more cases in other countries or the people caring for these two cases, the first of which occurred over three months ago.

With any newly identified virus, that may be associated with severe illness, it is better to err on the side of caution. All infection control precautions to prevent the spread of this virus are therefore being taken in the case of the London patient with the confirmed diagnosis. This includes isolation of the patient, barrier nursing and making sure that all staff wear the appropriate protective equipment.

Coronaviruses are fairly fragile, and outside of the body their survival time is only around 24 hours. They are easily destroyed by usual detergents and cleaning agents.

Where has this infection come from?

At this stage we do not know. New infections may occur from a mutation (change) to an existing virus which causes it to behave differently in the type or seriousness of infection caused. Some new infections may be caught from infectious agents, such as bacteria or viruses, circulating in the animal population (zoonoses). Certain infections may cause only mild infection in an animal species but more serious infections in people (and vice versa). At this stage we have no evidence that this is a zoonosis.

Is there a vaccine for this?

No, a vaccine is not available.

Is there a laboratory test?

The main test for this particular coronavirus is a PCR followed by sequencing. Full sequencing of the virus' genetic material is a complex test to absolutely confirm the strain of the virus.

What should I do if I am planning to travel to the Middle East?

Given that there have only been two confirmed cases worldwide, people planning to travel to the Middle East should continue with their plans. Travel advice will be kept under review if additional cases occur or when the patterns of transmission become clearer.

If I visited the Middle East and have signs of a cold/fever should I be worried?

If the symptoms are mild you almost certainly have an upper respiratory tract infection due to a common respiratory virus such as the common cold. However if the symptoms worsen considerably and you become very breathless you should contact your General Practitioner or NHS Direct mentioning which countries in the Middle East you have visited. Even with severe respiratory illness it is most likely that the diagnosis will be another more common respiratory pathogen, rather than this newly recognised coronavirus.

Is this similar to SARS?

SARS was also caused by a coronavirus but this is not SARS. Coronaviruses can cause a range of symptoms varying from mild symptoms such as the common cold to more serious respiratory illnesses. The two laboratory confirmed cases have experienced a serious respiratory illness which makes it similar to SARS in this respect.

Last reviewed: 23 September 2012

© Health Protection Agency 2012