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Coronavirus (COVID-19): what you need to do

Stay at home

- Only go outside for food, health reasons or work (but only if you cannot work from home)
- If you go out, stay 2 metres (6ft) away from other people at all times
- Wash your hands as soon as you get home

Do not meet others, even friends or family.

You can spread the virus even if you don't have symptoms.

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Public Health
England

Guidance

COVID-19: epidemiology, virology and clinical features

Updated 3 April 2020

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1. Epidemiology

On 31 December 2019, the World Health Organization (WHO) was informed of a [cluster of cases of pneumonia of unknown cause](#) detected in Wuhan City, Hubei Province, China.

On [12 January 2020](#) it was announced that a novel coronavirus had been identified in samples obtained from cases and

that initial analysis of virus genetic sequences suggested that this was the cause of the outbreak. This virus is [referred to as SARS-CoV-2](#), and the associated disease as COVID-19.

As of 3 April 2020 (10:00am), more than 1,000,249 cases have been diagnosed globally, with over 51,515 fatalities. In the 15 days to 3 April, over 784,700 cases were reported.

The [WHO coronavirus dashboard](#) has country by country information. WHO also publishes a [daily international situation report](#).

The [total number of confirmed cases in the UK](#) is published by the Department of Health and Social Care, and is available in a [visual dashboard](#).

2. Virology

Coronaviruses are a large family of viruses with some causing less-severe disease, such as the common cold, and others causing more severe disease such as Middle East respiratory syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) coronaviruses.

2.1 Nomenclature and characterisation

On [11 February](#), WHO named the syndrome caused by this novel coronavirus [COVID-19](#) (Coronavirus Disease 2019) using its [best practice guidance](#).

The [Coronavirus Study Group \(CSG\) of the International Committee on Taxonomy of Viruses](#) has designated the aetiological agent 'severe acute respiratory syndrome coronavirus 2' (SARS-CoV-2). Characterisation of SARS-CoV-2 is ongoing. Initial information shared by China and WHO indicates that SARS-CoV-2 is a beta-coronavirus that is genetically similar to SARS-like coronaviruses obtained from bats in Asia.

3. Transmission

The source of the outbreak has yet to be determined. Preliminary investigations identified environmental samples positive for SARS-CoV-2 in Huanan Seafood Wholesale Market in Wuhan City, however, some laboratory-confirmed patients did not report visiting this market. A zoonotic source to the outbreak has not been identified yet, but investigations are ongoing.

According to current evidence, the COVID-19 virus is primarily transmitted between people through respiratory droplets and contact routes.

Human-to-human transmission is occurring extensively. Hence, precautions to prevent human-to-human transmission are appropriate for both suspected and confirmed cases (see [infection prevention and control guidance](#)).

In addition to respiratory secretions, SARS-CoV-2 has been detected in blood, faeces and urine.

In the context of COVID-19, airborne transmission may be possible in specific circumstances and settings in which procedures or support treatments that generate aerosols are performed.

4. Clinical features

Fever, cough or chest tightness, myalgia, fatigue and dyspnoea are the main symptoms reported.

A variety of abnormalities may be expected on chest radiographs, but bilateral lung infiltrates appear to be common (similar to what is seen with other types of viral pneumonia).

Public Health England has issued [guidance on the investigation and initial clinical management of possible cases](#)

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