BRIEFING

ENVI in Focus

European Parliament

Novel Coronavirus Outbreak

State of Play, Preparedness and Response

Following the extraordinary Council meeting of health ministers on 13 February 2020, this paper summarises the latest available information on the novel coronavirus outbreak, and the Union's preparedness and response actions. It is an extended and updated version of the "At a Glance" overview, published on 14 February 2020.

Coronavirus basics

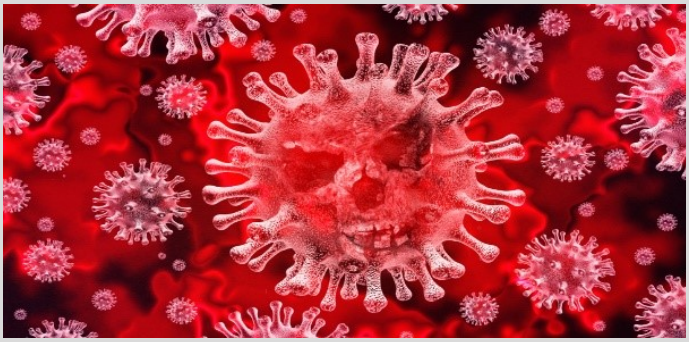
A **new coronavirus strain** that had not been identified in humans before, was detected **in Wuhan**, a city in Central China's Hubei province. An animal source from a live animal market was, most likely, responsible for some of the first reported human infections.

Research is currently undergoing to **detect the animal origin of the new coronavirus**. An earlier study suggested snakes but later it was discarded. According to current knowledge, the virus might come from bats, and transmitted to humans via an intermediary host animal, probably the pangolins, but this needs further investigation and confirmation. The way of **human-to-human transmission** is still to be confirmed, but most likely it is via droplets in personal contact.

Given the year of the outbreak, and due to the fact that it is a **new virus strain** that has not been identified in humans before, the virus was named by the World Health Organisation (WHO) temporarily as the novel (i.e. new) coronavirus, **2019-nCoV**. On some occasions, it was also referred to as the novel coronavirus pneumonia or **NCP**. On 11 February 2020, the WHO announced that they named the virus **COVID-19**, corona virus disease. The International Committee on Taxonomy of Viruses classified the new virus as severe acute respiratory syndrome coronavirus 2, **SARS-CoV-2**.

Coronaviruses

Coronaviruses are a family of viruses that can be found in humans and animals. These viruses originate from animals, transmitted from animals to humans (**zoonotic viruses**), and then spread from one individual to the other. In humans, they cause various **respiratory infections**, from the common cold to more severe, potentially lethal respiratory diseases. The virus is named after its morphology, as the spikes on the surface of the virus create an image similar to a crown or a solar corona.



Studies identified that the 2012-2013 Middle-East Respiratory Syndrome coronavirus (MERS-CoV) came from dromedary camels, and the 2002-2003 Severe Acute Respiratory Syndrome (SARS) from civet cats.

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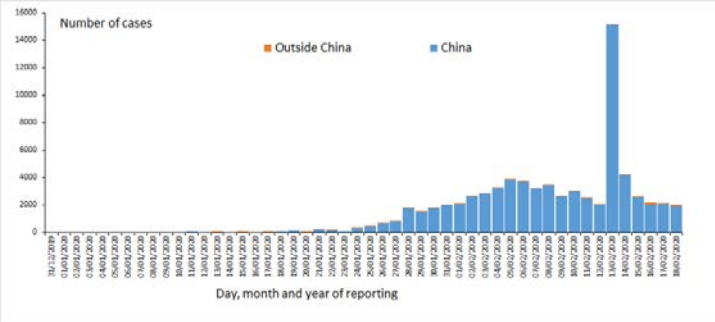
Global situation and response

The WHO publishes daily situation reports on the evolution of the disease. According to the latest available data at the time of closing the manuscript, on 18 February 2020 there were **over 73.300 cases worldwide**, of which close to 2.000 appearing in the last 24 hours. The **focal point of the disease remains in China**, with more than 72.500 cases and the death toll in the range of 1.900. Based on the likelihood of further spread, the impact on human health, and the effectiveness of preparedness and response measures, the WHO assesses the **risk to be very high for China, and high at regional and global level**. In addition to statistical data on reported cases, a number of computer models have been developed by researchers to simulate the spread of the infection.

From 12 to 13 February 2020, 14.840 new cases were reported from Hubei. This spike was due to the fact that **China, for the first time, reported not only laboratory-confirmed cases but clinically diagnosed ones as well**. From all the new cases 13.332 were clinically diagnosed, and the remaining roughly 1.500 cases are laboratory-confirmed.

Epidemiological curve, including clinically diagnosed* cases in China



Source: ECDC

* Numbers reported from China include all suspected cases with a clinical diagnosis of pneumonia (not necessarily laboratory confirmed as having COVID-19)

China has been taking efforts to contain the outbreak, including expanding lockdown measures and monitoring of the residents and entry and exit requirements, as well as flight and travel bans. These steps have slowed down the global spread of the disease, with only 1% of the cases appearing outside of China. But WHO Director-General Dr. Tedros Adhanom Ghebreyesus warns that "it is impossible to predict [at this stage] which direction this epidemic will take", and underscores that "the potential havoc this virus could wreak in countries with weaker health systems" is a major concern.

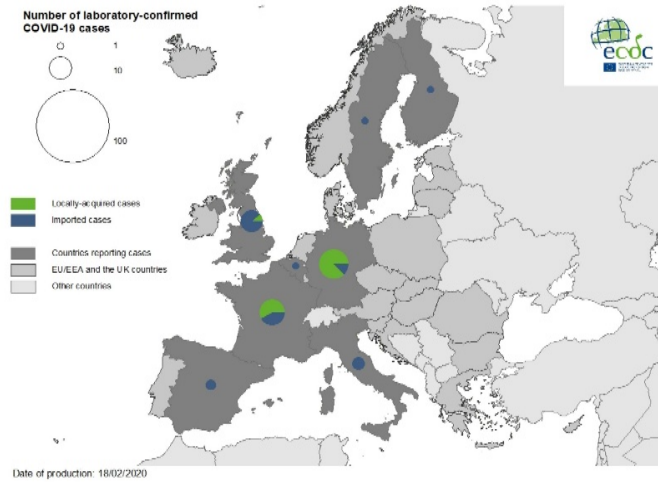
At the end of January 2020, the WHO declared **a public health emergency of international concern**. In the beginning of February 2020, it published its strategic preparedness and response plan to deal with the crises, outlining the public health measures that the international community needs to take to support all countries to prepare for, and respond to the outbreak. “Urgent support is needed to bolster weak health systems to detect, diagnose and care for people with the virus, to prevent further human to human transmission and protect health workers”, said the WHO Director-General. In its assessment, the WHO estimates that 675m USD is needed for the plan.

WHO’s global strategy and preparedness plan that allows the rapid activation of R&D activities during epidemics, the R&D Blueprint, is now also activated in order to accelerate diagnostics, vaccines and therapeutics of the new virus.

The WHO publishes a number of technical guidance on infection prevention and control, patient management, surveillence, etc.; and advises the general public about basic protective measures and clarifies common misconceptions.

State of play in the EU/EEA and the UK

Geographic distribution of COVID-19 in the EU and the UK



Source: ECDC

The European Centre for Disease Prevention and Control (ECDC) and the WHO Regional Office request countries to report new cases, including probable and confirmed cases, within 24 hours after identification. On this basis, the ECDC publishes daily situation updates for the EU/EEA and the UK. Pursuant to the latest update, **45 cases** have been reported from eight countries, with the highest number of cases in Germany (16) and the lowest in Belgium, Finland and Sweden (one each). Cases occur either via importation from outside the territory of the Union, i.e. in connection with a recent stay in the risk area, or from an infected person having travelled to the EU; or are due to local transmission.

In its updated risk assessment of 18 February 2020, the ECDC assesses **the risk of COVID-19 infection for the EU/EEA and the UK population as currently low**. The *probability of infection* in the area is very low, and containment measures are in place. *If an infection is acquired*, it has a high impact for the person concerned, and the impact for the population as a whole is moderate to high. The combination of these factors result in an overall low risk assessment. The ECDC also assess **the risk for healthcare systems capacity in the EU/EEA and the UK**, during the peak of the flu season, and concludes that it is **low to moderate**.

Preparedness and response measures taken at EU level

The **ECDC monitors closely and assesses regularly the situation**. Through its dedicated website, it issues daily situation updates and up-to-date risk assessment, and provides technical guidance on a number of issues, e.g. on dealing with patients, cleaning, the use of personal protection equipment, and non-pharmaceutical measures to delay and mitigate the impact of the virus. Ample information to the general public, in plain and comprehensible language, is also available.

The **Croatian Presidency activated the Integrated Political crises response mechanism** in relation to the outbreak, in information- sharing mode; that is in order to facilitate the exchange of information, ensure that there is common understanding of the situation, and allow for the preparation of analytical reports. The **Health Security Committee met several times**, to exchange information on the situation, and on the preparedness needs and gaps of the Member States. The **Union Civil Protection Mechanism** was activated at the end of January 2020, and four flights **repatriated already 550 EU citizens** from Wuhan. The **European Union Aviation Safety Agency** issued recommendations to national aviation authorities, airlines and airports in response to the outbreak. 10 million EUR has been mobilised from the **Horizon 2020 programme** as **emergency research funding**, while other EU-funded research actions are also underway; and the supercomputer centres are ready to help the work of researchers.

In an **extraordinary Council meeting on 13 February 2020**, health ministers adopted conclusions urging the Member States to take measures to protect public health, with particular attention to international travel, and calling for close and enhanced cooperation and sharing of information. The Council also called on the Commission to, inter alia, facilitate the cooperation of the Member State; activate existing funding

mechanisms to prepare for and respond to the health threat; promote amongst Member States the alignment of measures efficiently minimising the risk of further infections; and in cooperation with the European Medicines Agency and the national medicines agencies, evaluate the consequences of global health threats for the availability of medicines within the EU and the security of supply chains.

The **Environment, Public Health and Food Safety Committee** of the European Parliament discussed the matter with Commissioner Kyriakides during their meeting of 18 February 2020.

Measures taken by the Member States

Member States take measures in order to **detect individual infections** as early as possible and **break the infection chain**. Isolating the infected persons and tracking down those who have been in close contact with them is of key importance; the recommended quarantine period is 14 days, which is the maximum duration of the incubation period of the virus. Member States have also taken efforts to stop the spreading of the virus by applying **strict controls at the airports**, deploying a medical staff for welcoming arriving flights from China (e.g. France), even completely blocking flights from China (e.g. Italy).

These are **containment measures**, which are believed to be efficient and sufficient in the present situation, when the number of cases within the EU territory is low. Should the infection become more widespread, **protection of the vulnerable groups** and **mitigation measures** could also be put in place. Following the first fatality in Europe, the death of a visiting tourist from Hubei who died in France, French health minister emphasised the need "to get our health system ready to face a possible pandemic propagation of the virus". An expert in mathematical epidemiology pointed out that with nearly 50 cases in Europe, a death was not surprising; the most important is that **there still has not been sustained person-to-person transmission in Europe**.

EU legal framework

Though public health is **primarily the competence of the Member States**, the Union supports and complements the actions taken by them (Article 168 TFEU). Decision No 1082/2013/EU on **cross-border threats to health** lays down rules on epidemiological surveillance, monitoring, early warning of, and combating serious cross-border threats to health. Under the Decision, a **Health Security Committee** (HSC) was set up, which is composed of the representatives of the Member States, and chaired by the Commission. An **Early Warning and Response System** (EWRS) was established for direct and permanent communication between the Commission and the national authorities.

The **EU Integrated Political Crisis Response Arrangements (IPCR)** were established by the Council Implementing Decision No 2018/1993. The ICPR mechanism supports the Council Presidency, the Coreper and the Council, by providing tools and creating a platform for sharing information and coordinating crises responses at political level.

Decision No 1313/2013/EU established, and in 2019 strengthened further, the **Union Civil Protection Mechanism (UCPM)**. The UCPM plays a role in fostering cooperation in prevention of, preparedness for, and response to disasters. With the 24/7 Emergency Response Coordination Centre, a pool of assets and resources, and a European medical corps, the Mechanism can be activated in case of both natural and man-made disasters.

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