European Commission research actions on Coronavirus

Actions taken to tackle the novel coronavirus 2019-nCoV outbreak:


Research proposals funded through this emergency research funding are expected to advance our understanding of the novel coronavirus (2019-nCoV), contribute to more efficient clinical management of patients infected with the virus, and to the public health preparedness and response to the outbreak. Research teams are expected to share data rapidly so that results can immediately inform the public health response.

Such rapid reaction is made possible by the standing budget line for emergency research funds that the Commission maintains as part of the Horizon 2020 annual work programmes for Health research.

Ongoing projects for preparedness and response to outbreaks:

European funded research from the past years has invested greatly in preparing exactly for this type of public health emergency. Several EU funded projects (both FP7 and H2020) are currently contributing to the European and global preparedness and response activities. These include:

The PREPARE project, which supports the readiness of hospitals in Europe and enhances their understanding of the dynamics of the outbreak. This project has adjusted its activities to the new outbreak by entering outbreak response mode 1 (preparedness), the first of its three response modes. Activities conducted by PREPARE are planned and conducted in close collaboration with partner networks and the European Commission, and in alignment with WHO and ECDC. EU grant: €24 million (https://cordis.europa.eu/project/id/602525)

The European Virus Archive - GLOBAL (EVA-GLOBAL or EVAg), a virtual collection for human, animal and plant viruses, which to date has already responded to some 200 requests from 55 countries, to provide access to the necessary material for diagnosing coronavirus infection. EU grant: €12.2 million (https://cordis.europa.eu/project/id/653316)

1. https://www.prepare-europe.eu/outbreakresponsemodes
Additionally, the Commission is working with other research funders through the “Global research collaboration for infectious disease preparedness” (GloPID-R) network. This network is mobilised to facilitate a rapid and effective response to this outbreak, through the coordination of research agenda and addressing priority research needs. EU grant for GloPID-R 2: € 1.3 million (https://cordis.europa.eu/project/id/874667)

VEO is a new project, which started on 1 January 2020, focusing on data mining; they are currently mainly focusing on social media. EU grant: €15 million (https://cordis.europa.eu/project/id/874735)

MOOD is also a new project, as of 1 January 2020, focusing on data mining and providing epidemic modelling. The most recent estimates are published here. EU grant: €14 million (https://cordis.europa.eu/project/id/874850)

**Other ongoing efforts**

Through the Innovative Medicines Initiative (IMI), the following projects are involved in the novel coronavirus outbreak:

The Zoonotic anticipation and preparedness initiative (ZAPI) is a research project that aims to create new platforms and technologies that will facilitate a fast, coordinated, and practical response to new infectious diseases as soon as they emerge. Their focus includes other coronaviruses, potentially allowing for transfer of technology and expertise for the current outbreak.

The value of diagnostics to combat antimicrobial resistance by optimising antibiotic use (VALUE-Dx) project aims to transform medical practice by making it easier for doctors to deliver personalised, evidence-based antibiotic prescriptions thanks to the use of innovative diagnostic strategies. The project focuses on respiratory tract infections in community care settings but the project’s findings are also likely to be relevant for other infections, such as the novel coronavirus.

The Combatting bacterial resistance in Europe (COMBACTE-NET) is dedicated to building strong clinical, laboratory and research networks across Europe. COMBACTE-NET has established a pan-European network of clinics and hospitals for more efficient and speedy testing of novel treatment strategies, a network of microbiology laboratories to support the diagnosis of patients and identify the most appropriate treatments as well as to validate diagnostics tests. An epidemiologic network has also been established in the COMBACTE-MAGNET project that harmonises and connects various European systems of disease surveillance.

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3 [https://www.glopid-r.org/]
The European Commission has invested also in the development of clinical networks over many years to ensure preparedness for delivering clinical research in response to new infectious disease outbreaks including the above mentioned PREPARE, COMBACTE-NET and VALUE-Dx, among others.

Through the European and Developing Countries Clinical Trials Partnership (EDCTP 2), the following projects are also currently active in the coronavirus outbreak:

The African coaLition for Epidemic Research, Response and Training (ALERRT), has a response framework that alleviates administrative, regulatory and ethical bottlenecks and mobiles research capabilities ensuring swift action to initiate fit-for-purpose clinical and laboratory research in varying settings within sub-Saharan Africa. Institut Pasteur de Dakar, one of the partners of the project, is leading the activities for country preparedness under the direction of the Africa CDC (Centres for Disease Control and Prevention).

The Pan-African Network For Rapid Research, Response, Relief and Preparedness for Infectious Diseases Epidemics (PANDORA-ID-NET), which focuses on epidemic preparedness, is currently collaborating with the Africa CDC to offer assistance in terms of surveillance and laboratory skills training.

Additionally, EDCTP supports networks of research centres that are involved in clinical trials in sub-Saharan Africa. These Networks of Excellence (NoEs) facilitate research collaboration by uniting diverse institutions in the four regions of sub-Saharan Africa. To date, EDCTP funded the establishment of four regional Networks of Excellence: WANETAM, EACCR, CANTAM and TESA.

**Background on coronavirus**

Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV).

End of December, Chinese authorities identified a cluster of what is now recognised as “novel coronavirus” (2019-nCoV) infections in Wuhan City, China. This is a new virus strain that has not been previously identified in humans. The outbreak of the 2019-nCoV is spreading rapidly within China, but also outside the country. Cases have been detected in several countries in Asia, but also in Australia, Europe and North America. On 30 January 2020, the WHO declared a public health emergency of international concern (PHEIC).

Updates on the latest evolution of the outbreak can be found on the following websites: