Outbreak of novel coronavirus disease 2019 (COVID-19): situation in Italy

23 February 2020

Event background

For event background information, please visit ECDC’s website [1]. For the most recent information on the current situation regarding COVID-19, please visit this page.

Since ECDC’s fourth update on novel coronavirus published on 14 February 2020 – and as of 23 February 2020, an additional 18 504 cases have been reported, with 13 34 additional cases in 16 countries outside of China, including 77 cases in the EU/EEA and the UK. It is likely that the true number of infections, including those that are unreported and unrecognised due to mild symptoms or to being asymptomatic, is much higher 2. China changed the case definition several times during the course of the outbreak. This caused great uncertainties regarding the exact number of cases and the extent of the spread of the virus.

As of 23 February 2020, 9:00, more than 78 800 cases of COVID-19 have been reported worldwide, mainly in China. In Hubei province, 64 084 cases have been reported, 12 563 cases have been recorded in the rest of China. More than 1 790 cases have been reported from other countries. Local transmission has been reported in 14 countries do far: Canada, France, Germany, Italy, Iran, Japan, Malaysia, South Korea, Singapore, Thailand, the United Arab Emirates, the United Kingdom, the United States of America and Vietnam. See Situation update – worldwide and Communicable disease threats report, 16-22 February 2020, week 8. In the EU/EEA and the UK, 121 cases and three deaths have been reported as of 23 February. Among them, 98 are locally acquired: Italy (76), Germany (14), France (7) and the UK (1). Two deaths have been reported in Italy and one in France. See Situation update for the EU/EEA and the UK.

During the course of the day on 22 February, the Italian authorities reported clusters of cases in Lombardy. Initial case identification was based on local laboratory confirmations in the affected Region. Further confirmatory testing is being undertaken by the Italian national reference laboratory and extensive contact tracing is being performed. On 22 February, COVID-19 cases were also reported from two other Regions, Piedmont and Veneto. On 23 February Emilia-Romagna also reported cases. Transmission appears to not be first generation transmission from people travelling or returning from an affected area, but seems to have occurred locally. Transmission events have been reported to have occurred in hospitals, with COVID-19 cases identified among healthcare workers and patients. Two deaths among elderly people have been observed. COVID-19 cases have been identified in multiple municipalities. According to media reports, the affected Italian Regions with municipalities reporting cases are Piedmont (Torino), Lombardy (Codogno e dintorni, Sesto Cremonese, Pizzighettone, Soresina, Sesto S.G., Pieve Porto Morone), Veneto (V’o Euganeo, Mira) and Emilia-Romagna media. Extensive contact tracing is ongoing to identify additional cases and prevent further spread. Further details about the cases is not available at the moment.

President Fontana and Minister Speranza signed an order with response measures for the affected areas in Italy.


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Strict public health measures have been implemented in the affected municipalities and Regions. These measures include:

- a ban to leave or access an affected municipality or area
- suspension of demonstrations, events and all forms of meetings at public or private venues
- suspension of childcare, school education services and educational trips
- closure of museums to the general public
- suspension of public competitions and public office activities, with the exception of the provision of essential and public utility services
- quarantine and active surveillance for those who had close contact with people affected by the virus; this includes an obligation for people who had previously stayed in an epidemiological risk area abroad to inform the prevention department of a competent healthcare company so that self-isolation with active surveillance can be implemented
- suspension of work for some types of business and a shut-down of certain commercial activities
- the possibility that access to essential public services and businesses for the purchase of basic necessities will become conditional to the use of personal protective equipment
- access restrictions or suspension of transport services for cargo and passengers, with only a few clearly defined exceptions.

Updated information, including the number of cases is available from the Italian Ministry of Health's webpage.

For detailed information, regarding the cases detected in the EU/EEA, please visit the following page on ECDC’s website.

**Risk assessment questions**

- What is the risk associated with COVID-19 infection for the EU/EEA and UK populations?
- What is the risk of the occurrence of clusters, similar to the ones in Italy, associated with COVID-19 in other EU/EEA countries and the UK?
- What is the risk associated with COVID-19 infection for people from the EU/EEA and the UK travelling/resident in areas with presumed community transmission?
- What is the risk for healthcare systems in the EU/EEA and the UK during the peak of the flu season?

**ECDC risk assessment for the EU/EEA**

The information currently available about the different COVID-19 clusters of cases in four Regions in Italy is limited. The situation is dynamically evolving, with more cases expected in the coming days. The risk assessment for the EU/EEA might change when more data become available. The clusters are currently limited to a few Regions in northern Italy. No close contacts or other related cases have been reported to be linked to other European countries.

The risk associated with COVID-19 infection for people from the EU/EEA and UK is currently considered to be low to moderate.

This assessment is based on the following factors:

All previously reported cases in the EU/EEA and UK have clearly established epidemiological links; contact tracing measures have been in place to contain further spread. Extraordinary public health measures have been implemented in northern Italy and strong efforts are being made to identify, isolate and test contacts in order to contain the outbreak. The probability of further transmission in the EU/EEA and the UK is considered to be low, but cannot be excluded because a high level of uncertainties with several unpredictable factors and a situation that is still evolving.

The possibility of new introductions from other countries outside China in the EU/EEA appears to be increasing as the number of non EU/EEA countries reporting cases keeps going up. Among the increasing number of countries reporting COVID-19 cases are Israel, Lebanon, Iran, and Egypt, while the number of cases in countries outside of China (South Korea, Japan) has been increasing over the last few days. This also increases the possibility of cases being introduced from other countries outside China by travellers to the EU/EEA.

The impact of sustained transmission in the EU/EEA would be moderate to high, especially for elderly populations with comorbidities, given that the reported case severity is high among these groups.
The risk of the occurrence of similar clusters, similar to the ones in Italy, associated with COVID-19 in other countries in the EU/EEA and the UK is currently considered to be moderate to high.

This assessment is based on the following factors:

The current event in Italy indicates that local transmission may have resulted in several clusters for which an epidemiological link to areas where ongoing transmission is presumed, was not apparent. The accumulated evidence from clusters reported in the EU/EEA and the UK indicates that once imported, the virus causing COVID-19 can transmit rapidly. This may emanate from cases with mild symptoms that do not provoke healthcare-seeking behaviour. The increase in cases and the number of countries outside China reporting those cases increases the potential routes of importation of the infection into the EU/EEA and the UK.

The impact of such clusters in the EU/EEA would be moderate to high, especially if hospitals were affected and a large number of healthcare workers had to be isolated. The impact on vulnerable groups within affected hospitals or healthcare facilities is considered to be severe, in particular for the elderly.

The rigorous public health measures that were implemented immediately after identifying the Italian COVID-19 cases will reduce the impact of such outbreaks as well as the further spread.

The risk for people from the EU/EEA and the UK travelling/resident in areas with presumed community transmission is currently high.

This assessment is based on the following factors:

The overall number of reported cases in areas with community transmission is high or increasing. However, there are significant uncertainties regarding transmissibility and under-detection, particularly among mild or asymptomatic cases.

For travellers/residents, the impact of one or more infections is considered high, especially for elderly populations with comorbidities, because the reported case severity is high in these groups. The impact will also depend on the capacity and availability of healthcare during the epidemic.

The risk for healthcare systems capacity in the EU/EEA and the UK during the peak of the influenza season is low to moderate.

This assessment is based on the following factors:

As the number of reported COVID-19 cases in the EU/EEA and the UK remains low, the probability of widespread infection remains low during the peak of the 2019–2020 influenza season. The majority of countries reported widespread influenza activity for week 7/2020, but the proportion of specimens tested positive in sentinel surveillance is slightly decreasing; some EU/EEA countries might have already moved past the peak period of high influenza circulation: see https://flunewseurope.org.

If a significant increase in COVID-19 cases were to coincide with a high level of influenza activity, the potential impact on healthcare systems would be moderate to high. The increased number of cases would require additional resources for testing, case management, surveillance, and contact tracing. Increased transmission could result in further pressure on healthcare systems. This situation would be exacerbated should a substantial number of healthcare workers become infected.

Options for response

The information currently available on this cluster of cases with COVID-19 is limited. Options for response might change when more data become available.

Travellers planning to visit the affected municipalities in Italy should follow the recommendations from their national authorities and the Italian health authorities [6-9] and are advised to adhere to good hand and respiratory hygiene practices and avoid contact with sick people.

Travellers with respiratory symptoms returning from affected municipalities in Italy should contact their healthcare specialist. If the health status allows it, they should preferably contact their healthcare specialist via telephone, and indicate their travel history before seeking medical attention.

Infection prevention and control and appropriate hygiene measures for respiratory infections that spread via droplets are required should cases be identified. Isolation of cases and use of appropriate personal protective measures following national recommendations will additionally minimise the risk of nosocomial transmission.

Healthcare providers should be aware of the ongoing event and the cluster of cases with COVID-19. The clinical signs and symptoms include fever and difficulty in breathing. Invasive lesions of both lungs have been identified from chest radiographs. Travellers returning from China who stayed in Wuhan and now present with viral pneumonia of unknown aetiology should be identified and reported to the respective healthcare authorities as soon as possible. Guidance documents have been made available on WHO and ECDC pages.
The following guidance documents are related to healthcare workers:

- Personal protective equipment (PPE) needs in healthcare settings for the care of patients with suspected or confirmed novel coronavirus (2019-nCoV)
- Infection prevention and control for the care of patients with 2019-nCoV in healthcare settings
- Public health management of persons having had contact with novel coronavirus cases in the European Union

Source and date of request

ECDC internal decision, 22 February 2020.

Consulted experts

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This report was written with the coordination and assistance of an Internal Response Team at the European Centre for Disease Prevention and Control. All data published in this risk assessment are correct to the best of our knowledge at the time of publication. Maps and figures published do not represent a statement on the part of ECDC or its partners on the legal or border status of the countries and territories shown.
References


