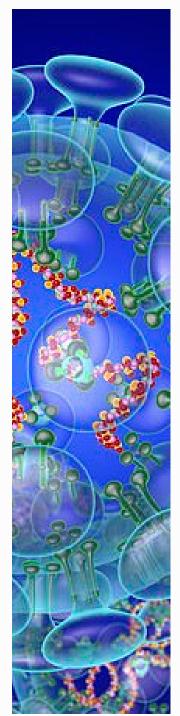


# **CORONAVIRUS BULLETIN**

#### Significant disease outbreak update

MARCH 20TH, 2020



## **General Update**

As circumstances surrounding the COVID-19 pandemic continue to escalate, summarizing developments over the last couple of days can prove to be challenging as a great deal of social and political activity has taken place across the world.

From a medical perspective, around 183 countries are reporting cases and more than 100 of those have more than 10 cases. In Italy, currently the most affected country, there have been more than 4,000 deaths and a similar number are currently described as being in serious/critical condition. Active cases in Italy are more than double the number of active cases in China, which has now fallen below 10,000. The cumulative total of COVID-19 cases outside China has now surpassed the cumulative total inside China.

China now has a cure rate (as a percentage of original cases) of approximately 72% in Wuhan, 93% in the rest of Hubei, and 97% in the rest of China.

A number of European countries have seen alarming increases in the number of severe cases and this appears to be driving public demand for more stringent measures.

Yesterday, we had some encouraging news in that China, for the first time, reported no new, confirmed, or suspected cases. However, today, it was reported that the total number of people who have died in Italy has exceeded the total number in China.

#### **Travel Restrictions**

Another recent, major change is the flood of border restrictions being enacted as countries attempt to slow the arrival of cases, and more particularly severe cases, in their health systems. Many countries including Israel, New Zealand, Australia, and Singapore now require self-isolation for 14 days of all people upon arrival. Others have restricted arrivals to exclusively their own citizens and residents, and some have closed their borders completely. A significant number of countries have restrictions based on where the travel has originated, or where the traveler has recently visited, and many more are urging citizens to reconsider travel plans to all destinations.

The United States has raised its travel advisory to a "level four", its highest level, instructing citizens abroad to return home or shelter in place indefinitely.

Citizens of the U.S. are also instructed not to travel abroad, according to the advisory, which was posted on the U.S. Department of State's website on Thursday.

Internally, some countries are restricting the movement of their citizens around the country, either on a city-by-city basis or more generally. Both the international and national restrictions are likely to get more severe over the coming month and be in line with the pandemic phase in each country.

IMG's provider network team is keeping abreast of entry requirements, responding to them with plans that allow continued operation, and communicating the restrictions and operational contingencies to our front line operations staff.

In addition, we recognize the impact that changing health advice, school closures, and other social distancing legislation will have on service delivery in all our locations. To address this, we have implemented comprehensive staff protection measures for all IMG team members around the world, as well as phased pre-positioning plans for our teams off-site.

### **Control Strategies**

The scale of this pandemic, its effect on global health, and, therefore, the global economy, is now widely recognized (as are the reasons for what were originally seen as "draconian" measures taken by the Chinese authorities in the last two months).

Although pandemic phases vary by country, Europe has seen a rapid progression from the importation phase (sporadic cases) to established community spread and a similar pattern is being seen in the U.S. This has resulted in governments having to escalate their responses rapidly - often leading to the accusation of inconsistency. It should be recognized that, although some of that criticism might be justified, governments need to respond to the phase of the pandemic prevalent in their country and making direct comparisons to the actions of other states or countries may be misleading.

Up until as recently as two weeks ago, it was thought that a combination of case identification, isolation, and limited social distancing (the "delay" strategy) would be sufficient to slow the spread of the virus.

Over the last week, as a result of outbreak modeling and the experience of Italy and South Korea, it has become clear that these strategies, of themselves, will not be enough to prevent the huge demand on intensive care units (in general) and, in particular, the requirement for mechanical ventilation.

Each person who contracts coronavirus is thought to, on average, infect a further 2 to 3 people. This number (R0 or the the basic reproduction number) needs to be reduced to below 1 for the virus to die out in the community.

Because of this, governments are moving to a "Suppression" strategy. This involves a wide range of more "draconian" social measures such as restrictions on freedom of movement, the forced closure of social venues such as pubs, clubs, and cinemas, and a campaign of personal social distancing.

The evidence supports that these measures can significantly reduce the number of people who become seriously unwell, protect the most vulnerable, and buy time for healthcare systems to expand to meet the need. This process is widely being described as "flattening the curve" as it spreads the number of new cases over a much longer period.

The downside of this approach is that, when the measures are relaxed, there is likely to be another peak in cases. In view of this, a response that involves periodic relaxation of the measures, over many months, is being suggested.

#### **Case Numbers**

**Total Confirmed** 

Total Deaths 11,113 87,3

Total Recovered

With total cases (since the start of the outbreak) standing at approximately 260,000, active cases are around 166,000, and recovered cases are near 90,000 (mostly in China). The majority of the currently active cases are outside China.

For the second day running, China has reported no new cases. Outside China, case volumes continue to climb dramatically: Italy-47,000, Spain-20,500, Germany-19,600, Iran-19,600, and the United States-14,600.

Of note, there have been 94 deaths in Korea, which represents a much lower proportion of identified cases. This is presumably because of the very successful drive to identify community cases, trace contacts, and isolate, which provides further hope that these measures will, in the long run, prove effective in our fight against this virus.

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Case data from the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)