

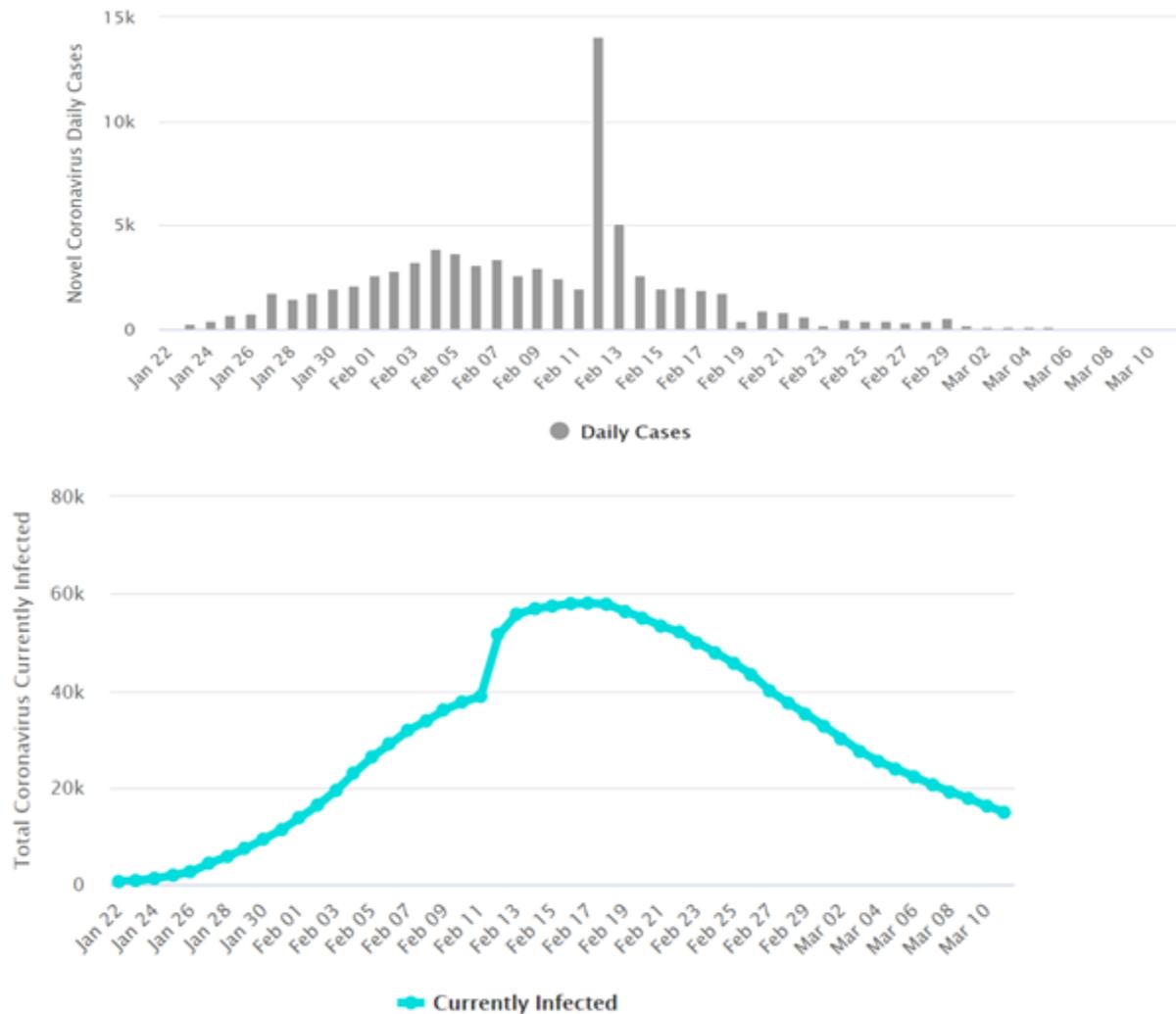


When was the last pandemic?

- Total Cases: 128,343 Total Deaths: 4,720 Total Recovered: 68,324
- WHO has declared COVID-19 a pandemic. The last pandemic it declared was the 2009 H1N1 (swine flu) outbreak.
- H1N1 spread to an estimated **11-21% of the global population**, and turned out to be milder than initially feared, and is seen as part of the seasonal flus that come and go every year.
- Early estimates of the fatality rate for H1N1 in 2009 were much higher than the ~ 0.01-0.03% it turned out to be
- ~ 3.4% of reported COVID-19 cases have died, according to the WHO on 3rd March. But its important to remember that the actual number of cases is likely to be much higher than the confirmed cases (due to many presenting with mild symptoms, and therefore not going into health systems to be tested, and so the **actual fatality rate** should be much **lower**).
- Imperial College London believes fatality rate outside of Wuhan is likely to be in the **0.5-1.5%** range.

Why is no one talking about China anymore?

Daily new cases in China



Source: Worldometer

- China has managed to gain some control over the epidemic. Yesterday China's top health commission said it has passed its peak, as it logged just 8 new infections in Hubei province, the epicentre of the outbreak. China has also reported no deaths outside of Hubei province on most days in the past week.

Ok- but should we believe China's numbers?

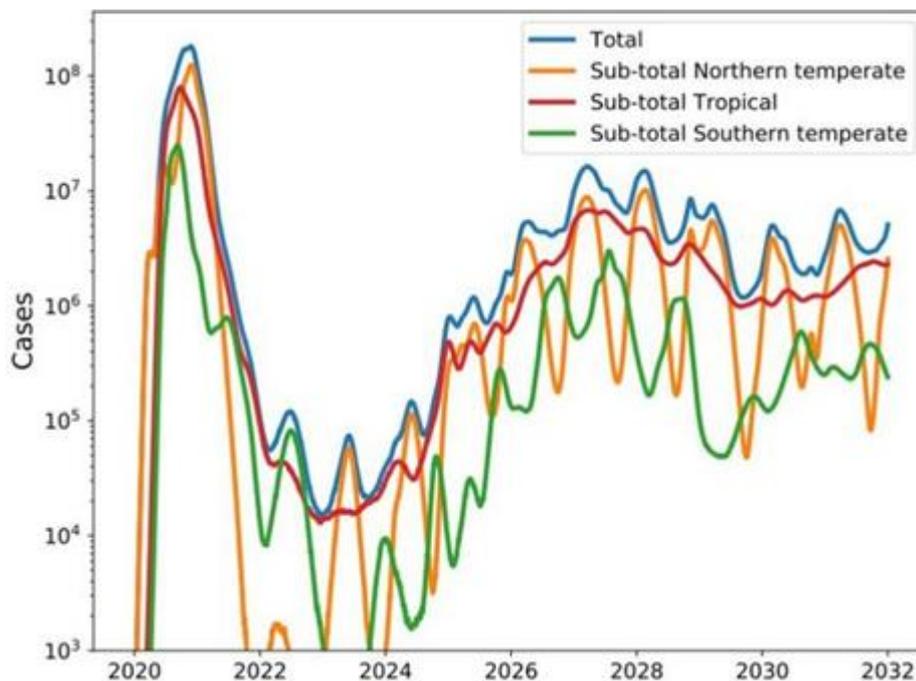
- Bruce Aylward, Assistant Director-General of WHO : "The big question is, are they hiding things? No, they are not". He says the organisation has looked at many different things to corroborate that cases are dropping, including going to clinics and talking to physicians in different provinces, and talking to people running clinical trials.

When will COVID-19 reach its peak around the world?

Short answer - no one knows. Long answer - here's various estimates below:

- As mentioned above, China believes (and the numbers corroborate) that it has passed its peak.

- On Tuesday South Korea's top public health official stated that they believe the country has also passed its peak.
- **"Europe is the new China"** according to the director of the US Center for Disease Control and Prevention.
- Matt Hancock, UK Health Secretary said yesterday that they expect the UK peak to occur "in a matter of a couple of months".
- Experts are [warning](#) Italy's peak may not arrive until mid-April in the north (the country's hardest hit area) and possibly later in other regions.
- The Chinese government's senior medical adviser believes the global pandemic is likely to be over by June.
- In one [paper](#), scientists from universities in Basel and Stockholm have modelled the effects of seasonal variation on COVID-19 transmission rates, and their model suggests that a worldwide peak won't arrive until winter 2020-2021. They believe the transmission rate will drop as we head into spring and summer, but will rise again afterwards, infecting as many as 100 million people in total. After its peak, the model suggests the virus will become a regular seasonal occurrence.
- It's important to note that no one yet knows how COVID-19 will be affected by the change in season.

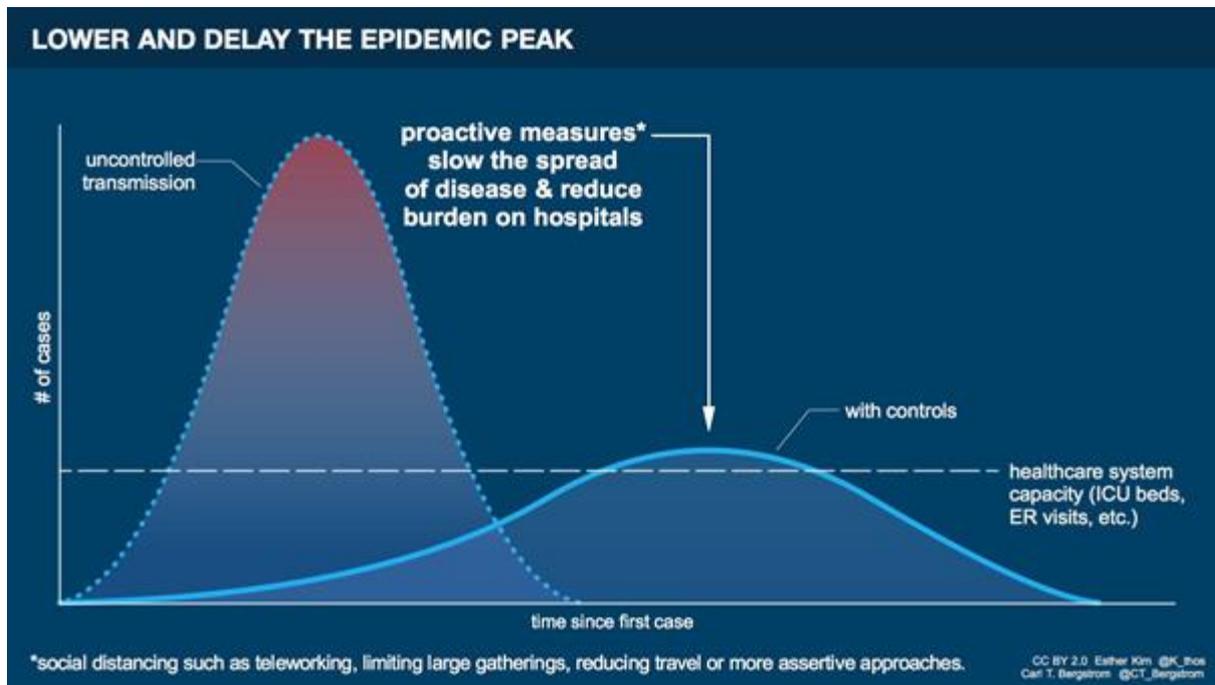


Is there anything Europe can do to manage the epidemic?

WHO Director General: *"Several countries have demonstrated that this virus can be suppressed and controlled. The challenge for many countries dealing with large clusters or community transmission is not whether they can do the same, it is whether they will."*

- COVID-19 has an estimated reproduction rate (the number of infections generated by each infected person) of somewhere between 2-3. The reproduction rate for Flu is 1.5. For the epidemic to end, the reproduction rate (R-nought) has to fall below 1.

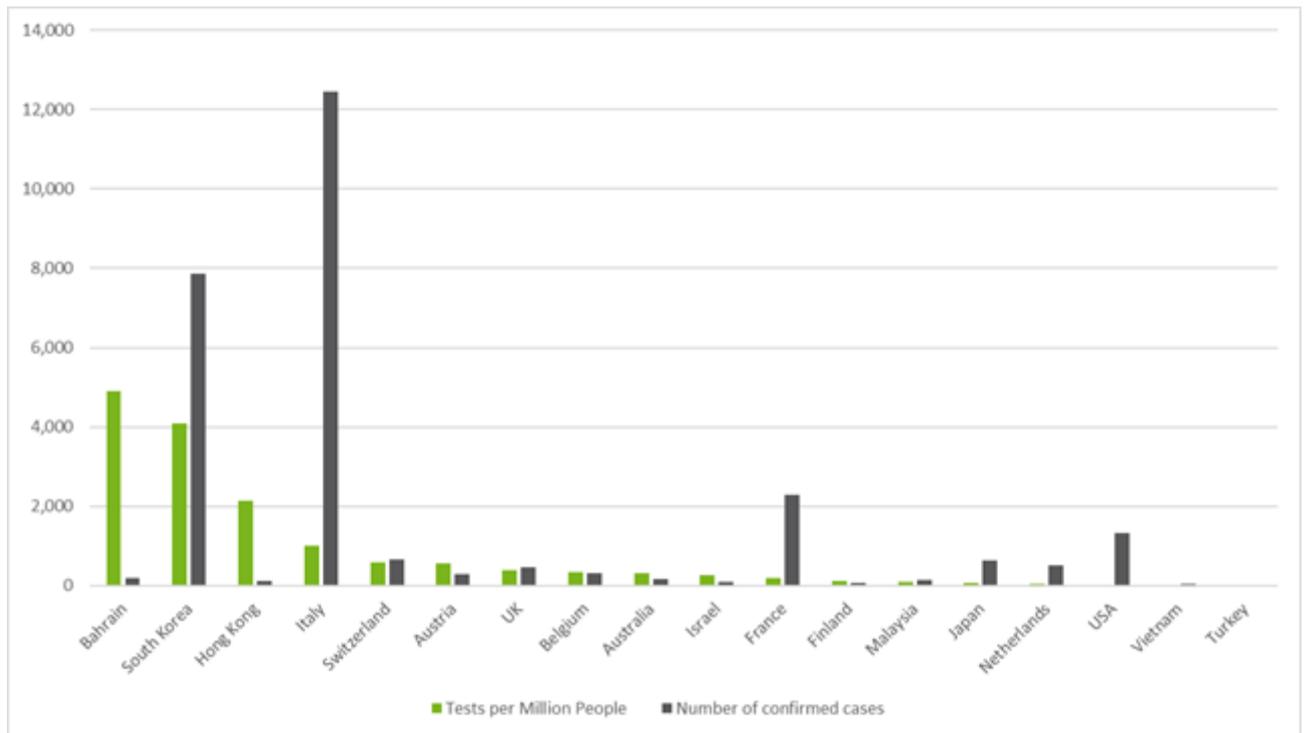
- R-nought can be lowered through a variety of interventions and, in the absence of a vaccine or treatments, the best strategy right now is **social distancing**, which helps *flatten the curve* (see below).



- The left curve on the above diagram is the spread of disease without interventions, the disease spreads quickly and healthcare systems are completely overwhelmed, leading to more deaths among those infected, as well as those who need care for unrelated medical conditions.
- The right hand curve is the spread of the disease with social distancing interventions such as limiting large gatherings, reducing travel etc. While a similar number of people will be infected, and it will prolong the epidemic (which seems counterintuitive) it leads to better outcomes.
- Flattening the curve means the spread is sufficiently slowed and the number of people infected at a given time is smaller, and hopefully within the capacity of healthcare systems. It also provides more time for additional treatments to be developed and tested. Both of these benefits help save lives.

Countries also need to make sure they have enough COVID-19 tests to go around.

Tests per million people, against number of confirmed cases:



Source: Worldometer, finnCap

Notably, the US ranks among the bottom in terms of number of tests per million people.

Confirmed cases globally:



Source: CDC

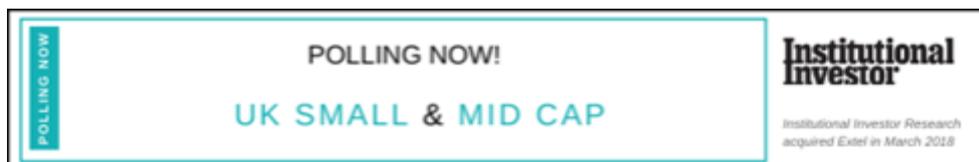
We will have more on COVID-19 as it develops, but to end this week’s Health Matter on a positive note, this week it was reported that the oldest patient yet, a [103 year old](#) Chinese grandmother, had made a full recovery from COVID-19, after being treated for 6 days in Wuhan, China.

Have a good weekend everyone and we wish you good health.

II UK Small & Mid Cap Research Team 2020 Survey

If you read finnCap Research/ this email and feel it positively contributes to your investments, we would greatly appreciate your support in the following survey under the following categories: Industry Research (where you can vote for individual research analysts), Sales and Corporate Access & Corporate Broking. Many thanks in advance for your support.

Please click on the link below to vote:



* Indicates a corporate client - RSVP [here](#) to express interest in roadshows

To UNSUBSCRIBE, please simply reply to that effect.

*Denotes corporate client of finnCap. This research cannot be classified as objective under finnCap research policy.

^ This company and finnCap have agreed that finnCap will produce and disseminate research and finnCap may receive remuneration in return for this service. This research cannot be classified as objective under the finnCap research policy.

A marketing communication under FCA Rules, this document has not been prepared in accordance with legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This research cannot be classified as objective under finnCap Group plc research policy. Visit www.finncap.com

MAR Research disclosures can be found at <http://www.finncap.com/disclosures>

The recommendation system used for this research is as follows. We expect the indicated target price relative to the FT All Share Index to be achieved within 12 months of the date of this publication. A 'Hold' indicates expected performance relative to this index of +/-10%, a 'Buy' indicates expected outperformance >10% and a 'Sell' indicates expected underperformance of >10%.

Approved and issued by finnCap Group plc for publication only to UK persons who are authorised persons under the Financial Services and Markets Act 2000 and to Professional customers. Retail customers who receive this document should ignore it. finnCap Group plc uses reasonable efforts to obtain information from sources which it believes to be reliable, but it makes no representation that the information or opinions contained in this document are accurate, reliable or complete. Such information and opinions are provided for the information of finnCap Group plc's clients only and are subject to change without notice. finnCap Group plc's salespeople, traders and other representatives may provide oral or written market commentary or trading strategies to our clients that reflect opinions contrary to or inconsistent with the opinions expressed herein. This document should not be copied or otherwise reproduced. finnCap Group plc and any company or individual connected with it may have a position or holding in any investment mentioned in this document or a related investment. finnCap Group plc may have been a manager of a public offering of securities of this company within the last 12 months, or have received compensation for investment banking services from this company within the past 12 months, or expect to receive or may intend to seek compensation for investment banking services from this company within the next three months. Nothing in this document should be construed as an offer or solicitation to acquire or dispose of any investment or to engage in any other transaction. finnCap Group plc authorised and regulated by the Financial Conduct Authority, London E14 5HS, and is a member of the London Stock Exchange.