

COVID-19 Update

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Monday March 14th, 2022

Deaths from COVID-19



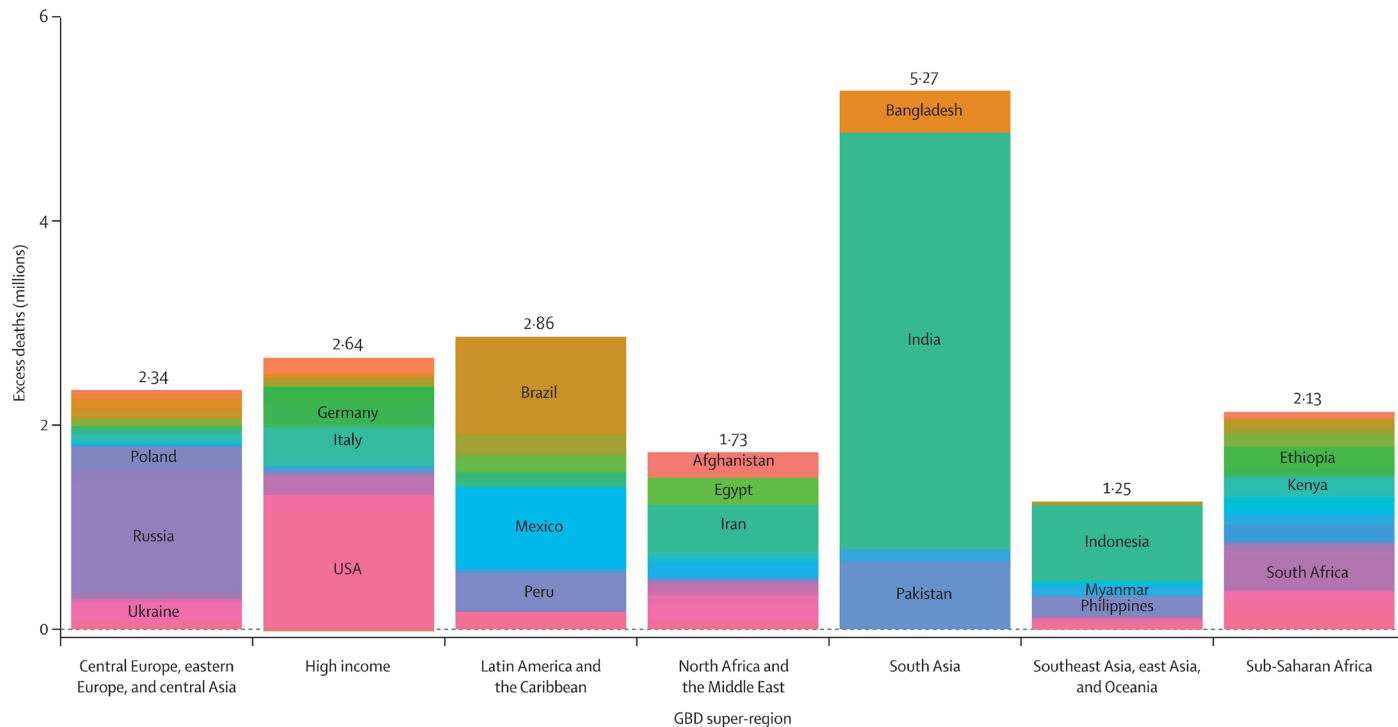
- Study just published in the Lancet¹ estimated the likely true deaths 2020 & 2021
- Reported COVID-19 deaths between Jan 1, 2020, and Dec 31, 2021, totaled 5.94 million worldwide
- Study estimated that 18.2 million (95% uncertainty interval 17.1–19.6M) people died worldwide

1. [https://www.thelancet.com/journals/lanct/article/PIIS0140-6736\(21\)02796-3/fulltext](https://www.thelancet.com/journals/lanct/article/PIIS0140-6736(21)02796-3/fulltext)

SARS-CoV-2 versus other Pandemics

- Black Death 1346-1353 - 75-200M
- Influenza Pandemic 1918 - 20-50M
- HIV/AIDS 1981 onwards - 36M
- **SARS-CoV-2- 2019 to ? 19M**
- Influenza Pandemic 1968 - 1M
- H1N1(swine Flu) 2009 - 284K
- MERS 2012- 885
- SARS 2002 - 774

Regional Distribution of Excess Deaths 2020-2021



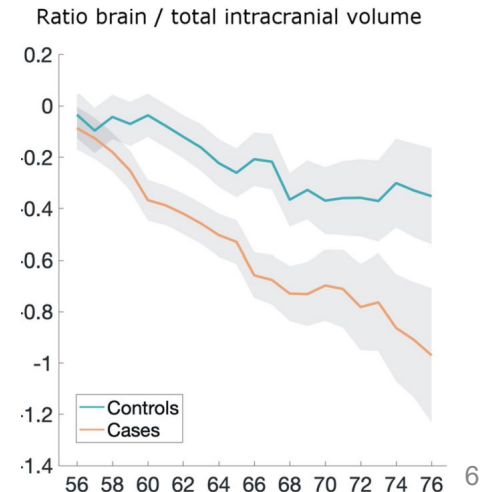
COVID & Potential Brain Changes



<https://www.nature.com/articles/s41586-022-04569-5>

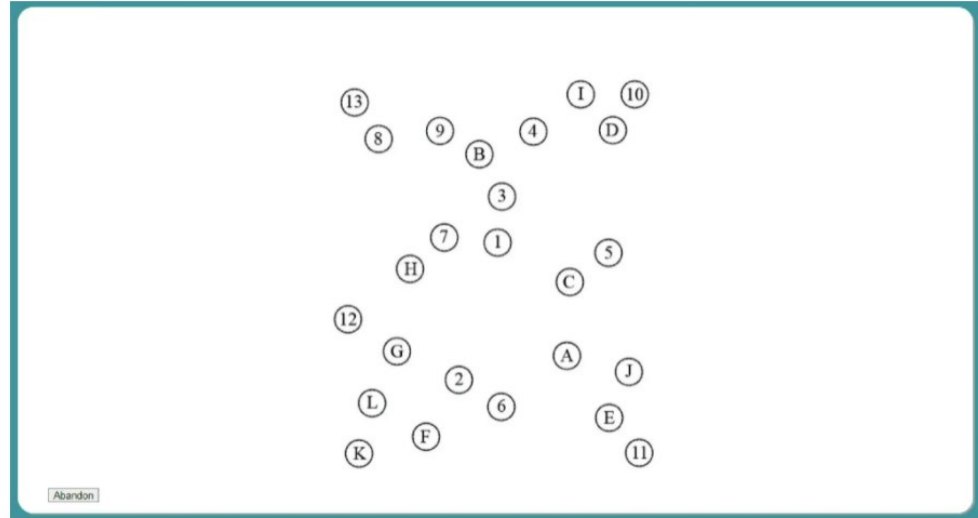
COVID & Potential Brain Changes

- 785 participants in UK Biobank aged 51-81
- 2 brain scans roughly three years apart, plus some basic cognitive testing
- 401 tested positive for COVID – 384 became the control group
- Normal aging, people lose gray matter each year e.g., in regions related to memory - 0.2 - 0.3%
- Covid patients in the study —
 - lost more than noninfected participants, experiencing between 0.2 percent and 2 percent additional gray matter loss in different brain regions
 - They also lost more overall brain volume and showed more tissue damage in certain areas.
 - Evidence that the more severe the illness the greater the loss
 - No difference on memory tests
 - Some deterioration on cognitive tests



Caution

- Cognitive test were limited
- The study doesn't prove cause and effect
- Important information not available e.g., what symptoms they had, if long-COVID was present or not
- Cause may be inflammation or “sensory deprivation”
- Not known if temporary or permanent damage



Patients in the study took a [trail-making test](#), a connect-the-dots exercise involving alternating letters and numbers. The Covid patients took longer to complete the task.

China Zero-COVID



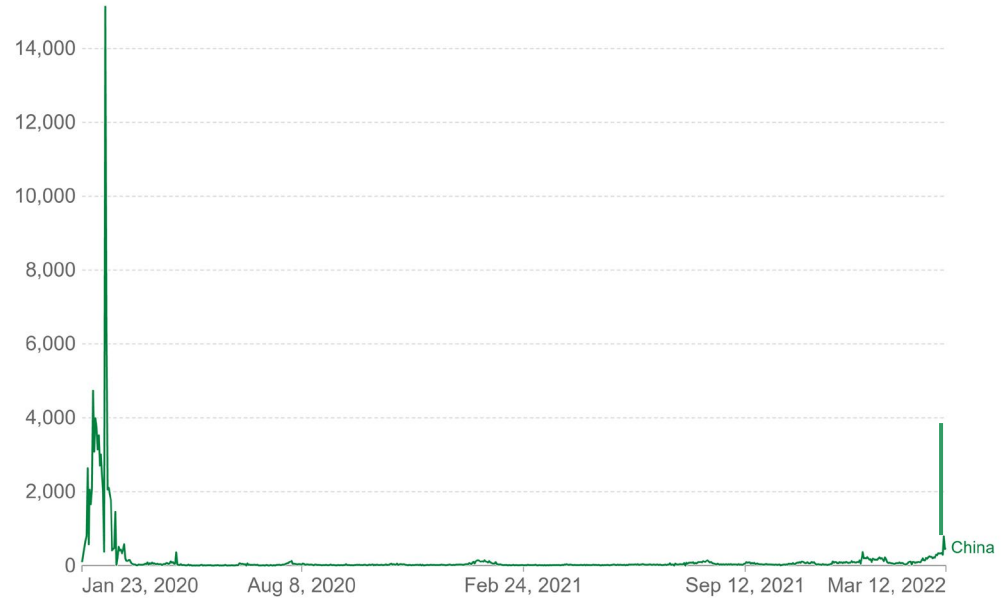
China

- 3,400 cases detected on March 12th
- New lockdowns in Shenzhen, Changchun, Yanji and in Jilin province
- School closures in Shanghai
- Mass testing – many more asymptomatic cases being detected
- The mayor of Jilin and the head of the Changchun health commission were dismissed from their jobs

Daily new confirmed COVID-19 cases

Due to limited testing, the number of confirmed cases is lower than the true number of infections.

Our World
in Data



Source: Johns Hopkins University CSSE COVID-19 Data

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Daily new confirmed COVID-19 cases per million people

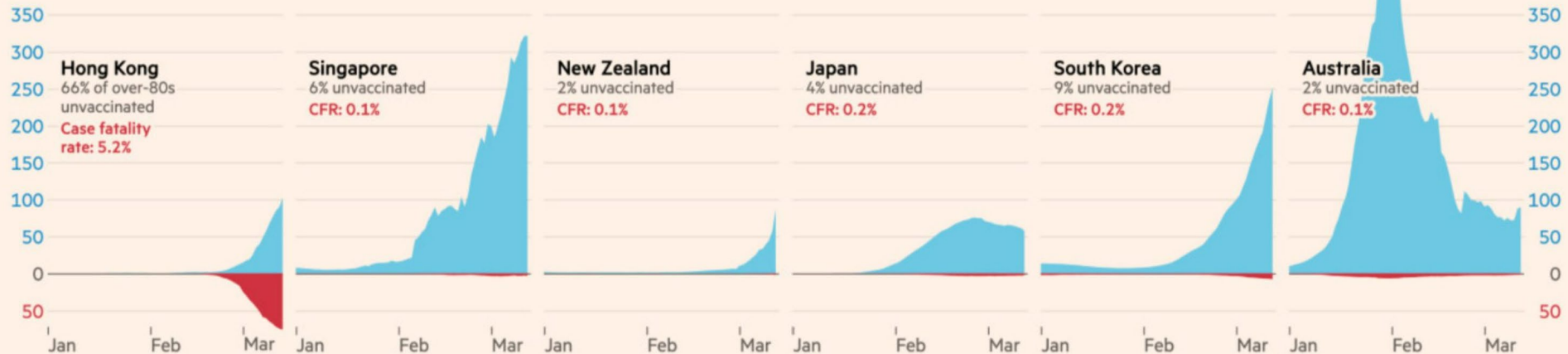
7-day rolling average. Due to limited testing, the number of confirmed cases is lower than the true number of infections.



Just a reminder on the power of vaccines

Cases are translating into deaths at much higher rates in Hong Kong than in peer countries with strong elderly vaccination coverage

Daily **cases** per 100,000 people, and daily **deaths** per 2 million

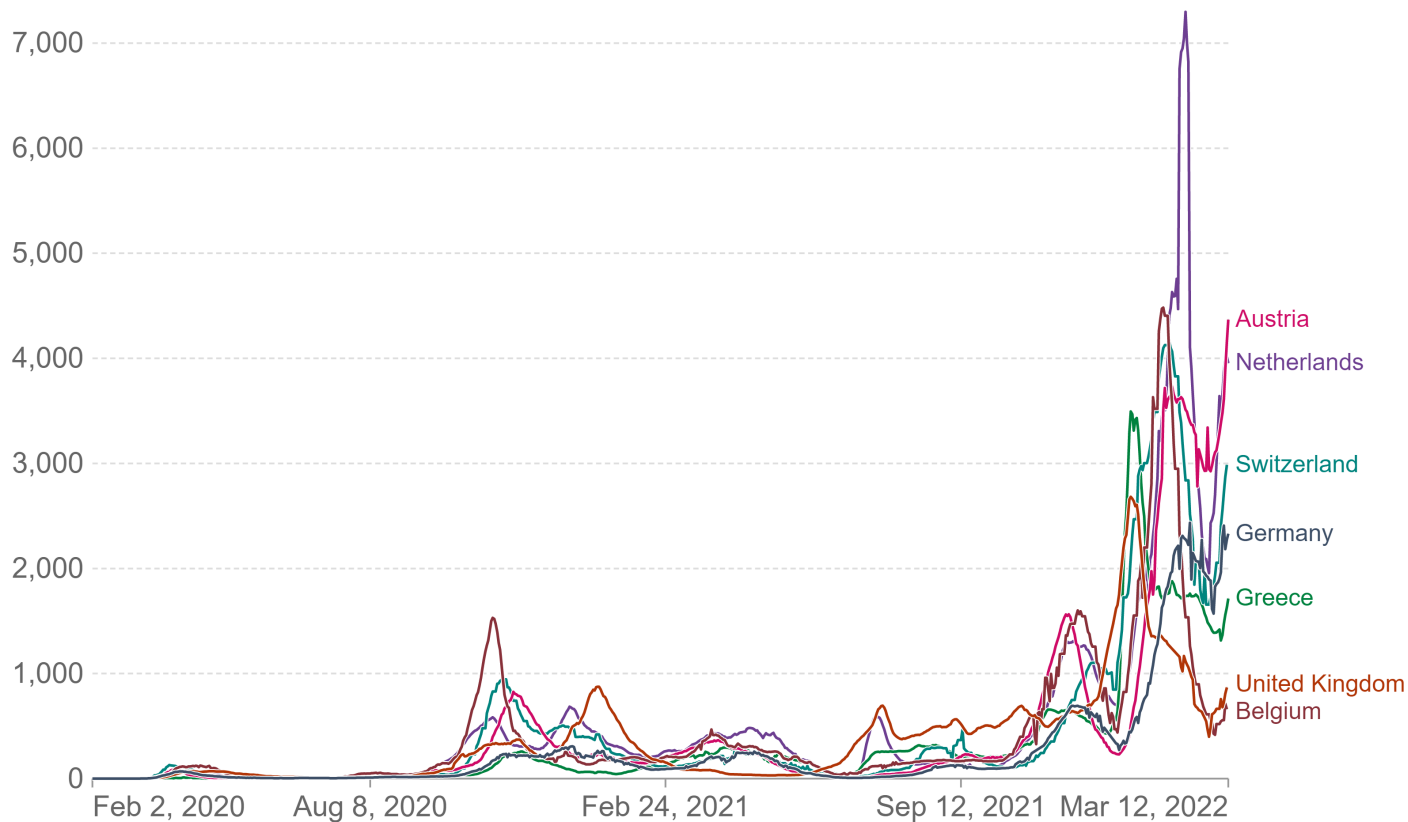


Source: FT analysis of data from Johns Hopkins CSSE. Cases shifted forward to account for lag between infection and death

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Daily new confirmed COVID-19 cases per million people

7-day rolling average. Due to limited testing, the number of confirmed cases is lower than the true number of infections.



BA.2 in the Northeast

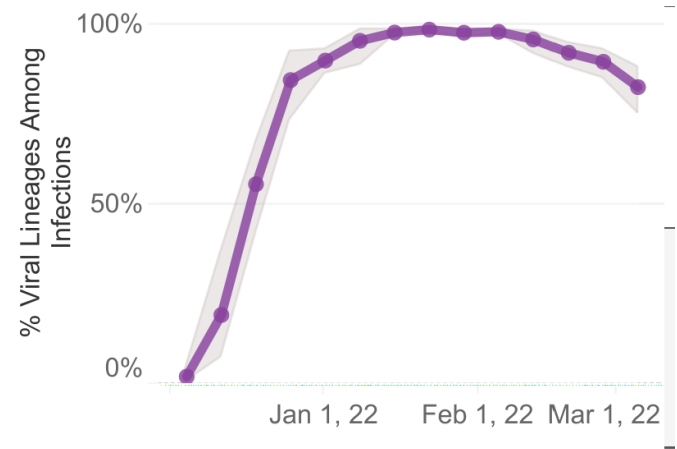
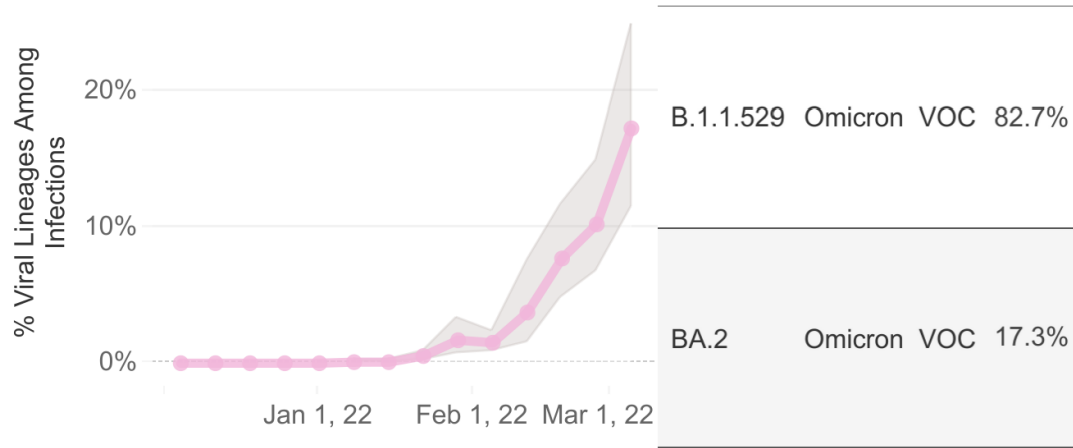
Region 2 BA.2 (Omicron):

Percent Share in the selected week: 17.3% (Colored line in the line chart below)

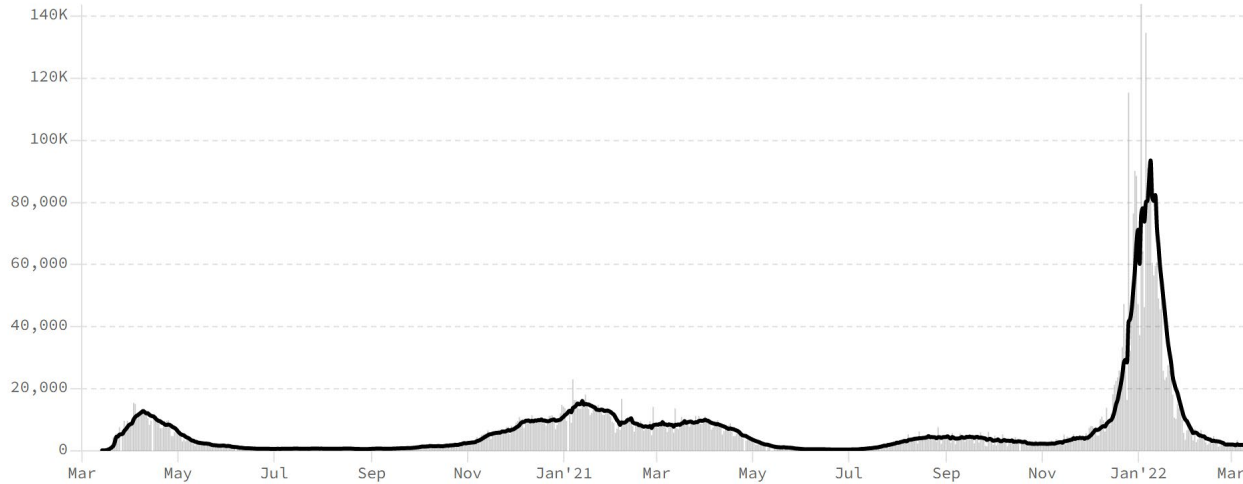
95%PI in the selected week: 11.5-24.9% (Grey shaded area in the line chart below)

Nowcast for weeks ending 2022-02-26 and 2022-03-05:

These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates



What next?



?

1. Continuing decline
2. Flattening of the curve
3. Modest bump up
4. New surge

The background of the slide features several large, detailed, purple virus-like particles. These particles have a spherical core and are covered in numerous protruding, cup-like or spike-like structures, giving them a complex, textured appearance. They are scattered across the frame, with some in sharp focus and others blurred in the background.

Questions

Upcoming NEBGH virtual events:

- **Mar. 15** – Tele-behavioral Health for Employees: Where Do We Go From Here?
- **Mar. 21** – **No Dr. Mark**
- **Mar. 22** – Prevention and Support for Substance Use Struggles
- **Mar. 28** – Dr. Mark's Weekly COVID-19 Update
- **June 16** – Benefits Leadership for a Changing World: Accept the Challenge!