

News in focus



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British hospitals have been inundated with people who have developed COVID-19 after being infected with the B.1.1.7 coronavirus variant.

IS THE CORONAVIRUS GETTING DEADLIER? THE DATA ARE INCONCLUSIVE

Deaths linked to the B.1.1.7 variant are rising, but questions remain about what is causing them.

By Smriti Mallapaty

The news is sobering, but complicated. Scientists have released the data behind a British government warning last month that the fast-spreading SARS-CoV-2 variant B.1.1.7 increases the risk of dying from COVID-19 compared with previous variants. But some scientists caution that the latest study – like the government warning – is preliminary, and still does not indicate whether the variant is more deadly, or is just spreading faster and so reaching greater numbers of vulnerable people.

The latest findings are concerning, but

to draw conclusions, “more work needs to be done”, says Muge Cevik, a public-health researcher at the University of St Andrews, who is based in Edinburgh, UK.

Last month, British Prime Minister Boris Johnson said preliminary data from several research groups suggested that B.1.1.7, which was first identified in the United Kingdom, was spreading more quickly than previous variants and was also associated with a higher risk of death. On 3 February, researchers at the London School of Hygiene & Tropical Medicine (LSHTM) released an analysis of some of those data, which suggests that the risk of dying is around 35% higher for people who are

confirmed to be infected with the new variant (N. Davies *et al.* Preprint at medRxiv <https://doi.org/ftkj; 2021>).

In real terms, that means that for men aged 70–84, the number who are likely to die from COVID-19 increases from roughly 5% for those who test positive for the older variant, to more than 6% for those confirmed to be infected with B.1.1.7, according to the analysis. For men aged 85 or over, the risk of dying increases from about 17% to nearly 22% for those confirmed to be infected with the new variant. The analysis has not been peer reviewed.

Other groups are also studying whether B.1.1.7 and other new SARS-CoV-2 variants are

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more deadly than earlier versions of the virus.

Since B.1.1.7 was first identified in September in southern England, it has become the dominant variant in the United Kingdom and has spread to more than 30 countries. To investigate whether the lineage causes an increased risk of dying, Nicholas Davies, an epidemiologist at the LSHTM, and his colleagues analysed data from more than 850,000 people who were tested for SARS-CoV-2 between 1 November and 11 January but who were not in hospital.

Although the B.1.1.7 variant was new, the researchers were able to identify people infected with it because of a glitch in a standard diagnostic kit used in the United Kingdom. The test normally looks for three SARS-CoV-2 genes to confirm the presence of the virus. But, in the case of B.1.1.7, changes to the spike protein mean that people who are infected still test positive, but for only two of these genes.

The team found that B.1.1.7 is more deadly than previous variants for all age groups, genders and ethnicities. “This provides strong evidence that there indeed exists increased mortality from the new strain,” says Henrik Salje, an infectious-disease epidemiologist at the University of Cambridge, UK.

However, Cevik says that the small number of deaths among young people included in the analysis is not enough to conclude that the new variant hits all ages equally. “It seems to really be affecting older age-groups,” she says.

This is to be expected, given that the chances of dying from COVID-19 increase significantly with age, says Tony Blakely, an epidemiologist at the University of Melbourne, Australia.

The findings are also consistent with other preliminary work summarized in a document published on 22 January by the New and Emerging Respiratory Virus Threats Advisory Group (known as NERVTAG), a UK government advisory group (see [go.nature.com/36kpraa](https://www.nature.com/36kpraa)). One research team at Imperial College London found that the average case fatality rate – the proportion of people with confirmed COVID-19 who will die as a result – was some 36% higher for people infected with B.1.1.7.

Other explanations

Cevik says more data and analysis are needed to conclude whether the variant is more deadly than other lineages. For instance, the latest study doesn't consider whether people infected with the variant have underlying co-morbidities, such as diabetes and obesity, and are therefore more vulnerable and at higher risk of dying, she says.

The study also covers only a small fraction of COVID-19 deaths in the United Kingdom – some 7% – and the effect could disappear if deaths in people tested at hospitals are included, says Cevik. Preliminary work by other groups has not found an increased risk

of death in people admitted to hospitals with the new variant, and this complicates the latest results.

Davies says it is possible that the new variant could be causing more-severe disease, resulting in more people ending up in hospital, but that, once there, their risk of dying could be the same as before. But he agrees that more data are needed before researchers can understand what's going on.

Some researchers had also suggested that B.1.1.7 could contribute to an increase in deaths because of its fast spread, which would overwhelm hospitals and affect the quality of care. But Davies says that he and his team ruled that out because they compared the risks of death associated with the new and older variants for people who were tested at the same time and place, and so would be subject to the same conditions in hospitals.

HOW TRUMP TURNED CONSPIRACY-THEORY RESEARCH UPSIDE DOWN

The former US president took QAnon and other fringe theories mainstream through social and mass media.

By Jeff Tollefson

For people around the world, the now-iconic images of a man in a horned head-dress roaming the US Capitol during the 6 January insurrection came as a shock.

For Kate Starbird, the images were frighteningly familiar. The ‘QAnon Shaman’ – the online persona of Jacob Anthony Chansley, or Jake Angeli – is a known superspreader of conspiracy theories that Starbird's research group has been monitoring for years.

The storming of the Capitol was “this physical manifestation of all of these digital characters we've been studying”, says Starbird, a

social scientist at the University of Washington in Seattle, who investigates the spread of disinformation on social media. “To see all of that come alive in real time was horrifying, but not surprising.”

Starbird is among a cadre of researchers in the United States and abroad who study the way disinformation and conspiracy theories take root and spread through social and mass media. As US president and a prolific tweeter, Republican Donald Trump turned their research upside down when he helped to push typically fringe theories into the mainstream – most recently, by downplaying the coronavirus pandemic and promoting the



The ‘QAnon Shaman’ became an icon of the 6 January insurrection at the US Capitol.