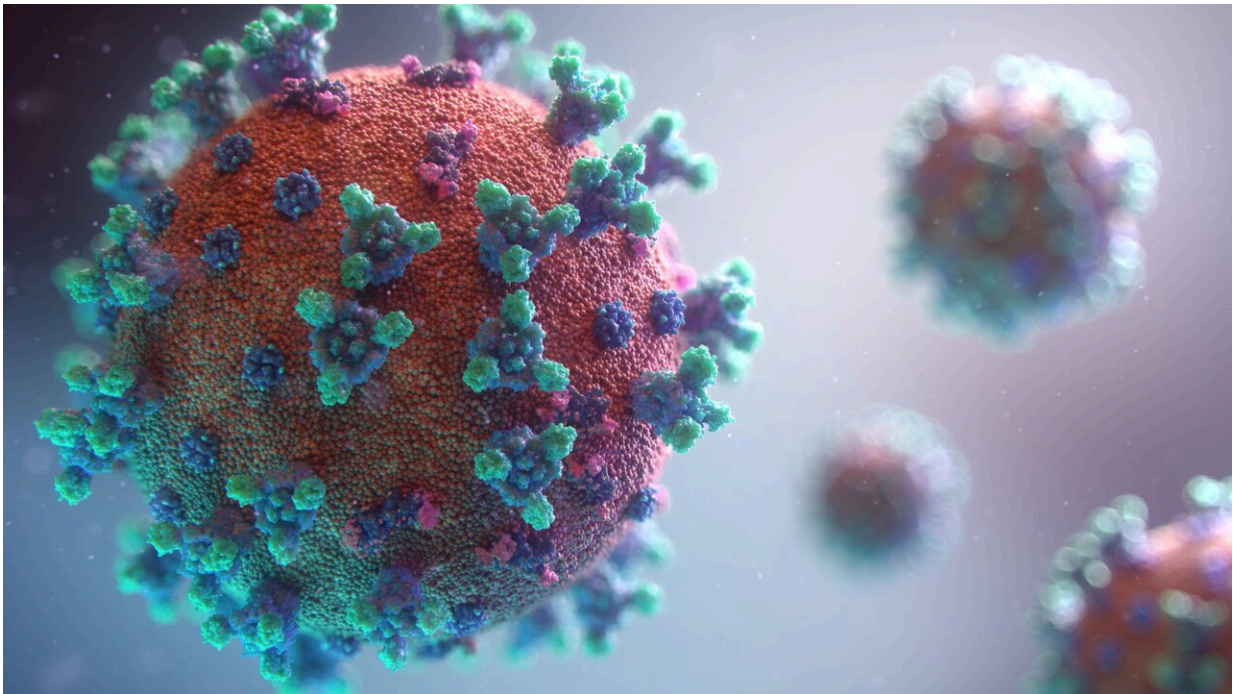


XBB.1.5, the most transmissible Covid subvariant yet

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Credit: Unsplash/CC0 Public Domain

The Omicron subvariant XBB.1.5, the most transmissible COVID-19 subvariant so far, is spreading quickly across the United States and was predicted on Friday to become Europe's dominant strain in a matter of weeks.

Here's what we know about XBB.1.5.

Where and what

The subvariant was first detected in the US in October and now represents more than 27 percent of the country's infections, according to the CDC's variant tracker.

Thirty-eight countries have reported XBB.1.5 cases, of which 82 percent have been reported in the US, eight percent in Britain and two percent in Denmark, the World Health Organization said in a rapid risk assessment on Wednesday.

The European Centre for Disease Prevention and Control (ECDC) said Friday that its modelling indicates XBB.1.5 could become the dominant strain in Europe in one or two months.

The surge would reflect the current low level of XBB.1.5—it currently accounts for just 2.5 percent of European cases—and its estimated growth rate, the agency said.

The subvariant is very similar to its predecessor XBB.1 but has an additional mutation to its spike protein—the key that allows the virus into the body's cells—said Grace Roberts, a virologist at Leeds University in Britain.

Contagiousness and severity

Maria Van Kerkhove, the WHO's technical lead on COVID, said this week that XBB.1.5 was the most transmissible form of COVID and clearly had a "growth advantage" over other forms of the virus.

The subvariant is currently spreading 12.5 percent faster than other variants in the US, according to the ECDC.

But Roberts told AFP "there's no data to suggest XBB.1.5 is any more harmful—in terms of severe disease and death—than previous variants".

The WHO is still assessing data on the subject but said XBB.1.5 did not carry any mutations that were known to increase severity.

Resistance to antibodies

Omicron's XBB variants, alongside BQ.1, are the most resistant to antibodies built up from vaccination and previous infections, according to the WHO.

A study published in the journal *Cell* last month found that XBB.1 is 63 times less likely to be neutralised by existing antibodies than the BA.2 subvariant.

It is also 49 times more resistant than the BA.4 and BA.5 subvariants, which are currently dominant in Britain and several other countries.

Roberts pointed to a recent preprint study, which has not been peer-reviewed, that suggests XBB.1.5 has a similar antibody resistance to XBB.1 but is more transmissible.

But it is "important to remember that antibodies are only one part of our immune systems," she said.

US expert Eric Topol said new research suggested that bivalent COVID vaccines targeting the BA.5 subvariant were also more effective in neutralising antibody response to XBB.1.5 than previous jabs.

That is because "the [spike protein](#) of the BA.5 bivalent more closely resembles XBB.1.5 than the Wuhan ancestral spike," Topol wrote on Substack this week.

How concerning?

The ECDC said the subvariants' overall risk level remains low for the general population.

However the risk is moderate to high for [vulnerable people](#) like the elderly or unvaccinated, it added, calling for more testing and vaccination uptake.

Roberts said there was "no cause to panic" about XBB.1.5.

"I don't think we need to take any drastic action at present," she said, adding that it remained important for countries to monitor the subvariant's progress.

The number of total COVID cases worldwide dropped by nine percent last week compared to the previous seven days, while deaths fell by 12 percent, according to the WHO, following a surge over the holiday period.

The 'Kraken'

Unlike with major variants, the WHO has decided not to name any of the Omicron subvariants after letters of the Greek alphabet, since for now most are similar in terms of transmissibility and severity.

But Twitter users have been unofficially giving the various subvariants nicknames based on mythology, with XBB.1.5 dubbed the "Kraken", Roberts said.

"I personally think this may cause unnecessary concern—especially naming viruses after mythical giant sea creatures!" she added.

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