

What's known about 'stealth' version of omicron?

January 26 2022, by Laura Ungar



A medical worker wearing protective gear collects a sample from a resident at a coronavirus test site in Xichen District in Beijing, Tuesday, Jan. 25, 2022. Hong Kong has already suspended many overseas flights and requires arrivals be quarantined, similar to mainland China's "zero-tolerance" approach to the virus that has placed millions under lockdowns and mandates mask wearing, rigorous case tracing and mass testing. Credit: AP Photo/Andy Wong

Scientists and health officials around the world are keeping their eyes on a descendant of the omicron variant that has been found in more than 50 countries, including the United States.

This version of the coronavirus, which scientists call BA.2, is widely considered stealthier than the original version of omicron because particular genetic traits make it somewhat harder to detect. Danish scientists reported this week that preliminary information suggests it may be 1 1/2 times more contagious than the original variant.

But scientists say there's a lot they still don't know about it, including whether it causes more severe disease.

WHERE HAS IT SPREAD?

More than 18,000 genetic sequences of BA.2 have been uploaded to GISAID, a global platform for sharing coronavirus data, according to [data collected by Scripps Research labs](#). The strain has been detected in at least 54 countries and 24 U.S. states.

"Thus far, we haven't seen it start to gain ground" in the U.S., said Dr. Wesley Long, a pathologist at Houston Methodist in Texas, which identified three cases as of earlier this week.

The mutant appears much more common in Asia and Europe. In Denmark, it has spread quickly and become the dominant variant, according to State Serum Institute, which falls under the Danish Ministry of Health.

"Preliminary calculations indicate that BA.2 is one and a half times more contagious than BA.1," the original omicron, the institute's Dr. Tyra Grove Krause said in a press release earlier this week. If it is more contagious, "it may mean that the wave of infections will be higher and

will extend further into February compared to the previous projections."

WHAT'S KNOWN ABOUT THIS VERSION OF THE VIRUS?

BA.2 has lots of mutations. About 20 of them in the spike protein that studs the outside of the virus are shared with the original omicron. But it also has additional genetic changes not seen in the initial version.

It's unclear how significant those mutations are, especially in a population that has encountered the original omicron, said Dr. Jeremy Luban, a virologist at the University of Massachusetts Medical School.

For now, the original omicron BA.1 and its descendant BA.2 are considered subsets of omicron. But global health leaders could give it its own Greek letter name if it is deemed a globally significant "variant of concern."

Scientists at the UK Health Security Agency found that vaccine effectiveness against symptomatic disease appears similar for BA.1 and BA.2. Looking at all vaccine brands combined, scientists found they were about 70% effective against symptomatic disease from BA.2 two or more weeks after a booster shot.

An initial analysis by scientists in Denmark shows no differences in hospitalizations for BA.2 compared with the original omicron. They are also looking into how well current vaccines work against it. It's also unclear how well treatments will work against it.

Doctors also don't yet know for sure if someone who's already had COVID-19 caused by omicron can be sickened again by BA.2. But they're hopeful, especially that a prior omicron infection might lessen

the severity if that happens.

The two versions of omicron have enough in common that it's possible that infection with the original mutant "will give you cross-protection against BA.2," said Dr. Daniel Kuritzkes, an infectious diseases expert at Brigham and Women's Hospital in Boston.

Scientists will be conducting tests to see if antibodies from an infection with the original omicron "are able to neutralize BA.2 in the laboratory and then extrapolate from there," he said.

HOW CONCERNED ARE HEALTH AGENCIES?

The World Health Organization classifies omicron overall as a variant of concern, its most serious designation of a coronavirus mutant, but it doesn't single out BA.2 with a designation of its own. Given its rise in some countries, however, the agency says investigations into its characteristics "should be prioritized."

The UK agency, meanwhile, has designated BA.2 a "variant under investigation," citing the rising numbers found in the U.K. and internationally.

WHY IS IT HARDER TO DETECT?

The original version of omicron had specific genetic features that allowed health officials to rapidly differentiate it from delta using a certain PCR lab test because of what's known as "S gene target failure."

BA.2 doesn't have this same genetic quirk. So on the test, Long said, it looks like delta.

"It's not that the test doesn't detect it; it's just that it doesn't look like omicron," he said.

WHAT SHOULD YOU DO TO PROTECT YOURSELF?

Doctors advise the same precautions they have all along: Get vaccinated and follow public health guidance about wearing masks, avoiding crowds and staying home when you're sick.

"The vaccines are still providing good defense against severe disease, hospitalization and death," Long said.

The latest version is another reminder that the pandemic hasn't ended.

"We all wish that it was over," Long said, "but until we get the world vaccinated, we're going to be at risk of having new variants emerge."

© 2022 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: What's known about 'stealth' version of omicron? (2022, January 26) retrieved 5 May 2024 from <https://medicalxpress.com/news/2022-01-stealth-version-omicron.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--