

Lab-Created Virus Can Help COVID-19 Research, Developers Say

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By Robert Preidt, *HealthDay Reporter*



MONDAY, July 27, 2020 (HealthDay News) -- A lab-created virus that's similar to but not as dangerous as the new coronavirus could aid efforts to create COVID-19 treatments and vaccines, according to scientists who created it.

Airborne and potentially deadly, the SARS-CoV-2 virus that causes COVID-19 must be studied under strict safety conditions. Precautions include full-body biohazard suits with pressurized respirators, and labs with multiple containment levels and specialized ventilation systems.

But many scientists lack access to such safety measures, slowing efforts to find drugs and vaccines. So a team of researchers at Washington University School of Medicine in St. Louis said they created a hybrid virus that doesn't require such extensive measures.

To create it, they replaced a gene in a mild virus with one from SARS-CoV-2. The hybrid virus infects cells and is recognized by antibodies just like SARS-CoV-2, but can be studied under ordinary laboratory safety protocols.

"I've never had this many requests for a scientific material in such a short period of time," said study co-author Sean Whelan, head of the university's Department of Molecular Microbiology.

"We've distributed the virus to researchers in Argentina, Brazil, Mexico, Canada and, of course, all over the U.S.," he said in a university news release. "We have requests pending from the U.K. and Germany. Even before we published, people heard that we were working on this and started requesting the material."

Researchers said the hybrid virus could help scientists evaluate a range of antibody-based preventives and treatments for COVID-19.

And since the hybrid virus looks like SARS-CoV-2 to the immune system, it's a potential vaccine candidate, researchers said. They're conducting animal studies to evaluate the possibility.

The study was recently published online in the journal *Cell Host & Microbe*.

More information

The U.S. Centers for Disease Control and Prevention has more on [COVID-19](#).

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