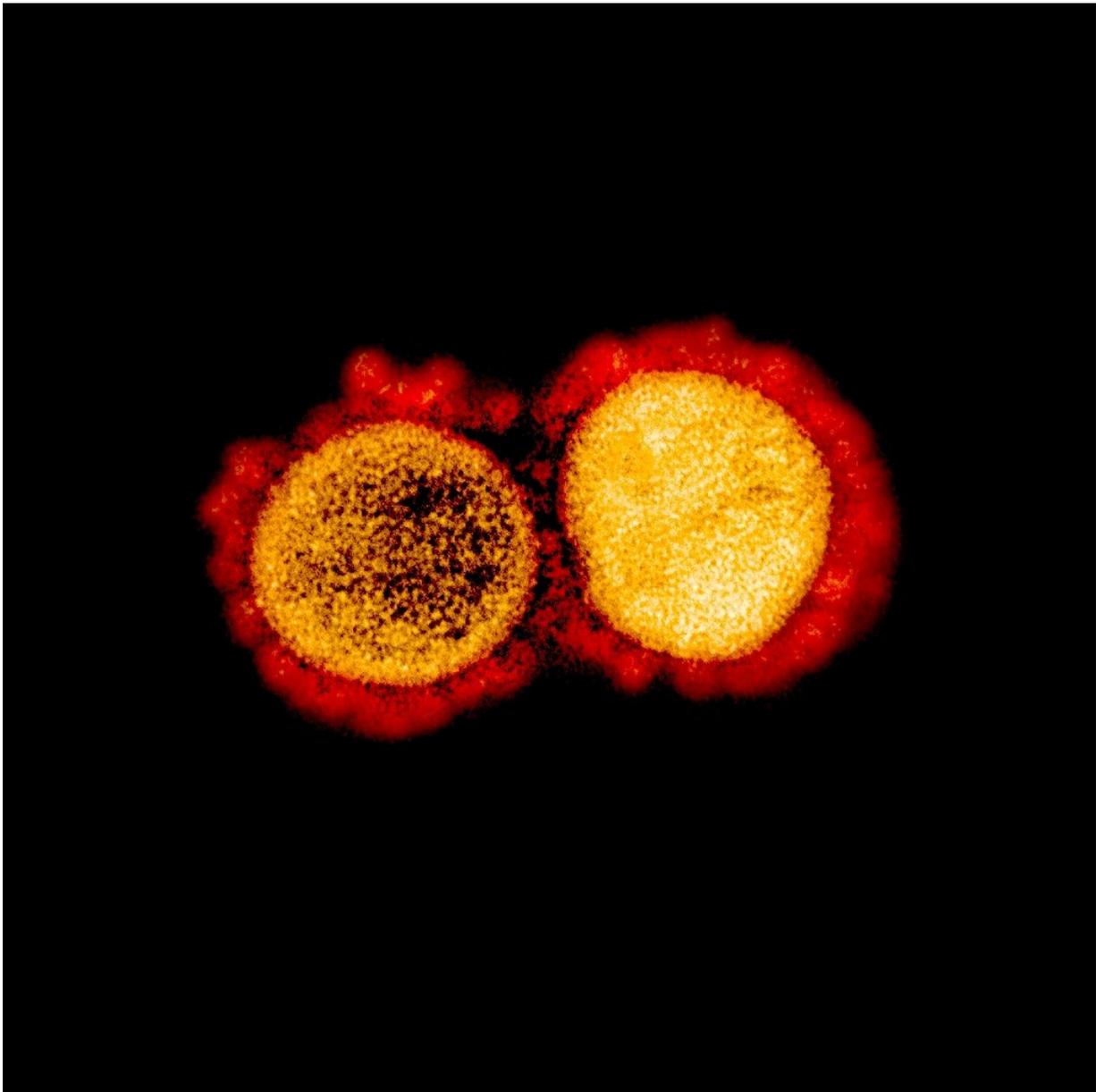


US developing coronavirus strain for human 'challenge' trials

August 15 2020



US government scientists are considering deliberately infecting volunteers with a strain of the new coronavirus in order to test vaccines more quickly

US scientists are developing a strain of the coronavirus that could be used to deliberately infect volunteers in so-called "challenge studies," a government agency said Friday.

The work is preliminary and the government is continuing to prioritize randomized clinical [trials](#) of [vaccine](#) candidates, the National Institute for Allergies and Infectious Diseases (NIAID) said.

Several of these have entered their final stages, including the vaccines developed by Moderna, Pfizer and AstraZeneca.

But NIAID has nonetheless "begun efforts to manufacture a strain that could be used to develop a human [challenge](#) model, if needed," it said in a statement.

In normal clinical trials, volunteers receive either a medicine or a placebo and their health is then followed over the course of months or years.

Scientists look for how well the vaccine or treatment worked when the person was naturally exposed to the pathogen.

A quicker way to test whether a drug works is by deliberately infecting volunteers, as has been done in the past for influenza, malaria, typhoid, [dengue fever](#), and cholera.

In the US, [advocacy groups](#) like 1DaySooner support challenge studies for COVID-19, but the subject is controversial because of how serious

the disease can be and because its effects aren't fully understood.

NIAID said it would probably reach a decision toward the end of 2020, when the late-stage clinical trials that are underway start reporting their results.

This would help it determine whether challenge studies are needed, safe and ethical, it added.

David Diemert, the director of George Washington University's vaccine trial research unit who is overseeing a trial of Moderna's vaccine in the US capital, told AFP he did not think challenge trials were appropriate for COVID-19.

"I think they're a critical tool, but only under the right circumstances," he said.

Diemert is himself leading a challenge trial into a hookworm vaccine.

But he said that for COVID-19, "we don't have a very clear understanding of who is at risk of developing severe disease and we have no treatment that is guaranteed to cure someone if they do develop severe disease."

There's also enough widespread community transmission in the US—the worst hit country in the world with 5.3 million confirmed cases—to mean challenge trials are not necessary, he added.

© 2020 AFP

Citation: US developing coronavirus strain for human 'challenge' trials (2020, August 15) retrieved 11 May 2024 from <https://medicalxpress.com/news/2020-08-coronavirus-strain-human-trials.html>

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.