

# Coronavirus Disease 2019 (COVID-19)

## CDC Grows SARS-CoV-2, the virus that causes COVID-19, in Cell Culture

*Virus isolates will be used for research by the scientific and medical community*

One important way that CDC is supporting global efforts to study and learn about the virus that causes COVID-19 in the laboratory is growing the virus in cell-culture so that researchers in the scientific and medical community can use the virus in their studies.

- On January 22, 2020, CDC received a clinical specimen collected from the first U.S. patient infected with SARS-CoV-2. CDC immediately placed the specimen into cell-culture in order to grow a sufficient amount of virus for study.
- On February 2, 2020, CDC generated enough SARS-CoV-2 grown in cell culture to distribute externally.
- On February 4, 2020, SARS-CoV-2 was shipped from CDC to the BEI Resources Repository. The BEI Resources Repository is affiliated with the National Institutes of Health (NIH). It is a central repository that supplies organisms and reagents to the broader community of microbiology and infectious disease researchers.

Once [BEI Resources](#) expands the material that they received from CDC, CDC's SARS-CoV-2 isolate can be requested by public and academic institutions that maintain appropriate facilities and safety programs, as well as have the appropriate expertise, as required by BEI. Some areas of COVID-19 research that public and academic institutions may study include:

- Antiviral research: This includes research aimed at testing the ability of existing or experimental antiviral medications to treat or prevent infection with SARS-CoV-2.
- Pathogenesis research: This includes research to determine the various ways the virus can be transmitted to a host, the severity of illness it causes in a host, how much virus is produced in the body, and what organs the virus can spread to within the body.

Virus stability research: This is research that indicates how long the virus can survive under certain conditions, such as how long the virus can remain viable and infectious on surfaces, and the temperatures at which it can survive.