

Monkeys infected with novel coronavirus developed short-term immunity

3 July 2020



Rhesus macaques are often used in scientific experiments because of their similarities to humans

Test monkeys infected with the novel coronavirus responsible for the COVID-19 pandemic were protected from reinfection for up to 28 days later, a Chinese study out Thursday in the journal *Science* said.

While the monkeys displayed initial immunity, it's unclear how long such immunity will last in humans - it will be necessary to wait months, or even years, to know if the millions of people infected at the start of the pandemic are protected from re-infection.

Scientists from Peking Union Medical College performed an experiment on rhesus macaques, often used because of their similarities to humans, to find out if they have a short-term immunity to the virus.

Six [rhesus macaques](#) were infected in their trachea with a dose of the SARS-CoV-2 virus. They developed mild to moderate symptoms, and took about two weeks to recover.

Twenty-eight days after the first infection, four of the six monkeys received another dose of [virus](#), but this time, despite a brief rise in temperature, they showed no sign of [reinfection](#), the study authors wrote.

By taking frequent samples the researchers discovered that the peak viral load was reached three days after the monkeys were infected.

The [monkeys](#) showed a stronger immune response after the first [infection](#), producing more so-called neutralizing antibodies which may have protected them against short-term reinfection, the scientists wrote.

More experiments are needed to see how long this immune defense remains, the authors said.

More information: Wei Deng et al. Primary exposure to SARS-CoV-2 protects against reinfection in rhesus macaques, *Science* (2020). [DOI: 10.1126/science.abc5343](https://doi.org/10.1126/science.abc5343)

© 2020 AFP

APA citation: Monkeys infected with novel coronavirus developed short-term immunity (2020, July 3) retrieved 5 June 2022 from <https://medicalxpress.com/news/2020-07-monkeys-infected-coronavirus-short-term-immunity.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.