

View this article online at: [patient.info/news-and-features/could-a-cure-for-the-common-cold-be-on-the-horizon](https://patient.info/news-and-features/could-a-cure-for-the-common-cold-be-on-the-horizon)

## Could a cure for the common cold be on the horizon?

Scientists may have found a way to stop the common cold virus in its tracks.

Tackling the [common cold](#) continues to be a challenge.

Most colds are caused by rhinoviruses, but there are around 160 different types and they mutate so easily they rapidly become resistant to drugs, or learn to hide from the [immune system](#).

Scientists from [UCSF](#) (University of California, San Francisco) and [Stanford University](#) believe that they have found a way to stop the common cold and closely-related viruses.

By using a technique called gene-editing, the researchers were able to reprogramme human and mice cells to stop making a protein that allows the virus to replicate.

Lead researcher Jan Carette, professor of microbiology at Stanford University in California, said: "Our grandmas have always been asking us, 'If you're so smart, why haven't you come up with a cure for the common cold?' Now we have a new way to do that."

Published in [Nature Microbiology](#), Carette and his colleagues found that switching off the protein known as methyltransferase SETD3 meant the virus couldn't replicate and died off.

The scientists then created genetically modified mice which were completely unable to produce that protein. The findings showed that these mice were healthy, despite lacking the protein for their whole lives.

"In contrast to normal mice, the SETD3-deficient mice were completely unaffected by the virus," Carette said. "It was the virus that was dead in the water, not the mouse."

However, the trials are not ready to be tested on humans just yet.

There are no plans to 'gene edit' humans to prevent colds. Instead, the task will be to identify a drug that can achieve the same effect by temporarily suppressing the protein.

For most people, the common cold is more of an inconvenience than a major threat to their health. However, in people with asthma, it can make their symptoms much worse.

Professor Jonathan Ball, a virologist at the University of Nottingham, cautioned that more research is needed to know the approach is safe.

"There is increasing interest in developing treatments that target these host proteins, because it can potentially overcome virus mutation – one of the major barriers to developing effective broadly active antivirals," Ball [told the BBC](#). "But of course, viruses are very adaptable and it is conceivable that even a host-targeting treatment might not keep them at bay for long."

*The [study's findings](#) are published in Nature Microbiology.*

**Disclaimer:** This article is for information only and should not be used for the diagnosis or treatment of medical conditions. Egton Medical Information Systems Limited has used all reasonable care in compiling the information but makes no warranty as to its accuracy. Consult a doctor or other healthcare professional for diagnosis and treatment of medical conditions. For details see our [conditions](#).

Authored by:	Peer Reviewed by: Natalie Healey	
Originally Published: 20/11/2023	Next review date: 17/09/2019	Document ID: doc_31169

---

View this article online at: [patient.info/news-and-features/could-a-cure-for-the-common-cold-be-on-the-horizon](https://patient.info/news-and-features/could-a-cure-for-the-common-cold-be-on-the-horizon)

Discuss Could a cure for the common cold be on the horizon? and find more trusted resources at [Patient](https://patient.info).

---



To find out more visit [www.patientaccess.com](https://www.patientaccess.com)  
or download the app



Follow us

