

## Universal mRNA-based vaccine targeting 20 types of flu is a real possibility

Scientists say they have made a breakthrough designing a vaccine against all 20 known types of flu.

It uses the same messenger-ribonucleic-acid (mRNA) technology as successful Covid vaccines.

Flu mutates and the current annual jab is updated to ensure the best match for the sort circulating but would probably not protect against new pandemic types.

The new vaccine triggered high levels of antibodies, in tests on ferrets and mice, that could fight a broad range.

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The antigens it contains – safe copies of recognisable bits of all 20 known subtypes of influenza A and B viruses – can teach the immune system how to fight them and, hopefully, any new strain that could spark a pandemic, the researchers say, in the journal [Science](#).

“The idea here is to have a vaccine that will give people a baseline level of immune memory to diverse flu strains,” Dr Scott Hensley, one of the scientists behind the work, at the University of Pennsylvania, said. “There will be far less disease and death when the next flu pandemic occurs.”

The 2009 swine flu pandemic – caused by a virus that jumped species to infect humans – was less serious than initially feared.

But the 1918 Spanish flu pandemic is thought to have killed tens of millions of people.

[\*\*This is an excerpt. Read the full article here\*\*](#)