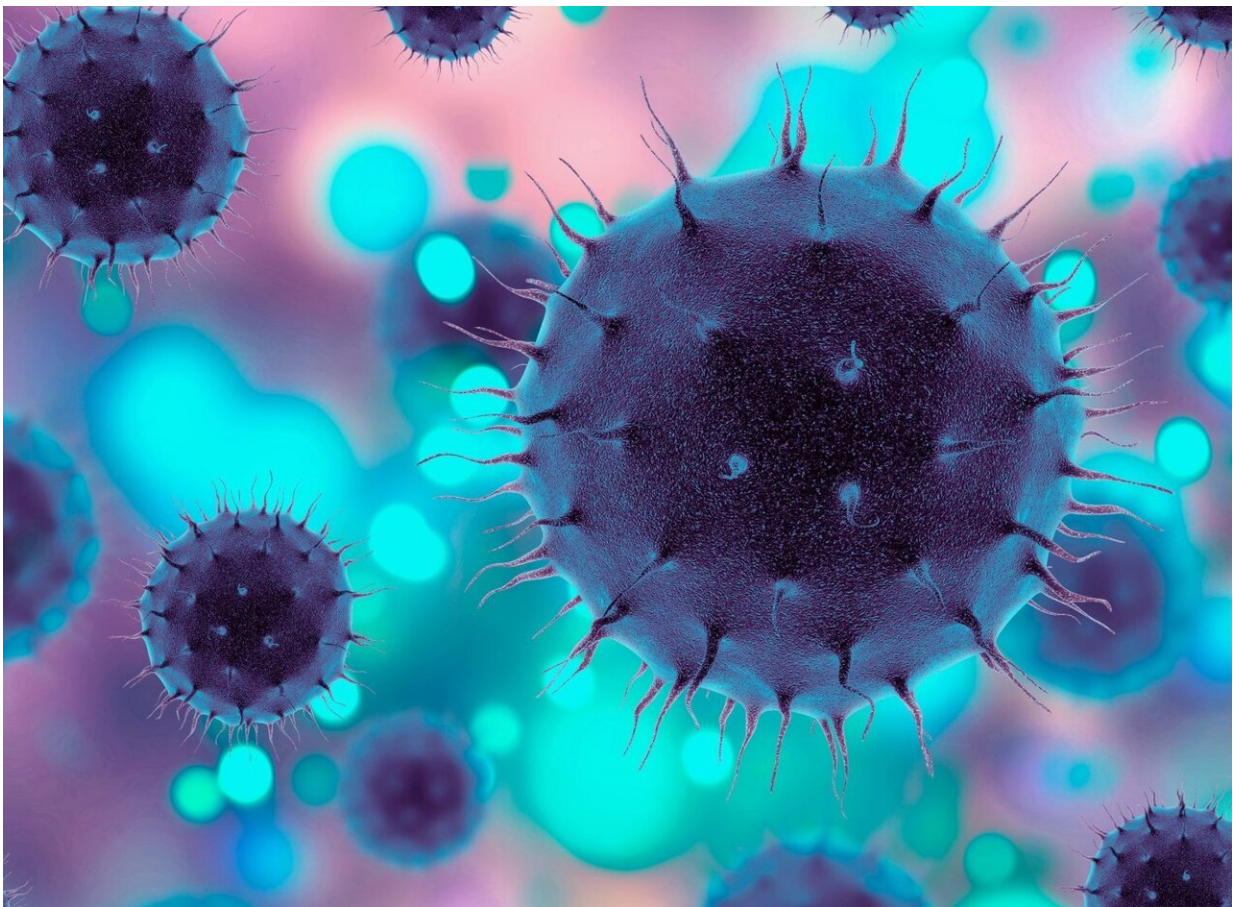


Vaccines will be best defense against bird flu, experts say

May 29 2024, by Dennis Thompson



Humanity's best protection against bird [flu](#) will be the development of effective vaccines, a new study says.

The H5N1 avian flu has been raging through cattle and poultry in the United States, increasing fears that the [virus](#) will make the leap into humans and potentially cause another pandemic.

Only two people to date are known to have contracted the virus linked to the current outbreak. Both patients were U.S. farm workers, and luckily they only suffered eye symptoms and made a full recovery with treatment, researchers said.

In the first human case, researchers found the strain had mutated to be better at infecting the cells of mammals.

The concern is that if H5N1 continues to spread in U.S. farms, it has the potential to mutate into a form that will easily spread among humans, researchers said.

Vaccines remain humanity's best defense against the threat posed by the H5N1 and other strains of [bird flu](#), according to the [research](#) published in the journal *Human Vaccines & Immunotherapeutics*.

"The H5N1, H7N9, and H9N2 subtypes of avian influenza virus pose a dual threat, not only causing significant economic losses to the global poultry industry but also presenting a pressing public health concern due to documented spillover events and human cases," said lead researcher Dr. Flavio Cargnin Faccin, a doctoral student with the University of Georgia.

"This deep delve into the landscape of avian influenza vaccines for

humans shows vaccination remains the primary defense against the spread of these viruses," Faccin said in a journal news release.

The researchers analyzed a number of different [vaccine](#) types—inactivated vaccines, live attenuated flu vaccines and mRNA vaccines—and determined they all show promise in protecting animals and people from the avian flu.

Overall, the team suggests "exploring and employing a diverse range of vaccine platforms will be crucial for enhancing pandemic preparedness and mitigating the threat of avian influenza viruses."

Work along those lines already is proceeding in mRNA vaccines.

A study published last week reported that an experimental mRNA vaccine against the H5N1 avian flu was effective in preventing serious illness and death in lab mice and ferrets.

The [lab animals](#) maintained high levels of antibodies a year after infection, and vaccinated animals infected with H5N1 cleared the virus quicker and suffered fewer symptoms than unvaccinated animals, [researchers reported](#) in the journal *Nature Communications*.

More information: The U.S. Centers for Disease Control and Prevention has more about the [bird flu](#).

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