

# National Institutes of Health Update

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U.S. Department of Health and Human Services

**NIH News**  
National Institutes of Health

National Institute of Allergy and  
Infectious Diseases (NIAID)

<http://www.niaid.nih.gov>

June 28, 2022

# Trial of Potential Universal Flu Vaccine Opens at NIH Clinical Center



# Evaluating New Vaccine Strategies for H5 Influenza



NIAID News   
@NIAIDNews



FLU NEWS: A clinical trial of an intranasal H5 vaccine —a [#flu](#) virus with pandemic potential—is testing if the immune response against a novel flu virus can be increased by changing the route of administration and adding an immune-boosting adjuvant. [#NIAID](#)

*ClinicalTrials.gov*

clinicaltrials.gov

A Safety and Immunogenicity of Intranasal Nanoemulsion A...  
A Safety and Immunogenicity of Intranasal Nanoemulsion  
Adjuvanted Recombinant Pandemic Flu Vaccine in Healthy ...

# NIAID Study Searches for Answers in Mystery of Long COVID

**NIAID Now June 07, 2022**

<https://www.niaid.nih.gov/news-events/niaid-study-focuses-long-covid-symptoms>

- Study designed using pre-specified diagnostic evaluations conducted on all participants.
- A high burden of persistent symptoms was observed in persons after initial COVID-19 disease.
- Extensive diagnostic evaluation revealed no specific cause of reported symptoms in most cases.

Media Advisory

Tuesday, July 19, 2022

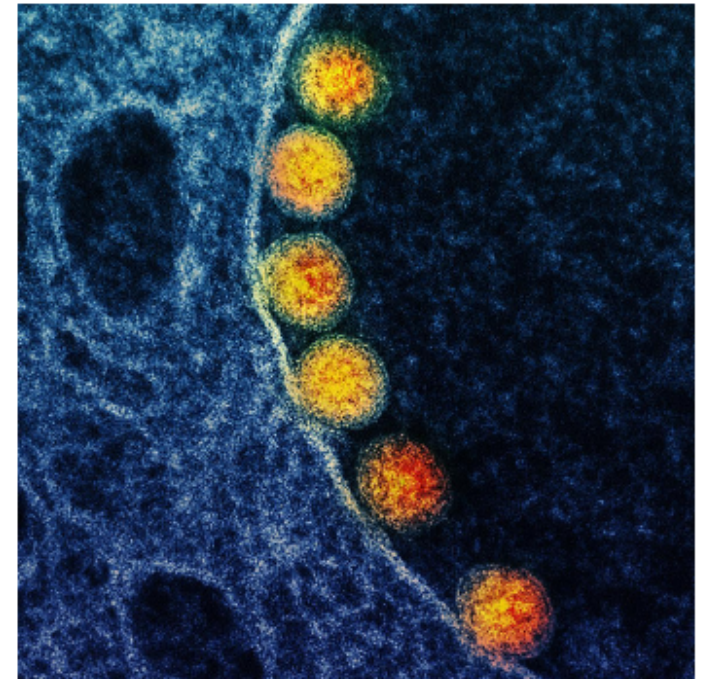
## Vaccine-Induced Immune Response to Omicron Wanes Substantially Over Time



### What

Although COVID-19 booster vaccinations in adults elicit high levels of neutralizing antibodies against the Omicron variant of SARS-CoV-2, antibody levels decrease substantially within 3 months, according to new clinical trial data. The findings, published today in *Cell Reports Medicine*, are from a study sponsored by the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health. The trial was led by NIAID's [Infectious Diseases Clinical Research Consortium](#).

As part of a “mix and match” [clinical trial](#), investigators administered COVID-19 booster vaccines to adults in the United States who had previously received a primary COVID-19 vaccination series under Emergency Use Authorization. Some participants received the same vaccine as their primary series, and others received a different vaccine. Investigators then evaluated immune responses over time. [Results previously reported in the \*New England Journal of Medicine\*](#) showed all combinations of primary and booster vaccines resulted in increased neutralizing antibody levels in the recipients.



Transmission electron micrograph of SARS-CoV-2 virus particles (gold) within endosomes of a heavily infected nasal Olfactory Epithelial Cell. *NIAID*

### **SARS-CoV-2 Variant Vaccine Boosters Trial: Preliminary Analyses**

Angela R. Branche, Nadine G. Roupheal, David J. Diemert, Ann R. Falsey, Cecilia Losada, Lindsey R. Baden, Sharon E. Frey, Jennifer A. Whitaker, Susan J. Little,  Evan J. Anderson, Emmanuel B. Walter, Richard M. Novak, Richard Rupp, Lisa A. Jackson, Tara M. Babu, Angelica C. Kottkamp, Anne F. Luetkemeyer, Lilly C. Immergluck, Rachel M. Presti, Martin Bäcker, Patricia L. Winokur, Siham M. Mahgoub, Paul A. Goepfert, Dahlene N. Fusco, Elissa Malkin, Jeffrey M. Bethony, Edward E. Walsh, Daniel S. Graciaa, Hady Samaha, Amy C. Sherman, Stephen R. Walsh, Getahun Abate, Zacharoula Oikonomopoulou, Hana M. El Sahly, Thomas C.S. Martin, Christina A. Rostad, Michael J. Smith, Benjamin G. Ladner, Laura Porterfield, Maya Dunstan, Anna Wald, Tamia Davis, Robert L. Atmar, Mark J. Mulligan, Kirsten E. Lyke, Christine M. Posavad, Megan A. Meagher, David S. Stephens, Kathleen M. Neuzil, Kuleni Abebe, Heather Hill, Jim Albert, Teri C. Lewis, Lisa A. Giebeig, Amanda Eaton, Antonia Netzl, Samuel H. Wilks, Sina Türeli, Mamodikoe Makhene, Sonja Crandon, Marina Lee, Seema U. Nayak, David C. Montefiori, Mat Makowski, Derek J. Smith, Paul C. Roberts, John H. Beigel, the COVAIL Study Group

doi: <https://doi.org/10.1101/2022.07.12.22277336>

Higher Omicron BA.1 titers were observed with Omicron-containing vaccines compared to Prototype vaccine and titers against Omicron BA.4/BA.5 were lower than against BA.1 for all candidate vaccines.