

# Is an allergy to a COVID vaccine always real? Placebo trial casts doubt

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Allergic reactions to the Pfizer or Moderna COVID vaccines are very

rare, and a new study questions whether many of those that do occur are even real.

In a small new study of 16 people who said they'd experienced an allergic reaction to a dose of the Pfizer vaccine, those who got a follow-up placebo (fake) vaccine were more likely to complain of another round of "allergic" reactions than those who got the real thing.

This phenomenon is something doctors have long known about, and it even has a name: Immunization Stress-Related Response (ISRR) syndrome.

"This has been reported prior to the COVID pandemic, but I think it's been accentuated by the COVID pandemic and these newer vaccinations," Dr. David Khan, president of the American Academy of Allergy, Asthma & Immunology (AAAAI), said in an [interview with HealthDay](#).

According to Khan, there's good news from the findings: "The vast majority of patients who've had reactions which they think are allergic can actually receive subsequent vaccinations, and do this safely, and there have been a number of studies that show that."

The study was presented recently at the AAAAI's annual meeting in San Antonio, Texas.

The new trial was led by Dr. Muhammad Khalid, a clinical fellow in the Laboratory of Allergic Diseases of the National Institute of Allergy and Infectious Diseases (NIAID), part of the U.S. National Institutes of Health.

The study involved 15 women and one man, averaging 45 years of age. All said they'd experienced symptoms indicating a systemic allergic

reaction after receiving their first dose of the Pfizer vaccine.

All of them were then given either a second dose of the vaccine or a placebo shot—they weren't told which—in a hospital intensive care unit setting.

After that phase of the trial, 13 of the patients went on to be given a real Pfizer shot in an "unblinded" manner, meaning they knew they were getting the real vaccine. They also got skin testing, looking for signs of a real allergic response.

The results: Of the 16 patients, 11 who got the fake vaccine "developed non-allergic manifestations (median onset: 3 minutes) such as numbness, tingling, dizziness, throat tightness, dysphagia [trouble swallowing], and transient hypertension [[high blood pressure](#)] consistent with ISRR," Khan's team reported.

That number was more than the nine people who got similar reactions after getting the real dose over the two phases of the trial.

In almost half (45%) of the cases, the reaction was deemed to be "moderate-severe," because of the level of distress individuals were feeling.

However, after skin test results came back, only 3 of the 16 participants were deemed to have experienced an actual allergic reaction to their second Pfizer shot, the NIAID team reported.

None of the symptoms occurring in people following a placebo vaccine were found to be due to an actual allergic response, the team noted.

The bottom line, according to the researchers: "ISRR is an under-recognized, vaccine-induced anaphylaxis mimic that likely contributes to

the elevated rate of 'allergic' reactions reported following COVID-19 mRNA vaccination."

None of this means that people aren't experiencing symptoms after receiving a vaccine—just that an innate allergy may not be the cause.

"As it turned out, there were more people who had reactions to the placebo than the actual [vaccine](#)," Khan said. "In fact, almost all of them had some type of symptoms, and the typical symptoms that we saw were not really allergic but could be mimics of an allergic reaction."

This study was presented at a medical meeting. As such, its findings should be considered preliminary until published in a peer-reviewed journal.

**More information:** Find out more about allergies at the [American College of Allergy, Asthma & Immunology](#).

Study: [annualmeeting.aaaai.org/UserFi...-RelatedResponse.pdf](#)

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