

# Don't Use Antibody Tests Post Vaccine to Determine Immunity

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## STORY AT-A-GLANCE

- › The U.S. Food and Drug Administration issued a safety communication in May 2021, warning both the public and health care providers not to use SARS-CoV-2 antibody tests to gauge immunity, especially after COVID-19 vaccination
- › There's a significant difference in the immune response triggered by natural infection and vaccination
- › In the case of COVID-19 mRNA vaccines, such as those produced by Pfizer and Moderna, antibodies to the spike protein are induced; in the case of natural SARS-CoV-2 infection, nucleocapsid proteins are detected by antibody testing
- › Because of this, people who have received a COVID-19 vaccine and haven't previously been infected will receive a negative antibody test, provided the test doesn't detect the vaccine-induced spike protein antibodies
- › A positive result from a SARS-CoV-2 antibody test could indicate previous infection or could also be caused by the vaccine

**Antibodies are proteins your body makes in response to infections and will be detectable in your blood after infection as a sign of your body's battle against that pathogen. Antibodies for COVID-19 are believed to develop within one to three weeks after infection, and a positive antibody test for COVID-19 means that a person may have been infected with SARS-CoV-2, the virus that causes COVID-19, in the past.<sup>1</sup>**

Titer blood tests, which measure the presence and amounts of certain antibodies in your blood, are sometimes used to prove immunity to a disease.<sup>2</sup> If your titer is positive, which means it's above a set value, you're considered to be immune to the disease, such as measles, mumps or rubella.<sup>3</sup>

This is why, for instance, proof of prior diagnosis with chickenpox, measles and mumps is allowed instead of vaccination to enter most U.S. public schools<sup>4</sup> — once you've had the disease and recovered, you're immune.

In the case of COVID-19, however, the U.S. Food and Drug Administration issued a safety communication in May 2021,<sup>5</sup> warning both the public and health care providers not to use SARS-CoV-2 antibody tests to gauge immunity, especially among people who've received a COVID-19 vaccine.

## **Antibody Testing Not Recommended to Assess COVID-19 Immunity**

In their safety communication, the FDA noted, "... results from currently authorized SARS-CoV-2 antibody tests should not be used to evaluate a person's level of immunity or protection from COVID-19 at any time, and especially after the person received a COVID-19 vaccination."

They state that while a positive antibody test may identify those who have been previously infected with SARS-CoV-2, "more research is needed in people who have received a COVID-19 vaccination." SARS-CoV-2 antibody tests haven't been studied to assess the level of protection the vaccine-induced immune response provides in those who've received a COVID-19 vaccine.

Even in people who have not been **vaccinated**, the FDA states that a positive antibody test isn't adequate to show that you're protected from COVID-19; it's only an indication that you were possibly infected with SARS-CoV-2 previously. In those who have received a COVID-19 vaccine, a positive result from a SARS-CoV-2 antibody test could indicate a previous natural infection or could be caused by the vaccine. According to the FDA:<sup>6</sup>

*“A COVID-19 vaccination may also cause a positive antibody test result for some but not all antibody tests. You should not interpret the results of your SARS-CoV-2 antibody test as an indication of a specific level of immunity or protection from SARS-CoV-2 infection.”*

## **COVID Vaccines Induce Antibodies to the Spike Protein**

There’s a significant difference in the immune response triggered by natural infection versus vaccination. In the case of COVID-19 mRNA vaccines, such as those produced by Pfizer and Moderna, antibodies to the **spike protein** are induced. In the case of natural SARS-CoV-2 infection, nucleocapsid proteins are detected by antibody testing.

Because of this, people who have received a COVID-19 vaccine and haven’t previously been infected will receive a negative antibody test, provided the test doesn’t detect the vaccine-induced spike protein antibodies.<sup>7</sup> Interestingly, it’s been found that the spike proteins can damage human cells and alter mitochondrial function even without a viral component.<sup>8</sup>

In an animal study published in *Circulation Research*, when a pseudo virus, which was a cell surrounded by spike proteins that did not contain a virus, was administered into the lungs of hamsters, it caused inflammation, and when healthy endothelial cells that line human arteries were exposed, it disrupted signaling to the mitochondria and caused damage and fragmentation.<sup>9</sup>

The good news about the FDA’s warning is that, as Daily Mail put it, “the [antibody] blood test likely won’t confirm that someone has been vaccinated (functioning like a pseudo-immunity passport).”<sup>10</sup> On the other hand, the warning also suggests that those who have previously had a positive antibody test for COVID-19 shouldn’t assume they’re protected. However, this could be a fear-based method to convince more people to get vaccinated. Daily Mail reported:<sup>11</sup>

*“The briefing comes as the United States’ vaccine rollout progress has slowed down in recent weeks, and some who have previously tested positive for COVID-19 or the antibodies do not believe getting vaccinated is necessary. The FDA is*

*saying otherwise and encouraging all Americans to get vaccinated if they are able to do so.”*

## **Red Cross Needs COVID Plasma – but Only From the Unvaccinated**

In the U.S., more than 100,000 people have been treated with COVID-19 convalescent plasma, which is sometimes referred to as survivor’s plasma.<sup>12</sup> Because it contains antibodies to SARS-CoV-2, convalescent plasma may help your body fight off the virus and has been found to reduce the progression of COVID-19 in mildly ill older adults.<sup>13</sup>

Transfusion of plasma with higher SARS-CoV-2 antibody levels has also been linked to a lower risk of death in nonventilated patients hospitalized for COVID-19, compared to transfusion of plasma with lower antibody levels.<sup>14</sup> The Red Cross accepts donations for COVID-19 convalescent plasma, but only from people who have not received a **COVID-19 vaccine**.

According to the Red Cross, “At this time individuals who have received a COVID-19 vaccine are not able to donate convalescent plasma with the Red Cross. The Red Cross is working as quickly as possible to evaluate this change – as it may involve complex system updates.”<sup>15</sup>

In a video posted to Twitter by Musicman, a news anchor states, “That [convalescent] plasma is made up of antibodies from people who have recovered from the virus, but the vaccine wipes out those antibodies, making the convalescent plasma ineffective in treating other COVID-19 patients.”<sup>16</sup>

While the Red Cross site doesn’t explain why they’re “not able” to use convalescent plasma, in January 2021 the Regulatory Affairs Professionals Society (RAPS) offered a clue to its membership after the FDA revised its guidelines on who can qualify to donate.

“With two vaccines authorized for emergency use in the U.S. and others in clinical development, FDA says that convalescent plasma should not be collected from

individuals who received an investigational COVID-19 vaccine in a clinical trial or who received an authorized or licensed COVID-19 vaccine, unless they meet specific criteria detailed in the guidance,” RAPS says.<sup>17</sup>

In order to be eligible, the FDA stated vaccine recipients must have had symptoms of COVID-19 along with a **positive test** result, and be within six months of complete resolution of symptoms. According to the FDA, the purpose of the criteria is “to ensure the COVID-19 convalescent plasma collected from donors contains sufficient antibodies directly related to their immune response to COVID-19 infection.”<sup>18</sup>

Before the COVID-19 vaccines received emergency use authorization, the FDA also warned against collecting convalescent plasma from subjects who received the vaccine in a clinical trial “because of the uncertainty regarding the quality of the immune response produced by such investigational vaccines.”<sup>19</sup>

## **Problems With Antibody Tests**

There have been problems with COVID-19 antibody tests from the start, in part because it may turn positive if you have antibodies against common cold viruses. There are seven different coronaviruses that cause respiratory illness in humans. Four of them cause symptoms associated with the common cold, while three of them – SARS-CoV, MERS-CoV and SARS-CoV-2 – can cause more serious respiratory illness.

However, the antibodies created by these coronaviruses are very similar, and the U.S. CDC admitted that recovering from the **common cold can trigger a positive antibody test** for COVID-19, even if you were never infected with SARS-CoV-2 specifically. According to the CDC:<sup>20</sup>

*“A positive test result shows you may have antibodies from an infection with the virus that causes COVID-19. However, there is a chance that a positive result means you have antibodies from an infection with a different virus from the same family of viruses (called coronaviruses).”*

## Vaccine Risks for People Who've Had COVID

An international survey of 2,002 people who had received a first dose of COVID-19 vaccine found that people who had previously had COVID-19 experienced “significantly increased incidence and severity” of **side effects** after the COVID-19 vaccine.<sup>21</sup> Those who had previously had COVID-19 had a greater risk of experiencing any side effect, along with the following, specifically:

Fever
Breathlessness
Flu-like illness
Fatigue
Local reactions
Severe side effects leading to hospital care

The **mRNA COVID-19 vaccines** were linked to a higher incidence of side effects compared to the viral vector-based COVID-19 vaccines, but the mRNA side effects tended to be milder, local reactions. Systemic reactions, such as anaphylaxis, flu-like illness and breathlessness, were more likely to occur with the viral vector COVID-19 vaccines.

According to the researchers, the findings should prompt health officials to re-evaluate their vaccination recommendations for people who've had COVID-19,<sup>22</sup> but the CDC continues to state that those who have recovered from COVID-19 should still get vaccinated.<sup>23</sup>

Dr. Hooman Noorchashm, Ph.D., has repeatedly warned the FDA that “clear and present danger” exists for those who have had COVID-19 and subsequently get vaccinated, due to viral antigens that remain in the body after a person is naturally infected; the immune

response reactivated by the COVID-19 vaccine may trigger inflammation in tissues where the viral antigens exist.<sup>24</sup>

Noorchashm believes that people should be screened for SARS-CoV-2 viral proteins prior to COVID-19 vaccination, while vaccination should be delayed for people with symptomatic or asymptomatic COVID-19 infections, as well as for those who have recently recovered from the virus.

## **Booster Dose Within One Year of COVID Vaccine?**

The media continue to promote the fake narrative that natural immunity – the type acquired by getting infected by and recovering from a virus – isn't as powerful or long-lasting as vaccine-acquired immunity.<sup>25,26</sup>

However, Dr. Anthony Fauci stated during an Axios virtual event that a COVID-19 vaccine booster is likely. "I think we will almost certainly require a booster sometime within a year or so, after getting the primary [shot]," he said, "because the durability of protection against coronaviruses is generally not lifelong."<sup>27</sup>

Pfizer's CEO Albert Bourla has also stated that not only will people need a third booster dose of COVID-19 vaccine within 12 months of being fully vaccinated, but annual vaccination will probably be necessary.<sup>28</sup>

Robust natural immunity has been demonstrated, however, for at least eight months after infection in more than 95% of people who have recovered from COVID-19.<sup>29,30</sup> A Nature study also demonstrated robust natural immunity in people who recovered from SARS and SARS-CoV-2,<sup>31</sup> while additional data show patients who were infected with COVID-19 develop an immune response that could protect them for years.<sup>32</sup>

## **Sources and References**

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- <sup>3</sup> [Walk in Lab, MMR Immunity Profile Blood Test](#)
- <sup>4</sup> [IDPH, Minimum Immunization Requirements Entering a Child Care Facility or School in Illinois, Fall 2020](#)

- <sup>5, 6, 7</sup> U.S. FDA May 19, 2021
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- <sup>10, 11</sup> Daily Mail May 19, 2021
- <sup>12</sup> National Institutes of Health March 2, 2021
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