

Myocarditis and pericarditis

Some people who have received the Pfizer, Moderna, or Novavax COVID-19 vaccines have had rare cases of myocarditis (inflammation of the heart muscle) and pericarditis (inflammation of the lining outside the heart). In most cases, symptoms began within seven days after the second dose of COVID-19 vaccine. Most cases of myocarditis and pericarditis have been in young men. **The chance of having this occur is very low and is higher in people with COVID-19 disease than after vaccination.** Seek medical attention right away if you have any of the following symptoms after receiving COVID-19 vaccine:

- Chest pain
- Shortness of breath
- Feelings of having a fast-beating, fluttering, or pounding heart

For more information, visit [CDC: Myocarditis and Pericarditis Following mRNA COVID-19 Vaccination](#).

Guillain-Barré syndrome

A few people who have received the Johnson & Johnson COVID-19 have experienced [Guillain-Barré Syndrome](#) (GBS). GBS is a rare disorder where the body's immune system damages nerve cells, causing muscle weakness and sometimes paralysis. Most people fully recover from GBS, but some have permanent nerve damage. The benefits of vaccination outweigh the slight risk of this side effect and the chance of having this occur is very rare.

Symptoms of GBS have mostly been reported about two weeks after someone gets vaccinated and mostly in men ages 50-64 years of age. CDC will continue to monitor for and evaluate reports of GBS happening after COVID-19 vaccination and will share more information as it becomes available.

Seek medical attention right away if you have any of the following symptoms after receiving the Johnson & Johnson vaccine:

- Weakness or tingling sensations, especially in the legs or arms, that's worsening and spreading to other parts of the body
- Hard time walking
- Hard time with moving your face, including speaking, chewing, or swallowing
- Double vision or not being able to move eyes
- Difficulty with bladder control or bowel function

Blood clotting issues (thrombosis with thrombocytopenia syndrome, TTS)

Some people who have received the Johnson & Johnson COVID-19 vaccine have developed blood clots involving blood vessels in the brain, abdomen, and legs along with low levels of platelets (blood cells that help your body stop bleeding). Most people who developed these blood clots and low levels of platelets were adult women younger than 50 years old. **The chance of having this occur is very rare.** For women 50 years and older and men of all ages, this adverse event is even more rare. For three weeks after receiving the Johnson & Johnson COVID-19 vaccine, be on the lookout for these symptoms:

- Shortness of breath
- Chest pain
- Leg swelling
- Abdominal/stomach pain that doesn't go away
- Severe headaches or headaches that won't go away
- Blurred vision
- Easy bruising or tiny blood spots under the skin beyond the site of the injection

If you have any of these symptoms after getting the vaccine, you should seek medical attention right away. Tell the health care provider that you recently received the Johnson & Johnson vaccine.

If you got the Johnson & Johnson vaccine more than a month ago, you are unlikely to develop this condition.

People with a history of TTS following a COVID-19 vaccine should not get the Johnson & Johnson COVID-19 vaccine. These people should receive a single bivalent COVID-19 vaccine booster (Pfizer or Moderna) at least 2 months following their dose of the Johnson & Johnson COVID-19 vaccine and after their clinical condition has stabilized. Learn more at [Guidance for use of Janssen COVID-19 Vaccine \(Appendix A\)](#).