

# COVID-19 HEART COMPLICATIONS

The COVID-19 (SARS-CoV-2) pandemic has impacted the lives of millions worldwide. As the COVID-19 pandemic continues, the more questions arise about the long-term effects of infection. While there are many unknowns, current research has shown long term symptoms and illness related to heart health following COVID-19 infection. While people with existing cardiovascular disease are more susceptible to post-COVID cardiac injury, many previously healthy patients are experiencing similar outcomes.

“Long-haulers” are patients with lingering COVID-19 symptoms that manifest after the initial infection and may last weeks, months, or even years.<sup>1</sup> Some long-haul symptoms include fatigue, shortness of breath, cognitive problems, and cardiovascular injury. Since there is such a variety of symptoms for long-hauler COVID, it may be difficult to diagnose. Cardiac complications are particularly dangerous if left undiagnosed and untreated. These post-COVID heart complications may pose a major threat to the public’s health as infection rates continue to grow.



Researchers are still working to understand who is the most at risk for these complications. People with previous health conditions, severe COVID-19 symptoms, and those who are unvaccinated may be at a higher risk for heart complications. Additionally, minority populations are infected with COVID-19 and experience post-COVID symptoms at a higher rate than white populations. It is important to be aware of the potential long-term side effects and how to protect yourself and others from COVID-19.

## Post-COVID Heart Complications Signs & Symptoms

Post-COVID conditions or Long COVID can cause cardiac complications characterized by these potential symptoms:

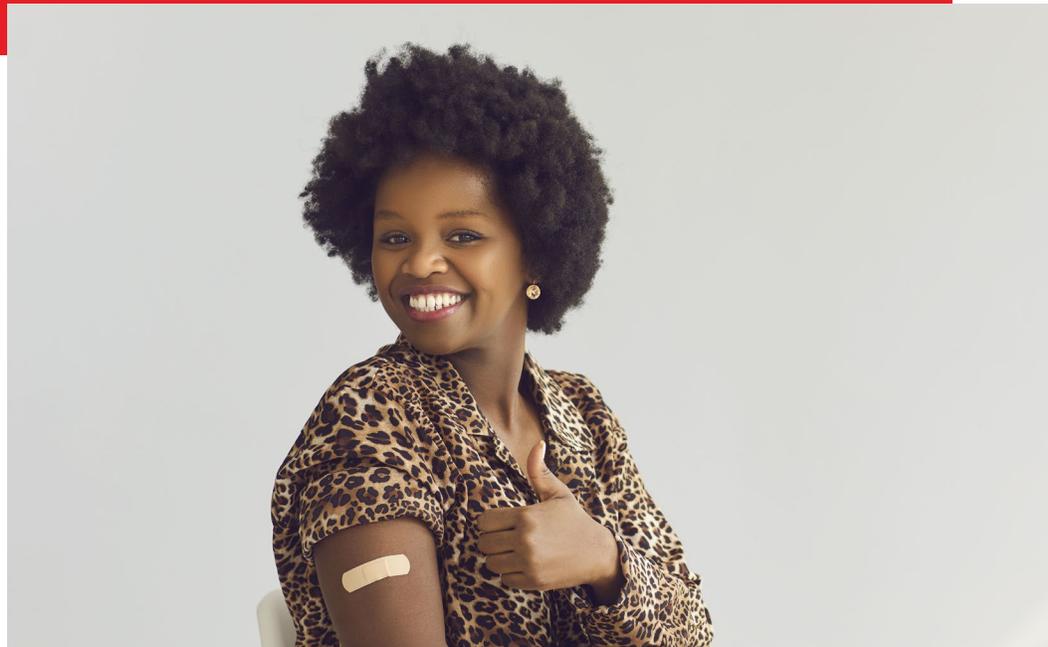
- Unexplained Chest Pain
- Shortness of Breath
- Frequent Palpitations
- Light Headedness

If you are experiencing any of these symptoms speak with your healthcare provider. If you are experiencing signs or symptoms of a heart attack, call 911 and seek medical attention.

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## Post COVID Heart Complications Prevalence

According to the Center for Disease Control (CDC), 33.2% of adults who have ever had COVID-19 go on to experience Long-COVID.<sup>ii</sup> This includes the adults who show signs of general symptoms, respiratory and heart complications, neurological symptoms, and digestive symptoms. While more research is needed to find the exact prevalence of heart complications, some studies have shown 25% of hospitalized patients have signs of heart injury following infection.<sup>iii</sup> Even with mild cases of COVID-19, patients were shown to have a 52% higher chance of stroke and a 72% higher risk of heart failure than those who have not contracted COVID-19.<sup>iv</sup> One study showed an increase of 247% of heart inflammation in people who were not hospitalized for COVID complications. This has been seen in a significant and concerning spike of over 44,000 extra heart attacks in the United States from 2020 to 2021.<sup>v</sup> COVID-19 can put you at risk for over 20 different heart complications, regardless of the severity of disease.<sup>vi</sup>



## How to Protect Yourself & Others

The number one way to prevent getting Long COVID is to protect yourself and others from an initial infection. This requires following COVID-19 guidance, vaccine recommendations, and using a mask when necessary. Those who are eligible should stay up to date with current vaccinations and booster recommendations. The new bivalent booster is now available to protect against the Omicron variant that is now causing a majority of the infections in the U.S.

For more information on vaccines and preventing the spread of infection visit [resphhealth.org/covid-19-what-you-should-know/](https://resphhealth.org/covid-19-what-you-should-know/).

Long-COVID specialty clinics are becoming more common across the country. People who might be experiencing post-COVID symptoms can visit these locations to get care and prevent more severe complications such as a heart attack or stroke. Researchers are working to understand the complexities of Long COVID and how to prevent these heart complications. The CDC is working to identify the most frequent symptoms, who is most affected, the role of vaccinations, and how to treat post-COVID.

Visit the [CDC Long-COVID website](https://www.cdc.gov/long-covid/) for updated information and resources.

## References

- <sup>i</sup> Center for Disease Control. (2022, September). Long Covid. Retrieved from CDC: <https://www.cdc.gov/nchs/covid19/pulse/long-covid.htm>
- <sup>ii</sup> Center for Disease Control. (2022, September). Long Covid. Retrieved from CDC: <https://www.cdc.gov/nchs/covid19/pulse/long-covid.htm>
- <sup>iii</sup> Silva Andrade, B., Siqueira, S., de Assis Soares, W. R., de Souza Rangel, F., Santos, N. O., dos Santos Freitas, A., Ribeiro da Silveira, P., et al. (2021). Long-COVID and Post-COVID Health Complications: An Up-to-Date Review on Clinical Conditions and Their Possible Molecular Mechanisms. *Viruses*, 13(4), 700. MDPI AG. Retrieved from <http://dx.doi.org/10.3390/v13040700>
- <sup>iv</sup> Sidik, S. M. (2022, August 2). Heart disease after Covid: What the data say. *Nature News*. Retrieved from <https://www.nature.com/articles/d41586-022-02074-3>
- <sup>v</sup> Sidik, S. M. (2022, February 10). Heart-disease risk soars after covid - even with a mild case. *Nature News*. Retrieved October 2022, from <https://www.nature.com/articles/d41586-022-00403->
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