



POTS Incidence After COVID-19 Infection and Vaccination: A Dramatic Increase

Yes, the incidence of POTS (Postural Orthostatic Tachycardia Syndrome) has **dramatically increased** following COVID-19 infection, with a more modest increase associated with COVID-19 vaccination. The data reveals a striking difference in risk between these two scenarios.

Dramatic Increase After COVID-19 Infection

The most significant finding is the unprecedented rise in POTS cases following COVID-19 infection. A major study analyzing over 65 million patient records found that **POTS incidence increased by more than 14-fold** after the COVID-19 pandemic began: ^[1] ^[2]

- **Pre-COVID rate:** 1.42 cases per 1 million person-years
- **Post-COVID rate:** 20.3 cases per 1 million person-years
- **Monthly new cases:** Increased from 4.21 to 22.66 cases per month (more than 5-fold increase) ^[2] ^[1]

This represents the most dramatic increase in POTS diagnoses ever documented, with researchers describing it as causing "an unprecedented acceleration in what was once thought to be a relatively rare condition". ^[2]

Prevalence in Long COVID Patients

Among COVID-19 survivors, POTS has emerged as a major component of long COVID syndrome:

- **2-14%** of all COVID-19 survivors develop POTS ^[3] ^[4]
- **30%** of highly symptomatic long COVID patients have POTS ^[5] ^[6]
- **Nearly 80%** of long COVID patients in specialized clinics meet POTS criteria ^[4]
- **22%** of patients with symptoms indicating autonomic dysfunction after COVID develop POTS ^[3]

COVID-19 Vaccination and POTS: Much Lower Risk

While there is an association between COVID-19 vaccination and POTS, the risk is **significantly lower** than with infection:

Risk Comparison

- **After COVID-19 infection:** 2,086 cases per 100,000 people^[7]
- **After COVID-19 vaccination:** 268 cases per 100,000 people^[7]

This means **COVID-19 infection carries approximately 5 times higher risk** of developing POTS compared to vaccination.^{[8] [9] [7]}

Vaccination Risk Details

- Risk of developing POTS after vaccination: **less than 5 cases per million doses**^[8]
- Post-vaccination POTS cases typically had **pre-existing conditions** that increased their risk^{[10] [11]}
- Most post-vaccination cases occurred in people with prior COVID infection, Ehlers-Danlos syndrome, mast cell activation syndrome, or autoimmune conditions^[11]

Timeline and Characteristics

Post-Infection POTS

- Typically develops **6-8 months** after COVID-19 infection^{[12] [3]}
- Can occur regardless of initial COVID severity^[13]
- Often presents with more severe fatigue and post-exertional malaise compared to traditional POTS^[14]

Post-Vaccination POTS

- Usually appears **2-7 days** after vaccination^[15]
- Most documented cases involved people with pre-existing risk factors^{[15] [11]}
- Symptoms generally improve with standard POTS treatments^{[11] [15]}

Clinical Implications

The data strongly supports that **COVID-19 vaccination actually provides substantial protection against POTS** by preventing infection, which carries a much higher risk. As one researcher noted, "preventing COVID-19 through vaccination is still the best way to reduce your risk of developing POTS".^[7]

For clinicians, this dramatic increase means POTS should be considered in patients with persistent symptoms after COVID-19 infection, particularly those experiencing orthostatic intolerance, tachycardia, fatigue, and brain fog. Many patients previously categorized as having "long COVID" may actually have diagnosable and treatable POTS.^{[16] [2]}

The five-fold increase in POTS cases has led to unprecedented waiting lists at specialized clinics and highlights the need for increased awareness, diagnostic capabilities, and treatment resources for this condition.^[2]

1. <https://pubmed.ncbi.nlm.nih.gov/39775762/>
2. https://news.utoledo.edu/index.php/03_24_2025/covid-19-brought-about-a-large-rise-in-pots-cases
3. <https://www.cardioaragon.com/wp-content/uploads/Postural-orthostatic-tachycardia-syndrome-as-a-sequela-of-covid-19.pdf>
4. <https://www1.racgp.org.au/newsgp/clinical/how-is-pots-related-to-long-covid>
5. <https://www.nature.com/articles/s41569-023-00842-w>
6. <https://www.aafp.org/pubs/afp/afp-community-blog/entry/management-of-pots-due-to-long-covid.html>
7. <https://www.nhlbi.nih.gov/news/2022/researchers-study-links-between-covid-and-pots>
8. <https://www.cedars-sinai.org/newsroom/abc-7-syndrome-pots-in-rare-cases-can-be-associated-with-covid-vaccine-as-well-as-virus-itself/>
9. <https://www.nature.com/articles/s44161-022-00180-z>
10. <https://www.cedars-sinai.org/newsroom/new-study-is-there-a-link-between-covid-19-vaccination-and-pots/>
11. <https://pubmed.ncbi.nlm.nih.gov/38176772/>
12. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10065129/>
13. <https://www.webmd.com/covid/covid-19-pots>
14. <https://blog.leapcure.com/post-covid-pots-vs-traditional-pots-key-differences-in-symptoms-and-treatment/>
15. <https://pmc.ncbi.nlm.nih.gov/articles/PMC9323926/>
16. <https://utswmed.org/medblog/pots-long-covid-research/>
17. <https://fasciainstitute.org/after-covid-understanding-pots-and-dysautonomia/>
18. https://www.autoimmuneinstitute.org/covid_timeline/long-vax-rare-link-between-covid-vaccination-pots-and-sfn/
19. <https://www.standinguptopots.org/longCOVID>
20. <https://pmc.ncbi.nlm.nih.gov/articles/PMC8621226/>
21. <https://jamanetwork.com/journals/jama/fullarticle/2800964>
22. https://en.wikipedia.org/wiki/Postural_orthostatic_tachycardia_syndrome
23. <https://academic.oup.com/europace/article/11/1/18/491154>
24. <https://www.ceemjournal.org/m/journal/view.php?doi=10.15441%2Fceem.22.409>
25. <https://www.sciencedirect.com/science/article/abs/pii/S0002962924010619>
26. <https://pmc.ncbi.nlm.nih.gov/articles/PMC9186518/>