

Minnesotans with long COVID symptoms report higher levels of social risk factors

Social determinants of health are the nonmedical factors that influence health. These include, but are not limited to, access to health care, economic stability, food stability, transportation, housing stability, and social support and connections. Social support is important because it can significantly reduce stress, improve mental and physical well-being, and help people live longer, healthier lives.¹

“In 2023, the Minnesota Department of Health (MDH) called 20,000 adult Minnesotans with a known COVID-19 infection to learn about symptoms and experiences occurring three months or more after their infection. Social risk factors were also assessed. A total of 1,270 people completed the interview. **Due to low participation and other survey limitations, the survey cannot tell us the prevalence of long COVID, nor does this group represent all Minnesotans experiencing lasting symptoms after a COVID-19 infection.** Nonetheless, their input can help the public, health care providers, and public health professionals understand long COVID symptoms and how they can impact a person’s daily activities and health care experiences. Survey findings on reported symptoms and impacts on activities of daily life can be found here:

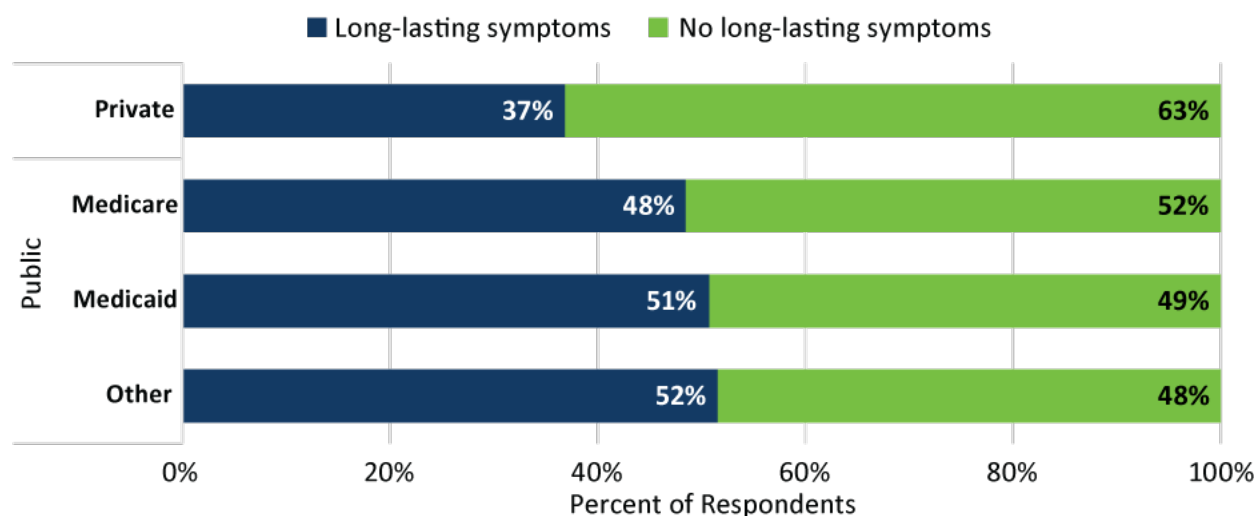
<https://www.health.state.mn.us/diseases/longcovid/data.html> ”

While this survey cannot tell us what came first – long-lasting symptoms or social risk factors – the results highlight that respondents experiencing long-lasting symptoms are also experiencing high levels of health care access needs, economic instability, food insecurity, social isolation, and adverse social connections. Similar findings have been observed nationally. It is critically important to ensure these social risk factors are evaluated and addressed as part of the care, recovery, and support for Minnesotans experiencing long lasting symptoms after a SARS-CoV-2 infection.²

What did the survey find?

Insurance status is often used as a proxy for sociodemographic factors that can affect health care access and status. Overall, 51% of respondents reported private health insurance coverage (such as through an employer), followed by Medicare (18%), Medicaid (16%), and other types of health insurance coverage, which included Veterans Administration (VA) coverage, self-pay and uninsured individuals (15%). About 50% of respondents who had Medicare, Medicaid, or other types of insurance reported long-lasting symptoms, this was even higher among respondents who were uninsured or self-pay (60%). In comparison, only 37% of respondents with private insurance coverage reported long-lasting symptoms.

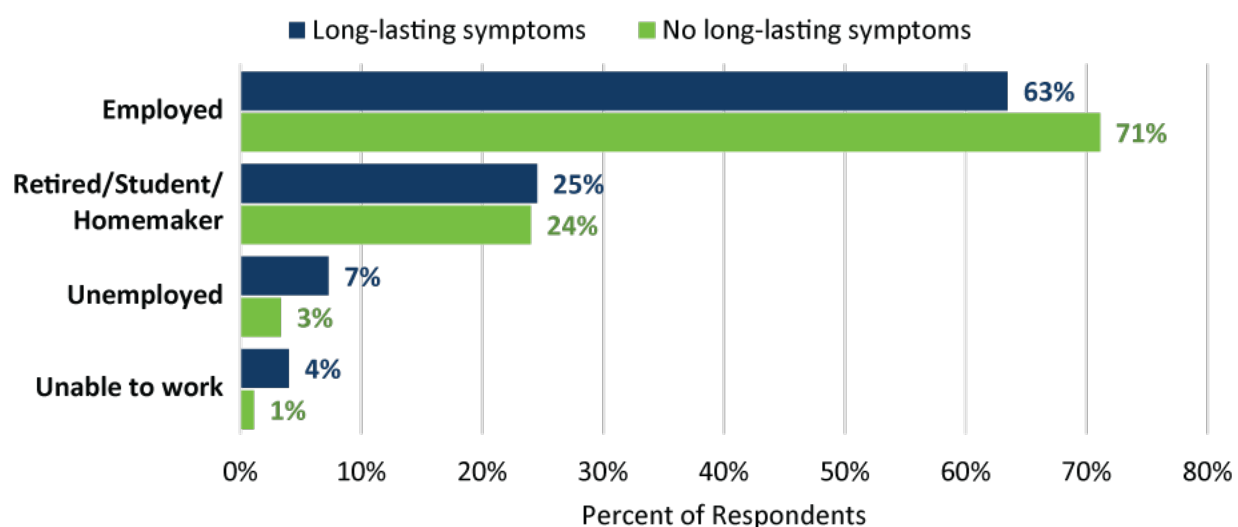
Respondents with public insurance coverage are more likely to report long-lasting symptoms.



Long COVID symptoms and employment status

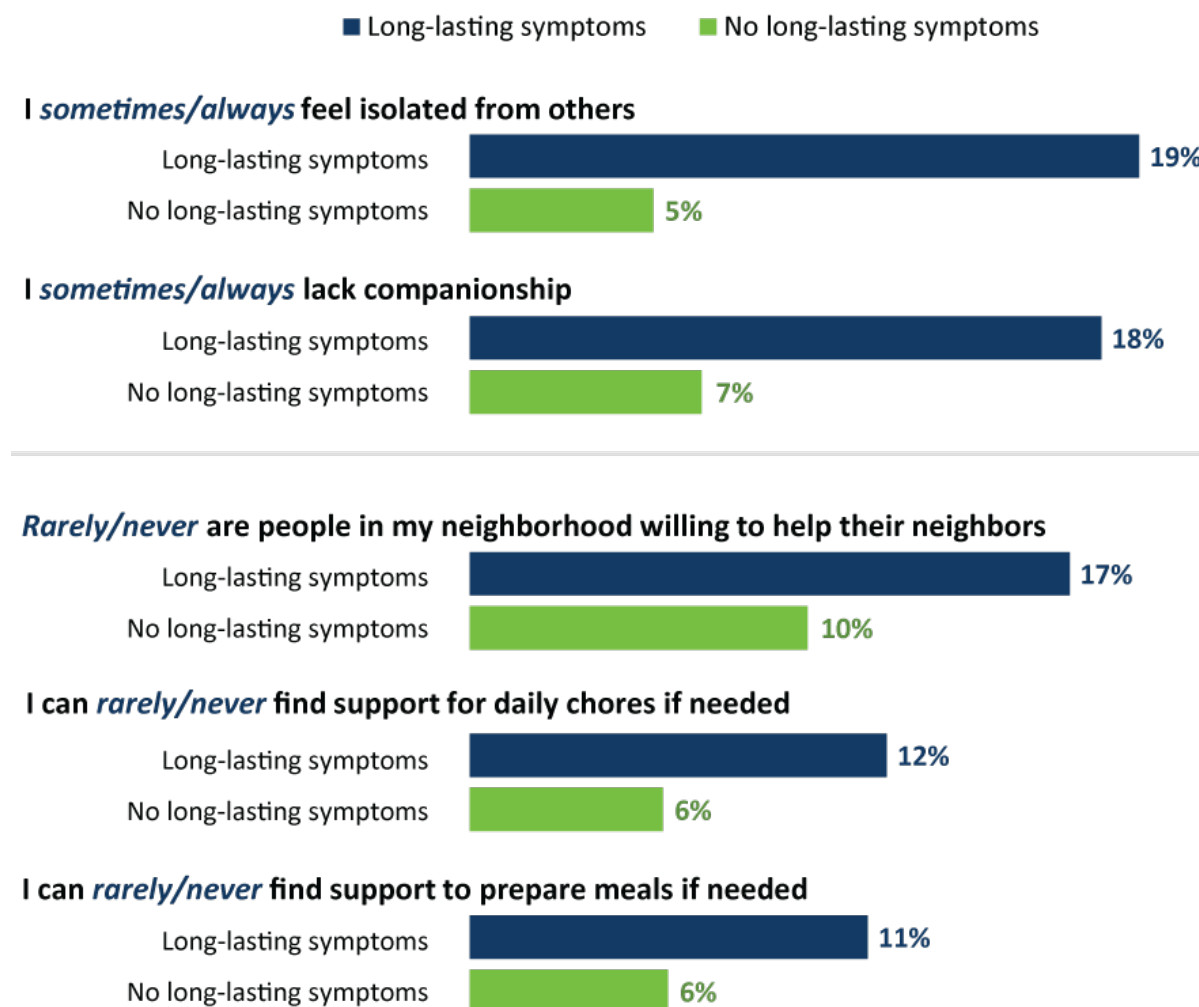
Compared to respondents reporting no lasting symptoms, those experiencing long-lasting symptoms were less likely to be employed. Eleven percent of respondents experiencing long-lasting symptoms reported being unemployed or unable to work. This compares to 4% of respondents reporting no long-lasting symptoms.

Respondents with long-lasting symptoms were more likely to be unemployed or unable to work than respondents without symptoms.



Long COVID symptoms and social connectedness

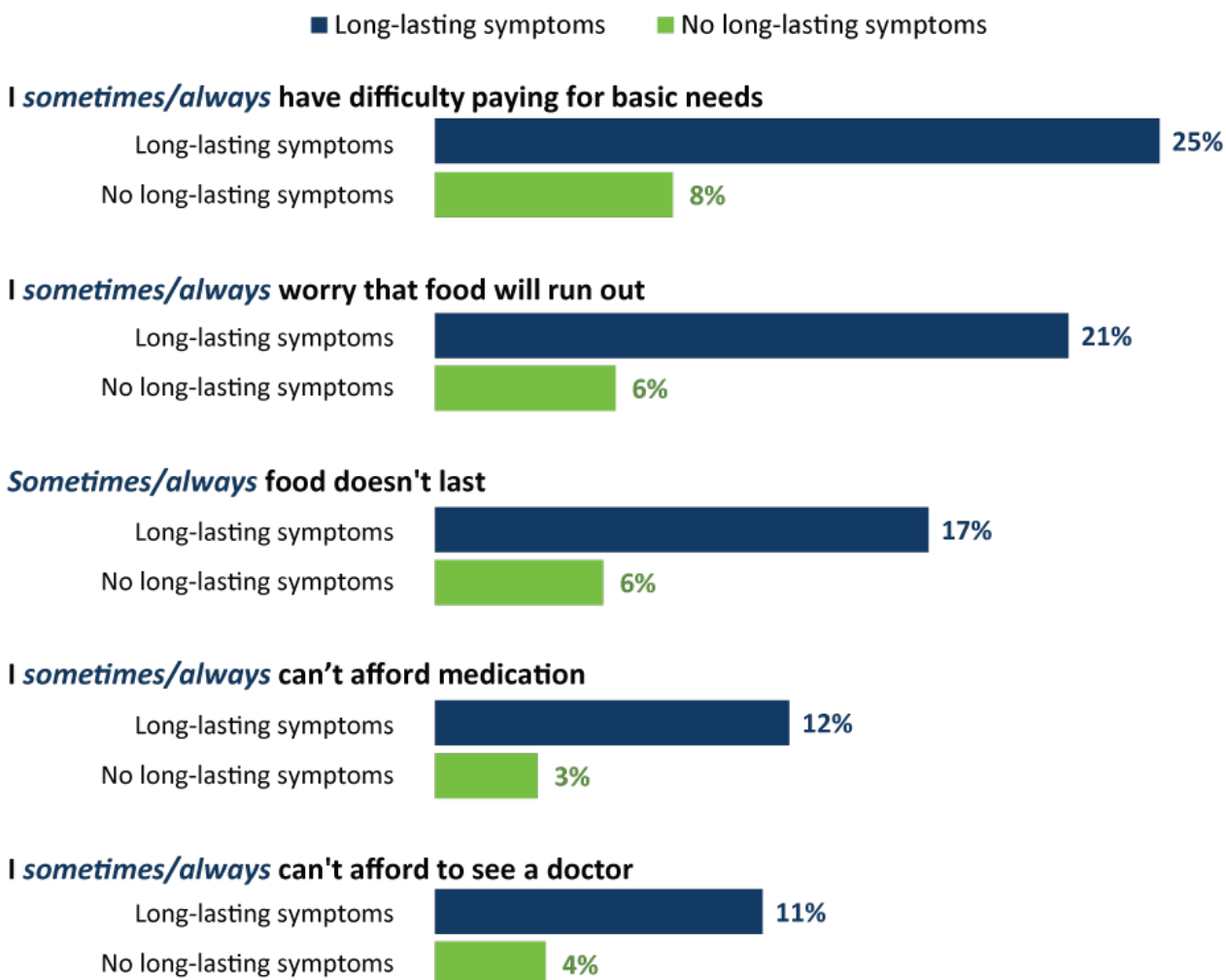
Respondents with long-lasting symptoms were less likely to report neighborhood support and almost four times more likely to report feeling socially isolated and lacking companionship.



Long COVID Symptoms and Social Needs

Difficulty paying for basic needs was three times higher compared to respondents not reporting long-lasting symptoms. Reported food insecurity was three times higher and health care access was more challenging with reports of inability to afford doctor visits or medications also three times higher compared to respondents reporting no lasting symptoms.

Respondents who reported long-lasting symptoms also reported greater economic instability.



What can I do to prevent long COVID?

The best way to prevent long COVID is to avoid getting infected or re-infected with the virus that causes COVID-19. Additional protective measures include:

- Getting an updated COVID-19 vaccine.
- Practicing good hygiene, including washing your hands and covering your cough.
- Taking steps for cleaner air, like opening windows, using filtration, or holding gatherings outside.
- Wearing a mask or keeping physical distance during viral respiratory illness season.

What should I do if I think I have long COVID?

Start by talking with a doctor or health care provider about your symptoms.

- The Centers for Disease Control and Prevention (CDC) offers resources to help you prepare for your appointment: [Healthcare Appointment Checklist for Long COVID \(cdc.gov/covid/media/pdfs/2024/07/COVID-19-fact-sheet-post-appointment-checklist-c.pdf\)](https://www.cdc.gov/covid/media/pdfs/2024/07/COVID-19-fact-sheet-post-appointment-checklist-c.pdf).
- Visit [Long COVID Resources and Support \(health.state.mn.us/diseases/longcovid/resources.html\)](https://health.state.mn.us/diseases/longcovid/resources.html) for more information about medical and social support that may be available to you.

What is MDH doing to address long COVID?

MDH is one of the first state health departments in the country to have a program and staff dedicated to long COVID. Work includes:

- Raising awareness about long COVID and creating informational resources.
- Implementing an ongoing statewide survey to monitor long COVID symptoms and similar conditions in Minnesotans who had COVID-19 or other infections.
- Conducting a statewide study across 12 health systems who provide services to over 90% of Minnesota's population to recognize and describe patients experiencing long COVID symptoms. This can help improve diagnosis and care practices, especially among underserved patient populations.
- Convening the Long COVID Guiding Council of clinical professionals from 14 organizations, including major health systems, Federally Qualified Health Centers, the Veterans Administration, and the Minnesota Department of Human Services.
- Providing funding to 18 community partner organizations that serve disabled, myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS), low income, rural, American Indian, Latine, African American, African immigrant, Asian American, Asian immigrant, and LGBTQ+ communities throughout Minnesota. These organizations reach thousands of individuals disproportionately impacted by the COVID-19 pandemic. They are helping us to understand the impacts of long COVID, raise awareness, and increase access to quality care and support for long COVID and related conditions.
- Serving as national leadership on committees and workgroups for:
 - The Centers for Disease Control and Prevention
 - The U.S. Department of Health and Human Services Office of Long COVID
 - The Agency for Healthcare Research and Quality
 - The Association of State and Territorial Health Officials
 - The Council for State and Territorial Epidemiologists
 - The National Association of Chronic Disease Directors

For more information on our current projects, collaborations, and resources, visit the [MDH Long COVID Program webpage \(health.state.mn.us/diseases/longcovid/about.html\)](https://health.state.mn.us/diseases/longcovid/about.html).

Resources

¹ Office of the Surgeon General (OSG). Our Epidemic of Loneliness and Isolation: *The U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community* [Internet]. Washington (DC): US Department of Health and Human Services; 2023–. PMID: 37792968.

² Feldman CH, Santacroce L, Bassett IV, Thaweethai T, Alicic R, Atchley-Challenner R, Chung A, Goldberg MP, Horowitz CR, Jacobson KB, Kelly JD, Knight S, Lutrick K, Mudumbi P, Parthasarathy S, Prendergast H, Quintana Y, Sharareh N, Shellito J, Sherif ZA, Taylor BD, Taylor E, Tsevat J, Wiley Z, Williams NJ, Yee L, Aponte-Soto L, Baissary J, Berry J, Charney AW, Costantine MM, Duven AM, Erdmann N, Ernst KC, Feuerriegel EM, Flaherman VJ, Go M, Hawkins K, Jacoby V, John J, Kelly S, Kindred E, Laiyemo A, Levitan EB, Levy BD, Logue JK, Marathe JG, Martin JN, McComsey GA, Metz TD, Minor T, Montgomery AP, Mullington JM, Ofotokun I, Okumura MJ, Peluso MJ, Pogreba-Brown K, Raissy H, Rosas JM, Singh U, VanWagoner T, Clark CR, Karlson EW. Social Determinants of Health and Risk for Long COVID in the U.S. RECOVER-Adult Cohort. *Annals of Internal Medicine*, 178(9), 1287–1297. <https://doi.org/10.7326/ANNALS-24-01971>.