JOHNS HOPKINS COVID LONG STUDY

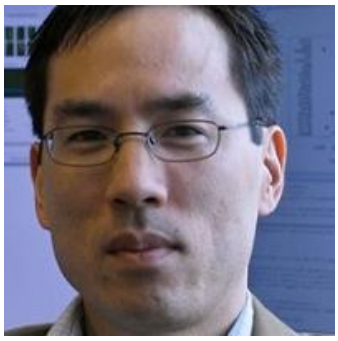
Spring 2025 Newsletter

The Johns Hopkins COVID Long Study began in February of 2021 with the goal of learning more about the short- and long-term health impacts of COVID-19 illness. Thanks to our dedicated participants, we have heard from more than 31,000 individuals from across the United States and more than 4,500 individuals from around the globe.

Every COVID-19 story matters. We are grateful to everyone who has shared their story with us.

Principal Investigator Corner & Recruitment Updates	Who We Are	What We Have Learned	Resources
Page 2	Page 3	Page 4-5	Page 6

PRINCIPAL INVESTIGATOR CORNER

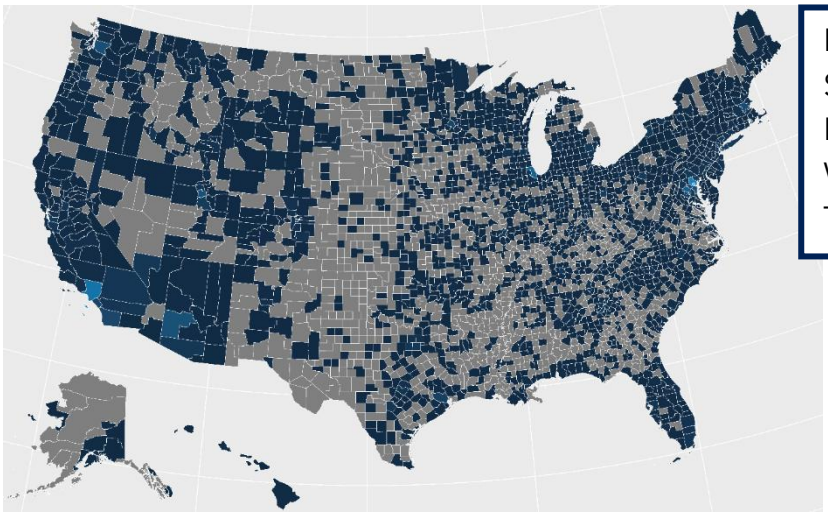


As we reflect on the past four years of this important research, we want to take a moment to express our gratitude to you, our dedicated study participants. Your commitment and time have allowed us to gain valuable insights into the short- and long-term effects of COVID-19. We appreciate your continued patience as we work through the process of analyzing the data we have collected thus far. We have two analyses that are almost completed, and we look forward to sharing those results in the near future. Additionally, in response to some important feedback we received from you, we have incorporated a number of changes to our survey including adding some new questions about post-exertional malaise. Post-exertional malaise, or PEM, is a condition that causes a person to feel significantly worse after even mild physical or mental activity. We are looking forward to learning about PEM and the prevalence of PEM in our study population. Until next time, wishing you and your family a safe and happy spring!

RECRUITMENT UPDATES

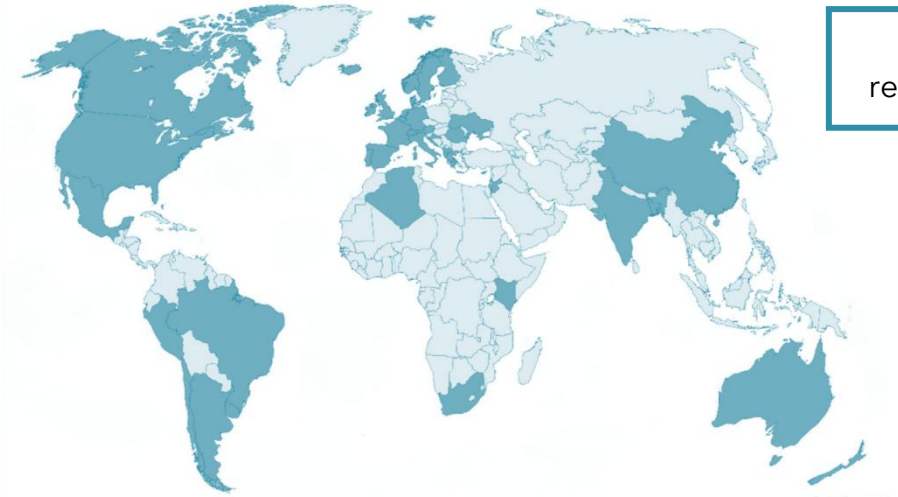
As of March 25, 2025, we have recruited 31,655 individuals across 53 states and territories in the United States and 4,537 individuals across 100 different countries globally. Additionally, we have 11,984 individuals who completed their first follow-up survey! We have recruited participants of all ages, and while the majority of our participants are white (81%), we also have participants who are Black, East Asian, South Asian, Native American/American Indian, Alaskan Native, and Native Hawaiian/Pacific Islander. Of all who have participated, 7% reported being of Hispanic, Latino, or Spanish origin. Our participants are 75% female. Of our global participants, 29% are from Canada, 19% are from Australia, 15% are from Germany, and 8% are from the United Kingdom. At the time of their initial COVID-19 illness, 99% reported having symptoms, and 85% reported new/continuing symptoms after their initial illness had cleared. If you haven't read our cohort profile paper in *BMJ Open* yet, you can read it here!

WHO WE ARE



Northeast: 19%
South: 39%
Midwest: 20%
West: 22%
Territories: <1%

*Darker colors represent more surveys



Global representation

COVID Status**

Recovered COVID: 6%
Long COVID: 42%
Indeterminate Status: 16%
non-COVID: 35%

***This breakdown is as of March 25, 2025, and represents a participant's COVID status at the time of their first survey completion (baseline). We used the WHO definition of long COVID to classify a participant as having long COVID or recovered COVID. A participant with an indeterminate status is someone we could not classify as there was not enough time between their initial SARS-CoV-2 infection and the date they completed their baseline survey to make a determination. A participant with a non-COVID status is someone who reported they never experienced a SARS-CoV-2 infection at baseline.*

WHAT WE HAVE LEARNED

At the baseline visit (first survey completed), we asked our participants to report any medications they had taken for the initial treatment of COVID-19. Here is what they reported as of September 5, 2025, broken down by long COVID status.

Please note: Participants are able to select more than one treatment type, so the percentages will not add up to 100%.

Status of Ever Taken Medications for the Initial Treatment of COVID-19	Recovered COVID (n=1,797)	Long COVID (n=12,708)	Indeterminate (n=5,104)
	Total (percent)	**Total (percent)**	**Total (percent)**
No	1,382 (77%)	7,283 (57%)	3,170 (62%)
Yes	415 (23%)	5,425 (43%)	1,934 (38%)
If Yes, Treatment Type(s)	**Recovered COVID (n=415)**	**Long COVID (n=5,424)**	**Indeterminate (n=1,934)**
	Total (percent)	**Total (percent)**	**Total (percent)**
Monoclonal antibodies (Bamlanivimab)	20 (4.8%)	388 (7.2%)	177 (9.2%)
Lopinavir/Ritonavir (Kaletra)	2 (0.5%)	21 (0.4%)	4 (0.2%)
Hydroxychloroquine (Plaquenil)	10 (2.4%)	177 (3.3%)	25 (1.3%)
Hydroxychloroquine (Plaquenil) with azithromycin (Z-pak)	6 (1.5%)	174 (3.2%)	31 (1.6%)
Chloroquine	1 (0.2%)	21 (0.4%)	4 (0.2%)
Ribavirin	1 (0.2%)	11 (0.2%)	1 (0.1%)
Remdesivir	7 (1.7%)	450 (8.3%)	104 (5.4%)
Azithromycin (Z-pak)	32 (7.7%)	1,201 (22%)	299 (15%)
Oseltamivir (Tamiflu)	1 (0.2%)	67 (1.2%)	8 (0.4%)
Convalescent Plasma	3 (0.7%)	125 (2.3%)	31 (1.6%)
Vitamin C	139 (33%)	2,913 (54%)	1,023 (53%)
Vitamin D			
Zinc	132 (32%)	2,630 (48%)	885 (46%)
Steroids	27 (6.5%)	1,114 (21%)	177 (9.2%)
Paxlovid	96 (23%)	534 (9.9%)	177 (9.2%)
Molnupiravir	4 (1.0%)	46 (0.9%)	14 (0.7%)
Metformin	3 (0.7%)	50 (0.9%)	1 (0.1%)

WHAT WE HAVE LEARNED

At the baseline visit, we also asked about hospitalization due to initial SARS-CoV-2 infection. Here is what we found as of September 5, 2024, broken down by long COVID status.

Please note: Participants are able to report more than one hospital admittance status and treatments required, so the percentages will not add up to 100%.

Hospitalization Status	**Recovered COVID (n=1,804)**	**Long COVID (n=12,952)**	**Indeterminate (n=5,140)**
	Total (percent)	**Total (percent)**	**Total (percent)**
No	1,766 (98%)	11,318 (87%)	4,883 (95%)
Yes	38 (2.1%)	1,634 (13%)	257 (5.0%)
If Yes, Hospital Admittance Status	**Recovered COVID (n=38)**	**Long COVID (n=1,634)**	**Indeterminate (n=257)**
	Total (percent)	**Total (percent)**	**Total (percent)**
Emergency Room (ER)	34 (89%)	1,477 (90%)	236 (92%)
General Hospital Floor	17 (45%)	853 (52%)	122 (47%)
Intensive Care	7 (18%)	401 (25%)	35 (14%)
If Yes, Treatments Required	**Recovered COVID (n=38)**	**Long COVID (n=1,634)**	**Indeterminate (n=257)**
	Total (percent)	**Total (percent)**	**Total (percent)**
Supplemental Oxygen	14 (37%)	933 (57%)	130 (51%)
Ventilator Support	4 (11%)	150 (9.2%)	5 (2.0%)
If Yes, Number of Days Hospitalized	**Recovered COVID (n=38)**	**Long COVID (n=1,595)**	**Indeterminate (n=253)**
	Total (percent)	**Total (percent)**	**Total (percent)**
0 (seen but no hospital admittance)	9 (24%)	324 (20%)	59 (23%)
1-5 days	19 (50%)	652 (41%)	125 (49%)
6-10 days	5 (13%)	274 (17%)	54 (21%)
11-15 days	1 (2.6%)	131 (8.2%)	6 (2.4%)
More than 15 days	4 (11%)	214 (13%)	9 (3.6%)

RESOURCES

- American Academy of Physical Medicine and Rehabilitation: Long COVID (PASC) Resources
  Link
- Centers for Disease Control and Prevention: COVID-19
  Link
- Centers for Disease Control and Prevention: More Resources about COVID-19
  Link
- Centers for Disease Control and Prevention: Long COVID or Post-COVID Conditions
  Link
- FACT SHEET: Americans with Disabilities Act Resources to Support Individuals with Long COVID
  Link
- Johns Hopkins Bloomberg School of Public Health: Coronavirus Questions and Answers
  Link
- Long COVID Alliance
  Link
- Survivor Corps
  Link
- U.S. Department of Health & Human Services: Guidance on "Long COVID" as a Disability Under the ADA, Section 504, and Section 1557
  Link
- World Health Organization: COVID-19 pandemic
  Link

**Note: The Johns Hopkins COVID Long Study is a survey-based study. Resources are being offered for informational purposes only. This list is not comprehensive and does not constitute an endorsement by the Johns Hopkins University.*