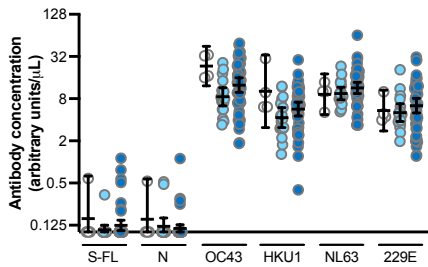
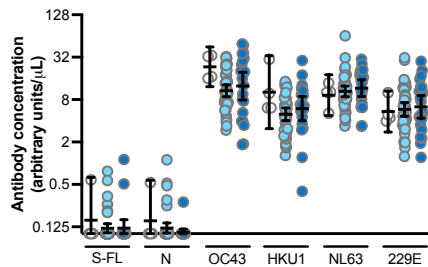


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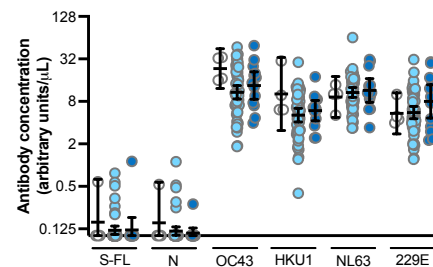
Difficulty breathing



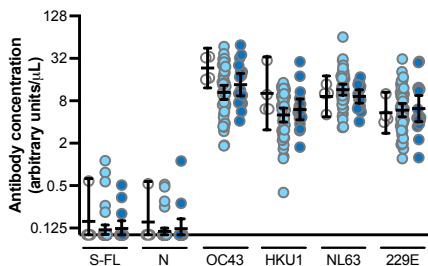
Fever



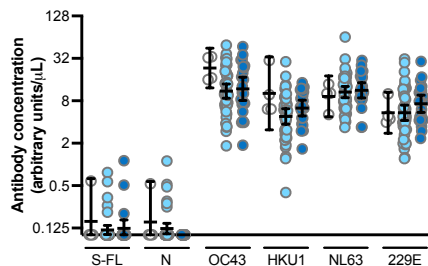
Fatigueess



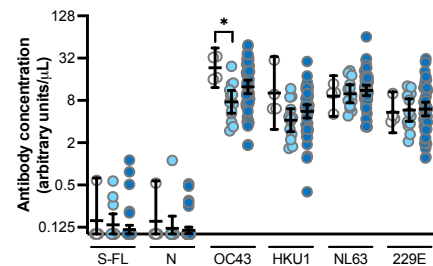
Loss of taste/smell



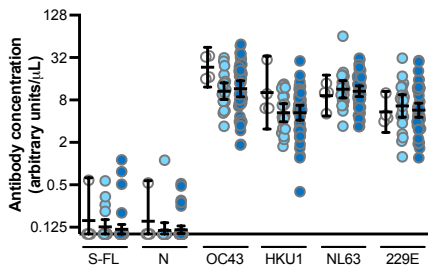
Cough



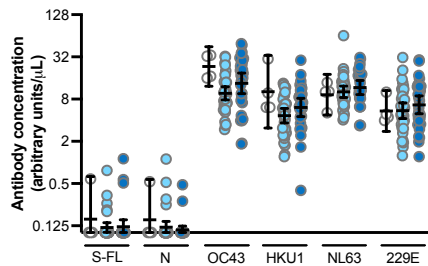
Nausea/vomiting



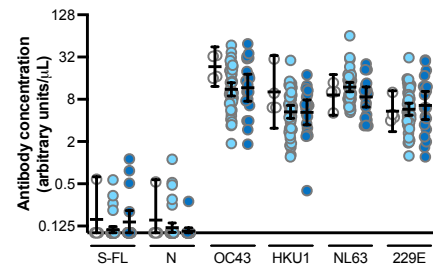
Diarrhea



Loss of appetite



Muscle/body aches



○ No symptoms ● Other symptoms
● Symptom highlighted in the graph

Supplemental Figure. Correlation between pre-existing antibody concentrations and reported COVID-19-related symptoms in symptomatic (n=64) and asymptomatic (n=4) health care workers with a PCR-confirmed SARS-CoV-2 infection. Significant p-values (<0.05) are indicated above the graph (one-way ANOVA using \log_2 -transformed antibody concentrations). Horizontal lines show the geometric mean concentrations and 95% confidence intervals. * p<0.05.

Supplemental Table 1. Participant characteristics.

| | Total (N=2043) | Seropositive (N=55) | Seronegative (N=1988) | P-value |
|---------------------------------|-------------------|------------------------|--------------------------|---------|
| Age (in years), median (IQR) | 36 (30-46)* | 34 (29-44) | 36 (30-46)* | 0.293 |
| Sex, n (%) | | | | 0.719 |
| Male | 502 (24.6) | 17 (30.9) | 485 (24.4) | |
| Female | 1536 (75.2) | 38 (69.1) | 1498 (75.4) | |
| Other | 2 (0.1) | 0 | 2 (0.1) | |
| Unknown | 3 (0.1) | 0 | 3 (0.2) | |
| Race, n (%) | | | | 0.291 |
| Asian | 172 (8.4) | 2 (3.6) | 170 (8.6) | |
| Black | 117 (5.7) | 5 (9.1) | 112 (5.6) | |
| White | 1694 (82.9) | 45 (81.8) | 1649 (82.9) | |
| Other/multiracial | 33 (1.6) | 1 (1.8) | 32 (1.6) | |
| Unknown | 27 (1.3) | 2 (3.6) | 25 (1.3) | |
| Ethnicity, n (%) | | | | 0.293 |
| Hispanic | 71 (3.5) | 4 (7.3) | 67 (3.4) | |
| Non-Hispanic | 1971 (96.5) | 51 (92.7) | 1920 (96.6) | |
| Unknown | 1 (<0.1) | 0 | 1 (0.1) | |

* Age was not reported for 1 participant.

Supplemental Table 2. Characteristics of 64 participants who had no detectable S-RBD antibodies during the spring and summer of 2020 and reported via the online survey that they had a symptomatic lab-confirmed SARS-CoV-2 infection after the last blood draw.

| | Total (N=64) |
|--|---------------------|
| Symptoms, n (%) | |
| Cough | 42 (65.6) |
| Fever or chills | 42 (65.6) |
| Nausea/vomiting | 13 (20.3) |
| Diarrhea | 20 (31.3) |
| Unusual fatigue | 51 (79.7) |
| Loss of taste or smell | 47 (73.4) |
| Difficulty breathing | 17 (26.6) |
| Loss of appetite | 34 (53.1) |
| Muscle/body aches | 45 (70.3) |
| Other | 23 (35.9) |
| Estimated date of SARS-CoV-2 infection, n (%) | |
| July 2020 | 6 (9.4) |
| August 2020 | 1 (1.6) |
| September 2020 | 0 |
| October 2020 | 9 (14.1) |
| November 2020 | 14 (21.9) |
| December 2020 | 30 (46.9) |
| January 2021 | 4 (6.3) |
| Resolution of symptoms, n (%) | |
| Within 7 days | 13 (20.3) |
| Within 1 month | 32 (50.0) |
| More than 1 month | 13 (20.3) |
| Unknown | 6 (9.4) |
| Hospitalization because of COVID-19, n (%) | 2 (3.1) |

Supplemental Table 3. Effects of log₂ pre-existing antibody titers, age and sex on symptom duration (days) via multivariate regression.

| | Estimate | SE | P-value |
|------------|-----------------|-----------|----------------|
| S-FL | -2.731 | 2.685 | 0.313 |
| Age | 3.204 | 2.697 | 0.240 |
| Sex (male) | 5.675 | 7.964 | 0.479 |
| N | 1.895 | 2.698 | 0.485 |
| Age | 3.606 | 2.712 | 0.189 |
| Sex (male) | 6.299 | 7.997 | 0.434 |
| OC43 | -8.166 | 2.739 | 0.004 |
| Age | 0.170 | 2.752 | 0.951 |
| Sex (male) | 4.226 | 7.498 | 0.575 |
| HKU1 | -5.867 | 2.630 | 0.030 |
| Age | 2.392 | 2.644 | 0.369 |
| Sex (male) | 5.559 | 7.704 | 0.474 |
| NL63 | -2.354 | 2.683 | 0.384 |
| Age | 3.548 | 2.697 | 0.194 |
| Sex (male) | 6.218 | 7.973 | 0.439 |
| 229E | -3.054 | 2.846 | 0.288 |
| Age | 2.840 | 2.742 | 0.305 |
| Sex (male) | 8.483 | 8.255 | 0.308 |