

**Appendix Table S1: Characteristics of patients by test outcome\***

<b>Characteristic</b>	<b>All tested, N=10,620 N (column %) or median (IQR)</b>	<b>Tested negative, N=5,341 N (column %) or median (IQR)</b>	<b>Tested positive, N=5,279 N (column %) or median (IQR)</b>
<b>Age, years</b>			
19-44	4606 (43.4)	2760 (51.7)	1846 (35.0)
45-54	1819 (17.1)	917 (17.2)	902 (17.1)
55-64	1893 (17.8)	872 (16.3)	1021 (19.3)
65-74	1214 (11.4)	417 (7.8)	797 (15.1)
≥75	1088 (10.2)	375 (7.0)	713 (13.5)
Male	4366 (41.1)	1751 (32.8)	2615 (49.5)
<b>Race/ethnicity</b>			
Non-Hispanic white	4451 (41.9)	2448 (45.8)	2003 (37.9)
Non-Hispanic African American	1492 (14.0)	657 (12.3)	835 (15.8)
Asian	927 (8.7)	544 (10.2)	383 (7.3)
Hispanic	2233 (21.0)	903 (16.9)	1330 (25.2)
Other/ Multiracial	788 (7.4)	391 (7.3)	397 (7.5)
Unknown	729 (6.9)	398 (7.5)	331 (6.3)
<b>Tobacco use</b>			
Current	6722 (63.3)	3454 (64.7)	3268 (61.9)
Former	1718 (16.2)	816 (15.3)	902 (17.1)
Never, including passive exposure	829 (7.8)	541 (10.1)	288 (5.5)
Unknown	1351 (12.7)	530 (9.9)	821 (15.6)
<b>Obesity</b>			
BMI <25 kg/m <sup>2</sup>	3468 (32.7)	2062 (38.6)	1406 (26.6)
BMI 25.0-29.9 kg/m <sup>2</sup>	3388 (31.9)	1619 (30.3)	1769 (33.5)
BMI 30.0-39.9 kg/m <sup>2</sup>	2768 (26.1)	1214 (22.7)	1554 (29.4)
BMI ≥40 kg/m <sup>2</sup>	526 (5.0)	215 (4.0)	311 (5.9)
Unknown	470 (4.4)	231 (4.3)	239 (4.5)
<b>Any chronic condition</b>			
Any cardiovascular condition	6105 (57.5)	2782 (52.1)	3323 (62.9)
Coronary artery disease	1186 (11.2)	482 (9.0)	704 (13.3)
Heart failure	694 (6.5)	327 (6.1)	367 (7.0)
Hyperlipidemia	3101 (29.2)	1387 (26.0)	1714 (32.5)
Hypertension	3769 (35.5)	1513 (28.3)	2256 (42.7)
Diabetes	1966 (18.5)	670 (12.5)	1296 (24.6)
Asthma or chronic obstructive pulmonary disorder	1970 (18.5)	1036 (19.4)	934 (17.7)
Chronic kidney disease	1083 (10.2)	436 (8.2)	647 (12.3)
Cancer	802 (7.6)	399 (7.5)	403 (7.6)

\*excluding 637 patients who tested negative and 287 patients who tested positive who did not have prior visits in the health system and did not have current data on demographics or comorbidities

**Appendix Table S2: Site of first positive test by admission status**

<b>Location of first positive test</b>	<b>Not hospitalized, N=2538 N (row %) or median (IQR)</b>	<b>Hospitalized, N=2741 N (row %) or median (IQR)</b>
Outpatient	1949 (96.2)	78 (3.8)
Emergency department	505 (16.1)	2627 (83.9)
Inpatient	3 (10.0)	27 (90.0)
Missing	81 (90.0)	9 (10.0)

**Appendix Table S3: Characteristics of patients by first test location**

<b>Characteristic</b>	<b>First tested in emergency department, N=3,132 N (column %) or median (IQR)</b>	<b>First tested in outpatient setting, N=2,027 N (column %) or median (IQR)</b>
<b>Age, years</b>		
19-44	604 (19.3)	1201 (59.3)
45-54	498 (15.9)	377 (18.6)
55-64	680 (21.7)	323 (15.9)
65-74	669 (21.4)	106 (5.2)
≥75	681 (21.7)	20 (1.0)
Male	1911 (61.0)	648 (32.0)
<b>Race/ethnicity</b>		
Non-Hispanic white	1215 (38.8)	731 (36.1)
Non-Hispanic African American	470 (15.0)	350 (17.3)
Asian	206 (6.6)	173 (8.5)
Hispanic	866 (27.7)	440 (21.7)
Other/ Multiracial	241 (7.7)	150 (7.4)
Unknown	134 (4.3)	183 (9.0)
<b>Tobacco use</b>		
Current	159 (5.1)	119 (5.9)
Former	610 (19.5)	267 (13.2)
Never, including passive exposure	1813 (57.9)	1378 (68.0)
Unknown	550 (17.6)	263 (13.0)
<b>Obesity</b>		
BMI <25 kg/m <sup>2</sup>	1072 (34.2)	648 (32.0)
BMI 25.0-29.9 kg/m <sup>2</sup>	1004 (32.1)	527 (26.0)
BMI 30.0-39.9 kg/m <sup>2</sup>	197 (6.3)	106 (5.2)
BMI ≥40 kg/m <sup>2</sup>	731 (23.3)	642 (31.7)
Unknown	128 (4.1)	104 (5.1)
Any chronic condition*	2383 (76.1)	862 (42.5)
Any cardiovascular condition*	2081 (66.4)	607 (29.9)
Coronary artery disease	630 (20.1)	62 (3.1)
Heart failure	350 (11.2)	11 (0.5)
Hyperlipidemia	1262 (40.3)	407 (20.1)
Hypertension	1812 (57.9)	396 (19.5)
Diabetes	1108 (35.4)	162 (8.0)
Asthma or chronic obstructive pulmonary disorder	619 (19.8)	292 (14.4)
Chronic kidney disease	602 (19.2)	38 (1.9)
Cancer	304 (9.7)	85 (4.2)

**Appendix Table S4: Characteristics of patients with suspected Covid-19 in the emergency department (not tested)**

<b>Characteristic</b>	<b>Suspected COVID-19, N=5,914 N (%) or median (IQR)</b>
<b>Age, years</b>	
19-44	3225 (54.5)
45-54	1075 (18.2)
55-64	897 (15.2)
65-74	457 (7.7)
≥75	260 (4.4)
Male	3088 (52.2)
<b>Race/ethnicity</b>	
Non-Hispanic white	1539 (26.0)
Non-Hispanic African American	924 (15.6)
Asian	319 (5.4)
Hispanic	2297 (38.8)
Other/ Multiracial	471 (8.0)
Unknown	364 (6.2)
<b>Tobacco use</b>	
Never	2984 (50.5)
Former	667 (11.3)
Current	722 (12.2)
Unknown	1541 (26.1)
<b>Obesity</b>	
BMI <25 kg/m <sup>2</sup>	1256 (21.2)
BMI 25.0-29.9 kg/m <sup>2</sup>	1506 (25.5)
BMI 30.0-39.9 kg/m <sup>2</sup>	1246 (21.1)
BMI ≥40 kg/m <sup>2</sup>	225 (3.8)
Unknown	1681 (28.4)
Any chronic condition*	2503 (42.3)
Any cardiovascular condition*	1780 (30.1)
Coronary artery disease	231 (3.9)
Heart failure	102 (1.7)
Hyperlipidemia	1039 (17.6)
Hypertension	1365 (23.1)
Diabetes	686 (11.6)
Asthma or chronic obstructive pulmonary disorder	887 (15.0)
Chronic kidney disease	139 (2.4)
Cancer	238 (4.0)

**Appendix Table S5: Risk of hospitalization, including ED suspected cases in not hospitalized group**

Characteristic	Risk of hospitalization Odds ratio (95% CI)	p	Average marginal effect
Week*			
Age, years			
19-44	Reference		
45-54	2.00 (1.70-2.35)	<0.001	8%
55-64	3.03 (2.58-3.57)	<0.001	14%
65-74	6.26 (5.17-7.59)	<0.001	26%
≥75	14.59 (11.56-18.45)	<0.001	41%
Male	2.10 (1.87-2.35)	<0.001	9%
Race/ethnicity			
Non-Hispanic white	Reference		
Non-Hispanic African American	0.65 (0.55-0.78)	<0.001	-5%
Asian	1.26 (0.99-1.59)	0.058	3%
Hispanic	0.97 (0.84-1.12)	0.694	0%
Other/ Multiracial	1.41 (1.14-1.75)	0.002	4%
Unknown	0.89 (0.68-1.15)	0.376	-1%
Tobacco use			
Never	Reference		
Former	0.73 (0.62-0.86)	<0.001	-4%
Current	0.45 (0.36-0.57)	<0.001	-9%
Unknown	1.08 (0.92-1.26)	0.332	1%
Obesity			
BMI <25 kg/m <sup>2</sup>	Reference		
BMI 25.0-29.9 kg/m <sup>2</sup>	1.16 (1.00-1.35)	0.058	2%
BMI 30.0-39.9 kg/m <sup>2</sup>	1.51 (1.29-1.76)	<0.001	5%
BMI ≥40 kg/m <sup>2</sup>	2.24 (1.74-2.88)	<0.001	11%
Unknown	0.16 (0.12-0.22)	<0.001	-16%
Coronary artery disease	1.28 (1.04-1.56)	0.018	3%
Heart failure	2.56 (1.90-3.48)	<0.001	11%
Hyperlipidemia	0.73 (0.63-0.84)	<0.001	-4%
Hypertension	1.68 (1.47-1.93)	<0.001	6%
Diabetes	1.72 (1.49-1.99)	<0.001	7%
Asthma or chronic obstructive pulmonary disorder	0.93 (0.80-1.10)	0.407	-1%
Chronic kidney disease	3.13 (2.51-3.91)	<0.001	14%
Cancer	1.09 (0.87-1.36)	0.443	1%

\*included in model, but ORs too unreliable to display because of time variation in testing capability. In weeks 10-11 only 34 non-hospitalized and 65 hospitalized patients tested positive. Adding the ED non-tested population increases the non-hospitalized group to 1,782, artificially reducing the apparent hospitalization rate and skewing ORs.

**Appendix Table S6: Risk of hospitalization, including only patients first tested in the ED**

Characteristic	Risk of hospitalization Odds ratio (95% CI)	p	Average marginal effect
<b>Week</b>			
9 or 10	Reference		
11	0.92 (0.56-1.49)	0.735	-2%
12	6.33 (3.77-10.60)	<0.001	24%
13	7.25 (4.33-12.10)	<0.001	25%
14	8.30 (4.50-15.49)	<0.001	26%
<b>Age, years</b>			
19-44	Reference		
45-54	1.57 (1.13-2.17)	0.007	6%
55-64	2.16 (1.56-3.02)	<0.001	9%
65-74	3.50 (2.36-5.24)	<0.001	14%
≥75	7.56 (4.54-12.96)	<0.001	19%
Male	1.61 (1.27-2.04)	<0.001	5%
<b>Race/ethnicity</b>			
Non-Hispanic white	Reference		
Non-Hispanic African American	0.88 (0.65-1.19)	0.405	-1%
Asian	0.54 (0.38-0.77)	<0.001	-6%
Hispanic	1.53 (0.92-2.61)	0.108	4%
Other/ Multiracial	1.65 (1.01-2.79)	0.052	4%
Unknown	1.22 (0.69-2.20)	0.501	2%
<b>Tobacco use</b>			
Never	Reference		
Former	0.84 (0.60-1.18)	0.308	-2%
Current	0.84 (0.50-1.47)	0.528	-2%
Unknown	0.70 (0.52-0.96)	0.025	-3%
<b>Obesity</b>			
BMI <25 kg/m <sup>2</sup>	Reference		
BMI 25.0-29.9 kg/m <sup>2</sup>	1.17 (0.85-1.61)	0.324	2%
BMI 30.0-39.9 kg/m <sup>2</sup>	1.38 (0.99-1.93)	0.054	3%
BMI ≥40 kg/m <sup>2</sup>	2.28 (1.31-4.13)	0.005	7%
Unknown	0.21 (0.12-0.35)	<0.001	-21%
Coronary artery disease	0.97 (0.64-1.49)	0.885	0%
Heart failure	4.34 (2.04-10.77)	<0.001	14%
Hyperlipidemia	0.75 (0.56-1.01)	0.058	-3%
Hypertension	1.61 (1.20-2.15)	0.001	5%
Diabetes	1.30 (0.96-1.77)	0.087	3%
Asthma or chronic obstructive pulmonary disorder	0.78 (0.56-1.09)	0.135	-2%
Chronic kidney disease	1.56 (1.01-2.47)	0.050	4%
Cancer	0.99 (0.62-1.63)	0.981	0%