# #1908



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## Background

• Demographic and social factors associated with increased risk of COVID-19 hospitalization are poorly understood.<sup>1-3</sup>

## **Methods**

- Active surveillance at two hospitals in Atlanta, GA
- May 2021 June 2022
- Study Eligibility:
  - Adults  $\geq$ 18 years of age admitted with an acute respiratory infection (ARI)
  - Willing to participate in an interview regarding medical, social and vaccination history
  - Able to provide NP swabs at enrollment or from hospital testing
- Extensive in-person interview on demographic and social factors (e.g., employment status, smoking history, alcohol use, COVID-19 associated behaviors).
- Enrolled patients' medical records, past medical history, and vaccine documentation were reviewed and abstracted.
- COVID-19 status determined using hospital PCR results or documentation from medical record.
- Analysis
  - Baseline characteristics were compared with bivariate analysis (two-tailed p-value < 0.05).
  - Descriptive statistics were reported, and groups were tested using T-test, Chi-square, and Fischer's exact test where applicable.
  - Adjusted Odds Ratios were calculated using a stepwise logistic regression model, with 0.05 being the inclusion limit.
  - The final adjusted model included education, employment, home health, healthcare visit within 3 months, childcare >6 hours/week, travel, going to restaurants, and smoking status.
  - All statistics were calculated using SAS v.9.4

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<ul> <li>• 1444 subjects were enrolled and had SARS-CoV-2 PCR results available (773 [54%] positive and 671 negative (46%]).</li> <li>• Median age was greater in SARS-CoV-2 negative cohort than in positive cohort (50 and 54 years, respective); P&lt; 0.0001).</li> <li>• Table 1 and Table 2 demonstrate the baseline differences between COVID-19 positive and negative patients.</li> <li>• Table 3 summarizes the multivariate model results</li> <li>• Table 3 summarizes the multivariate model results</li> <li>• Table 3 commarizes (2000).</li> <li>• Table 3 summarizes (2000).</li> <li>• Tab</li></ul>	<ul> <li>• 1444 subjects were enrolled and had SARS-CoV-2 PCR results</li> </ul>				Table 1. Baseline Demographics, Education, and Employment Among COVID-19 Positive and         Negative Patients			
available (773 [543] positive and 671 negative (46%)).       Image: https://www.image: https://wwww.image: https://wwwwwwww.image: https://wwww.image: https://wwww								
Evaluation (Fr. J. Construction (SARS-COV-2) negative cohord than in positive cohord (60 and 54 years, respectively; P.S. 0.0001).         Ass. metian (160)         St (42, 31)         Bit (47, 52)         St (42, 34)         Bit (47, 52)	$a_{1}a_{1}a_{1}a_{1}a_{1}a_{1}a_{1}a_{1}$				Demographic (n=1444)	(n = 773)	(n=671)	Rivariate n-value
• Median age was greater in SARS-COV-2 negative conort flan in positive control (60 and 54 years, respectively, PC 0.0001).     • Table 1 and Table 2 demonstrate the baseline differences between COVID-19 positive and negative patients.     • Table 3 summarizes the multivariate model results     • Table 3 summarizes the multivariate model results     • Table 3. Other Social Factors Among COVID-19 Positive and COVID-19 Negative Patients     • Table 3. Other Social Factors Among COVID-19 Positive and COVID-19 Negative Patients     • Table 3. Other Social Factors Among COVID-19 Positive and COVID-19 Negative Patients     • Table 3. Other Social Factors Among COVID-19 Positive and COVID-19 Negative Patients     • Table 3. Other Social Factors Among COVID-19 Negative Patients     • Table 3. Other Social Factors Among COVID-19 Negative Patients     • Table 3. Other Social Factors Among COVID-19 Negative Patients     • Table 3. Other Social Factors Among COVID-19 Negative Patients     • Table 3. Other Social Factors Among COVID-19 Negative Patients     • Table 3. Other Social Factors Among COVID-19 Negative Patients     • Table 3. Other Social Factors Among COVID-19 Negative Patients     • Table 3. Other Social Factors Among COVID-19 Negative Patients     • Table 3. Other Social Factors Among COVID-19 Negative Patients     • Table 3. Other Social Factors Among COVID-19 Negative Patients     • CoviD 3.					Age, median [IOR]	54 [42, 65]	60 [47, 70]	<.0001
positive cohort (60 and 54 years, respectively; P< 0.0001).         mass Mula         04/12/3         14/12/3         14/12/3         0.07           - Table 1 and Table 2 demonstrate the baseline differences between COVID-19 positive and negative patients.         -	<ul> <li>Median age was greater in SARS-CoV-2 negative cohort than in</li> </ul>				Female, n (%)	427 (55.2)	363 (54,1)	0.7
• Table 1 and Table 2 demonstrate the baseline differences between COVID-19 positive and negative patients. <u>Bick or Africa American</u> <u>97(23)</u> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b> <b>7(23)</b>	positive cohort (60 and 54 years, respectively; P< 0.0001).				Race: White	174 (22.5)	184 (27.4)	0.07
Covid 1 and 1 and 2 definition the definition of the solution of the so	• Table 1 and Table 2 domonstrate the baseline differences between				Black or African American	554 (71.7)	449 (66.9)	
Adam       11(1,3)       11(1,3)       11(1,3)       11(1,3)         Table 3 summarizes the multivariate model results       Table 2. Other Social Factors Among COVID-19 Positive and COVID-19 Negative Patients       38(4,8)       27(4,0)       0.5         Table 2. Other Social Factors Among COVID-19 Positive and COVID-19 Negative Patients       81(2,3)       28(3,1)       28(3,2)       0.638 (92,1)         Weight Social Factors Among COVID-19 Positive and COVID-19 Negative Patients       10(1,2)       12(1,2)       27(1,2)       0.002         Weight Social Factors Among COVID-19 Negative Patients       10(1,2)       12(1,2)       20(1,2)       0.002         Weight Social Factors Among COVID-19 Negative Patients       10(1,2)       12(1,2)       0.002       10(1,2)       0.002         Weight Social Factors Among COVID-19 Negative Patients       10(1,2)       0.002       10(1,2)       10(1,2)       0.002         Weight Social Factors Among COVID-19 Negative Patients       10(1,2)       0.002       10(1,2)       0.002       10(1,2)       0.002         Weight Social Factors Among COVID-19 Negative Patients       10(1,2)       0.012       10(1,2)       0.002       10(1,2)       0.002       10(1,2)       0.002       10(1,2)       10(1,2)       10(1,2)       10(1,2)       10(1,2)       0.002       10(1,2)       10(1,2)	COVID-19 positive and negative patients.				Multiracial	17 (2.2)	7 (1.0)	
<ul> <li>Table 3 summarizes the multivariate model results</li> <li>Table 3 summarizes the multivariate model results</li> <li>Table 2. Other Social Factors Among COVID-19 Positive and COVID-19 Negative Platients</li> <li>(covid) 19 Positive (1e773)</li> <li>(cov</li></ul>					Asian	10 (1.3)	13 (1.9)	
Table 2. Other Social Factors Among COVID-19 Positive and COVID-19 Negative Particular         Ethicity, Hispanic not Latino         38 (4.9)         27 (4.0)         6.8           Table 2. Other Social Factors Among COVID-19 Positive and COVID-19 Negative Particular         Nor Specified         74 (3.3)         26 (3.5)         60 (3.5)           Household: Uve aione         161 (20.8)         164 (4.4)         0.1         104 (20.5)         103 (20.0)         26 (3.6)         103 (20.0)         0.02           We with olifer handle's 59 (10.7)         57 (8.5)         0.02         108 (4.6)         102 (24.1)         152 (22.8)            Use with oliffer handle's 59 (10.7)         57 (8.5)         0.02         104 (3.6)         102 (24.1)         123 (15.9)         142 (21.2)            Healthcare with regat 3 months         58 (4.6)         58 (47.6)         152 (22.8)             Healthcare with regat 3 months         38 (4.8)         39 (53.1)         0.002	<ul> <li>Table 3 summarizes the multivity</li> </ul>	variate model res	sults		Other/Not Specified	18 (2.3)	18 (2.7)	
Table 2. Other Social Factors Among COVID-19 Positive and COVID-19 Negative Patients:         Non-Higgs (1)         21(1)         22(3)         42(3)         23(3)           Intersected:         (no-773)         (no-773)         Patients         10(1)         97(1)					Ethnicity: Hispanic or Latino	38 (4.9)	27 (4.0)	0.5
Table 2. Other Social Factors Among COVID-19 Positive and COVID-19 Negative Patients         No:specified         24 (3.3)         26 (3.9)					Non-Hispanic nor Latino	711 (92.0)	618 (92.1)	
Table 2. Other Social Factors Among COVID-19 Positive and COVID-19 Negative Patients         counce 3         counce 3 <thcounce 3<="" th="">         counce 3         <t< td=""><td></td><td></td><td></td><td></td><td>Not Specified</td><td>24 (3.1)</td><td>26 (3.9)</td><td></td></t<></thcounce>					Not Specified	24 (3.1)	26 (3.9)	
COVID-19 Positive Household: Live alone         COVID-19 Regitive (n=773)         Fundame (n=773)         Fundame (	Table 2. Other Social Factors Among COVID-19 Positive and COVID-19 Negative Patients				Education: None/Some High School*	76 (10.0)	92 (13.8)	0.003
In $-773$ In $-6721$ $-yalke$ Some College/Associate degree/Tide School $249$ [22 6) $161$ [24 2) $-12$ [23 - 128 -		COVID-19 Positive	<b>COVID-19</b> Negative	Bivariate	High School Grad/GED	192 (25.1)	193 (29.0)	
Household: Live alone         161 (20.8)         164 (24.4)         0.1         179 (23.4)         132 (22.8)         Use Ute With object and Use State		(n = 773)	(n=671)	p-value	Some College/Associate degree/Trade School	249 (32.6)	161 (24.2)	
Line with other adults         581 (75.2)         491 (73.2)         0.4         Advanced Degree         68 (8.9)         67 (10.1)	Household: Live alone	161 (20.8)	164 (24.4)	0.1	College Grad (reference)	179 (23.4)	152 (22.8)	
Live with children under 5 yo       98 (12.7)       5.7 (8.5)       0.01       Coloration       Co	Live with other adults	581 (75.2)	491 (73.2)	0.4	Advanced Degree	68 (8.9)	67 (10.1)	
Use with children between 5-17 yo         205 (26.5)         131 (19.5)         0.002         Net employeed         282 (36.5)         367 (54.7)           Healthcare: Recycles home healthcare:         53 (6.9)         367 (54.7)         (21.2)         142 (21.2)         (21.4)         282 (36.5)         367 (54.7)           Healthcare: Recycles home healthcare:         53 (6.9)         369 (55.1)         0.002         On Disability         123 (15.9)         142 (21.2)         (21.4)         282 (36.5)         367 (54.7)           Children: Swycare Attending:         60 (14.6)         47 (15.0)         0.9         Work Frame home:         235 (63.9)         98 (60.5)         0.09           Work frame home: 2 darycles home hom: 2 darycles home:         136 (22.8)         136 (14.2)         0.07           Sola J Distancing: Yes (Always + Usuality)         681 (83.1)         562 (88.9)         0.4           Sometime: (About J/2 and seldom)         77 (8.7)         69 (10.3)         +         Work fram home:         67 (18.9)         45 (28.7)         0.07           Never         151 (27.2)         138 (28.0)         0.55         0.37         0.49         Work fram home: 2 darycles home home:         37 (28.7)         0.67           Sometimes (About J/2 and seldom)         77 (8.7)         69 (10.3)         +	Live with children under 5 yo	98 (12.7)	57 (8.5)	0.01	Employment: Employed Currently (reference)	368 (47.6)	162 (24.1)	<.0002
Healthcare:         Good (5.9)         47 (13.1)         COOD           Performants'         360 (46.99)         369 (5.1)         On Disability         128 (12.3)         1.42 (12.3)         -           Healthcare:         for (14.6)         47 (15.0)         0.00         Work Face to-Face with Public         138 (50.0)         90 (55.6)         0.2           Work Face to-Face with Public         138 (50.0)         90 (55.6)         0.2           Monthy         137 (15.9)         127 (25.8)         70 (56.6)         0.06           Social Distancing:         65 (98.10)         152 (20.3)         0.4         Work from home: cancer days/week         25 (63.9)         98 (60.5)         0.09           Tavel:         70 (55.6)         100 (52.8)         70 (56.6)         0.06         Work from home: 2 anore days/week         25 (63.9)         52 (3.1)         41 (25.3)         -           Tavel:         70 (25.6)         104 (52.8)         70 (15.6)         0.004         -         Work from home: 2 anore days/week         25 (63.9)         0.61 (15.6)         0.004           Social Distancing:         64 (25.8)         117 (59.4)         51 (16.4)         -         -         -         -         -         -         -         -         -         -	Live with children between 5-17 yo	205 (26.5)	131 (19.5)	0.002	Not employed	282 (36.5)	367 (54.7)	
Healthcare worker       52 (14.1)       28 (17.3)       0.4         Procover of Children: Dayoer Attending children: Myore Attending Children: Myore Attending       60 (14.6)       47 (15.0)       0.9         Work from home: Cannot work from home*       235 (6.3)       98 (60.5)       0.2         Work from homes: Cannot work from home*       235 (6.3)       98 (60.5)       0.09         Work from homes: Cannot work from home*       235 (6.3)       98 (60.5)       0.09         Work from home 2: Adaptive kase       25 (6.8)       5 (3.1)       -         Childrea ege:       Sysers old       104 (52.8)       70 (63.6)       0.08         Si 22 years old       117 (59.4)       51 (46.4)       <.0001	Healthcare: Receives home healthcare	53 (6.9)	87 (13.1)	<.0001	On Disability	123 (15.9)	142 (21.2)	
Exposure to Children:         0014.6         47 (15.0)         0.9         Work Face-to-Face with Public         134 (50.0)         90 (55.6)         0.2           Weekly Exposure to Children under Syo*         169 (22.0)         135 (20.3)         0.4         0.9         Work from home: 1-2 days/week         25 (63.9)         98 (60.5)         0.09           Michage and the performing childcare for >bhr /week*         177 (59.4)         51 (46.4)         <.0001	Healthcare visit in the past 3 months*	360 (46.99)	369 (55.1)	0.002	Healthcare worker	52 (14.1)	28 (17.3)	0.4
Children*         60 (14.6)         47 (15.0)         0.9         Work from home:         235 (63.9)         98 (60.5)         0.09           Performing childrare for sher /week*         109 (72.6)         110 (16.4)         <0001	Exposure to Children: Daycare Attending				Work Face-to-Face with Public	184 (50.0)	90 (55.6)	0.2
Weekly Exposure to Children under Soy*         169 (22.0)         135 (20.3)         0.4         Work from home 1.2 days/week         25 (6.8)         5 (3.1)           Performing childrare for sehr, /week*         139 (25.6)         110 (16.4)         <.0001	children*	60 (14.6)	47 (15.0)	0.9	Work from home: Cannot work from home*	235 (63.9)	98 (60.5)	0.09
Performing childcare for >6hr /week*         110 (15.28)	Weekly Exposure to Children under 5yo*	169 (22.0)	135 (20.3)	0.4	Work from home 1-2 days/week	25 (6.8)	5 (3.1)	
Childcare age:       cs years old       104 (52.8)       70 (63.6)       0.08       Work Hom nome exclusively       65 (23.1)       41 (25.3)       4.1 (25.3)         3-12 years old       117 (59.4)       51 (46.4)       <.0001	Performing childcare for >6hr /week*	197 (25.6)	110 (16.4)	<.0001	Work from home 3 or more days/week	23 (6.2)		
5-12 years old       117 (59.4)       51 (46.4)       <.0001         13-13 gears old       45 (2.8)       18 (16.4)       0.004         Travel: Traveled out of state in the past month*       155 (20.0)       78 (11.6)       <.0001	Childcare age: <5 years old*	104 (52.8)	70 (63.6)	0.08	Work from nome exclusively	85 (23.1)	41 (25.3)	0.01
13-18 years old       45 (22.8)       18 (16.4)       0.004         Travel: Targeted out of state in the past month*       155 (20.0)       78 (11.6)       <0001	5-12 years old	117 (59.4)	51 (46.4)	<.0001	Workplace Requires COVID-19 Vaccination*	$\frac{67(18.9)}{18.9}$	45 (28.7)	0.01
Travel:       Taveled out of state in the past month*       155 (20.0)       78 (11.6)       <.0001	13-18 years old	45 (22.8)	18 (16.4)	0.004		ted separately of in the	denominator	
Social Distancing: res (Always + Usually)       689 (89.1)       582 (88.3)       0.4         Sometimes (About 1/2 and seldom)       17 (2.2)       19 (2.8)       .         Masking Indoors: res (Always + Usually)*       681 (88.1)       593 (88.5)       0.5         Sometimes (About 1/2 and seldom)       71 (9.2)       533 (7.9)       .         Never       21 (2.7)       24 (3.6)       Adj-OR       95% Wald (CI)         Somothimes (About 1/2 and seldom)       71 (9.2)       133 (4.9)       0.02       .       Adj-OR       95% Wald (CI)         Never       66 (8.5)       33 (4.9)       0.02       .       Adj-OR       95% Wald (CI)         Monthly       16 (2.1)       13 (1.9)       .       .       .       .       .         Never (ref)       691 (89.4)       624 (93.1)       . </td <td><b>Travel:</b> Traveled out of state in the past month*</td> <td>155 (20.0)</td> <td>78 (11.6)</td> <td>&lt;.0001</td> <td></td> <td></td> <td></td> <td></td>	<b>Travel:</b> Traveled out of state in the past month*	155 (20.0)	78 (11.6)	<.0001				
Sometimes (About 1/2 and seldom)       67 (8.7)       69 (10.3)         Masking Indoors: Yes (Always + Usually)*       681 (88.1)       593 (88.5)       0.5         Sometimes (About 1/2 and seldom)       71 (9.2)       53 (7.9)          Never       21 (2.7)       24 (3.6)          Gym/Sports Center: ≥once/week*       66 (8.5)       33 (4.9)       0.02         Monthly       16 (2.1)       13 (1.9)          Never (reft)       691 (89.4)       624 (93.1)          Restaurant/Café: ≥once/week*       175 (22.6)       112 (16.7)       0.002         Monthly       159 (20.6)       117 (25.8)          Never (reft)       439 (56.8)       385 (57.5)          Shopping Center: ≥once/week*       374 (48.4)       264 (39.4)       0.002         Never (reft)       262 (33.9)       253 (37.8)          Smoking and drug use: Currently Smoke*       60 (7.9)       115 (17.2)       <.0001	Social Distancing: Yes (Always + Usually)	689 (89.1)	582 (88.9)	0.4				
Never       17 (2.2)       19 (2.8)         Masking indoors: Yes (Always + Usually)*       681 (88.1)       593 (88.5)       0.5         Sometimes (About 1/2 and seldom)       71 (9.2)       53 (7.9)       Table 3. Multivariate Analysis of Social Risk Factors Associated with COVID Positivity*         Never       21 (2.7)       24 (3.6)       Adj-OR       95% Wald (CI)         Monthly       16 (2.1)       13 (1.9)       Employment: Disability vs Current       0.487       0.347       0.684         Never (ref)       691 (89.4)       624 (93.1)       Employment: No vs Current       0.429       0.329       0.559         Nomthly       155 (20.6)       112 (16.7)       0.005       Home Healthcare       0.666       0.453       0.977         House r(ref)       439 (56.8)       385 (57.5)       Itavin 3months       0.724       0.576       0.909         Never (ref)       262 (33.9)       253 (37.8)       Restaurant: Monthly vs Never       0.671       0.504       0.892         Smoking and drug use:       139 (26.1)       244 (36.6)       Restaurant: Monthly vs Never       0.589       0.456       0.76         Previously Smoked       199 (26.1)       244 (36.6)       Table simplified to include only those social factors with statistical significance in the multivariate analysis </td <td>Sometimes (About 1/2 and seldom)</td> <td>6/ (8./)</td> <td>69 (10.3)</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Sometimes (About 1/2 and seldom)	6/ (8./)	69 (10.3)					
Masking indoors: res (Always + Usuality)**       681 (88.1)       393 (88.5)       0.5         Sometimes (About 1/2 and seldom)       71 (9.2)       53 (7.9)       Table 3. Multivariate Analysis of Social Risk Factors Associated with COVID Positivity*         Monthly       16 (2.1)       13 (1.9)       Employment: Disability vs Current       0.487       0.347       0.684         Never (ref)       691 (89.4)       624 (93.1)       Employment: Disability vs Current       0.429       0.329       0.559         Monthly       159 (20.6)       173 (25.8)       Employment: No vs Current       0.466       0.453       0.977         How re (ref)       439 (56.8)       385 (57.5)       5       5       How Healthcare       0.666       0.453       0.977         How re (ref)       137 (17.7)       153 (22.8)       Travel       1.634       1.181       2.261         Never (ref)       262 (33.9)       253 (37.8)       Smoking: Current vs Never       0.337       0.231       0.499         Smoking and drug use: Currently Smoke*       109 (26.1)       244 (36.6)       5       0.36       * Table simplified to include only those social factors with statistical significance in the multivariate analysis         Never Smoked (ref)       503 (66.0)       308 (46.2)       0.36       0.323       0.321 <td>Never</td> <td></td> <td><u> </u></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Never		<u> </u>					
Sometimes (Addit 12 and senderit)         11 (s.2)         33 (4.9)         12           Never         21 (2.7)         24 (3.6)         Adj-OR         95% Wald (CI)           Monthly         16 (2.1)         13 (1.9)         Important (1.1)         0.487         0.437         0.684           Never (ref)         691 (89.4)         624 (93.1)         Important (1.1)         0.02         Important (1.1)         0.02         Important (1.1)         0.429         0.329         0.559           Restaurant/Café > conce/week*         175 (22.6)         112 (16.7)         0.002         Important (1.1)         0.024         0.437         0.433         0.977           Monthly         159 (20.6)         173 (25.8)         Important (1.1)         0.002         Important (1.1)         0.024         0.576         0.909           Nothly         137 (17.7)         153 (22.8)         Important (1.1)         0.671         0.604         0.892           Smoking and drug use:         Currently Smoke*         60 (7.9)         115 (17.2)         <0001	<b>Wasking Indoors:</b> Yes (Always + Usually)*		593 (88.5)	0.5				
Never       121 (2.7)       24 (3.5)       Adj-OR       95% Wald (2)         Gym/Sports Center: ≥once/week*       66 (8.5)       33 (4.9)       0.02       Imployment: No vs Current       0.487       0.347       0.684         Never (ref)       691 (89.4)       624 (93.1)       Imployment: No vs Current       0.429       0.329       0.559         Never (ref)       159 (20.6)       112 (16.7)       0.005       Hom Healthcare       0.666       0.453       0.977         Never (ref)       439 (56.8)       385 (57.5)       Imployment: No vs Current       0.374       0.576       0.909         Never (ref)       137 (17.7)       153 (22.8)       Imployment: No Never       1.634       1.181       2.261         Smoking and drug use: Currently Smoke*       60 (7.9)       115 (17.2)       <.0001	Sometimes (About 1/2 and seidom)		<u> </u>		Table 3. Multivariate Analysis of Socia	l Risk Factors Assoc	iated with COVII	D Positivity*
Synty Sports Center: Zonce/week         00 (8:3)         35 (4:3)         0.02           Monthly         16 (2.1)         13 (1.9)            Restaurant/Café: ≥once/week*         175 (22.6)         112 (16.7)         0.005           Monthly         159 (20.6)         173 (25.8)            Never (ref)         439 (56.8)         338 (57.5)            Shopping Center: ≥once/week*         374 (48.4)         264 (39.4)         0.002           Monthly         137 (17.7)         153 (22.8)            Never (ref)         262 (33.9)         253 (37.8)            Smoking and drug use:         Currently Smoke*         60 (7.9)         115 (17.2)         <.0001	Gym/Sports Contor: Sonso/wook*		24 (3.0)	0.02			Adj-OR 95	Wald (CI)
Monthly         10 (2.1)         13 (1.9)         Employment: No vs Current         0.429         0.329         0.559           Restaurant/Café: ≥once/week*         175 (22.6)         112 (16.7)         0.005         0.005         0.666         0.453         0.977           Monthly         159 (20.6)         173 (25.8)         0.724         0.576         0.909           Never (ref)         439 (56.8)         385 (57.5)         0.002         1.634         1.181         2.261           Monthly         137 (17.7)         153 (22.8)         0.592         0.514         0.504         0.892           Never (ref)         262 (33.9)         253 (37.8)         0.637         0.237         0.231         0.49           Never (ref)         262 (33.9)         253 (37.8)         0.504         0.892         Smoking: Previous vs Never         0.671         0.504         0.892           Never (ref)         203 (66.0)         308 (46.2)         0.338         0.456         0.76           Previously Smoked         199 (26.1)         244 (36.6)         503         50.50         50.58         0.456         0.76           Vorg Use*         44 (5.7)         41 (6.1)         503         50.23         0.33         0.456         0.	Monthly		12 (1 0)	0.02	Employment: Disability vs Current		0.487 0.34	7 0.684
Never (ref)         0.01 (03.4)         0.24 (03.4)         0.024           Restaurant/Café: ≥once/week*         175 (02.6)         112 (16.7)         0.005           Monthly         159 (20.6)         173 (25.8)         0.724         0.576         0.909           Never (ref)         439 (56.8)         385 (57.5)         1.634         1.181         2.261           Monthly         137 (17.7)         153 (22.8)         1.634         1.634         1.834           Never (ref)         262 (33.9)         253 (37.8)         0.6001         0.671         0.504         0.892           Smoking and drug use:         Currently Smoke*         60 (7.9)         115 (17.2)         <.0001	Never (ref)	601 (80 /)	<u> </u>		Employment: No vs Current		0.429 0.32	9 0.559
Notes         112 (10.7)         0.003           Monthly         159 (20.6)         173 (25.8)         1.379         1.037         1.834           Never (ref)         439 (56.8)         385 (57.5)         1.037         1.834           Shopping Center: ≥once/week*         374 (48.4)         264 (39.4)         0.002           Monthly         137 (17.7)         153 (22.8)         1.634         1.181         2.261           Never (ref)         262 (33.9)         253 (37.8)         8         8         8         8         8         0.002           Smoking and drug use:         Currently Smoke*         60 (7.9)         1.15 (17.2)         <.0001	Restaurant/Café: >once/week*	175 (22.6)	112 (16 7)	0.005	Home Healthcare		0.666 0.45	3 0.977
Minimital         1.30 (20.0)         1.30 (20.0)         1.30 (20.0)         1.33 (20.0)	Monthly	159 (20.6)	173 (25.8)	0.005	HC Visit w/in 3months		0.724 0.57	6 0.909
Instruction       100 (0.0.0)       100 (0.0.0)       100 (0.0.0)       100 (0.0.0)         Shopping Center: ≥once/week*       374 (48.4)       264 (39.4)       0.002         Monthly       137 (17.7)       153 (22.8)       0.002         Never (ref)       262 (33.9)       253 (37.8)       0.337       0.231       0.49         Smoking and drug use: Currently Smoke*       60 (7.9)       115 (17.2)       <.0001	Never (ref)	439 (56 8)	385 (57 5)		Childcare >6hr/wk		1.379 1.03	7 1.834
Monthly         137 (17.7)         153 (22.8)         0.602           Never (ref)         262 (33.9)         253 (37.8)         0.337         0.231         0.49           Smoking and drug use:         Currently Smoke*         60 (7.9)         115 (17.2)         <.0001	Shopping Center: >once/week*	374 (48 4)	264 (39 4)	0.002	Travel		1.634 1.18	1 2.261
Moder (ref)         Los (arr)         Los (arr) <thlos (arr)<="" th=""> <thlos (arr)<="" th=""> <t< td=""><td>Monthly</td><td>137 (17.7)</td><td>153 (22.8)</td><td></td><td>Restaurant: Monthly vs Never</td><td></td><td>0.671 0.504</td><td>4 0.892</td></t<></thlos></thlos>	Monthly	137 (17.7)	153 (22.8)		Restaurant: Monthly vs Never		0.671 0.504	4 0.892
Smoking and drug use:         Currently Smoke*         60 (7.9)         115 (17.2)         <.0001           Previously Smoked         199 (26.1)         244 (36.6)           Table simplified to include only those social factors with statistical significance in the multivariate analysis           Never Smoked (ref)         503 (66.0)         308 (46.2)           Table simplified to include only those social factors with statistical significance in the multivariate analysis           Drug Use*         44 (5.7)         41 (6.1)   <	Never (ref)	262 (33.9)	253 (37.8)		Smoking: Previous vs Never		0.337 0.23	1 0.49
Previously Smoked     199 (26.1)     244 (36.6)       Never Smoked (ref)     503 (66.0)     308 (46.2)       Drug Use*     44 (5.7)     41 (6.1)       Consuming alcohol     300 (38.8)     243 (36.2)       * Missing data not listed separately or in the denominator     0.3	Smoking and drug use: Currently Smoke*	60 (7.9)	115 (17.2)	<.0001	Smoking: Current vs Never		0.589 0.45	6 0.76
Never Smoked (ref)503 (66.0)308 (46.2)Drug Use*44 (5.7)41 (6.1)Consuming alcohol300 (38.8)243 (36.2)* Missing data not listed separately or in the denominator	Previously Smoked	199 (26.1)	244 (36.6)		* Table simplified to include only those social fact	tors with statistical signi	ficance in the multiv	variate analysis
Drug Use*44 (5.7)41 (6.1)Consuming alcohol300 (38.8)243 (36.2)* Missing data not listed separately or in the denominator	Never Smoked (ref)	503 (66.0)	308 (46.2)					
Consuming alcohol 300 (38.8) 243 (36.2) 0.3 * Missing data not listed separately or in the denominator	Drug Use*	44 (5.7)	41 (6.1)					
* Missing data not listed separately or in the denominator	Consuming alcohol	300 (38.8)	243 (36.2)	0.3				
	* Missing data not lis	ted separately or in the	denominator					

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# **Social Risk Factors for COVID-19-Related Hospitalizations in Adults**



### Limitations

- Self-reporting bias and voluntary enrollment may impact the results.
- Asymptomatic SARS-CoV-2 infections not included.
- Changing behaviors (e.g., nonpharmaceutical) interventions) over time may have impacted the observed outcomes.

### Conclusions

 SARS-CoV-2 positive patients were typically younger, more likely to care for school-aged children, more likely to work outside the home, but less likely to receive home healthcare or smoke.

### • Personal and public health strategies to mitigate COVID-19 should take into consideration modifiable social risk factors.

### References

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Acknowledgements: Thank you to Amy Keane for her invaluable assistance. We also thank the patients who enrolled in this study. We also thank the nurses and staff of EUH and EUHM for their enthusiasm and assistance.

Funding: This study is an investigator-sponsored study funded by Pfizer.