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## Prevalence of SARS-CoV-2 Antibodies in First Responders and Public Safety Personnel, New York City, New York, USA, May–July 2020

## Appendix

Appendix Table 1. Survey questionnaire administered in study of first responder and public safety personnel, New York City, New York, USA, May 18–July 2, 2020\*

Question no.	Questionnaire item	Response categories		
1.	Name (not provided to CDC)	First		
		Last		
2.	Home address (not provided to CDC)	Street		
		City		
		State		
		Zip		
3.1	Phone number (mobile) (not provided to CDC)	Area code, phone number		
3.2	Verify phone number (mobile) (not provided to CDC)	Area code, phone number		
4.1	Email address (not provided to CDC)	(fill)		
4.2	Verify email address (not provided to CDC)	(fill)		
5.	County/borough of workplace	[scroll] (jurisdictions to provide list)		
		Other (fill)		
6.	Date of birth (not provided to CDC)	MM/DD/YYYY		
7.1	Sex at birth	Male		
		Female		
7.2	Current gender (not provided to CDC)	Man		
		Woman		
		Transgender man/trans man/female-to-male (FTM)		
		Transgender woman/trans woman/male-to-female (MTF)		
		Genderqueer/gender nonconforming neither exclusively		
		male nor female		
		Other (fill)		
		Decline to answer		
8.	Sexual orientation (not provided to CDC)	Gay		
		Straight		
		Bisexual		
		Something else/not sure		
		Decline to answer		
9.	Are you Hispanic or Latino/Latina?	Yes		
		NO		
		Don't know		
- 10		Decline to answer		
10.	What is your race? (select all that apply)	White		
		Black/African American		
		Asian		
		American Indian or Alaska Native		
		Native Hawalian of other Pacific Islander		
104	Diagon polost your and group			
IUA	Please select your age group	10-29 y		
		3U-39 y		
		40-49 y		
		DU−D9 y		
		00-04 y 65, 60 y		
		00-09 y		

Question no.	Questionnaire item	Response categories
		70 y or older
11.1	What is your occupation?	Nurse (e.g., RN, APRN, LPN)
		Midlevel clinician (e.g., PA, NP, nurse-midwife)
		Nurse assistant (e.g., CNA)
		Physician (e.g., MD, DO)
		Student or trainee
		Medical examiner
		Mortuary technician
		Police officer
		Firefighter
		Emergency medical technician
		Medical first responder
		Occupational/physical/speech therapist
		Therapy aide/assistant
		Pharmacist pharmacist assistant
		Diagnostic imagining technologist/technician
		Clinical laboratory technologist/technician
		Phlebotomist
		Social worker/case manager
		Administration, clerk
		Medical records specialist/medical registrar
		Dietary services staff
		Environmental services staff
		Maintenance staff
		Orderly/transportation staff
		Security guard
12.1	What is your main workplace or work setting?	Emergency department
	(select all that apply) (skip question 12.2 if non-	Hospital intensive care unit
	hospital response)	Hospital ward/floor
		Other nospital location
		Fire station/department
		Modical examiner office
		Other (fill)
12.2	What bospital do you work at?	[scroll] (jurisdictions to provide list)
12.2	what hospital do you work at:	Other (fill)
13.1	Since March 1st, how many weeks have you	Weeks (scroll) [min of 1, max of 20]
	worked in this setting?	
13.2	Since March 1st. on average, how many shifts	Shifts (fill) [min of 1, max of 14]
-	did you work per week in this setting?	
13.3	Since March 1st, on average, how many hours	Hours (scroll) [min of 1, max of 24]
	did you work per shift?	
15.1	In the course of your work, how often did you	Gown (Go to Q 18)
	use personal protective equipment (PPE) when	
	within 6 feet of a person with suspected or	
	confirmed COVID-19? All the time; Most of the	
	time; Sometimes; Rarely/never; Not applicable	
15.2		Gloves (Go to Q 18)
15.3		N95 respirator (Go to Q 16)
15.4		Powered air purifying respirator (PAPR) (Go to Q 17)
15.5		Survival face shield (Go to Q 18)
15.0		Other respirator (Go to Q 18)
10.7	In the leat year, have you been fit tested for the	
10.	in the last year, have you been fit tested for the	res
	respirator you wore:	No
		Don't know
17.	In the last year, have you been trained to use	Yes
	the respirator you wore?	No
		Don't know
18.	Since March 1, on average, how many times	More than 25 times
	per shift did you participate in any aerosol-	
	generating procedures for suspected or	
	confirmed COVID-19 patient(s)? For example,	

Question no.	Questionnaire item	Response categories
	open suctioning of airways; sputum induction;	
	cardiopulmonary resuscitation; endotracheal	
	intubation and extubation; noninvasive	
	ventilation (e.g., BiPAP, CPAP); bronchoscopy;	
	manual ventilation.	
		11–25 times
		6-10 times
		1–5 unies
		Not applicable
19.1	Did you spend more than 10 min within 6 feet of	Yes
	a coworker who tested positive for COVID-19?	
	·	No
		Don't know
19.2	Did you spend more than 10 min within 6 feet of	Yes
	a household member who tested positive for	
	COVID-19?	
		No Danit Imanu
10.2	Did you around more than 10 min within 6 fact of	Don't know
19.3	Did you spend more than 10 min within 6 feet of	res
	66 MB-19:	No
		Don't know
20	How many times were you tested for COVID-	(scroll) [indicate 0 if none] (if 0 Go to 23.1)
	19? (nasal, throat, or saliva sample)	· · · · · · ·
21.	Have you ever had a positive result for COVID-	Yes
	19?	
		No Danit Imanu
22	Approximately, when was the last time you were	
22.	tostod for COVID 19 in 2020 (oveluding blood	
	testing for exposure to SARS-CoV-2)2	
		Don't know
23.1	Since March 1, have you experienced any of	Fever
	the following symptoms?	
		Chills
		Cough (new onset or worsening of chronic cough)
		Sore throat
		Shortness of breath or difficulty breathing
		Vomiting
		Diarrnea ( $\geq$ 3 looser than normal stools/24nr period)
		Muscle aches
		Headacha (new appet or warraning headacha)
		Other (fill)
24.	When did these symptoms start? (estimate as	mm/dd
	best as possible)	
		Don't know
25.	Did you seek healthcare for these symptoms?	Yes
		No
		Don't know
26.	Were you hospitalized for COVID-19 illness?	Yes
		NO Danit know
27	Do you live in a single-family home or multiunit	Single family
21.	housing (like an apartment)?	Single ranniy
	houding (into an aparanona).	Multi-unit
		Other (fill)
28.	Number of household members currently in the	Specify (scroll)
	residence including yourself (resident, family,	
	live-in staff, roommates, and long-term visitors)	
29.	What is your height?	Feet
20	What is your weight?	
30.	What is your weight?	veight in pounds
51.1	medical conditions?	Diabeles
		Hypertension (high blood pressure)

Question no.	Questionnaire item	Response categories			
		Chronic heart disease			
		Chronic kidney disease			
		Chronic liver disease			
		Asthma			
		COPD/emphysema/chronic bronchitis			
		Immunosuppressive condition (e.g., HIV, autoimmune disease)			
		Immune-weakening medication or therapy (e.g., cancer			
		treatment)			
32.	Since March 1, have you been or are you currently pregnant? (only when sex at birth is female)	Yes			
		No			
		Don't know			

\*APRN, advanced practice registered nurse; BiPAP, bilevel positive airway pressure; CDC, Centers for Disease Control and Prevention; CNA, certifying nursing assistant; COPD, chronic obstructive pulmonary disease; COVID-19, coronavirus disease; CPAP, continuous positive airway pressure; DO, doctor of osteopathy; LPN, licensed practical nurse; MD, medical doctor; NP, nurse practitioner; PA, physician assistant; RN, registered nurse; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.

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Characteristic   OR (95% Cl)     Sex   Referent   Referent   Referent   Referent   Referent   Referent   Referent     F   1.20 (1.10–1.30)   1.02 (0.93–1.11)   0.94 (0.86–1.03)   0.89 (0.81–0.98)   0.88 (0.78–0.97)     Age group, y   Referent   Referent   Referent   Referent   Referent   Referent     35–44   0.70 (0.59–0.83)   0.66 (0.56–0.79)   0.68 (0.57–0.81)   0.78 (0.65–0.94)   0.79 (0.66–0.95)     45–59   0.49 (0.41–0.58)   0.46 (0.39–0.54)   0.53 (0.44–0.63)   0.61 (0.51–0.74)   0.63 (0.52–0.76)     60–64   0.50 (0.37–0.68)   0.48 (0.36–0.66)   0.58 (0.42–0.79)   0.56 (0.41–0.78)   0.59 (0.42–0.82)     >65   0.43 (0.26–0.72)   0.41 (0.24–0.68)   0.46 (0.27–0.78)   0.45 (0.26–0.77)   0.47 (0.27–0.81)     Race or ethnicity   Non-Hispanic White   Referent   Referent   Referent   Referent     Hispanic or Latino   1.59 (1.46–1.73)   1.54 (1.42–1.68)   1.30 (1.19–1.42)   1.31 (1.20–1.4	
Sex M   Referent   Referent <t< td=""><td>racteristic</td></t<>	racteristic
M   Referent   Referent   Referent   Referent   Referent   Referent   Referent     F   1.20 (1.10–1.30)   1.02 (0.93–1.11)   0.94 (0.86–1.03)   0.89 (0.81–0.98)   0.88 (0.78–0.97)     Age group, y   18–24   Referent   Referent   Referent   Referent   Referent   Referent     25–34   0.70 (0.59–0.83)   0.66 (0.56–0.79)   0.68 (0.57–0.81)   0.78 (0.65–0.94)   0.79 (0.66–0.95)     35–44   0.49 (0.41–0.58)   0.46 (0.39–0.54)   0.53 (0.44–0.63)   0.61 (0.51–0.74)   0.63 (0.52–0.76)     45–59   0.50 (0.37–0.68)   0.48 (0.36–0.66)   0.58 (0.42–0.79)   0.56 (0.41–0.78)   0.59 (0.42–0.82)     >65   0.43 (0.26–0.72)   0.41 (0.24–0.68)   0.46 (0.27–0.78)   0.45 (0.26–0.77)   0.47 (0.27–0.81)     Race or ethnicity   Non-Hispanic Vhite   Referent   Referent   Referent   Referent   Referent     Hispanic or Latino   1.59 (1.46–1.73)   1.54 (1.42–1.68)   1.30 (1.19–1.42)   1.31 (1.20–1.44)   1.29 (1.17–1.42)     Non-Hispanic Black   1.91 (1.73–2.10)   1.93 (	
F   1.20 (1.10-1.30)   1.02 (0.93-1.11)   0.94 (0.86-1.03)   0.89 (0.81-0.98)   0.88 (0.78-0.97)     Age group, y   18-24   Referent	1
Age group, y   Referent   Referent   Referent   Referent   Referent   Referent   Referent   Referent     25-34   0.70 (0.59-0.83)   0.66 (0.56-0.79)   0.68 (0.57-0.81)   0.78 (0.65-0.94)   0.79 (0.66-0.95)     35-44   0.49 (0.41-0.58)   0.46 (0.39-0.54)   0.53 (0.44-0.63)   0.61 (0.51-0.74)   0.63 (0.52-0.76)     45-59   0.50 (0.42-0.59)   0.47 (0.39-0.56)   0.56 (0.47-0.67)   0.61 (0.50-0.74)   0.63 (0.52-0.77)     60-64   0.50 (0.37-0.68)   0.48 (0.36-0.66)   0.58 (0.42-0.79)   0.56 (0.41-0.78)   0.59 (0.42-0.82)     >65   0.43 (0.26-0.72)   0.41 (0.24-0.68)   0.46 (0.27-0.78)   0.45 (0.26-0.77)   0.47 (0.27-0.81)     Race or ethnicity   Non-Hispanic White   Referent   Referent   Referent   Referent     Hispanic or Latino   1.59 (1.46-1.73)   1.54 (1.42-1.68)   1.30 (1.19-1.42)   1.31 (1.20-1.44)   1.29 (1.17-1.42)     Non-Hispanic Asian   1.16 (1.01-1.33)   1.17 (1.02-1.35)   1.08 (0.93-1.25)   1.11 (0.95-1.29)   1.10 (0.94-1.28)     Non-Hispanic Black   1.91 (1.73-2.10)	
18–24   Referent   Referent   Referent   Referent   Referent   Referent   Referent     25-34   0.70 (0.59–0.83)   0.66 (0.56–0.79)   0.68 (0.57–0.81)   0.78 (0.65–0.94)   0.79 (0.66–0.95)     35-44   0.49 (0.41–0.58)   0.46 (0.39–0.54)   0.53 (0.44–0.63)   0.61 (0.51–0.74)   0.63 (0.52–0.76)     45–59   0.50 (0.42–0.59)   0.47 (0.39–0.56)   0.56 (0.47–0.67)   0.61 (0.50–0.74)   0.63 (0.52–0.77)     60–64   0.50 (0.37–0.68)   0.48 (0.36–0.66)   0.58 (0.42–0.79)   0.56 (0.41–0.78)   0.59 (0.42–0.82)     >65   0.43 (0.26–0.72)   0.41 (0.24–0.68)   0.46 (0.27–0.78)   0.45 (0.26–0.77)   0.47 (0.27–0.81)     Race or ethnicity   Referent   Referent   Referent   Referent     Hispanic or Latino   1.59 (1.46–1.73)   1.54 (1.42–1.68)   1.30 (1.19–1.42)   1.31 (1.20–1.44)   1.29 (1.17–1.42)     Non-Hispanic Asian   1.16 (1.01–1.33)   1.17 (1.02–1.35)   1.08 (0.93–1.25)   1.11 (0.95–1.29)   1.10 (0.94–1.28)     Non-Hispanic Black   1.91 (1.73–2.10)   1.93 (1.75–2.14)   1.67 (1.50–1.87)	group, y
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8-24
35-44 0.49 (0.41-0.58) 0.46 (0.39-0.54) 0.53 (0.44-0.63) 0.61 (0.51-0.74) 0.63 (0.52-0.76)   45-59 0.50 (0.42-0.59) 0.47 (0.39-0.56) 0.56 (0.47-0.67) 0.61 (0.50-0.74) 0.63 (0.52-0.77)   60-64 0.50 (0.37-0.68) 0.48 (0.36-0.66) 0.58 (0.42-0.79) 0.56 (0.41-0.78) 0.59 (0.42-0.82)   >65 0.43 (0.26-0.72) 0.41 (0.24-0.68) 0.46 (0.27-0.78) 0.45 (0.26-0.77) 0.47 (0.27-0.81)   Race or ethnicity Non-Hispanic White Referent Referent Referent Referent   Hispanic or Latino 1.59 (1.46-1.73) 1.54 (1.42-1.68) 1.30 (1.19-1.42) 1.31 (1.20-1.44) 1.29 (1.17-1.42)   Non-Hispanic Asian 1.16 (1.01-1.33) 1.17 (1.02-1.35) 1.08 (0.93-1.25) 1.11 (0.95-1.29) 1.10 (0.94-1.28)   Non-Hispanic Black 1.91 (1.73-2.10) 1.93 (1.75-2.14) 1.67 (1.50-1.87) 1.52 (1.35-1.71) 1.50 (1.33-1.68)   Other 1.15 (0.91-1.46) 1.19 (0.94-1.50) 0.02 (0.80-1.30) 0.98 (0.77-1.25) 0.97 (0.76-1.24)	5-34
45-59 0.50 (0.42-0.59) 0.47 (0.39-0.56) 0.56 (0.47-0.67) 0.61 (0.50-0.74) 0.63 (0.52-0.77)   60-64 0.50 (0.37-0.68) 0.48 (0.36-0.66) 0.58 (0.42-0.79) 0.56 (0.41-0.78) 0.59 (0.42-0.82)   >65 0.43 (0.26-0.72) 0.41 (0.24-0.68) 0.46 (0.27-0.78) 0.45 (0.26-0.77) 0.47 (0.27-0.81)   Race or ethnicity Non-Hispanic White Referent Referent Referent Referent   Hispanic or Latino 1.59 (1.46-1.73) 1.54 (1.42-1.68) 1.30 (1.19-1.42) 1.31 (1.20-1.44) 1.29 (1.17-1.42)   Non-Hispanic Asian 1.16 (1.01-1.33) 1.17 (1.02-1.35) 1.08 (0.93-1.25) 1.11 (0.95-1.29) 1.10 (0.94-1.28)   Non-Hispanic Black 1.91 (1.73-2.10) 1.93 (1.75-2.14) 1.67 (1.50-1.87) 1.52 (1.35-1.71) 1.50 (1.33-1.68)   Other 1.15 (0.91-1.46) 1.19 (0.94-1.50) 1.02 (0.80-1.30) 0.98 (0.77-1.25) 0.97 (0.76-1.24)	5-44
60–64 0.50 (0.37–0.68) 0.48 (0.36–0.66) 0.58 (0.42–0.79) 0.56 (0.41–0.78) 0.59 (0.42–0.82)   >65 0.43 (0.26–0.72) 0.41 (0.24–0.68) 0.46 (0.27–0.78) 0.45 (0.26–0.77) 0.47 (0.27–0.81)   Race or ethnicity Non-Hispanic White Referent Referent Referent Referent Referent   Non-Hispanic or Latino 1.59 (1.46–1.73) 1.54 (1.42–1.68) 1.30 (1.19–1.42) 1.31 (1.20–1.44) 1.29 (1.17–1.42)   Non-Hispanic Asian 1.16 (1.01–1.33) 1.17 (1.02–1.35) 1.08 (0.93–1.25) 1.11 (0.95–1.29) 1.10 (0.94–1.28)   Non-Hispanic Black 1.91 (1.73–2.10) 1.93 (1.75–2.14) 1.67 (1.50–1.87) 1.52 (1.35–1.71) 1.50 (1.33–1.68)   Other 1.15 (0.91–1.46) 1.19 (0.94–1.50) 0.02 (0.80–1.30) 0.98 (0.77–1.25) 0.97 (0.76–1.24)	5-59
>65   0.43 (0.26-0.72)   0.41 (0.24-0.68)   0.46 (0.27-0.78)   0.45 (0.26-0.77)   0.47 (0.27-0.81)     Race or ethnicity Non-Hispanic White   Referent	0–64
Race of ethnicity Non-Hispanic White   Referent	65
Non-Hispanic White   Referent   Referent <td>e or ethnicity</td>	e or ethnicity
Hispanic or Latino 1.59 (1.46–1.73) 1.54 (1.42–1.68) 1.30 (1.19–1.42) 1.31 (1.20–1.44) 1.29 (1.17–1.42)   Non-Hispanic Asian 1.16 (1.01–1.33) 1.17 (1.02–1.35) 1.08 (0.93–1.25) 1.11 (0.95–1.29) 1.10 (0.94–1.28)   Non-Hispanic Black 1.91 (1.73–2.10) 1.93 (1.75–2.14) 1.67 (1.50–1.87) 1.52 (1.35–1.71) 1.50 (1.33–1.68)   Other 1.15 (0.91–1.46) 1.19 (0.94–1.50) 1.02 (0.80–1.30) 0.98 (0.77–1.25) 0.97 (0.76–1.24)	Ion-Hispanic White
Non-Hispanic Asian   1.16 (1.01-1.33)   1.17 (1.02-1.35)   1.08 (0.93-1.25)   1.11 (0.95-1.29)   1.10 (0.94-1.28)     Non-Hispanic Black   1.91 (1.73-2.10)   1.93 (1.75-2.14)   1.67 (1.50-1.87)   1.52 (1.35-1.71)   1.50 (1.33-1.68)     Other   1.15 (0.91-1.46)   1.19 (0.94-1.50)   1.02 (0.80-1.30)   0.98 (0.77-1.25)   0.97 (0.76-1.24)	lispanic or Latino
Non-Hispanic Black   1.91 (1.73–2.10)   1.93 (1.75–2.14)   1.67 (1.50–1.87)   1.52 (1.35–1.71)   1.50 (1.33–1.68)     Other   1.15 (0.91–1.46)   1.19 (0.94–1.50)   1.02 (0.80–1.30)   0.98 (0.77–1.25)   0.97 (0.76–1.24)	Ion-Hispanic Asian
Other $1.15 (0.91-1.46) 1.19 (0.94-1.50) 1.02 (0.80-1.30) 0.98 (0.77-1.25) 0.97 (0.76-1.24)$	Ion-Hispanic Black
	Other
Decline to answer 0.99 (0.86–1.13) 1.06 (0.92–1.21) 0.98 (0.84–1.13) 0.95 (0.82–1.10) 0.94 (0.81–1.08)	Decline to answer
Weight status	ght status
Underweight or normal weight Referent Referent Referent Referent Referent Referent Referent	Inderweight or normal weight
Overweight 1.00 (0.91–1.10) 1.07 (0.97–1.18) 1.06 (0.95–1.16) 1.07 (0.97–1.19) 1.08 (0.97–1.19)	Dverweight
Obese   1.07 (0.97-1.18)   1.13 (1.02-1.25)   1.12 (0.99-1.23)   1.12 (1.01-1.25)   1.13 (1.01-1.26)	bese
Severely obese   1.36 (1.10–1.68)   1.42 (1.15–1.76)   1.39 (1.10–1.71)   1.31 (1.04–1.64)   1.31 (1.05–1.65)	everely obese
Housing	ising
Single family Referent Referent Referent Referent Referent	ingle family
Multiunit   1.33 (1.24–1.42)   1.03 (0.95–1.12)   0.99 (0.91–1.07)   0.99 (0.91–1.08)	Iultiunit
Residence borough	idence borough
Staten Island Referent Referent Referent Referent Referent	taten Island
Bronx 1.64 (1.43–1.88) 1.18 (0.98–1.42) 1.27 (1.06–1.54) 1.27 (1.06–1.54)	ronx
Brooklyn 1.58 (1.40–1.78) 1.24 (1.06–1.45) 1.25 (1.07–1.47) 1.25 (1.06–1.46)	rooklyn
Manhattan 1.10 (0.93–1.30) 1.05 (0.86–1.29) 1.16 (0.94–1.44) 1.17 (0.95–1.45)	lanhattan
Queens   1.38 (1.23–1.55)   1.12 (0.96–1.30)   1.20 (1.03–1.40)   1.20 (1.03–1.40)	lueens
Outside New York City   0.91 (0.82–1.02)   0.79 (0.68–0.91)   0.88 (0.76–1.01)   0.89 (0.77–1.02)	Outside New York City
Exposure to a person with COVID-19 (Referent = not exposed)	
Household member 3.77 (3.44–4.13) 3.41 (3.10–3.76) 3.51 (3.19–3.87) 3.52 (3.19–3.87)	lousehold member
Coworker 1.16 (1.07–1.25) 0.97 (0.90–1.05) 1.03 (0.95–1.12) 1.05 (0.97–1.15)	Coworker
Patient 1.36 (1.27–1.46) 1.13 (1.05–1.22) 0.90 (0.82–0.98) 0.88 (0.80–0.97)	atient
Other person   1.41 (1.32–1.51)   1.15 (1.07–1.25)   1.21 (1.11–1.31)   1.22 (1.13–1.32)	Other person
Workplace borough	kplace borough
Staten Island Referent Referent Referent Referent	taten Island
Bronx 1.65 (1.37–1.97) 1.26 (1.17–1.83) 1.27 (1.01–1.59) 1.27 (1.01–1.60)	ronx
Brooklyn 1.43 (1.21–1.71) 1.46 (1.03–1.54) 1.27 (1.03–1.55) 1.28 (1.04–1.57)	rooklyn
Manhattan 1.12 (0.94–1.34) 1.26 (0.90–1.38) 1.11 (0.90–1.38) 1.11 (0.90–1.38)	lanhattan
Queens 1.30 (1.09–1.55) 1.11 (1.01-1.56) 1.08 (0.87–1.35) 1.08 (0.87–1.35)	lueens
Occupation	upation
Police Referent Referent Referent	olice

Appendix Table 2. Stepwise multivariable model for odds ratios of seropositivity for severe acute respiratory syndrome coronavirus 2 IgG in study of first responders and public safety personnel, New York City, New York, USA, May 18–July 2, 2020\*

$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$		Unadjusted model, n =	Adjusted model 1, n =	Adjusted model 2, n =	Adjusted model 3, n =	Adjusted model 4, n
Characteristic   OR (95% Cl)   OR (95% Cl)   OR (95% Cl)   OR (95% Cl)     Correctional staff   2.75 (2.39–3.16)   2.55 (2.18–2.98)   2.55 (2.18–2.98)   2.59 (1.9–2.68)   2.59 (1.9–2.68)   2.29 (1.95–2.69)     Traffic officer   1.98 (1.52–2.57)   2.25 (2.18–2.98)   2.29 (1.95–2.69)   2.06 (1.55–2.74)     Police dispatcher   2.53 (1.74–3.69)   2.04 (1.37–3.04)   1.95 (1.31–2.91)     Paramedic   1.92 (1.66–2.23)   2.07 (1.76–2.44)   1.90 (1.57–2.29)     Security guard   1.87 (1.39–2.52)   1.68 (1.21–2.32)   1.68 (1.21–2.32)     Firefighter   1.15 (1.05–1.25)   1.38 (1.25–1.53)   1.30 (1.15–1.46)     Other direct patient care providers†   1.12 (0.83–1.51)   1.32 (0.94–1.84)   1.32 (0.94–1.84)     Medicolegal death investigator   0.51 (0.33–0.79)   0.66 (0.42–1.03)   0.64 (0.41–1.00)     Aerosol-generating procedure for COVID-19 patient   1.02 (0.91–1.14)   1.02 (0.91–1.14)   1.02 (0.91–1.14)     6 - 10 times   1.25 (1.14–1.37)   1.02 (0.93–1.24)   1.06 (0.77–1.16)   1.02 (0.83–1.24)     1.1 -2 Stimes   1.25 (1.14–1.37)   1.02 (0.83–1.24)		19,909	19,904	19,904	19,904	= 19,904
$\begin{array}{ccccc} Correctional staff & 2.75 (2.39–3.16) & 2.55 (2.18–2.98) & 2.55 (2.18–2.99) \\ Emergency medical technician & 2.65 (2.35–2.97) & 2.51 (2.19–2.88) & 2.29 (1.95–2.69) \\ Traffic officer & 1.98 (1.52–2.57) & 2.23 (1.68–2.97) & 2.06 (1.55–2.74) \\ Police dispatcher & 2.53 (1.74–3.69) & 2.04 (1.37–3.04) & 1.95 (1.31–2.91) \\ Paramedic & 1.92 (1.66–2.23) & 2.07 (1.76–2.44) & 1.90 (1.57–2.29) \\ Security guard & 1.87 (1.39–2.52) & 1.78 (1.29–2.46) & 1.68 (1.21–2.32) \\ Dispatcher (Fire or EMS) & 1.81 (1.40–2.34) & 1.64 (1.25–2.14) & 1.54 (1.17–2.02) \\ Direpatcher (Fire or er MS) & 1.81 (1.40–2.34) & 1.57 (1.99–2.46) & 1.68 (1.21–2.32) \\ Direpatcher (There or EMS) & 1.81 (1.40–2.34) & 1.64 (1.25–2.14) & 1.54 (1.17–2.02) \\ Direpatcher (There or EMS) & 1.81 (1.40–2.34) & 1.37 (0.99–1.91) & 1.32 (0.94–1.84) \\ Firefighter (matical first responder & 0.99 (0.84–1.18) & 1.37 (0.99–1.91) & 1.32 (0.94–1.84) \\ Firefighter (medical first responder & 0.99 (0.84–1.18) & 0.66 (0.42–1.03) & 0.64 (0.41–1.00) \\ \hline Aerosol-generating procedure for COVID-19 patient & Referent \\ 1-5 times & 1.25 (1.14–1.37) & 1.02 (0.91–1.14) \\ 6-10 times & 1.55 (1.34–1.79) & 1.05 (0.08–1.24) \\ 1.05 (0.89–1.24) & 1.00 (0.89–1.24) & 1.00 (0.97–1.16) \\ Use of PPE within 6 feet of a person with COVID-19 \\ \hline Use of PPE within 6 feet of a person with COVID-19 \\ \hline Gowns all the time & 1.26 (1.11–1.29) & 1.00 (0.90–1.10) \\ Gloves all the time & 1.46 (1.36–1.56) & 1.09 (0.99–1.16) \\ Surgical facemask all the time & 1.39 (1.30–1.49) & 0.07 (0.98–1.17) \\ Surgical facemask all the time & 1.39 (1.30–1.49) & 0.07 (0.98–1.17) \\ Surgical facemask all the time & 1.39 (1.30–1.49) & 0.07 (0.98–1.17) \\ Surgical facemask all the time & 1.39 (1.30–1.49) & 0.07 (0.98–1.17) & 0.03 (0.91–1.18) & 0.09 (0.11–1.18) & 0.09 (0.11–1.18) & 0.09 (0.11–1.18) & 0.09 (0.11–1.18) & 0.09 (0.11–1.18) & 0.00 (0.90–1.10) & 0.07 (0.98–1.17) & 0.07 (0.98–1.17) & 0.07 (0.98–1.17) & 0.07 (0.98–1.17) & 0.07 (0.98–1.17) & 0.07 (0.98–1.17) & 0.07 (0.98–1.17) & 0.07 (0.98–1.17) & 0.07 (0.98–1.17) &$	Characteristic	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
$\begin{array}{ccccc} {\rm Emergency medical technician} & 2.65 (2.35-2.97) & 2.51 (2.19-2.88) & 2.29 (1.95-2.69) \\ {\rm Traffic officer} & 1.98 (1.52-2.57) & 2.23 (1.68-2.97) & 2.06 (1.55-2.74) \\ {\rm Police dispatcher} & 2.53 (1.74-3.69) & 2.04 (1.37-3.04) & 1.95 (1.51-2.91) \\ {\rm Paramedic} & 1.92 (1.66-2.23) & 2.07 (1.76-2.44) & 1.90 (1.57-2.29) \\ {\rm Security guard} & 1.87 (1.39-2.52) & 1.78 (1.29-2.46) & 1.68 (1.21-2.32) \\ {\rm Dispatcher} (Fire or EMS) & 1.81 (1.40-2.34) & 1.64 (1.25-2.14) & 1.54 (1.17-2.02) \\ {\rm Firefighter} & 1.15 (1.05-1.25) & 1.38 (1.25-1.53) & 1.30 (1.15-1.46) \\ {\rm Other direct patient care providers}^{\dagger} & 1.12 (0.83-1.51) & 1.37 (0.99-1.91) & 1.32 (0.94-1.84) \\ {\rm Firefighter/medical first responder} & 0.99 (0.84-1.18) & 1.12 (0.33-1.34) & 1.04 (0.85-1.26) \\ {\rm Medicolegal death investigator} & 0.51 (0.33-0.79) & 0.66 (0.42-1.03) & 0.64 (0.41-1.00) \\ \hline {\rm Aerosol-generating procedure for COVID-19 patient} & & \\ 0 times & {\rm Referent} & {\rm 1.25 (1.14-1.37) & 1.02 (0.91-1.14) \\ -5 times & 1.25 (1.14-1.37) & 0.99 (0.89-1.24) & 1.05 (0.89-1.24) \\ {\rm 11-25 times} & 1.55 (1.34-1.79) & 1.02 (0.87-1.24) & {\rm 0.96 (0.78-1.17) \\ {\rm Not applicable} & 1.17 (1.49-2.10) & {\rm 0.96 (0.78-1.17) & 1.02 (0.89-1.24) \\ {\rm Mot applicable} & 1.17 (1.49-2.10) & {\rm 1.02 (0.97-1.16) & {\rm 0.96 (0.78-1.17) & 1.02 (0.97-1.16) \\ {\rm Gowns all the time} & 1.20 (1.11-1.29) & {\rm 1.02 (0.97-1.16) & {\rm 1.02 (0.97-1.1$	Correctional staff	2.75 (2.39–3.16)			2.55 (2.18–2.98)	2.55 (2.18–2.99)
$\begin{array}{cccc} Tarfic officer & 1.98 (1.52-27) & 2.23 (1.88-2.97) & 2.06 (1.55-2.74) \\ Police dispatcher & 2.53 (1.74-3.69) & 2.04 (1.37-3.04) & 1.95 (1.31-2.91) \\ Paramedic & 2.04 (1.37-3.04) & 1.95 (1.31-2.91) \\ Security guard & 1.87 (1.39-2.52) & 2.07 (1.76-2.44) & 1.90 (1.57-2.29) \\ Security guard & 1.87 (1.39-2.52) & 1.78 (1.29-2.46) & 1.68 (1.21-2.32) \\ Dispatcher (Fire or EMS) & 1.81 (1.40-2.34) & 1.64 (1.25-2.14) & 1.54 (1.77-0.2) \\ Firrefighter & 1.15 (1.05-1.25) & 1.38 (1.25-1.53) & 1.30 (1.15-1.46) \\ Other direct patient care providers \dagger & 1.12 (0.83-1.51) & 1.37 (0.99-1.91) & 1.32 (0.94-1.84) \\ Firrefighter/medical first responder & 0.99 (0.84-1.18) & 1.12 (0.93-1.34) & 1.04 (0.85-1.26) \\ Medicolegal death investigator & 0.51 (0.33-0.79) & 0.66 (0.42-1.03) & 0.64 (0.41-1.00) \\ \hline Aerosol-generating procedure for COVID-19 patient & \\\hline 0 times & Referent & \\\hline 1-5 times & 1.25 (1.14-1.37) & 1.02 (0.91-1.14) \\ 6-10 times & 1.25 (1.34-1.79) & 1.05 (0.89-1.24) \\ 11-25 times & 1.50 (1.25-1.80) & 0.96 (0.78-1.17) \\ >25 times & 1.50 (1.25-1.80) & 0.96 (0.78-1.17) \\ >25 times & 1.00 (0.90-1.10) & 1.00 (0.90-1.10) \\ \\ Use of PPE within 6 feet of a person with COVID-19 \\\hline Use of PPE within 6 feet of a person with COVID-19 \\\hline Gloves all the time & 1.26 (1.11-1.29) & 1.03 (0.91-1.18) \\ Surgical facemask all the time & 1.36 (1.23-1.50) & 1.03 (0.91-1.18) \\ Surgical facemask all the time & 1.36 (1.23-1.50) & 0.90 (0.90-1.10) \\ \hline Mot capplicable & 1.19 (1.06-1.35) & 0.90 (0.90-1.10) \\ \hline Mot capplicable & 1.39 (1.30-1.49) & 0.00 (0.90-1.10) \\ \hline Mot capplicable & 1.39 (1.30-1.49) & 0.00 (0.90-1.10) \\ \hline Mot capplicable & 0.19 (0.90-1.49) & 0.00 (0.90-1.10) \\ \hline Mot capplicable & 0.19 (1.06-1.30) & 0.10 (0.90-1.10) \\ \hline Mot capplicable & 0.19 (1.06-1.30) & 0.10 (0.90-1.10) \\ \hline Mot capplicable & 0.19 (0.06-1.30) & 0.10 (0.90-1.10) \\ \hline Mot capplicable & 0.19 (0.06-1.30) & 0.10 (0.90-1.10) \\ \hline Mot capplicable & 0.19 (0.06-1.30) & 0.10 (0.90-1.10) \\ \hline Mot capplicable & 0.19 (0.06-1.30) & 0.10 (0.90-1.10) \\ \hline Mot capplicable & 0.10 $	Emergency medical technician	2.65 (2.35-2.97)			2.51 (2.19–2.88)	2.29 (1.95–2.69)
$\begin{array}{ccccc} \mbox{Police dispatcher} & 2.53 (1.74-3.69) & 2.04 (1.37-3.04) & 1.95 (1.31-2.91) \\ \mbox{Paramedic} & 1.92 (1.66-2.23) & 2.07 (1.76-2.44) & 1.90 (1.57-2.29) \\ \mbox{Security guard} & 1.87 (1.39-2.52) & 1.78 (1.29-2.46) & 1.68 (1.21-2.32) \\ \mbox{Dispatcher (Fire or EMS)} & 1.81 (1.40-2.34) & 1.64 (1.25-2.14) & 1.54 (1.17-2.02) \\ \mbox{Firefighter} & 1.15 (1.05-1.25) & 1.38 (1.25-1.53) & 1.30 (1.15-1.46) \\ \mbox{Other direct patient care providers}^+ & 1.12 (0.83-1.51) & 1.37 (0.99-1.91) & 1.32 (0.94-1.84) \\ \mbox{Firefighter/medical first responder} & 0.99 (0.84-1.18) & 1.12 (0.93-1.34) & 1.04 (0.85-1.26) \\ \mbox{Medicolegal death investigator} & 0.51 (0.33-0.79) & 0.66 (0.42-1.03) & 0.64 (0.41-1.00) \\ \mbox{Aerosol-generating procedure for COVID-19 patient} & 1.25 (1.14-1.37) & 1.02 (0.91-1.14) \\ \mbox{1-25 times} & 1.25 (1.34-1.79) & 1.05 (0.89-1.24) \\ \mbox{11-25 times} & 1.50 (1.25-1.80) & 0.96 (0.78-1.17) \\ \mbox{25 times} & 1.77 (1.49-2.10) & 1.06 (0.97-1.16) \\ \mbox{Not applicable} & 1.11 (1.02-1.20) & 1.06 (0.97-1.16) \\ \mbox{Mot applicable} & 1.20 (1.11-1.29) & 1.00 (0.90-1.10) \\ \mbox{Gloves all the time} & 1.20 (1.11-1.29) & 1.00 (0.90-1.10) \\ \mbox{Gloves all the time} & 1.36 (1.23-1.50) & 0.03 (0.91-1.18) \\ \mbox{Surgical facemask all the time} & 1.39 (1.30-1.49) & 0.07 (0.98-1.17) \\ \mbox{Surgical facemask all the time} & 1.20 (1.91-1.49) & 0.07 (0.98-1.17) \\ \mbox{Surgical facemask all the time} & 1.20 (1.11-1.29) & 0.07 (0.98-1.17) \\ \mbox{Surgical facemask all the time} & 1.39 (1.30-1.49) & 0.07 (0.98-1.17) \\ \mbox{Surgical facemask all the time} & 1.02 (0.91-1.49) & 0.07 (0.98-1.17) \\ \mbox{Surgical facemask all the time} & 1.02 (0.91-1.49) & 0.07 (0.98-1.17) \\ \mbox{Surgical facemask all the time} & 1.39 (1.30-1.49) & 0.07 (0.98-1.17) \\ \mbox{Surgical facemask all the time} & 1.29 (1.30-1.49) & 0.07 (0.98-1.17) \\ \mbox{Surgical facemask all the time} & 1.29 (1.23-1.50) & 0.07 (0.98-1.17) \\ \mbox{Surgical facemask all the time} & 0.07 (0.98-1.17) & 0.07 (0.98-1.17) \\ Surgical$	Traffic officer	1.98 (1.52–2.57)			2.23 (1.68–2.97)	2.06 (1.55–2.74)
$\begin{array}{cccc} Paramedic & 1.92  (1.66-2.23) & 2.07  (1.76-2.44) & 1.90  (1.57-2.29) \\ Security guard & 1.87  (1.39-2.52) & 1.78  (1.29-2.46) & 1.68  (1.21-2.32) \\ Dispatcher (Fire or EMS) & 1.81  (1.40-2.34) & 1.64  (1.25-2.14) & 1.54  (1.17-2.02) \\ Firefighter & 1.15  (1.05-1.25) & 1.38  (1.25-1.53) & 1.30  (1.15-1.46) \\ Other  direct patient care providers \dagger & 1.12  (0.83-1.51) & 1.37  (0.99-1.91) & 1.32  (0.94-1.84) \\ Firefighter/medical first responder & 0.99  (0.84-1.18) & 1.12  (0.93-1.34) & 1.04  (0.85-1.26) \\ Medicolegal death investigator & 0.51  (0.33-0.79) & 0.66  (0.42-1.03) & 0.64  (0.41-1.00) \\ \hline Aerosol-generating procedure for COVID-19 patient & & & & & & & & & & & & & & & & & & &$	Police dispatcher	2.53 (1.74–3.69)			2.04 (1.37–3.04)	1.95 (1.31–2.91)
Security guard $1.87 (1.39-2.52)$ $1.78 (1.29-2.46)$ $1.68 (1.21-2.32)$ Dispatcher (Fire or EMS) $1.81 (1.40-2.34)$ $1.64 (1.25-2.14)$ $1.54 (1.17-2.02)$ Firefighter $1.15 (1.05-1.25)$ $1.38 (1.25-1.53)$ $1.30 (1.5-1.46)$ Other direct patient care providers $\dagger$ $1.12 (0.83-1.51)$ $1.37 (0.99-1.91)$ $1.32 (0.94-1.84)$ Firefighter/medical first responder $0.99 (0.84-1.18)$ $1.12 (0.93-1.34)$ $1.04 (0.85-1.26)$ Medicolegal death investigator $0.51 (0.33-0.79)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ Aerosol-generating procedure for COVID-19 patient $1.25 (1.14-1.37)$ $1.02 (0.91-1.14)$ 6-10 times $1.25 (1.14-1.37)$ $1.05 (0.89-1.24)$ $1-55$ times $1.55 (1.34-1.79)$ $0.96 (0.78-1.17)$ $1-25$ times $1.50 (0.89-1.24)$ $1.06 (0.97-1.16)$ Use of PPE within 6 feet of a person with COVID-19 $1.11 (1.02-1.20)$ $1.00 (0.90-1.10)$ Glowes all the time $1.20 (1.11-1.29)$ $1.03 (0.91-1.18)$ Glowes all the time $1.36 (1.23-1.50)$ $1.03 (0.91-1.18)$ Surgical facemask all the time $1.36 (1.23-1.50)$ $1.03 (0.91-1.18)$	Paramedic	1.92 (1.66–2.23)			2.07 (1.76–2.44)	1.90 (1.57–2.29)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Security guard	1.87 (1.39–2.52)			1.78 (1.29–2.46)	1.68 (1.21–2.32)
Firefighter $1.15 (1.05-1.25)$ $1.38 (1.25-1.53)$ $1.30 (1.15-1.46)$ Other direct patient care providers† $1.12 (0.83-1.51)$ $1.37 (0.99-1.91)$ $1.32 (0.94-1.84)$ Firefighter/medical first responder $0.99 (0.84-1.18)$ $1.12 (0.93-1.34)$ $1.04 (0.85-1.26)$ Medicolegal death investigator $0.51 (0.33-0.79)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ Aerosol-generating procedure for COVID-19 patient $0.51 (0.33-0.79)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ $0$ timesReferentReferent $1.25 (1.14-1.37)$ $1.00 (0.91-1.14)$ $6-10$ times $1.55 (1.34-1.79)$ $1.05 (0.89-1.24)$ $11-25$ times $1.50 (1.25-1.80)$ $0.96 (0.78-1.17)$ >25 times $1.77 (1.49-2.10)$ $1.02 (0.83-1.24)$ Not applicable $1.11 (1.02-1.20)$ $1.00 (0.90-1.10)$ Gowns all the time $1.20 (1.11-1.29)$ $1.00 (0.90-1.10)$ Gloves all the time $1.36 (1.23-1.50)$ $1.03 (0.91-1.18)$ Surgical facemask all the time $1.36 (1.23-1.50)$ $1.03 (0.91-1.18)$ Surgical facemask all the time $1.20 (1.20 - 1.49)$ $1.00 (0.90-1.10)$	Dispatcher (Fire or EMS)	1.81 (1.40–2.34)			1.64 (1.25–2.14)	1.54 (1.17–2.02)
Other direct patient care providers $1.12 (0.83-1.51)$ $1.37 (0.99-1.91)$ $1.32 (0.94-1.84)$ Firefighter/medical first responder $0.99 (0.84-1.18)$ $1.12 (0.93-1.34)$ $1.04 (0.85-1.26)$ Medicolegal death investigator $0.51 (0.33-0.79)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ Aerosol-generating procedure for COVID-19 patient $0.51 (0.33-0.79)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ $0.66 (0.42-1.03)$ $1.25 (1.14-1.37)$ $1.02 (0.91-1.14)$ $0.61 (0.91-1.14)$ $6-10$ times $1.25 (1.14-1.37)$ $1.02 (0.91-1.14)$ $0.96 (0.78-1.17)$ $52$ times $1.50 (1.25-1.80)$ $0.96 (0.78-1.17)$ $>25$ times $0.96 (0.78-1.17)$ $> 25$ times $1.77 (1.49-2.10)$ $1.02 (0.83-1.24)$ $1.02 (0.83-1.24)$ Not applicable $1.11 (1.02-1.20)$ $1.06 (0.97-1.16)$ Use of PPE within 6 feet of a person with COVID-19 $1.00 (0.90-1.10)$ $1.90 (0.90-1.10)$ Gloves all the time $1.36 (1.23-1.50)$ $1.03 (0.91-1.18)$ Surgical facemask all the time $1.39 (1.30-1.49)$ $1.07 (0.98-1.17)$ NOE construction of the time $1.30 (1.29-1.20)$ $1.02 (0.92-1.02)$	Firefighter	1.15 (1.05–1.25)			1.38 (1.25–1.53)	1.30 (1.15–1.46)
Firefighter/medical first responder $0.99 (0.84-1.18)$ $1.12 (0.93-1.34)$ $1.04 (0.85-1.26)$ Medicolegal death investigator $0.51 (0.33-0.79)$ $0.66 (0.42-1.03)$ $0.64 (0.41-1.00)$ Aerosol-generating procedure for COVID-19 patient $0$ timesReferentReferent0 timesReferent $1.25 (1.14-1.37)$ $1.02 (0.91-1.14)$ 6-10 times $1.55 (1.34-1.79)$ $1.05 (0.89-1.24)$ 11-25 times $1.50 (1.25-1.80)$ $0.96 (0.78-1.17)$ > 25 times $1.77 (1.49-2.10)$ $1.02 (0.83-1.24)$ Not applicable $1.11 (1.02-1.20)$ $1.00 (0.97-1.16)$ Use of PPE within 6 feet of a person with COVID-19 $1.20 (1.11-1.29)$ $1.00 (0.90-1.10)$ Gowns all the time $1.46 (1.36-1.56)$ $1.19 (1.06-1.33)$ Eye protection all the time $1.39 (1.30-1.49)$ $1.03 (0.91-1.18)$ Surgical facemask all the time $1.39 (1.30-1.49)$ $0.090 - 1.00$	Other direct patient care providers†	1.12 (0.83–1.51)			1.37 (0.99–1.91)	1.32 (0.94–1.84)
Medicolegal death investigator   0.51 (0.33–0.79)   0.66 (0.42–1.03)   0.64 (0.41–1.00)     Aerosol-generating procedure for COVID-19 patient    Referent   Referent     0 times   Referent   1.25 (1.14–1.37)   1.02 (0.91–1.14)     6–10 times   1.55 (1.34–1.79)   1.05 (0.89–1.24)     11–25 times   1.50 (1.25–1.80)   0.96 (0.78–1.17)     >25 times   1.77 (1.49–2.10)   1.02 (0.83–1.24)     Not applicable   1.11 (1.02–1.20)   1.06 (0.97–1.16)     Use of PPE within 6 feet of a person with COVID-19   1.00 (0.90–1.10)   Gloves all the time     Gowns all the time   1.36 (1.23–1.56)   1.19 (1.06–1.33)   1.99 (1.06–1.33)     Eye protection all the time   1.39 (1.30–1.49)   1.03 (0.91–1.18)   Surgical facemask all the time   1.09 (1.09–1.42)	Firefighter/medical first responder	0.99 (0.84–1.18)			1.12 (0.93–1.34)	1.04 (0.85–1.26)
Aerosol-generating procedure for COVID-19 patient   Referent   Referent     0 times   1.25 (1.14–1.37)   1.02 (0.91–1.14)     6–10 times   1.55 (1.34–1.79)   1.05 (0.89–1.24)     11–25 times   1.50 (1.25–1.80)   0.96 (0.78–1.17)     > 25 times   1.77 (1.49–2.10)   1.02 (0.83–1.24)     Not applicable   1.11 (1.02–1.20)   1.06 (0.97–1.16)     Use of PPE within 6 feet of a person with COVID-19   1.00 (0.90–1.10)     Gloves all the time   1.20 (1.11–1.29)   1.00 (0.90–1.10)     Gloves all the time   1.36 (1.23–1.56)   1.19 (1.06–1.33)     Eye protection all the time   1.36 (1.23–1.50)   1.03 (0.91–1.18)     Surgical facemask all the time   1.39 (1.30–1.49)   1.07 (0.98–1.17)	Medicolegal death investigator	0.51 (0.33-0.79)			0.66 (0.42-1.03)	0.64 (0.41-1.00)
0 times   Referent   Referent     1-5 times   1.25 (1.14–1.37)   1.02 (0.91–1.14)     6-10 times   1.55 (1.34–1.79)   1.05 (0.89–1.24)     11-25 times   1.50 (1.25–1.80)   0.96 (0.78–1.17)     >25 times   1.77 (1.49–2.10)   1.02 (0.83–1.24)     Not applicable   1.11 (1.02–1.20)   1.06 (0.97–1.16)     Use of PPE within 6 feet of a person with COVID-19   5   5     Gowns all the time   1.20 (1.11–1.29)   1.00 (0.90–1.10)     Gloves all the time   1.46 (1.36–1.56)   1.19 (1.06–1.33)     Eye protection all the time   1.36 (1.23–1.50)   1.03 (0.91–1.18)     Surgical facemask all the time   1.39 (1.30–1.49)   1.07 (0.98–1.17)	Aerosol-generating procedure for COVID-19 patient					
1-5 times $1.25 (1.14-1.37)$ $1.02 (0.91-1.14)$ $6-10$ times $1.55 (1.34-1.79)$ $1.05 (0.89-1.24)$ $11-25$ times $1.50 (1.25-1.80)$ $0.96 (0.78-1.17)$ >25 times $1.77 (1.49-2.10)$ $1.02 (0.83-1.24)$ Not applicable $1.11 (1.02-1.20)$ $1.06 (0.97-1.16)$ Use of PPE within 6 feet of a person with COVID-19Gowns all the timeGowns all the time $1.46 (1.36-1.56)$ Lye protection all the time $1.36 (1.23-1.50)$ Surgical facemask all the time $1.39 (1.30-1.49)$ $1.07 (0.98-1.17)$ $1.07 (0.98-1.17)$	0 times	Referent				Referent
6-10  times $1.55 (1.34-1.79)$ $1.05 (0.89-1.24)$ $11-25  times$ $1.50 (1.25-1.80)$ $0.96 (0.78-1.17)$ >25 times $1.77 (1.49-2.10)$ $1.02 (0.83-1.24)$ Not applicable $1.11 (1.02-1.20)$ $1.06 (0.97-1.16)$ Use of PPE within 6 feet of a person with COVID-19Gowns all the timeGowns all the time $1.46 (1.36-1.56)$ Lye protection all the time $1.36 (1.23-1.50)$ Surgical facemask all the time $1.39 (1.30-1.49)$ Not (0.98-1.17) $1.07 (0.98-1.17)$	1–5 times	1.25 (1.14–1.37)				1.02 (0.91–1.14)
11-25 times 1.50 (1.25-1.80) 0.96 (0.78-1.17)   >25 times 1.77 (1.49-2.10) 1.02 (0.83-1.24)   Not applicable 1.11 (1.02-1.20) 1.06 (0.97-1.16)   Use of PPE within 6 feet of a person with COVID-19   Gowns all the time 1.20 (1.11-1.29) 1.00 (0.90-1.10)   Gloves all the time 1.46 (1.36-1.56) 1.19 (1.06-1.33)   Eye protection all the time 1.36 (1.23-1.50) 1.03 (0.91-1.18)   Surgical facemask all the time 1.39 (1.30-1.49) 1.07 (0.98-1.17)	6–10 times	1.55 (1.34–1.79)				1.05 (0.89–1.24)
>25 times   1.77 (1.49–2.10)   1.02 (0.83–1.24)     Not applicable   1.11 (1.02–1.20)   1.06 (0.97–1.16)     Use of PPE within 6 feet of a person with COVID-19   1.20 (1.11–1.29)   1.00 (0.90–1.10)     Gowns all the time   1.46 (1.36–1.56)   1.19 (1.06–1.33)     Eye protection all the time   1.36 (1.23–1.50)   1.03 (0.91–1.18)     Surgical facemask all the time   1.39 (1.30–1.49)   1.07 (0.98–1.17)	11–25 times	1.50 (1.25–1.80)				0.96 (0.78–1.17)
Not applicable   1.11 (1.02–1.20)   1.06 (0.97–1.16)     Use of PPE within 6 feet of a person with COVID-19	>25 times	1.77 (1.49–2.10)				1.02 (0.83–1.24)
Use of PPE within 6 feet of a person with COVID-19   1.00 (0.90–1.10)     Gowns all the time   1.20 (1.11–1.29)   1.00 (0.90–1.10)     Gloves all the time   1.46 (1.36–1.56)   1.19 (1.06–1.33)     Eye protection all the time   1.36 (1.23–1.50)   1.03 (0.91–1.18)     Surgical facemask all the time   1.39 (1.30–1.49)   1.07 (0.98–1.17)     NDE respirate all the time   1.30 (1.20–1.49)   1.07 (0.98–1.17)	Not applicable	1.11 (1.02–1.20)				1.06 (0.97–1.16)
Gowns all the time 1.20 (1.11–1.29) 1.00 (0.90–1.10)   Gloves all the time 1.46 (1.36–1.56) 1.19 (1.06–1.33)   Eye protection all the time 1.36 (1.23–1.50) 1.03 (0.91–1.18)   Surgical facemask all the time 1.39 (1.30–1.49) 1.07 (0.98–1.17)   NOF respirator all the time 1.39 (1.20–1.49) 0.02 (0.98–1.17)	Use of PPE within 6 feet of a person with COVID-19					
Gloves all the time 1.46 (1.36–1.56) 1.19 (1.06–1.33)   Eye protection all the time 1.36 (1.23–1.50) 1.03 (0.91–1.18)   Surgical facemask all the time 1.39 (1.30–1.49) 1.07 (0.98–1.17)   NOE coordinate all the time 1.20 (1.20–1.30) 0.02 (0.98–1.00)	Gowns all the time	1.20 (1.11–1.29)				1.00 (0.90–1.10)
Eye protection all the time 1.36 (1.23–1.50) 1.03 (0.91–1.18)   Surgical facemask all the time 1.39 (1.30–1.49) 1.07 (0.98–1.17)   NOE respirator all the time 1.30 (1.20–1.20) 0.08 (0.98–1.00)	Gloves all the time	1.46 (1.36–1.56)				1.19 (1.06–1.33)
Surgical facemask all the time   1.39 (1.30–1.49)   1.07 (0.98–1.17)     NO5 respirator all the time   1.30 (1.20–1.49)   0.08 (0.98–1.00)	Eye protection all the time	1.36 (1.23–1.50)				1.03 (0.91–1.18)
NOE requires to real the time $1.20(1.20, 1.20)$	Surgical facemask all the time	1.39 (1.30–1.49)				1.07 (0.98–1.17)
1.29 (1.20-1.39) 0.98 (0.86-1.09)	N95 respirator all the time	1.29 (1.20–1.39)				0.98 (0.88–1.09)
PAPR all the time   1.44 (1.20–1.72)   1.15 (0.94–1.42)	PAPR all the time	1.44 (1.20–1.72)				1.15 (0.94–1.42)

\*Bold indicates significance. COVID-19, coronavirus disease; EMS, emergency medical service; OR, odds ratio; PAPR, powered air-purifying respirator; PPE, personal protective equipment. †Other direct patient care providers include nurses, nurse assistants, physicians, midlevel clinicians, respiratory therapists, occupational therapists, speech therapists, physical therapists, therapy aides, and dentists.



**Appendix Figure 1.** Flowchart of eligible participants and analytic sample in study of severe acute respiratory syndrome coronavirus 2 antibodies in public safety personnel, New York City, New York, USA, May 18–July 2, 2020. PPE, personal protective equipment.



**Appendix Figure 2.** Percent seropositive for severe acute respiratory syndrome coronavirus 2 IgG by number of current household members in study of public safety personnel, New York City, New York, USA, May 18–July 2, 2020.



**Appendix Figure 3.** Percent seropositive for severe acute respiratory syndrome coronavirus 2 IgG for selected occupations, by personal protective equipment use, in study of public safety personnel, New York City, New York, USA, May 18–July 2, 2020. Red bars: Lower bound of the 95% CI for percentage positive in "all of the time" group is above the upper bound of the 95% CI for percentage positive in "not all of the time" group. Participants who reported "not applicable" were excluded. PAPR, powered air-purifying respirator.