

**Supplemental Table S1. Facility Characteristics and Infection Control Policies**

Facility Characteristics (as of January 2021)	Nursing Home Facility			
	1	2	3	4
Ownership status	Non profit - Corporation	For profit - Individual	Non profit - Corporation	Non profit - Other
Bed size	161	40	215	85
Star rating	2	5	2	4
Composition of COVID-19 response team	Nurses aids, nurses, IP nurse, DON, administrator, medical director	DON, IP, administrator, therapy manager, maintenance director	CNAs, LPN/RN, unit manager, IP nurse, DON, administrator, medical director	IP nurse, RN manager, medical director, executive management team, DON, administrator
<b>COVID-19 Unit Characteristics</b>				
Presence of a dedicated unit for treatment of COVID-19 patients?	Yes	Yes	Yes	Yes
Are all rooms private, shared, or mix of both?	Mix of both	Private	Mix of both	Private
Do dedicated staff care for COVID-19 patients, or can staff care for both positive and negative patients in the same shift?	Dedicated staff	Dedicated staff	Dedicated staff	Dedicated staff
Policy for removing COVID-19 patients from isolation precautions	Remove 14 days after positive test and 2 negative tests (24 hrs apart)	Remove 10 days after symptom onset and negative rapid test prior to moving out of unit	Remove after 10 days from positive test and with no symptoms	Remove 10 days after symptom onset
<b>Audits</b>				
Does your facility audit HCP compliance with the following practices?				
Hand hygiene	Yes, daily	Yes, weekly	Yes, every 2 months	Yes, daily
PPE donning and doffing	Yes, weekly	Yes, weekly	Yes, every 2 months	Yes, daily
Cleaning and disinfection of resident rooms	Yes, monthly	Yes, weekly	Yes, every admission and discharge	Yes, daily
Cleaning and disinfection of resident equipment	Yes, weekly	Yes, weekly	Yes, between patient use	Yes, daily
<b>Personal Protective Equipment</b>				
When are gowns/gloves used?	All patient encounters	Extended use of gowns in the COVID unit;	At all times in COVID unit	As soon as entering COVID-19 unit; off

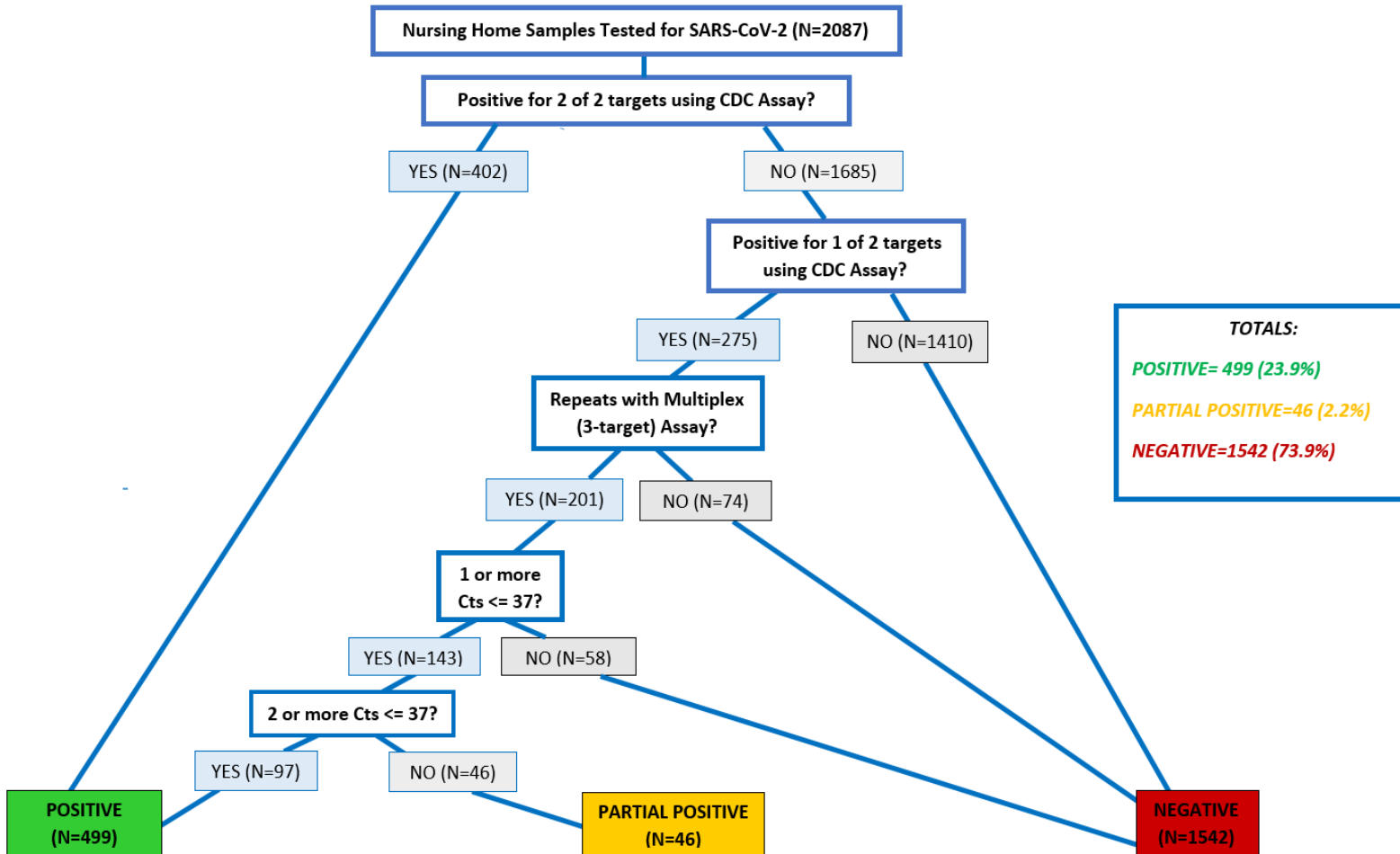
		gloves changed at patient encounter		when entering breakroom
Mask types worn in COVID-19 unit	N95	N95	Standard masks and N95	Standard masks and N95
Length of mask wearing?	Extended use	Extended use	Extended use	Extended use
Eye protection worn?	Yes	Yes	Yes	Yes
Eye protection disinfected between patient encounters?	Yes	No	Yes	No
What PPE is worn for aerosol generating procedures (AGPs)?	Respirator, eye protection, gowns/gloves	Respirator, eye protection, gowns/gloves	No AGPs performed	No AGPs performed
Are new masks provided to staff on a daily basis?	Yes	Yes	Yes	Yes
All patients required to wear masks outside their room?	Yes	Yes	Yes	Yes
All patients required to wear masks inside their room during patient care?	Yes	No	Yes	Yes
<b>Environmental Cleaning</b>				
Cleaning policy in place?	Yes	Yes	Yes	Yes
Frequency of COVID-19 patient room cleaning	Everyday	Everyday	Everyday	Every other day
Approx. time spent cleaning COVID-19 patient room (in mins)	20	15-30	15	30
Approx. time spent cleaning COVID-19 patient room, following patient discharge (in mins)	30	30	60	120
Frequency of COVID-19 unit/hallway cleaning	Daily	Daily	3x/day	Daily
Typical cleaning times	7am-4:30pm	Afternoon	7am-3:30pm	1:30-4pm
Daily cleaning products used	Clorox Bleach Germicidal Cleanser and wipes	TBcide on regular days; Bleach following patient discharge	Clorox Bleach Germicidal Cleaner, Peroxide Multi Surface Cleaner and Disinfectant, and Sani-Clean 2	Ecolab Peroxide Multi Surface Cleaner and Disinfectant, 9 other Clorox products
High-touch areas emphasized	Doorknobs; call lights; side rails; toilets; sinks; TV/call remotes	Bedside tables; bathrooms	Door knobs; call lights; pull cords; bathroom railings; toilets; sinks; table tops; TV/call remotes	Hand rails; door knobs; tray tables; remotes; call lights; walls; chairs; wardrobes; windowsill
Air vents cleaned regularly?	Yes, unknown frequency.	Yes, at patient discharge.	Yes, unknown frequency.	Yes, once/week.

Privacy curtain policy in place?	Yes, changed/cleaned at the time of discharge	No privacy curtains in COVID-19 patient rooms	Privacy curtains are changed when a patient is discharged from the unit.	No privacy curtains in COVID-19 patient rooms
Environmental services education provided?	Yes, teaching sessions with quiz conducted annually and as needed	Yes, monthly in-person meetings	Yes, monthly educational games, quizzes with prizes	Yes, monthly inservices
Do nurses, CNAs assist with room cleaning?	Yes; strip the room of linen, bedding, towels	No	Yes; every shift they assist with cleaning high-touch areas, changing bedding, and cleaning bed pans	No

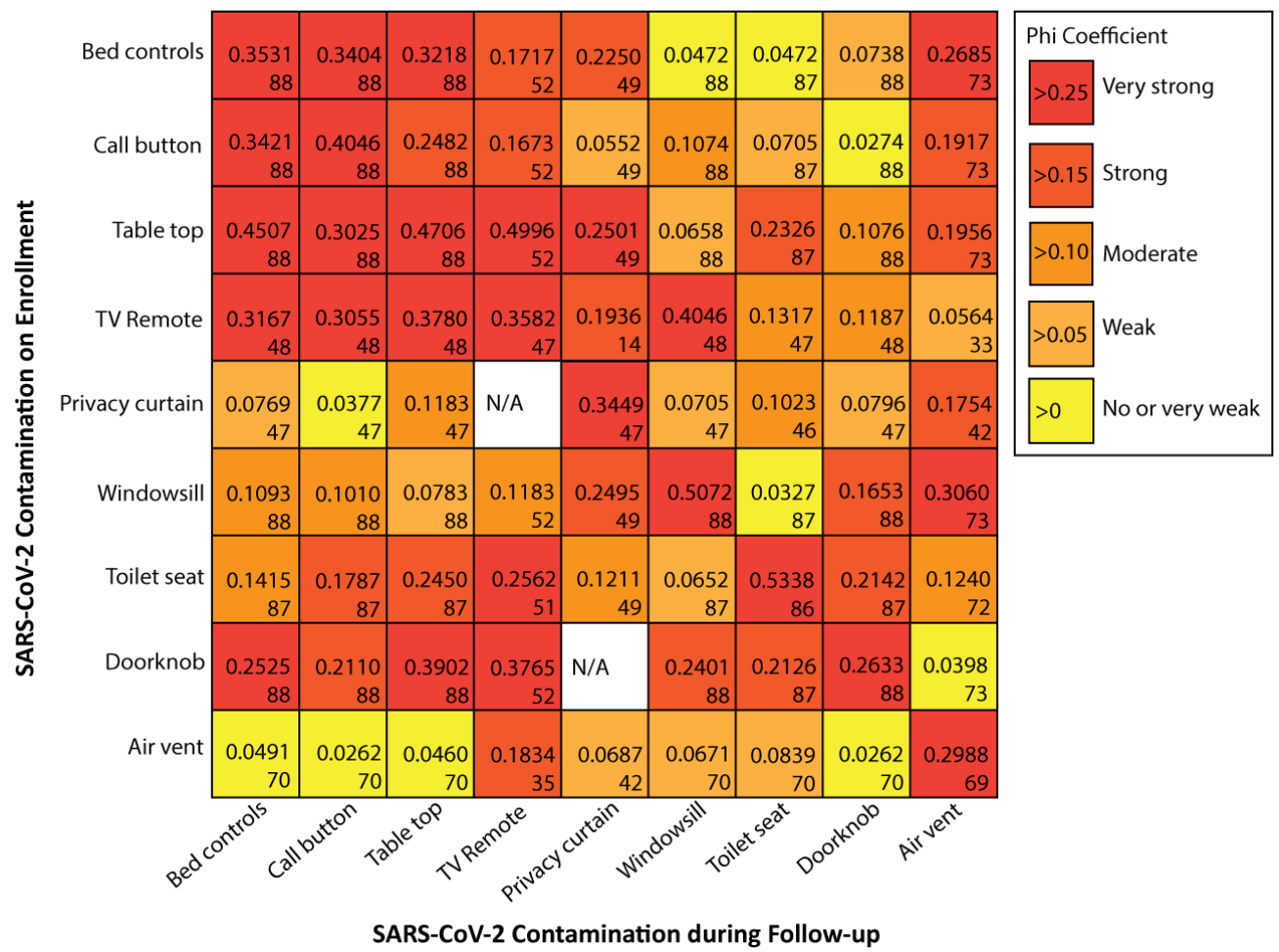
**Supplemental Table S2. Study Population COVID-19 Signs and Symptoms, per Medical Chart Documentation**

	Nursing Home Facility				Total N=104
	1 N=6	2 N=27	3 N=62	4 N=9	
<i>In the two weeks following the initial COVID-19 positive test, were the following symptoms present, as documented in nursing/physician notes?</i>					
Hypoxia (blood O2 <95%)	6 (100.0)	22 (81.5)	61 (98.4)	9 (100.0)	98 (94.2)
Hypotension (BP < 90/60)	6 (100.0)	18 (66.7)	56 (90.3)	7 (77.8)	87 (83.7)
Fever or chills	3 (50.0)	9 (33.3)	43 (69.4)	4 (44.4)	59 (56.7)
Cough	4 (66.7)	11 (40.7)	34 (54.8)	6 (66.7)	55 (52.9)
Poor appetite/Poor po intake	3 (50.0)	6 (22.2)	40 (64.5)	3 (33.3)	52 (50.0)
Fatigue	1 (16.7)	7 (25.9)	30 (48.4)	0 (-)	38 (36.5)
Shortness of breath or difficulty breathing	1 (16.7)	7 (25.9)	16 (25.8)	1 (11.1)	25 (24.0)
Tachypnea (abnormally rapid breathing; R>24 or HR>120)	1 (16.7)	3 (11.1)	15 (24.2)	1 (11.1)	20 (19.2)
Diarrhea	0 (-)	7 (25.9)	9 (14.5)	3 (33.3)	19 (18.3)
Muscle or body aches	0 (-)	1 (3.7)	15 (24.2)	2 (22.0)	18 (17.3)
Nausea or vomiting	2 (33.3)	5 (18.5)	8 (12.9)	0 (-)	15 (14.4)
Congestion or runny nose	0 (-)	3 (11.1)	11 (17.7)	1 (11.1)	15 (14.4)
Worsening functional status	0 (-)	0 (-)	10 (16.1)	1 (11.1)	11 (10.6)
Headache	0 (-)	2 (7.4)	5 (8.1)	0 (-)	7 (6.7)
New loss of taste or smell	1 (16.7)	2 (7.4)	4 (6.5)	0 (-)	7 (6.7)
Sore throat	1 (16.7)	1 (3.7)	4 (6.5)	0 (-)	6 (5.8)
Change in mental status	0 (-)	2 (7.4)	3 (4.8)	1 (11.1)	6 (5.8)
No. symptoms present, mean (SD)	4.8 (2.3)	3.9 (2.5)	5.9 (2.1)	4.3 (2.4)	5.2 (2.4)

Supplemental Figure S1. PCR Results Algorithm for CDC and Multiplex Assays



**Supplemental Figure S2. Pairwise Correlation of Environmental Contamination on Enrollment and during Follow-up**



Phi Coefficient (measure of pairwise correlation) indicated in each pairwise square. N observations for each pair indicated in bottom right corner of each pairwise square. Strength of pairwise correlations indicated by colors, per figure legend.