

Table S1. Bivariable analysis assessing the association between colonization with *S. aureus* in the nares and/or oropharynx and participant demographics and risk factors in adults (n=174)

Risk Factor	Number Positive (%)	Total (N)	PR ^a	95% CI	p-value
Age	NA	NA	0.98 ^b	0.97-1.00	0.082
Sex					
Male	38 (40)	94	-ref-	-ref-	-ref-
Female	38 (49)	78	1.25	0.85-1.82	0.254
Race					
White	68 (42)	162	-ref-	-ref-	-ref-
Other	8 (67)	12	1.64	0.98-2.74	0.062
House size					
One	0 (0)	1	-ref-	-ref-	-ref-
Two	32 (42)	77	1.10	0.87-1.38	0.431
Three	15 (38)	40	1.09	0.89-1.34	0.409
Four	19 (50)	38	1.09	0.90-1.30	0.379
Five	9 (56)	16	1.08	0.92-1.26	0.342
Six	0	0	1.07	0.94-1.23	0.295
Seven	1 (50)	2	1.07	0.96-1.19	0.237
Number of children in the home					
Zero	36 (41)	87	-ref-	-ref-	-ref-
One	12 (39)	31	1.07	0.88-1.31	0.502
Two	18 (45)	40	1.07	0.89-1.28	0.480
Three	9 (64)	14	1.06	0.90-1.25	0.452
Four	0 (0)	0	1.06	0.92-1.22	0.419
Five	1 (50)	2	1.06	0.93-1.20	0.378
Number of <i>S. aureus</i> positive environmental sites in the home					
Zero	45 (37)	122	-ref-	-ref-	-ref-
One	11 (48)	23	1.34	1.07-1.66	0.009
Two	12 (67)	18	1.26	1.10-1.43	<0.001
Three	4 (80)	5	1.18	1.11-1.26	<0.001
Four	3 (75)	4	1.12	1.09-1.16	<0.001
Five	1 (50)	2	1.08	1.03-1.13	<0.001
Currently have asthma					
No	70 (44)	158	-ref-	-ref-	-ref-
Yes	6 (33)	15	0.77	0.35-1.71	0.527
History of eczema					
No	69 (44)	158	-ref-	-ref-	-ref-
Yes	7 (44)	16	0.99	0.50-1.97	0.974
History of other skin conditions					
No	69 (45)	155	-ref-	-ref-	-ref-
Yes	7 (37)	19	0.75	0.35-1.62	0.471
History of diabetes					
No	73 (44)	165	-ref-	-ref-	-ref-
Yes	2 (25)	8	0.80	0.27-2.43	0.701
Disorder of the immune system					
No	66 (42)	156	-ref-	-ref-	-ref-
Yes	3 (38)	8	1.27	0.74-2.18	0.383

^aPR=prevalence ratio. PRs were adjusted for age and estimated at age=43. For continuous variables, PR estimates are calculated as each discrete value over the previous discrete value (i.e. Prevalence ratio for housesize=2 was calculated as prevalence given housesize=2/ prevalence given housesize=1). For dichotomous variables, PR estimates are estimated for prevalence given yes over prevalence given no.

^bPR for age estimated at age=44 vs. age=43

Table S1. Bivariable analysis assessing the association between colonization with *S. aureus* in the nares and/or oropharynx and participant demographics and risk factors in adults (n=174) continued

Risk Factor	Number Positive (%)	Total (N)	PR ^a	95% CI	p-value
Current heart condition					
No	69 (42)	162	-ref-	-ref-	-ref-
Yes	6 (60)	10	1.61	0.96-2.71	0.072
Ever had cancer					
No	71 (44)	163	-ref-	-ref-	-ref-
Yes	5 (46)	11	1.27	0.63-2.57	0.504
Currently take cancer medications					
No	72 (43)	166	-ref-	-ref-	-ref-
Yes	4 (50)	8	1.02	0.40-2.58	0.963
Used an antibiotic in the last 90 days					
No	70 (46)	154	-ref-	-ref-	-ref-
Yes	6 (30)	20	0.60	0.26-1.42	0.245
Family member had an SSTI					
No	73 (47)	157	-ref-	-ref-	-ref-
Yes	2 (15)	13	0.36	0.11-1.18	0.093
Participant worked in healthcare					
No	61 (45)	136	-ref-	-ref-	-ref-
Yes	15 (42)	36	0.83	0.49-1.41	0.496
Visited a hospital in last 90 days.					
No	44 (42)	105	-ref-	-ref-	-ref-
Yes	32 (47)	68	1.32	0.86-2.04	0.209
Admitted to an outpatient facility					
No	70 (44)	160	-ref-	-ref-	-ref-
Yes	6 (50)	12	0.92	0.41-2.04	0.834
Family member hospitalized in last 90 days					
No	73 (43)	170	-ref-	-ref-	-ref-
Yes	3 (75)	4	1.82	0.96-3.47	0.069
Had a child in daycare					
No	63 (44)	142	-ref-	-ref-	-ref-
Yes	13 (41)	32	0.72	0.38-1.39	0.335
Played team sports					
No	70 (43)	162	-ref-	-ref-	-ref-
Yes	6 (55)	11	1.05	0.49-2.24	0.908
Had a family member play team sports					
No	41 (42)	98	-ref-	-ref-	-ref-
Yes	32 (47)	68	1.06	0.70-1.62	0.779
Used a fitness center					
No	49 (41)	120	-ref-	-ref-	-ref-
Yes	27 (53)	51	1.22	0.74-2.02	0.431

^aAdjusted for the age and PRs estimated at age=43. For dichotomous variables, PR estimates are estimated for prevalence given yes over prevalence given no.

Table S1. Bivariable analysis assessing the association between colonization with *S. aureus* in the nares and/or oropharynx and participant demographics and risk factors in adults (n=174) continued

Risk Factor	Number Positive (%)	Total (N)	PR ^a	95% CI	p-value
Shared bath towels with other members of the household					
No	52 (46)	114	-ref-	-ref-	-ref-
Yes	22 (38)	58	0.79	0.49-1.28	0.340
Shared hand towels with other members of the household					
No	10 (42)	24	-ref-	-ref-	-ref-
Yes	66 (44)	150	0.92	0.50-1.67	0.775
Used antibacterial hand soap					
No	15 (41)	37	-ref-	-ref-	-ref-
Yes	61 (45)	137	1.22	0.69-2.17	0.491
Worked with livestock					
No exposure	46 (42)	110	-ref-	-ref	-ref-
Exposure	23 (53)	42	0.73	0.44-1.05	0.167

^aAdjusted for the age and PRs estimated at age=43. For dichotomous variables, PR estimates are estimated for prevalence given yes over prevalence given no.

Table S2. Bivariable analysis assessing the association between colonization with *S. aureus* in the nares and/or oropharynx and participant demographics and risk factors in minors (n=83)

Risk Factor	Number Positive (%)	Total (N)	PR ^a	95% CI	p-value
Age					
Sex					
Male	13 (35)	37			
Female	17 (37)	46			
Race					
White	27 (36)	74	-ref-	-ref-	-ref-
Other	3 (33)	9	0.74	0.13-4.19	0.736
House size					
Two	2 (50)	4	-ref	-ref-	-ref-
Three	2 (11)	18	1.37	0.76-2.48	0.298
Four	11 (36)	31	1.34	0.79-2.27	0.281
Five	14 (54)	26	1.30	0.84-2.01	0.242
Six	0 (0)	0	1.25	0.90-1.74	0.175
Seven	1 (25)	4	1.21	0.98-1.50	0.083
Number of children in the home					
One	0 (0)	1	-ref-	-ref-	-ref-
Two	3 (16)	19	1.68	0.83-3.41	0.150
Three	13 (35)	37	1.54	0.90-2.64	0.113
Four	13 (59)	22	1.39	1.01-1.91	0.041
Five	0 (0)	4	1.25	1.07-1.46	0.004
Number of <i>S. aureus</i> positive environmental sites in the home					
Zero	12 (23)	53	-ref-	-ref-	-ref-
One	4 (44)	9	1.68	1.07-2.64	0.025
Two	4 (57)	7	1.53	1.08-2.18	0.018
Three	2 (50)	4	1.38	1.10-1.72	0.005
Four	6 (86)	7	1.24	1.09-1.41	<0.001
Five	2 (67)	3	1.14	1.04-1.25	0.006
Currently have asthma					
No	21 (30)	70	-ref-	-ref-	-ref-
Yes	8 (67)	12	2.18	1.15-4.15	0.017
History of eczema					
No	25 (34)	74	-ref-	-ref-	-ref-
Yes	5 (56)	9	2.06	0.82-5.18	0.126
History of other skin conditions					
No	26 (37)	71	-ref-	-ref-	-ref-
Yes	4 (33)	12	0.84	0.21-3.34	0.81
Used an antibiotic in the last 90 days					
No	25 (37)	67	-ref-	-ref-	-ref-
Yes	5 (31)	16	0.50	0.12-2.13	0.348
Family member had an SSTI					
No	25 (35)	72	-ref-	-ref-	-ref-
Yes	5 (50)	10	1.51	0.48-4.74	0.476

^aAdjusted for the age, gender, and age by gender interaction. Estimates for PR are calculated at the values of gender=Female and age=10. For continuous variables, PR estimates are calculated as each discrete value over the previous discrete value (i.e. Prevalence ratio for housesize=2 was calculated as prevalence given housesize=2/prevalence given housesize=1). For dichotomous variables, PR estimates are estimated for prevalence given yes over prevalence given no.

Table S2. Bivariable analysis assessing the association between colonization with *S. aureus* in the nares and/or oropharynx and participant demographics and risk factors in minors (n=83) continued.

Risk Factor	Number Positive (%)	Total (N)	PR ^a	95% CI	p-value
Participant had an SSTI					
No	29 (36)	81	-ref-	-ref-	-ref-
Yes	1 (50)	2			
Participant worked or volunteered in healthcare					
No	16 (28)	82	-ref-	-ref-	-ref-
Yes	14 (54)	26	2.15	0.93-4.94	0.073
Visited a hospital in last 90 days.					
No	19 (30)	64	-ref-	-ref-	-ref-
Yes	11 (58)	19	2.15	0.92-5.02	0.078
Admitted to an outpatient center					
No	27 (36)	75	-ref-	-ref-	-ref-
Yes	3 (38)	8	1.04	0.25-4.33	0.952
Family member hospitalized in last 90 days					
No	27 (36)	76	-ref-	-ref-	-ref-
Yes	3 (43)	7	1.05	0.18-5.93	0.960
Had a child in daycare					
No	21 (40)	53	-ref-	-ref-	-ref-
Yes	9 (30)	30	0.89	0.26-3.13	0.860
Played team sports					
No	13 (31)	42	-ref-	-ref-	-ref-
Yes	17 (43)	40	0.70	0.22-2.22	0.542
Had a family member play team sports					
No	6 (29)	21	-ref-	-ref-	-ref-
Yes	24 (39)	61	1.001	0.33-3.02	0.998
Used a fitness center					
No	11 (28)	40	-ref-	-ref-	-ref-
Yes	18 (43)	42	1.59	0.59-4.29	0.362
Shared bath towels with other members of the household					
No	19 (39)	49	-ref-	-ref-	-ref-
Yes	11 (33)	33	0.75	0.27-2.07	0.574
Shared hand towels with other members of the household					
No	3 (30)	10	-ref-	-ref-	-ref-
Yes	27 (37)	73	1.80	0.32-10.23	0.506

^aAdjusted for the age, gender, and age by gender interaction. Estimates for PR are calculated at the values of gender=Female and age=10. For dichotomous variables, PR estimates are estimated for prevalence given yes over prevalence given no.

Table S2. Bivariable analysis assessing the association between colonization with *S. aureus* in the nares and/or oropharynx and participant demographics and risk factors in minors (n=83) continued.

Risk Factor	Number Positive (%)	Total (N)	PR ^a	95% CI	p-value
Used antibacterial hand soap					
No	3 (21)	14	-ref-	-ref-	-ref-
Yes	27 (39)	69	1.66	0.33-8.36	0.542
Worked with livestock					
No exposure	19 (36)	55	-ref-	-ref	-ref-
Exposure	8 (33)	24	1.28	-0.03-2.60	0.055

Figure S1: Minimum spanning tree and resistance proportions.

Minimum spanning tree of spa type diversity of 147 isolates comprising 57 spa types by county. The size of the circle is proportional to the number of isolates within the set; thickness of connecting lines is proportional to genetic distance.

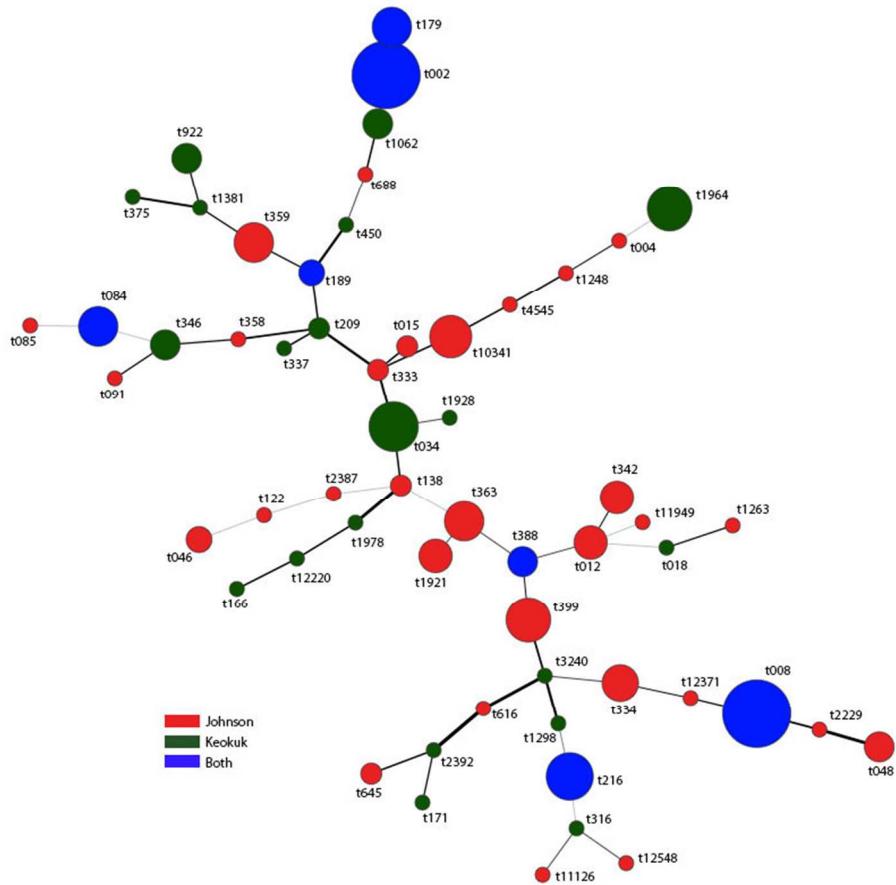


Figure S1a: Minimum spanning tree and resistance proportions. Minimum spanning tree of spa type diversity of 147 isolates comprising 57 spa types by county. The size of the circle is proportional to the number of isolates within the set; thickness of connecting lines is proportional to genetic distance.

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