

COVID-19 Symptoms by Variant Period in the North Carolina COVID-19 Community Research Partnership

Appendix

COVID-19 Community Research Partnership

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Appendix Table 1. Estimated effect of comorbidities on duration of COVID-19 symptoms among those expressing symptoms, North Carolina, USA

Comorbidity*	Beta†	95% CI	p value
Autoimmune disease	0.58	0.13–1.04	0.012
Cancer	-0.41	-1.14 to 0.32	0.274
Cardiovascular disease	0.11	-0.3 to 0.52	0.591
Pulmonary disease	0.93	0.38–1.48	<0.001
Obesity	0.61	0.16–1.06	0.008
Diabetes	0.43	-0.2 to 1.07	0.183
Immunocompromised	0.61	-0.71 to 1.92	0.366
Renal disease	1.33	0.05–2.62	0.042

*Adjusted for variant wave, age, vaccination, boosting, prior infection, and sex.

†Difference in symptom duration (days)

Appendix Table 2.: Symptom frequency and duration amongst those unvaccinated against SARS-CoV-2 at time of infection and expressed symptoms

Symptom	Rate of occurrence*				Duration of symptoms†			
	Pre-Delta, N = 1,720	Delta, N = 229	Omicron, N = 137	p value‡	Pre-Delta, N = 1,720	Delta, N = 229	Omicron, N = 137	p value§
Cough	1,329 (77)	200 (87)	110 (80)	0.002	5 (2–10)	5 (2–10)	2 (1–5)	<0.001
Fatigue	1,295 (75)	182 (79)	95 (69)	0.092	5 (2–9)	4 (2–9)	2 (1–4)	<0.001
Headache	1,314 (76)	183 (80)	95 (69)	0.070	4 (2–7)	3 (1–6)	2 (1–4)	<0.001
Muscle pain	1,179 (69)	177 (77)	84 (61)	0.003	3 (2–6)	3 (1–7)	2 (1–3)	<0.001
Sore throat	931 (54)	133 (58)	85 (62)	0.13	3 (1–5)	2 (1–5)	2 (1–3)	<0.001
Loss of taste/smell	949 (55)	126 (55)	24 (18)	<0.001	2 (1–4)	2 (1–4)	1 (1–2)	<0.001
Diarrhea	601 (35)	93 (41)	37 (27)	0.030	2 (1–3)	2 (1–3)	1 (1–2)	0.012
Fever	722 (42)	125 (55)	63 (46)	0.001	2 (1–4)	2 (1–4)	2 (1–2)	0.11
Chills	710 (41)	127 (55)	64 (47)	<0.001	2 (1–3)	2 (1–4)	1 (1–2)	0.005
Nausea	452 (26)	86 (38)	30 (22)	<0.001	2 (1–3)	2 (1–4)	1 (1–2)	0.012
Shortness of breath	310 (18)	49 (21)	14 (10)	0.024	2 (1–5)	2 (1–3)	1 (1–1)	0.016
Pain and pressure in chest	148 (8.6)	25 (11)	8 (5.8)	0.2	1 (1–3)	2 (1–3)	1 (1–1)	0.3
Confused/inability to awake/arose	56 (3.3)	17 (7.4)	4 (2.9)	0.006	1 (1–2)	1 (1–1)	1 (1–1)	0.4
Bluish lips/face	7 (0.4)	4 (1.7)	1 (0.7)	0.034	1 (1–1)	1 (1–2)	1 (1–1)	0.4

*Values are no. (%) except as indicated.

†Values are median (IQR) except as indicated. IQR, interquartile range.

‡By Pearson χ^2 test, Fisher exact test.

§By Kruskal-Wallis rank sum test.

Appendix Table 3. Symptom frequency and duration amongst those vaccinated, but not boosted, against SARS-CoV-2 at time of infection and expressed symptoms

Characteristic	Rate of occurrence*				Duration of symptoms, d†			
	Pre-Delta, N = 28	Delta, N = 844	Omicron, N = 436	p value‡	Pre-Delta, N = 28	Delta, N = 844	Omicron, N = 436	p value§
Cough	23 (82)	701 (83)	384 (88)	0.051	3 (2–7)	5 (2–9)	3 (1–7)	<0.001
Fatigue	19 (68)	680 (81)	338 (78)	0.14	5 (4–12)	4 (2–8)	3 (1–5)	<0.001
Headache	17 (61)	631 (75)	310 (71)	0.12	3 (2–5)	3 (2–6)	2 (1–4)	<0.001
Muscle pain	21 (75)	546 (65)	293 (67)	0.4	3 (1–6)	3 (2–5)	2 (1–3)	<0.001
Sore throat	16 (57)	494 (59)	299 (69)	0.002	3 (2–7)	3 (1–5)	2 (1–4)	0.016
Loss of taste/smell	12 (43)	443 (52)	95 (22)	<0.001	2 (2–4)	2 (1–3)	1 (1–2)	<0.001
Diarrhea	10 (36)	241 (29)	127 (29)	0.7	2 (1–4)	1 (1–3)	1 (1–2)	0.045
Fever	9 (32)	378 (45)	173 (40)	0.11	2 (1–3)	2 (1–3)	1 (1–2)	<0.001
Chills	10 (36)	422 (50)	232 (53)	0.2	2 (1–6)	2 (1–3)	1 (1–2)	<0.001
Nausea	8 (29)	203 (24)	109 (25)	0.8	2 (1–3)	1 (1–3)	1 (1–2)	0.084
Shortness of breath	6 (21)	84 (10.0)	40 (9.2)	0.12	6 (3–9)	2 (1–4)	1 (1–2)	0.009
pain and pressure in chest	4 (14)	46 (5.5)	23 (5.3)	0.14	4 (1–9)	1 (1–2)	1 (1–2)	0.2
Confused/ inability to awake/arose	2 (7.1)	30 (3.6)	12 (2.8)	0.3	4 (3–4)	1 (1–2)	1 (1–2)	0.058
Bluish lips/face	0 (0)	5 (0.6)	3 (0.7)	>0.9	NA	1 (1–1)	1 (1–1)	

*Values are no. (%) except as indicated.

†Values are median (IQR) except as indicated. IQR, interquartile range.

‡By Pearson χ^2 test, Fisher exact test.

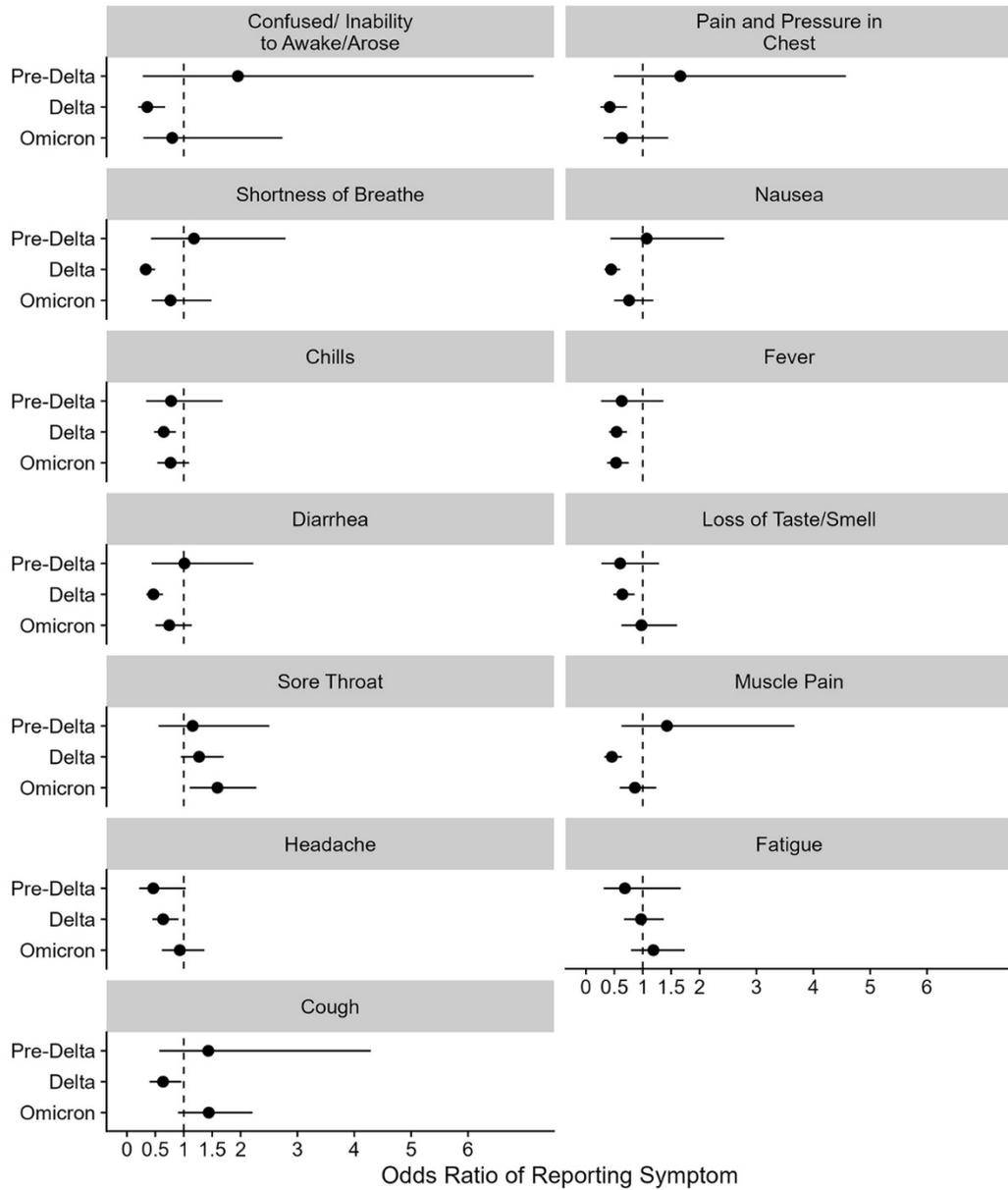
§By Kruskal-Wallis rank sum test.

Appendix Table 4. Estimated effect of reinfection of SARS-CoV-2 on duration of symptoms amongst those with symptoms during the Omicron variant period*

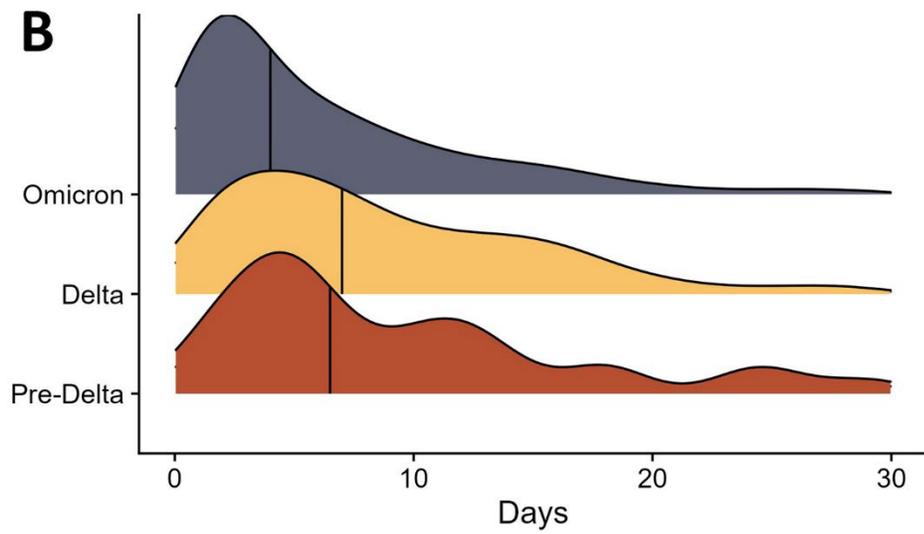
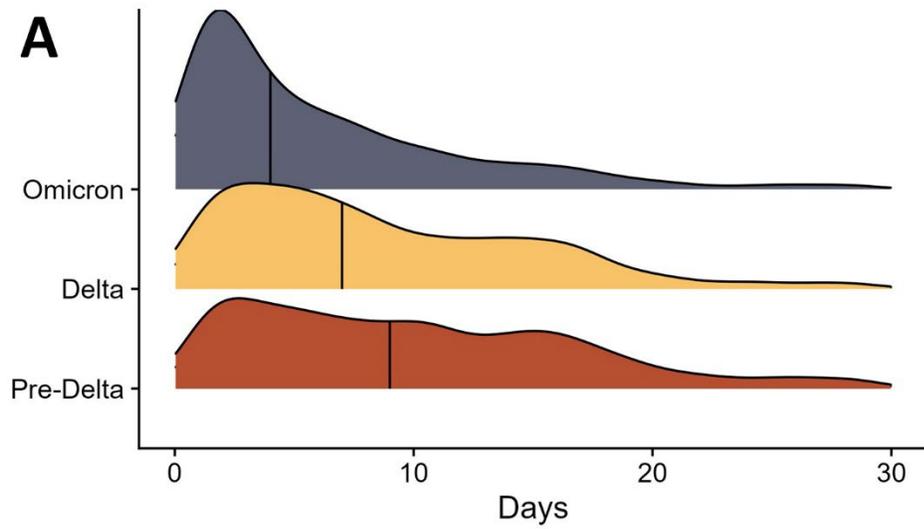
Characteristic	Beta†	95% CI	p value
Reinfection	-0.39	-1.4, 0.64	0.5

*Adjusting for age, vaccination, boosting, and sex

†Difference in symptom duration (days).



Appendix Figure 1. Odds ratio of reporting a given symptom in those vaccinated at the time of self-reported infection (baseline, unvaccinated) stratified by variant (adjusted for age and sex). Bars indicate 95% Bayesian credible intervals. Dashed line represents parity with unvaccinated persons.



Appendix Figure 2. Kernel density estimates for symptom duration by variant for those who had symptoms, amongst the vaccinated (A) and unvaccinated (B). Vertical line represents the median symptom duration for each stratified variant group.