

# THE LANCET Microbe

## Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Galmiche S, Cortier T, Charmet T, et al. SARS-CoV-2 incubation period across variants of concern, individual factors, and circumstances of infection in France: a case series analysis from the ComCor study. *Lancet Microbe* 2023; published online April 18. [https://doi.org/10.1016/S2666-5247\(23\)00005-8](https://doi.org/10.1016/S2666-5247(23)00005-8).

## Appendix

### **SARS-CoV-2 incubation period across variants of concern, individual factors, and circumstances of infection in France: a cross-sectional analysis of the ComCor study**

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**Table S1: Demographic characteristics of participants depending on the variant responsible for infection**

<b>Variant</b>	<b>Historical strain</b>	<b>Alpha</b>	<b>Beta/Gamma</b>	<b>Delta</b>	<b>Omicron</b>	<b>Total</b>
<b>Total</b>	<b>7539</b>	<b>5133</b>	<b>453</b>	<b>4606</b>	<b>2682</b>	<b>20413</b>
<b>Female</b>	5072 (67.3%)	3455 (67.3%)	288 (63.6%)	3043 (66.1%)	1902 (70.9%)	<b>13760 (67.4%)</b>
<b>Age (years)</b>						
18-29	1625 (21.6%)	1129 (22.0%)	94 (20.8%)	740 (16.1%)	681 (25.4%)	<b>4269 (20.9%)</b>
30-39	1982 (26.3%)	1367 (26.6%)	129 (28.5%)	1235 (26.8%)	813 (30.3%)	<b>5526 (27.1%)</b>
40-49	1517 (20.1%)	1097 (21.4%)	108 (23.8%)	979 (21.3%)	534 (19.9%)	<b>4235 (20.8%)</b>
50-59	1279 (17.0%)	882 (17.2%)	60 (13.3%)	866 (18.8%)	349 (13.0%)	<b>3436 (16.8%)</b>
60-69	861 (11.4%)	520 (10.1%)	48 (10.6%)	575 (12.5%)	224 (8.4%)	<b>2228 (10.9%)</b>
≥70	275 (3.7%)	138 (2.7%)	14 (3.1%)	211 (4.6%)	81 (3.0%)	<b>719 (3.5%)</b>
<b>Healthcare worker</b>	1247 (16.5%)	592 (11.5%)	60 (13.2%)	547 (11.9%)	320 (11.9%)	<b>2766 (13.6%)</b>
<b>Smoking status</b>						
Non-smoker, no nicotine substitution	6284 (83.4%)	4104 (80.0%)	356 (78.6%)	3635 (78.9%)	2086 (77.8%)	<b>16465 (80.7%)</b>
Non-smoker, nicotine substitution	64 (0.9%)	40 (0.8%)	6 (1.3%)	37 (0.8%)	22 (0.8%)	<b>169 (0.8%)</b>
Non-smoker, electronic cigarette only	248 (3.3%)	223 (4.3%)	9 (2.0%)	203 (4.4%)	118 (4.4%)	<b>801 (3.9%)</b>
<10 cigarettes/day	478 (6.3%)	405 (7.9%)	47 (10.4%)	386 (8.4%)	221 (8.2%)	<b>1537 (7.5%)</b>
10-20 cigarettes/day	327 (4.3%)	243 (4.7%)	27 (6.0%)	248 (5.4%)	174 (6.5%)	<b>1019 (5.0%)</b>
>20 cigarettes/day	138 (1.8%)	117 (2.3%)	8 (1.8%)	97 (2.1%)	61 (2.3%)	<b>422 (2.1%)</b>
<b>Underlying conditions</b>						
Chronic respiratory disease	630 (8.4%)	443 (8.6%)	37 (8.2%)	350 (7.6%)	206 (7.7%)	<b>1666 (8.2%)</b>
Hypertension	627 (8.3%)	417 (8.1%)	30 (6.6%)	426 (9.3%)	157 (5.9%)	<b>1657 (8.1%)</b>
Underweight	236 (3.1%)	149 (2.9%)	8 (1.8%)	165 (3.6%)	109 (4.1%)	<b>667 (3.3%)</b>
Diabetes	173 (2.3%)	109 (2.1%)	6 (1.3%)	117 (2.5%)	54 (2.0%)	<b>459 (2.3%)</b>
Coronary artery disease	73 (1.0%)	30 (0.6%)	4 (0.9%)	38 (0.8%)	20 (0.8%)	<b>165 (0.8%)</b>

Legend: COVID-19 cases with identified incubation period and variant included via an online study in France (October 2020-February 2022).

**Table S2: Deviance information criterion (DIC) for various models fitted to data on incubation period**

Model	DIC	DIC(pois $p_1$ )-DIC
Poisson + $p_1$	86127.92	0
Negative-Binomial + $p_1$	85203.79	924.13
Log-Normal + $p_1$	84887.01	1240.91
Gamma + $p_1$	84565.98	1561.94
Poisson + ( $p_1, p_2$ )	86091.53	36.39
Negative-Binomial + ( $p_1, p_2$ )	85187.08	940.84
Log-Normal + ( $p_1, p_2$ )	84790.74	1337.18
Gamma + ( $p_1, p_2$ )	84522.35	1605.57

Legend: Probability models fitted using a Monte Carlo Markov Chains (MCMC) algorithm to the distribution of the incubation periods in the 20413 COVID-19 cases with identified incubation period and variant.

**Table S3: Estimation of parameters  $p_1$  (probability to report an incubation period of 7 days when the true incubation period duration is 6 or 8 days) and  $p_2$  (probability to report an incubation period of 7 days when the true incubation period duration is 5 or 9 days)**

Parameter	Estimation (95% credible interval)
$p_1$	0.25 (0.22-0.28)
$p_2$	0.09 (0.06-0.11)

Legend:  $p_1$  and  $p_2$  were estimated jointly with the parameters of the gamma distribution using a Monte Carlo Markov Chains algorithm.

**Table S4: Parameters of the gamma distribution of the model describing the incubation period corrected for days 5-9**

Variant	Mean (95% credible interval)	Standard deviation (95% credible interval)
Historical strain	4.07 (4.03-4.12)	2.12 (2.08-2.16)
Alpha	4.42 (4.35-4.48)	2.30 (2.25-2.36)
Beta or Gamma	4.66 (4.42-4.91)	2.65 (2.44-2.91)
Delta	3.89 (3.83-3.95)	2.06 (2.01-2.11)
Omicron	3.09 (3.02-3.15)	1.64 (1.59-1.70)

Legend: Correction for days 5-9 was done using parameters  $p_1$  (probability to report an incubation period of 7 days when the true incubation period duration is 6 or 8 days) and  $p_2$  (probability to report an incubation period of 7 days when the true incubation period duration is 5 or 9 days)

**Table S5: Factors associated with the incubation period in univariable and multivariable analyses, including type of interaction environment**

	N	%	Univariable analysis		Multivariable analysis	
			Coefficient	95% confidence interval	Coefficient	95% confidence interval
<b>Total</b>	<b>20413</b>					
<b>Female</b>	13760	67.4	0.04	0.03 ; 0.1	0.1	0.02 ; 0.2
<b>Variant</b>						
Historical variant	7539	36.9	0 (ref)	..	0 (ref)	..
Alpha	5133	25.1	0.4	0.3 ; 0.4	0.4	0.3 ; 0.4
Beta or Gamma	453	2.2	0.6	0.5 ; 0.8	0.6	0.3 ; 0.8
Delta	4606	22.6	- 0.2	- 0.3 ; - 0.1	- 0.1	- 0.2 ; 0.02
Omicron	2682	13.1	- 1.0	- 1.1 ; - 0.9	- 0.9	- 1.0 ; - 0.8
<b>Age (years)</b>						
18-29	4269	20.9	0 (ref)	..	0 (ref)	..
30-39	5526	27.1	0.1	- 0.01 ; 0.2	0.1	- 0.02 ; 0.1
40-49	4235	20.7	0.2	0.1 ; 0.3	0.2	0.1 ; 0.3
50-59	3436	16.8	0.2	0.1 ; 0.3	0.2	0.1 ; 0.3
60-69	2228	10.9	0.4	0.3 ; 0.5	0.4	0.3 ; 0.5
≥70	719	3.5	0.3	0.1 ; 0.5	0.4	0.2 ; 0.5
<b>Smoking status</b>						
Non-smoker, no nicotine substitution	16465	80.7	0 (ref)	..	0 (ref)	..
Non-smoker, nicotine substitution	169	0.8	- 0.2	- 0.5 ; 0.2	- 0.2	- 0.5 ; 0.2
Non-smoker, electronic cigarette only	801	3.9	0.1	- 0.1 ; 0.3	0.2	0.0 ; 0.3
<10 cigarettes/day	1537	7.5	0.1	- 0.04 ; 0.2	0.2	0.03 ; 0.3
10-20 cigarettes/day	1019	5.0	0.2	0.02 ; 0.3	0.2	0.1 ; 0.4
>20 cigarettes/day	422	2.1	0.3	0.1 ; 0.5	0.4	0.1 ; 0.6
<b>Vaccine status</b>						
Unvaccinated	13868	67.9	0 (ref)	..	0 (ref)	..
One dose <90 days since last injection	354	1.7	- 0.2	- 0.5 ; 0.0	- 0.2	- 0.4 ; 0.1
One dose 90-179 days since last injection	143	0.7	- 0.9	- 1.3 ; - 0.6	- 0.3	- 0.7 ; 0.1
One dose ≥180 days since last injection	97	0.5	- 1.0	- 1.4 ; - 0.6	- 0.5	- 0.9 ; - 0.1
Two doses <90 days since last injection	642	3.2	- 0.2	- 0.4 ; - 0.1	0.1	- 0.1 ; 0.3
Two doses 90-179 days since last injection	3266	16.0	- 0.6	- 0.7 ; - 0.5	- 0.1	- 0.3 ; - 0.02
Two doses ≥180 days since last injection	942	4.6	- 0.7	- 0.8 ; - 0.5	- 0.2	- 0.4 ; - 0.05
Three doses <90 days since last injection	903	4.4	- 0.8	- 0.1 ; - 0.7	0.0	- 0.2 ; 0.2
Three doses 90-179 days since last injection	42	0.2	- 0.8	- 1.5 ; - 0.2	- 0.3	- 0.9 ; 0.3
Three doses ≥180 days since last injection	16	0.1	- 1.2	- 2.3 ; - 0.1	- 0.6	- 1.3 ; 0.1
Four doses <90 days since last injection	3	0.01	- 0.4	- 2.3 ; 2.1	0.5	- 2.4 ; 3.4
Undated last dose of vaccine	137	0.7	- 0.2	- 0.6 ; 0.2	0.2	- 0.3 ; 0.7
<b>Past episode of SARS-CoV-2 infection</b>						
No	19744	96.7	0 (ref)	..	0 (ref)	..
Yes, virologically or serologically confirmed	512	2.5	- 0.5	- 0.7 ; - 0.3	0.0	- 0.2 ; 0.2
Yes, diagnosed on clinical evaluation only	157	0.8	- 0.1	- 0.5 ; 0.2	0.0	- 0.4 ; 0.3
<b>Symptoms in index case</b>	6819	33.4	- 0.1	- 0.2 ; - 0.1	- 0.1	- 0.2 ; - 0.1

	N	%	Univariable analysis		Multivariable analysis	
			Coefficient	95% confidence interval	Coefficient	95% confidence interval
<b>Type of interaction environment</b>						
Family	7656	37.5	0 (ref)	..	0 (ref)	..
Friends	6526	32.0	- 0.2	- 0.3 ; - 0.2	- 0.2	- 0.3 ; - 0.1
Professional	4367	21.4	0.1	0.0 ; 0.2	0.03	- 0.1 ; 0.1
School/university	231	1.1	0.04	- 0.3 ; 0.3	0.1	- 0.2 ; 0.4
Sports activity	357	1.7	- 0.2	- 0.5 ; 0.03	- 0.1	- 0.3 ; 0.1
Cultural activity	146	0.7	- 0.2	- 0.6 ; 0.2	- 0.1	- 0.5 ; 0.2
Religious activity	31	0.2	0.4	- 0.4 ; 1.2	0.6	- 0.3 ; 1.4
Healthcare	172	0.8	0.1	- 0.3 ; 0.4	0.2	- 0.2 ; 0.6
Other environment	927	4.5	0.03	- 0.1 ; 0.2	0.0	- 0.2 ; 0.2

Legend: Multivariable analysis is adjusted on all variables presented in the table.

**Table S6: Factors associated with the incubation period in multivariable linear regression averaged over 15 resamplings of incubation periods of 7 days and assigned to figures between 5 and 9 following probabilities derived from the gamma distribution**

	<b>Coefficient</b>	<b>95% confidence interval</b>
<b>Female</b>	0.1	0.02 ; 0.1
<b>Variant</b>		
Historical variant	0 (ref)	..
Alpha	0.3	0.3 ; 0.4
Beta or Gamma	0.6	0.3 ; 0.8
Delta	- 0.1	- 0.2 ; 0.03
Omicron	- 0.9	- 1.0 ; - 0.7
<b>Age (years)</b>		
18-29	0 (ref)	..
30-39	0.1	0.0 ; 0.2
40-49	0.2	0.1 ; 0.3
50-59	0.2	0.1 ; 0.3
60-69	0.4	0.3 ; 0.5
≥70	0.4	0.2 ; 0.6
<b>Smoking status</b>		
Non-smoker, no nicotine substitution	0 (ref)	..
Non-smoker, nicotine substitution	- 0.2	- 0.5 ; 0.2
Non-smoker, electronic cigarette only	0.2	0.0 ; 0.3
<10 cigarettes/day	0.1	0.02 ; 0.2
10-20 cigarettes/day	0.2	0.1 ; 0.4
>20 cigarettes/day	0.4	0.1 ; 0.6
<b>Vaccine status</b>		
Unvaccinated	0 (ref)	..
One dose <90 days since last injection	- 0.2	- 0.4 ; 0.1
One dose 90-179 days since last injection	- 0.3	- 0.7 ; 0.1
One dose ≥180 days since last injection	- 0.5	- 0.9 ; - 0.1
Two doses <90 days since last injection	0.1	- 0.1 ; 0.3
Two doses 90-179 days since last injection	- 0.1	- 0.3 ; - 0.02
Two doses ≥180 days since last injection	- 0.2	- 0.4 ; - 0.05
Three doses <90 days since last injection	0.0	- 0.2 ; 0.2
Three doses 90-179 days since last injection	- 0.3	- 0.9 ; 0.3
Three doses ≥180 days since last injection	- 0.6	- 1.3 ; 0.0
Four doses <90 days since last injection	0.6	- 2.3 ; 3.3
Undated last dose of vaccine	0.2	- 0.3 ; 0.7
<b>Past episode of SARS-CoV-2 infection</b>		
No	0 (ref)	..
Yes, virologically or serologically confirmed	0.0	- 0.2 ; 0.2
Yes, diagnosed on clinical evaluation only	0.0	- 0.4 ; 0.4
<b>Symptoms in index case</b>	- 0.1	- 0.2 ; - 0.05
<b>Mask-wearing</b>		
Neither participant or index case	0 (ref)	..
Index case only	0.0	- 0.2 ; 0.2
Participant only	0.2	0.1 ; 0.3
Both participant and index case	0.1	0.02 ; 0.2

**Table S7: Factors associated with the incubation period in univariable and multivariable Poisson regression analyses**

	Univariable analysis		Multivariable analysis	
	Coefficient	95% confidence interval	Coefficient	95% confidence interval
<b>Female</b>	1.01	0.99 ; 1.02	1.02	1.01 ; 1.03
<b>Variant</b>				
Historical variant	1 (ref)	..	1 (ref)	..
Alpha	1.08	1.06 ; 1.09	1.08	1.06 ; 1.09
Beta or Gamma	1.12	1.07 ; 1.18	1.12	1.07 ; 1.18
Delta	0.96	0.94 ; 0.98	0.98	0.96 ; 1.01
Omicron	0.78	0.77 ; 0.80	0.80	0.77 ; 0.83
<b>Age (years)</b>				
18-29	1 (ref)	..	1 (ref)	..
30-39	1.02	1.00 ; 1.04	1.02	1.00 ; 1.04
40-49	1.05	1.03 ; 1.07	1.05	1.02 ; 1.07
50-59	1.05	1.03 ; 1.08	1.05	1.02 ; 1.07
60-69	1.09	1.06 ; 1.12	1.09	1.06 ; 1.12
≥70	1.07	1.03 ; 1.11	1.09	1.04 ; 1.13
<b>Smoking status</b>				
Non-smoker, no nicotine substitution	1 (ref)	..	1 (ref)	..
Non-smoker, nicotine substitution	0.97	0.90 ; 1.04	0.96	0.89 ; 1.04
Non-smoker, electronic cigarette only	1.02	0.98 ; 1.06	1.03	1.00 ; 1.07
<10 cigarettes/day	1.02	0.99 ; 1.04	1.03	1.00 ; 1.06
10-20 cigarettes/day	1.04	1.00 ; 1.07	1.05	1.02 ; 1.09
>20 cigarettes/day	1.06	1.01 ; 1.12	1.08	1.03 ; 1.13
<b>Vaccine status</b>				
Unvaccinated	1 (ref)	..	1 (ref)	..
One dose <90 days since last injection	0.95	0.90 ; 1.01	0.96	0.91 ; 1.01
One dose 90-179 days since last injection	0.80	0.73 ; 0.88	0.92	0.83 ; 0.92
One dose ≥180 days since last injection	0.77	0.70 ; 0.85	0.88	0.80 ; 0.98
Two doses <90 days since last injection	0.95	0.91 ; 0.99	1.03	0.99 ; 1.07
Two doses 90-179 days since last injection	0.87	0.85 ; 0.89	0.97	0.94 ; 0.99
Two doses ≥180 days since last injection	0.86	0.83 ; 0.89	0.95	0.92 ; 0.99
Three doses <90 days since last injection	0.83	0.80 ; 0.85	1.01	0.97 ; 1.05
Three doses 90-179 days since last injection	0.83	0.70 ; 0.97	0.94	0.80 ; 1.09
Three doses ≥180 days since last injection	0.75	0.62 ; 0.91	0.86	0.70 ; 1.04
Four doses <90 days since last injection	0.92	0.49 ; 1.70	1.15	0.60 ; 2.20
Undated last dose of vaccine	0.96	0.86 ; 1.07	1.05	0.95 ; 1.17
<b>Past episode of SARS-CoV-2 infection</b>				
No	1 (ref)	..	1 (ref)	..
Yes, virologically or serologically confirmed	0.89	0.85 ; 0.94	1.00	0.95 ; 1.06
Yes, diagnosed on clinical evaluation only	0.98	0.90 ; 1.06	1.00	0.92 ; 1.08



	Univariable analysis		Multivariable analysis	
	Coefficient	95% confidence interval	Coefficient	95% confidence interval
<b>Symptoms in index case</b>	0.97	0.96 ; 0.99	0.97	0.96 ; 0.99
<b>Mask-wearing</b>				
Neither participant nor index case	1 (ref)	..	1 (ref)	..
Index case only	1.01	0.96 ; 1.06	1.00	0.95 ; 1.05
Participant only	1.08	1.04 ; 1.10	1.05	1.03 ; 1.08
Both participant and index case	1.05	1.03 ; 1.08	1.03	1.01 ; 1.05

Legend: Multivariable analysis is adjusted on all variables presented in the table. Underlying conditions and indoors/outdoors setting variables were dropped from the multivariable model given absence of statistical significance.

**Table S8: Comparison of estimated incubation period durations after transformation of the coefficients of the linear regression and the Poisson models.**

<b>Model</b>	<b>Estimated incubation period</b>	
	<b>Linear regression</b>	<b>Poisson</b>
<b>Male</b>	4.5	4.5
<b>Female</b>	4.6	4.6
<b>Variant</b>		
Historical	4.6	4.6
Alpha	5.0	5.0
Beta or Gamma	5.2	5.2
Delta	4.5	4.5
Omicron	3.7	3.7
<b>Age</b>		
18-29	4.4	4.4
30-39	4.5	4.5
40-49	4.6	4.6
50-59	4.6	4.6
60-69	4.8	4.8
≥70	4.8	4.8
<b>Smoking status</b>		
Non-smoker, no nicotine substitution	4.5	4.5
Non-smoker, nicotine substitution	4.4	4.4
Non-smoker, electronic cigarette only	4.7	4.7
<10 cigarettes/day	4.7	4.7
10-20 cigarettes/day	4.8	4.8
>20 cigarettes/day	4.9	4.9
<b>Vaccine status</b>		
Unvaccinated	4.7	4.7
One dose <90 days since last injection	4.5	4.5
One dose 90-179 days since last injection	4.4	4.3
One dose ≥180 days since last injection	4.2	4.2
Two doses <90 days since last injection	4.9	4.9
Two doses 90-179 days since last injection	4.6	4.6
Two doses ≥180 days since last injection	4.5	4.5
Three doses <90 days since last injection	4.7	4.8
Three doses 90-179 days since last injection	4.4	4.4
Three doses ≥180 days since last injection	4.1	4.0
Four doses <90 days since last injection	5.3	5.4
Undated last dose of vaccine	5.0	5.0
<b>Past episode of SARS-CoV-2 infection</b>		
No	4.6	4.6
Yes, virologically or serologically confirmed	4.6	4.6
Yes, diagnosed on clinical evaluation only	4.5	4.5
<b>Symptoms in index case</b>		
No	4.6	4.6
Yes	4.5	4.5
<b>Mask-wearing</b>		
Neither participant or index case	4.5	4.5
Index case only	4.5	4.5
Participant only	4.7	4.7
Both participant and index case	4.6	4.6

Legend: Coefficients of respective models are described in tables 3 and S7.

**Table S9: Description of study population, linear regression model of factors associated with the incubation period in univariable and multivariable analyses when restricted to participants who report a positive test in the index case**

	N	%	Univariable analysis		Multivariable analysis	
			Coefficient	95% confidence interval	Coefficient	95% confidence interval
<b>Total</b>	<b>18005</b>					
<b>Female</b>	12238	68.0	0.1	0.0 ; 0.1	0.1	0.1 ; 0.2
<b>Variant</b>						
Historical variant	6619	36.8	0 (ref)	..	0 (ref)	..
Alpha	4642	25.8	0.3	0.3 ; 0.4	0.3	0.3 ; 0.4
Beta or Gamma	408	2.3	0.6	0.3 ; 0.8	0.6	0.3 ; 0.8
Delta	3918	21.8	-0.2	-0.3 ; -0.1	-0.1	-0.2 ; 0.02
Omicron	2418	13.4	-1.0	-1.1 ; -0.9	-0.8	-1.0 ; -0.7
<b>Age (years)</b>						
18-29	3852	21.4	0 (ref)	..	0 (ref)	..
30-39	4974	27.6	0.1	-0.01 ; 0.2	0.1	-0.01 ; 0.2
40-49	3699	20.5	0.2	0.1 ; 0.3	0.2	0.1 ; 0.3
50-59	2977	16.5	0.2	0.1 ; 0.3	0.2	0.1 ; 0.3
60-69	1908	10.6	0.4	0.3 ; 0.5	0.4	0.3 ; 0.5
≥70	595	3.3	0.3	0.1 ; 0.5	0.4	0.2 ; 0.6
<b>Smoking status</b>						
Non-smoker, no nicotine substitution	14480	80.4	0 (ref)	..	0 (ref)	..
Non-smoker, nicotine substitution	143	0.8	-0.1	-0.5 ; 0.3	-0.2	-0.5 ; 0.2
Non-smoker, electronic cigarette only	713	4.0	0.1	-0.1 ; 0.3	0.1	-0.02 ; 0.3
<10 cigarettes/day	1380	7.7	0.1	-0.02 ; 0.2	0.2	0.03 ; 0.3
10-20 cigarettes/day	921	5.1	0.2	0.04 ; 0.4	0.3	0.1 ; 0.4
>20 cigarettes/day	368	2.0	0.3	0.03 ; 0.5	0.3	0.1 ; 0.6
<b>Vaccine status</b>						
Unvaccinated	12298	68.30	0 (ref)	..	0 (ref)	..
One dose <90 days since last injection	320	1.78	-0.2	-0.5 ; 0.1	-0.1	-0.4 ; 0.1
One dose 90-179 days since last injection	131	0.73	-1.0	-1.3 ; -0.6	-0.4	-0.8 ; -0.05
One dose ≥180 days since last injection	85	0.47	-1.2	-1.6 ; -0.9	-0.7	-1.1 ; -0.3
Two doses <90 days since last injection	541	3.00	-0.3	-0.5 ; -0.1	0.1	-0.1 ; 0.3
Two doses 90-179 days since last injection	2841	15.78	-0.6	-0.7 ; -0.5	-0.2	-0.3 ; -0.03
Two doses ≥180 days since last injection	815	4.53	-0.7	-0.9 ; -0.6	-0.3	-0.4 ; -0.1
Three doses <90 days since last injection	812	4.51	-0.9	-1.0 ; -0.7	-0.1	-0.2 ; 0.1
Three doses 90-179 days since last injection	36	0.20	-0.9	-1.6 ; -0.3	-0.4	-1.0 ; 0.2
Three doses ≥180 days since last injection	15	0.08	-1.2	-1.9 ; -0.4	-0.6	-1.4 ; 0.1
Four doses <90 days since last injection	3	0.02	-0.4	-3.1 ; 2.3	0.4	-2.5 ; 3.3
Undated last dose of vaccine	108	0.60	-0.1	-0.7 ; 0.4	0.3	-0.2 ; 0.8
<b>Past episode of SARS-CoV-2 infection</b>						
No	17395	96.6	0 (ref)	..		
Yes, virologically or serologically confirmed	473	2.6	-0.5	-0.7 ; -0.3	0.1	-0.1 ; 0.3
Yes, diagnosed on clinical evaluation only	137	0.8	-0.1	-0.5 ; 0.3	0.0	-0.4 ; 0.4
<b>Symptoms in index case</b>	6023	33.5	-0.2	-0.2 ; -0.1	-0.1	-0.2 ; -0.1

	N	%	Univariable analysis		Multivariable analysis	
			Coefficient	95% confidence interval	Coefficient	95% confidence interval
<b>Mask-wearing</b>						
Neither participant or index case	14370	79.8	0 (ref)	..	0 (ref)	..
Index case only	407	2.3	0.1	- 0.1 ; 0.3	0.1	- 0.2 ; 0.3
Participant only	1350	7.5	0.3	0.2 ; 0.4	0.2	0.1 ; 0.3
Both participant and index case	1878	10.4	0.2	0.1 ; 0.3	0.1	0.01 ; 0.2
<b>Indoors/outdoors setting</b>						
Indoors with closed windows	13369	74.3	0 (ref)	..	..	..
Indoors with open windows	3584	19.9	0	- 0.1 ; 0.1	..	..
Outdoors	1052	5.8	0.1	- 0.1 ; 0.2	..	..
<b>Underlying conditions</b>						
Chronic respiratory disease	1425	7.9	0.1	- 0.03 ; 0.2	..	..
Hypertension	1397	7.8	0.2	0.03 ; 0.3	..	..
Underweight	590	3.3	- 0.3	- 0.4 ; - 0.1	..	..
Diabetes	385	2.1	0.1	- 0.2 ; 0.3	..	..
Coronary artery disease	138	0.8	- 0.1	- 0.4 ; 0.3	..	..

Legend: The population represented 18005 out of the 20413 (88.2%) participants (2059, 10.1% did not know if the index case had tested positive, the remaining 349, 1.7%, did not report a positive test in the index case despite identifying them as such). Multivariable analysis is adjusted on all variables presented in the table except underlying conditions which were dropped from the model given absence of statistical significance.

## Supplementary methods

### Incubation Model

- $X$  is the random variable of reported incubation periods
- $Y$  is the random variable of latent incubation periods following either a Poisson, Negative-binomial, discretised Log-normal or Gamma law.

### The log-likelihood

$$LL = (\sum_{i,j} N_{i,j} \log(P(X = i, \theta_j, p_1, p_2)))$$

$N_{i,j}$  is the number of cases with an incubation period of  $i$  days for variant  $j$

$\theta_j$  is the set of parameters for the  $j$ th variant

$P(p_1) = 1$  if  $p_1 \in [0,1]$  and 0 otherwise

$P(p_2) = 1$  if  $p_2 \in [0,1]$  and 0 otherwise

### Probabilities for reported incubation periods

- $\forall k \in N_+ \setminus \{5,6,7,8,9\}: P(X = k, \theta_j, p_1, p_2) = P(Y = k, \theta_j)$
- $P(X = 7, \theta_j, p_1, p_2) = P(Y = 7, \theta_j) + p_1 (P(Y = 6, \theta_j) + P(Y = 8, \theta_j)) + p_2 (P(Y = 5, \theta_j) + P(Y = 9, \theta_j))$
- $k \in \{6, 8\}: P(X = k, \theta_j, p_1, p_2) = (1 - p_1) P(Y = k, \theta_j)$
- $k \in \{5, 9\}: P(X = k, \theta_j, p_1, p_2) = (1 - p_2) P(Y = k, \theta_j)$

### Questionnaire phrasing

French original phrasing:

“Les questions suivantes concernent la personne à l’origine de votre contamination.” “Combien de jours se sont passés entre votre dernier contact avec cette personne et l’apparition de vos symptômes ?”

English translation:

“The following questions refer to the person at the origin of your contamination.” “How many days went by between your last contact with that person and the onset of your symptoms?”

*Number between 1 and 99 required as a response.*