THE LANCET
Child & Adolescent Health

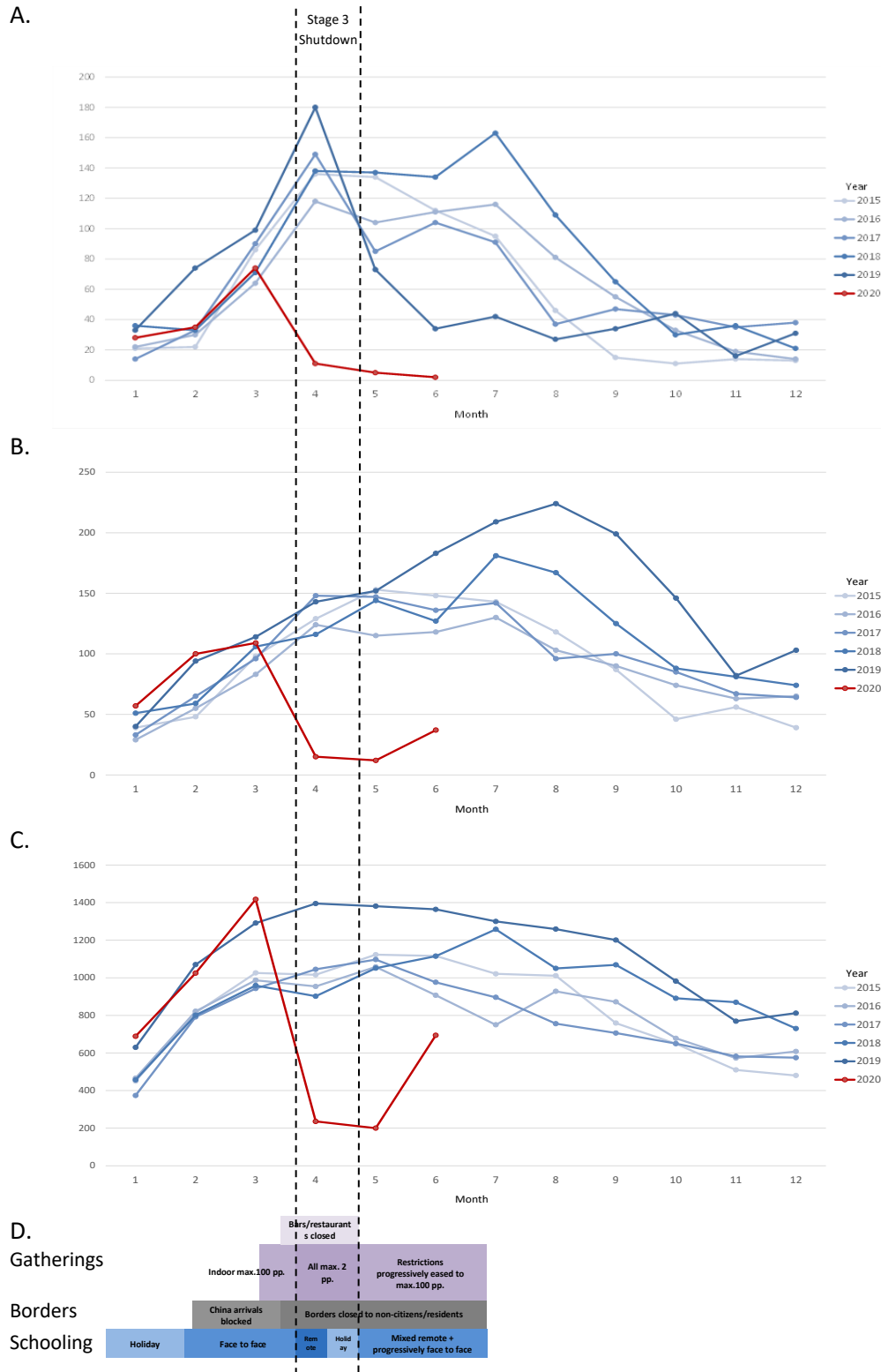## Supplementary appendix

This appendix formed part of the original submission We post it as supplied by the authors.

Figure 1: Panelled line graphs showing the monthly frequency of RSV PCR detections (A), ICD-10 coded* Bronchiolitis admissions (B), and SNOMED CT coded* Emergency Department acute respiratory presentations (C) 2014-19 and January to June 2020 aligned with the elements of the NSW and Australian COVID-19 pandemic response (D; amended from Macartney et al. 2020(9)).


*ICD-10-AM codes: J21.0, J21.1, J21.8, J21.9. SNOMED CT codes: 281794004, 56018004, 54150009, 4120002, 5505005, 233604007, 195967001, 50417007, 49727002, 385093006. See supplementary materials for specific diagnoses.

Figure 2: Observed and predicted trends of the frequency of RSV PCR detections, ICD-10-AM coded
Bronchiolitis admissions, and SNOMED CT-coded Emergency Department acute respiratory
attendances 2015 to 2020; **2a.** All aged <16 years and **2b.** Sub-group aged ≤2 years and **2c.** Table
showing observed and predicted counts.

2a.
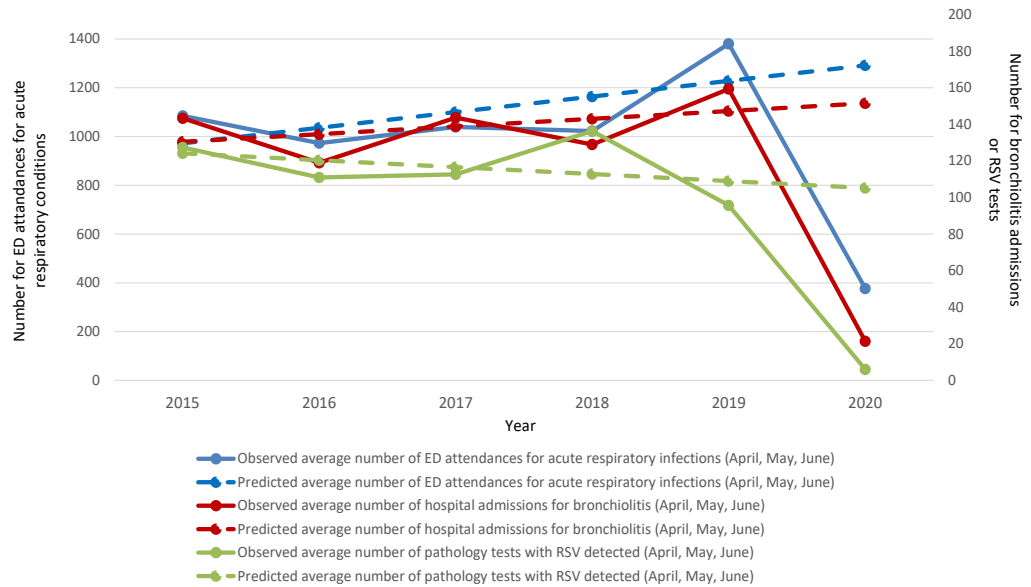
2b.
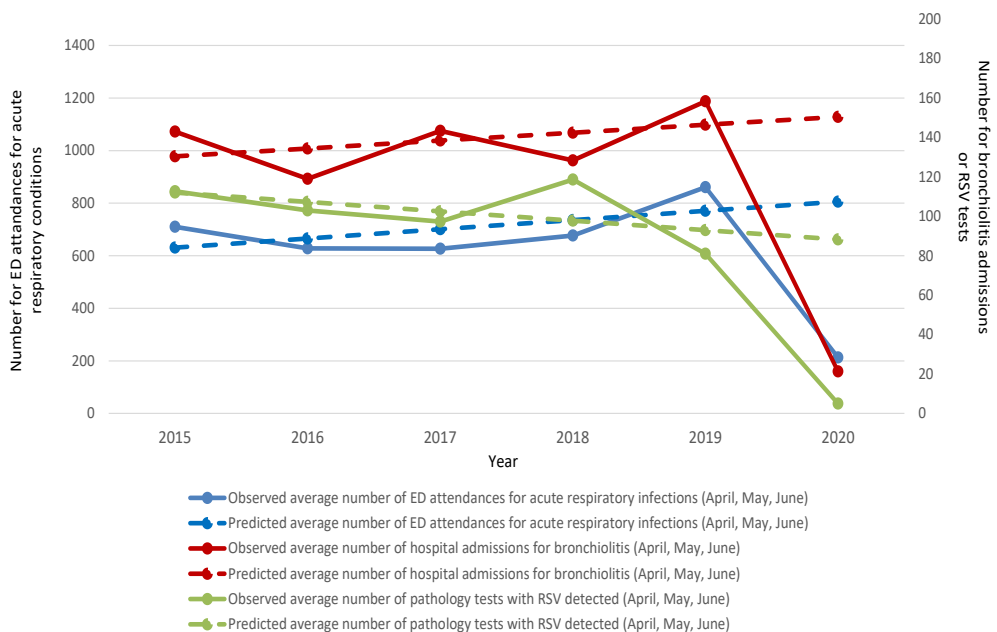
2c.

	Average number across April, May and June in 2020		Difference between observed and predicted values		
	Observed	Predicted	Absolute difference (SE)	Percentage difference (SE)	P value for difference
Children < 16 years of age					
ED attendance for acute respiratory infections (2015-19)	377	1292	-915 (211)	-70.8% (16.3%)	0.023
Non-admitted only	219	753	-534 (192)	-70.9% (25.5%)	0.069
Hospital admissions for bronchiolitis (2015-19)	21	151	-130 (23)	-85.9% (15.2%)	0.011
ICU	2	18	-16 (6)	-89.1% (32.7%)	0.074
Mechanical ventilation	1	4	-4 (2)	-85.1% (44.8%)	0.115
Pathology tests with RSV detected (2015-19)	6	105	-99 (24)	-94.3% (22.8%)	0.026
Children ≤ 2 years of age					
ED attendance for acute respiratory infections (2015-19)	213	806	-593 (132)	-73.6% (16.4%)	0.021
Non-admitted only	135	464	-328 (106)	-70.8% (22.9%)	0.054
Hospital admissions for bronchiolitis (2015-19)	21	150	-129 (23)	-85.8% (15.3%)	0.011
Pathology tests with RSV detected (2015-19)	5	88	-83 (21)	-94.3% (23.8%)	0.029

Table 1: Diagnostic codes used to extract hospitalisation and ED attendance data; **a.** International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM) discharge codes, **b.** Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) diagnosis codes.

1a.

*ICD-10-AM diagnosis code	Diagnosis
J21.0	Acute bronchiolitis due to respiratory syncytial virus
J21.1	Acute bronchiolitis due to human metapneumovirus
J21.8	Acute bronchiolitis due to other specified organisms
J21.9	Acute bronchiolitis unspecified

1b.

*SNOMED CT code	Diagnosis
281794004	Viral upper respiratory tract infection (disorder)
56018004	Wheezing (finding)
54150009	Upper respiratory infection (disorder)
4120002	Bronchiolitis (disorder)
5505005	Acute bronchiolitis (disorder)
233604007	Pneumonia (disorder)
195967001	Asthma (disorder)
50417007	Lower respiratory tract infection (disorder)
49727002	Cough (finding)
385093006	Community acquired pneumonia (disorder)

Table 2: Age distributions of the three datasets: **2a.** RSV PCR detections, **2b.** ICD-10-AM coded Bronchiolitis admissions, and **2c.** SNOMED CT-coded Emergency Department acute respiratory attendances 2015 to 2020.

2a.

Age (years)	Frequency	Percent
0	26832	38.53
1	11686	16.78
2	5868	8.43
0- 2	44386	63.73
3	4492	6.45
4	3666	5.26
5	2776	3.99
6	2238	3.21
7	1850	2.66
8	1626	2.33
9	1396	2.00
10	1344	1.93
11	1244	1.79
12	1326	1.90
13	1186	1.70
14	1114	1.60
15	1002	1.44
3 - 15	25260	36.27

2b.

Admission age (years)	Frequency	Percent
0	5490	81.56
1	1146	17.03
2	67	1
0 - 2	6703	99.60
3	12	0.18
4	6	0.09
5	1	0.01
6	0	
7	3	0.04
8	2	0.03
9	0	
10	1	0.01
11	0	
12	1	0.01
13		
14		
15		
3 – 15	27	0.40
missing	1	0.01

2c.

Age category (years)	Frequency	Percent
≤ 2	37158	63.38
3 – 15	21333	36.39
≥ 16	138	0.24

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