

Corrigendum to: Effectiveness of 3 Versus 6 ft of Physical Distancing for Controlling Spread of Coronavirus Disease 2019 Among Primary and Secondary Students and Staff: A Retrospective, Statewide Cohort Study

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The note below updates results in the corrected proof publication of this article [van den Berg, Schechter-Perkins, Jack et al. Effectiveness of 3 Versus 6 ft of Physical Distancing for Controlling Spread of Coronavirus Disease 2019 Among Primary and Secondary Students and Staff: A Retrospective, Statewide Cohort Study. Clin Infect Dis [https://doi.org/10.1093/](https://doi.org/10.1093/cid/ciab230)

[cid/ciab230](https://doi.org/10.1093/cid/ciab230)]. The updated analysis does not change the conclusion of the original manuscript, and continues to support the main finding that there was not a substantial difference in SARS-CoV-2 case rates among students or staff in districts that adopted a 3 versus 6 feet minimum physical distancing policy for students.

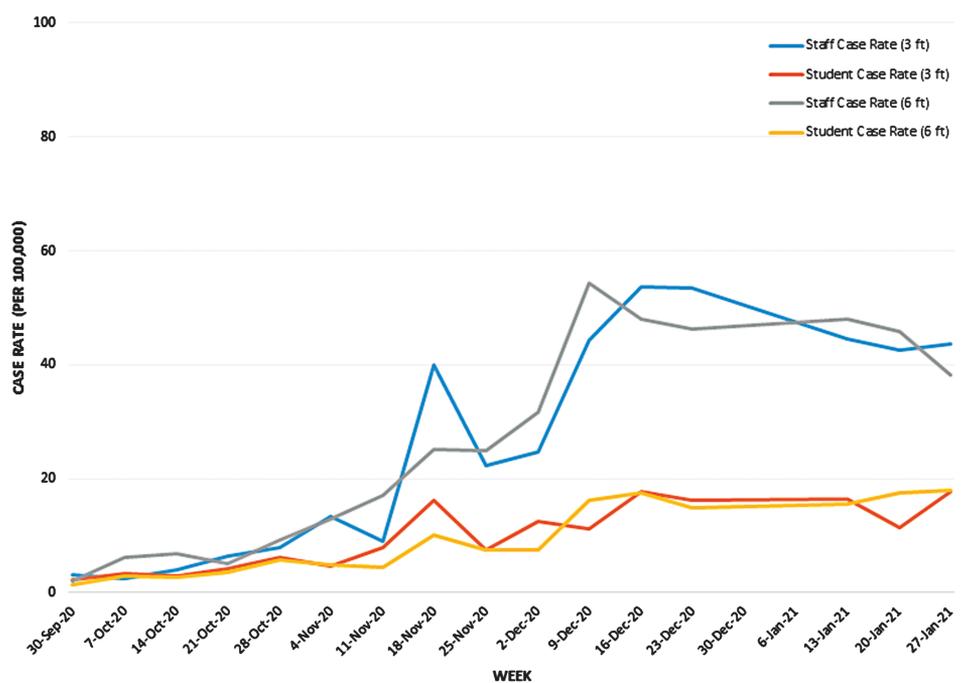


Figure 1. Incidence of coronavirus disease cases among students and school staff, by physical distancing (3 or 6 ft), reported to Massachusetts's Department of Elementary and Secondary Education during the first 16 weeks of the 2020–2021 academic year.

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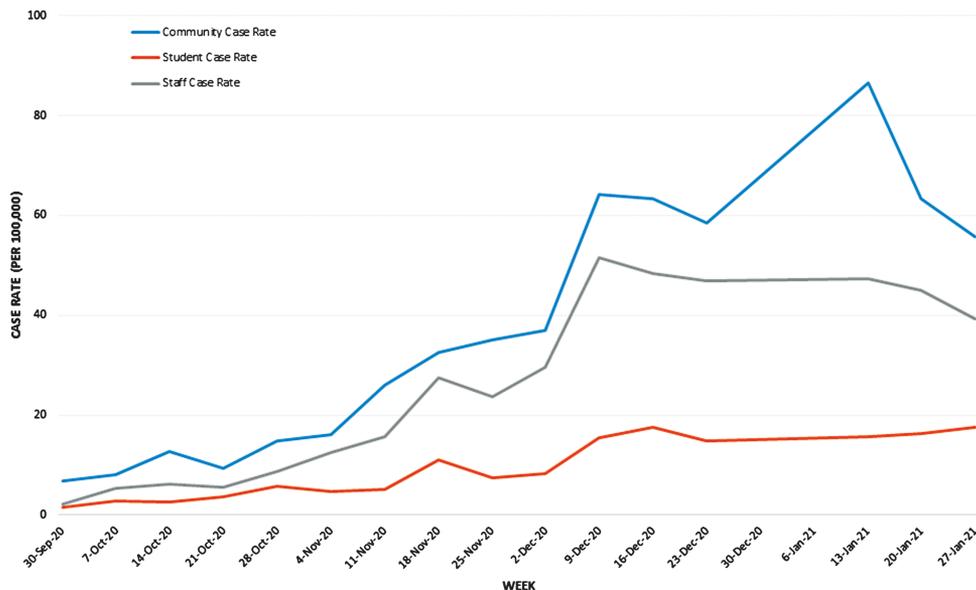


Figure 2. Incidence of coronavirus disease 2019 cases among students and school staff reported to Massachusetts’s Department of Elementary and Secondary Education during the first 16 weeks of the 2020–2021 academic year and community incidence of COVID-19 from USAFacts [19].

The original paper uses data from Massachusetts to study the relationship between physical distancing policy in schools and COVID-19 case rates among students and school staff during the early part of the 2020-21 school year, prior to the state-wide policy change announced in early 2021 mandating an option for full, in-person learning for all students. District weeks with low in-person enrollment, defined as <5% of students participating in any type of in-person learning were excluded from the analysis. The conclusion of the paper was that choice of 3 versus 6 feet of distance did not significantly impact COVID-19 rates in students or staff.

Subsequent to publication, the authors received updated data on student enrollment by mode for 3 of the biweekly periods. The original data for these periods had contained an error affecting a subset of districts. The change in the data affects approximately 5% of district-weeks in the analysis; 9 of the original 3625 district weeks are excluded in the updated analysis due to in-person enrollments below the authors’ cutoff. Below, the authors present updated versions of the figures and tables in the paper. The changes are minor. Full replication code and updated data are available here.

Table 1. Daily Incidence of Coronavirus Disease 2019 Among Students and School Staff Participating in In-Person Instruction in Massachusetts, as Reported to the Department of Elementary and Secondary Education

Week End Date	Daily Cases per 100 000 by Physical Distancing Requirement			
	Students		Staff	
	≥6 ft	≥3 ft	≥6 ft	≥3 ft
2020				
30 Sep	1.38	2.17	2.09	3.23
7 Oct	2.90	3.26	6.26	2.42
14 Oct	2.61	2.95	6.89	4.03
21 Oct	3.59	4.32	5.19	6.47
28 Oct	5.86	6.21	9.29	7.91
4 Nov	4.81	4.67	12.85	13.47
11 Nov	4.54	7.96	17.13	8.98
18 Nov	10.12	16.12	25.06	39.86
25 Nov	7.56	7.59	24.84	22.36
2 Dec	7.54	12.46	31.73	24.62
9 Dec	16.25	11.28	54.30	44.31
16 Dec	17.58	17.64	48.03	53.78
23 Dec	14.92	16.19	46.32	53.36
2021				
13 Jan	15.65	16.48	48.10	44.59
20 Jan	17.49	11.46	45.90	42.65
27 Jan	18.01	17.63	38.14	43.64

Table 2. Distribution of Infection Control Interventions Implemented in Massachusetts Public Schools With Any In-Person Instruction

Infection Control Intervention	Districts, No.	Students, No. ^a			Staff, No. ^a		
		All Districts	≥6-ft Distancing	≥3-ft Distancing	All Districts	≥6-ft Distancing	≥3-ft Distancing
School model^b							
High on-campus enrollment	90	186 587	122 925	55 289	27 415	18 880	8123
Lower on-campus enrollment	161	329 413	260 544	62 375	71 975	58 160	11 740
Elementary, middle, and high school all in same model	188	434 679	319 728	101 667	82 907	64 118	16 823
Universal masking^c							
Among all staff	251	516 000	383 469	117 665	99 390	77 040	19 863
Among all students	251	516 000	383 469	117 665	99 390	77 040	19 863
Physical distancing							
≥6 ft	194	383 469	383 469	...	77 040	77 040	...
≥3 ft	48	117 665	...	117 665	19 863	...	19 863
Other (4–5 ft)	9	14 866	...	...	2487	...	...
Enhanced cleaning protocol ^d	218	426 686	335 351	76 469	78 290	62 521	13 282
Cohorting (any)	214	464 208	348 973	100 751	88 264	69 486	16 605
Mandatory symptom screens before entering school buildings	223	470 887	359 517	99 670	91 428	72 832	16 533
Ventilation interventions ^e	205	415 989	325 921	75 331	76 539	60 891	13 189
Surveillance testing	5	6908	6180	728	2307	2181	126
Universal vaccination policy ^f	251	516 000	383 469	117 665	99 390	77 040	19 863
District demographic variables^g							
Children aged 5–17 y in poverty, %		10.47	10.24	12.13	...	...	...
Student race, %							
White		65.26	65.10	64.09	...	...	...
Black		6.97	7.36	5.76	...	...	...
Asian		7.58	7.91	6.34	...	...	...
Other		4.23	4.32	3.909	...	...	...
Hispanic		15.99	15.33	19.93	...	...	...

^aData represent no. (%) of students or staff, unless otherwise specified.

^bHigh on-campus enrollment is defined as districts with an average of ≥80% of their total enrolled students participating in on-campus instruction throughout the time period. Lower on-campus enrollment is defined as districts with an average of <80% of enrolled students participating in on-campus instruction.

^cDuring the study period, universal masking among staff and students in grades 2 and higher was a prerequisite for approval to open schools, according to the Massachusetts Department of Elementary and Secondary Education. Many districts opted to require (69.7%) or strongly recommend (26.3%) masking among students in younger grade levels.

^dCleaning protocols were variably defined but were recorded if the district reported any enhanced protocols beyond usual practices.

^eVentilation interventions were highly heterogeneous and included requirements to open windows, purchase of high-efficiency particulate air filters, plans for heating, ventilation, and air conditioning upgrades, and plans to move classrooms to outdoor spaces.

^fUniversal influenza vaccination for all students was mandated in the state of Massachusetts during the fall of 2020. The requirement was later waived owing to low rates of influenza during the 2020–2021 influenza season.

^gDemographic variables obtained from the National Center for Education Statistics at the district level [18].

Table 3. Regression and Sensitivity Analyses^a

Districts With Physical Distancing ≥6 ft	IRR for Students (95% CI)		IRR for Staff (95% CI)	
	Unadjusted	Adjusted ^b	Unadjusted	Adjusted ^b
All districts (3616 district-weeks) ^c	.846 (0.575–1.324)	.842 (0.603–1.317)	.989 (0.733–1.335)	1.015 (0.755–1.366)
Adjusted for district demographics (3603 district-weeks) ^d	.691 (0.465–1.02)	.709 (0.487–1.01)	.901 (0.663–1.226)	.915 (0.669–1.252)
Excluding districts with surveillance testing (3545 district-weeks) ^c	.832 (0.568–1.22)	.827 (0.594–1.15)	.971 (0.721–1.307)	.997 (0.743–1.338)
Versus distancing <6 ft (3754 district-weeks) ^e	.932 (0.644–1.34)	.904 (0.662–1.23)	1.096 (0.818–1.468)	1.104 (0.830–1.468)

Abbreviations: CI, confidence interval; IRR, incidence rate ratio

^aAll regressions were adjusted for week. Standard errors were adjusted for clustering by school district.

^bAdjusted for community incidence by week.

^cThe referent group was districts with 3 ft of physical distancing.

^dDemographic variables included in the model included the percentages of total enrolled students who were black, Hispanic, Asian, or other (including Native American, Native Alaskan, Native Hawaiian, Pacific Islander, ≥2 races, unknown, and other rate), and the percentage of children aged 5–17 years in poverty. One district was missing poverty data and was dropped from the regression analysis.

^eThe referent group was districts with <6 ft of physical distancing.