SUPPLEMENTARY TABLE 1. Classroom characteristics and mitigation measures in classrooms with a laboratory-confirmed COVID-19 case — Salt Lake County, Utah, December 3, 2020–January 31, 2021

	No. (%)
Characteristics	**Classrooms (n = 42)***
Classroom size: Number of students, median (range)	22 (3–33)
Classroom seating	
Students seated at a group table rather than individual desks[†]	18 (42.9)
Minimum no. ft between students' seats in classroom, median (range)[§,¶]	3.0 (1.0–5.0)
Students within a 6-ft radius, median (range)[¶]	8 (1–16)
Feet between teacher and closest seated student, median (range)[¶]	6.0 (2.0–9.8)
Lunch**	
Students who eat lunch at school	37 (88.1)
Students within a 6-ft radius, median (range)	4 (1–8)
Duration of lunch in minutes, median (range)	15 (12–30)
Mask wearing indoors	
No mask breaks (always masked except when eating lunch/drinking water)	36 (85.7)
Some mask breaks allowed[††]	6 (14.3)

* Only homeroom teachers were interviewed for index patients who were in multiple classrooms per day. Six index patients did not have traditional classroom exposures and were excluded; five were teachers or staff who circulated between multiple classrooms a day and interacted with students one-on-one or in small groups, and one was a student in a class for children with special health care needs. Three classrooms had two index patients; only one teacher's survey was administered to avoid double counting the classrooms. For characteristics concerning lunch, data were obtained from elementary school principals.

[†] A median 3 students were seated at each group table (range = 2–6 students).

[§] The investigation team measured the minimum distance between classroom seats using measuring tape. Teachers were consulted to ensure the seating arrangement had not changed since the dates of exposure to the index patient.

[¶] Missing data: Minimum no. ft between students' seats in classrooms: n = 2 classrooms; Students within a 6-ft radius: n = 3 classrooms; Feet between teacher and closest seated student: n = 5 classrooms.

** All students eating lunch at school ate in cafeterias except for one school where students ate in the hallway and one school that alternated between classroom and cafeteria every other day. Teachers ate in a separate location from the students.

[††] Indoor mask breaks included removing masks to talk in class or removing masks when standing at the perimeter of the classroom ≥6 ft from other students.

SUPPLEMENTARY TABLE 2. Summary of strategies implemented in 20 elementary schools to reduce transmission of SARS-CoV-2 — Salt Lake County, Utah, December 3, 2020–January 31, 2021

Mitigation strategy*	No. (%) Schools (n = 20)
1. Mask use	
Required for students, teachers, and other staff members	20 (100.0)
Required indoors	20 (100.0)
Required outdoors	16 (80.0)
2. Social distancing to the extent possible	
In the classroom	
Students cohorted by classroom	20 (100.0)
During lunch	
Students are seated ≥6 ft apart during lunch	0 (0.0)
Staggered mealtimes	19 (95.0)
Other environments	
Visual cues to remain 6 ft apart in communal areas[†]	20 (100.0)
Closure of communal areas[§]	9 (50.0)
Cancellation of in-person school activities[¶]	20 (100.0)
3. Hand hygiene and respiratory etiquette	
Adequate hand washing or hand sanitizing supplies	20 (100.0)
Hand washing or hand sanitizing stations located in:	
Classrooms	20 (100.0)
Cafeteria/dining areas	20 (100.0)
Other common areas**	16 (80.0)
Handwashing is being taught and reinforced	20 (100.0)
4. Cleaning, disinfecting, and ventilation	
Adequate cleaning supplies	20 (100.0)
Cleaning of high-touch surfaces[††]	20 (100.0)
Opening doors or windows when safe to do so	16 (80.0)
Use of fans to increase the effectiveness of open windows	7 (35.0)
Installing high-efficiency particulate air filtration systems for high-risk areas	18 (90.0)
5. Contact tracing in combination with isolation and quarantine	
Performed contact tracing in school	20 (100.0)
Plans in place for responding to symptomatic student, teacher, or staff member	20 (100.0)

* Mitigation strategies listed are in accordance with Centers for Disease Control and Prevention's 5 key mitigation strategies for schools (https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/indicators.html#thresholds).

[†] Visual cues include tape or stickers on the floors, signs or posters on the wall, physical barriers, or one-way hallways.
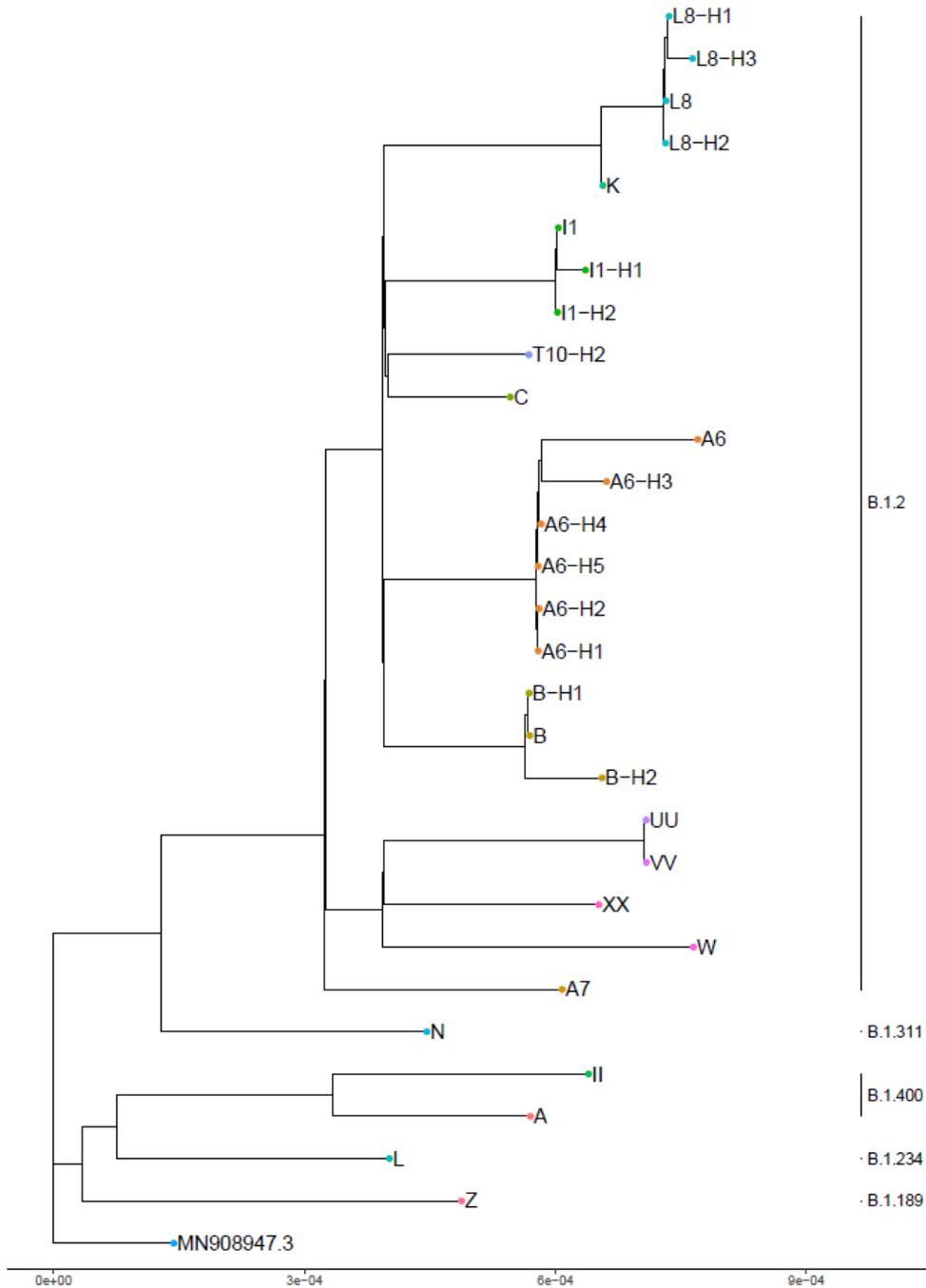
[§] Communal areas include classrooms, cafeterias, playgrounds, gymnasiums, or teacher's lounges. Missing data: n = 2.

[¶] In-person school activities include field trips, assemblies, parent meetings, and sporting events.

** Other common areas include hallways, libraries, and gymnasiums.

[††] Cleaning of high-touch surfaces include during class transitions, in the cafeteria, and in restrooms.

SUPPLEMENTARY FIGURE. Phylogenetic tree displaying available sequences from index patients, school contacts who received positive SARS-CoV-2 test results, and household members of school contacts who received positive SARS-CoV-2 test results, and corresponding lineages — Salt Lake County, Utah, December 3, 2020–January 31, 2021

Sequences from index patients are denoted by letters (i.e., A, B, C, K, L, N, W, II, UU, VV, XX); sequences from a school contact are denoted by the associated index patient followed by the identification number designated in Table 2 (i.e., A6, A7, I1, L8); sequences from a school contact's household member are denoted by the school contact's identification code followed by "H" and sequential numbering of the household members (i.e., A6-H1, A6-H2, A6-H3, A6-H4, A6-H5, I1-H1, I1-H2, L8-H1, L8-H2, L8-H3, T10-H2); MN908947.3 is the reference SARS-CoV-2 sequence. Index patients UU and VV are siblings. Lineages were assigned with pangolin (**P**hylogenetic **A**ssignment of **N**amed **G**lobal **O**utbreak **LIN**eages) (v.2.1.10, pangoLEARN v.2021-02-01; https://github.com/cov-lineages/pangolin). The x-axis represents nucleotide substitutions per site. The dot colors indicate different households.