

Data and Research on Covid-19 in Schools after Reopening



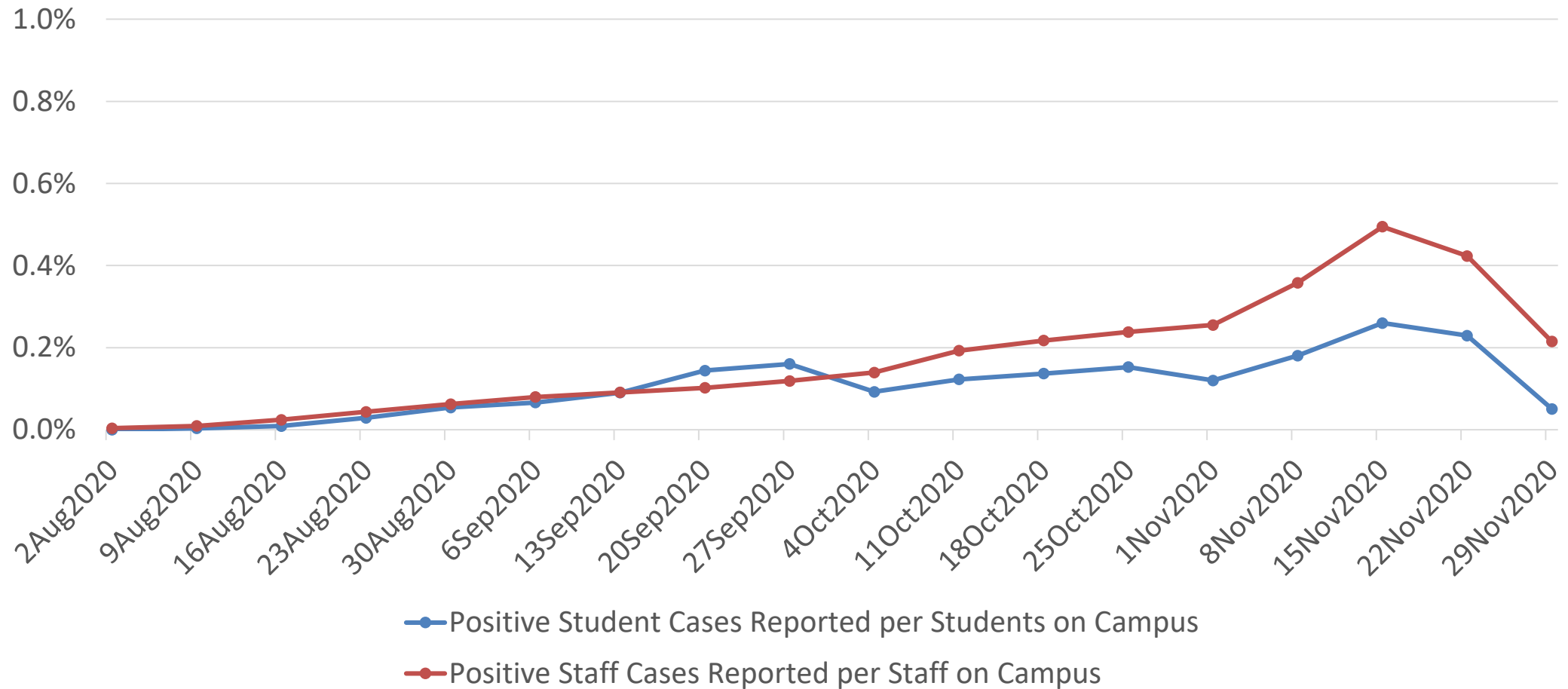
STATE BOARD OF EDUCATION

December 8, 2020

Data and Research on Covid-19 in Schools after Reopening

- 1 The student infection rate is less than the community rate.
- 2 Schools have not been “super spreader” sites. Most Covid-19 cases are associated with indoor gatherings of adults (restaurants, bars, workplaces, religious gatherings, and elderly care facilities) and households.
- 3 Students nationwide are seeing significant negative impacts from virtual learning. Nationally, some school leaders are responding by reopening schools for in-person learning.

Texas Data: Student and Staff Positivity Rate



Source: Texas Department of State Health Services

Post-Reopening, Schools Have Not Been Shown to Be “Super-Spreader” Sites

- One recent peer-reviewed study of school reopening in Spain concluded that schools did not impact the community infection rate, with the authors stating, “Most of expected positive cases in the schools would come from the exterior, and that transmission inside the schools was not expected to be relevant.” [1]
- Another recent study examined school reopening in 191 nations and again found no relationship between reopening and community rate. [2]
- Most cases within schools in the United States are isolated. In the week ending November 22, only 1.2% of reported cases were in schools with 10 or more total cases. [3]

[1] https://biocomsc.upc.edu/en/shared/20201002_report_136.pdf [2] <https://education.org/facts-and-insights#f09a6e46-8c5f-4d01-8297-d2a3f6c8f873> [3] <http://qualtrics.com/covid-school-dashboard>

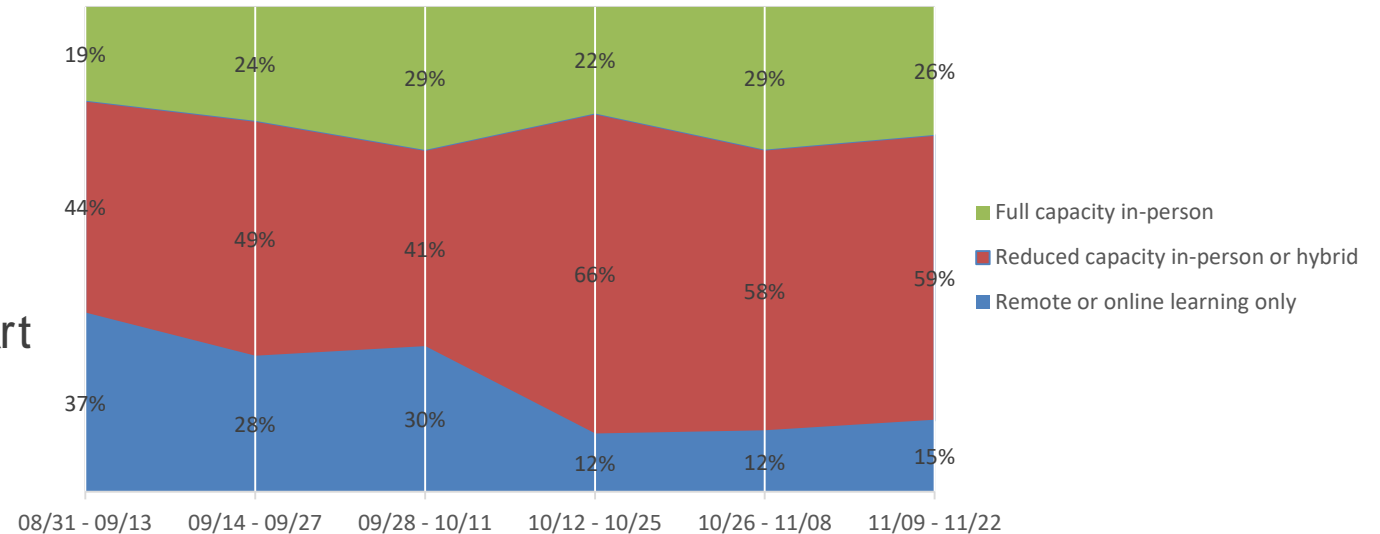
- The handful of areas in the United States which have seen clusters of school-related cases tend to meet to criteria: schools reopened before community rates were at or below CDC guidelines (50 cases per 100,000), and in areas where there was no mask mandate. [4]
- Detailed international research shows that the majority of Covid-19 cases are associated with indoor gatherings of adults in restaurants, bars, workplaces, religious gatherings, and elderly care facilities, as well as within households. Very few were associated with schools. A study using cellular phone data in 10 major United States cities determined that a small minority of “super spreader” events linked to bars, restaurants, gyms, hotels, and religious institutions account for a large majority of Covid-19 infections. [5]

[4] <https://www.vox.com/2020/11/15/21564488/covid-19-coronavirus-us-kids-schools-testing-education-remote>

[5] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7327724/>; <https://www.nature.com/articles/s41586-020-2923-3>

School Opening and Reopening

- As of October 19, 24 of the nation’s 50 largest systems have resumed in-person classes for large groups of students, and 11 others planned to in the coming weeks. Four more have opened, or plan to open, for small groups. [1]
- As of November 3rd, a survey of school system calendars showed that more than 60% of U.S. K-12 public school students will be attending schools that offer in-person learning in either full-time or hybrid models. [2]
- Nationwide, a reported 85% percent of schools had at least some in-person instruction as of November 22. [3]
- The percent of schools offering only remote instruction has more than cut in half since the start of the school year. [3]



[1] https://www.washingtonpost.com/education/school-districts-reopening-coronavirus/2020/10/19/3791c952-0ffb-11eb-8074-0e943a91bf08_story.html

[2] <https://www.npr.org/sections/coronavirus-live-updates/2020/10/22/926757172/a-rising-number-of-u-s-children-have-the-option-of-in-person-school>

[3] Source: Covid-19 School Response Dashboard

School Opening and Reopening

- As of October 5, schools in four states are ordered open by the governor or other statewide mandate: Iowa, Texas, Arkansas, and Florida. Schools in eight states are ordered closed or partially closed: Oregon, California, Hawaii, New Mexico, West Virginia, North Carolina, Delaware, and Washington DC. (In the partial closure states, there are state-mandated metrics for re-opening.) In the remaining states, schools may be open, closed, or a combination by local determination. ^[1]
- On November 30, Rhode Island closed bars, gyms, and other retail but not public schools. ^[2]
- After initially closing to all students, New York City schools reopened December 7 for elementary students and students with disabilities. Positive Covid-19 test rates for staff and students were less than one-half percent. ^[3]
- In November, Germany closed bars, restaurants, theaters, and gyms but schools remained open with strict health protocols in place (masks, student pods, etc.). France, Italy, the United Kingdom, and the Czech Republic are undertaking similar measures. ^[4]

[1] <https://www.cnn.com/interactive/2020/health/coronavirus-schools-reopening/>

[2] <https://www.washingtonpost.com/health/2020/11/28/covid-schools-open-rhode-island/>

[3] [1] <https://www.washingtonpost.com/education/2020/11/29/nyc-schools-reopening/>

[4] <https://www.npr.org/2020/11/13/934153674/lessons-from-europe-where-cases-are-rising-but-schools-are-open>; https://www.washingtonpost.com/world/europe/europe-schools-covid-open/2020/12/01/4480a5c8-2e61-11eb-9dd6-2d0179981719_story.html

Impact of Virtual School on Student Learning

While widespread data is scarce, available information shows the pandemic has a large and uneven impact on student learning.

Washington DC: After virtual learning in the spring, the percent of kindergartners who met early literacy targets this fall dropped by 11 percentage points compared to last year. First-graders experienced a drop of 12 percentage points, and second-graders saw a decline of seven percentage points. [1]

Fairfax County, VA: After a fall of virtual learning, there was an 83 percent increase in “F” grades, including a 111 percent increase for students with disabilities and a 106 percent increase for English learner students. [2]

Montgomery County: Failing grades for the first term have increased dramatically, especially for vulnerable and non-White or Asian students. For example, nearly 45 percent English learner students failed ninth-grade math; only 8 percent of those same students failed last year. The failure rate for students with disabilities in ninth-grade English was 32 percent; the rate for those same students last year was 6 percent. [1]

Modeling from McKinsey determined that if in-class instruction does not resume until January 2021), students could lose three to four months of learning if they receive average remote instruction, seven to 11 months with lower quality remote instruction, and 12 to 14 months if they do not receive any instruction at all. [3]

[1] https://www.washingtonpost.com/local/education/data-indicate-worsening-early-literacy-progress-and-widening-achievement-gap-among-district-students/2020/10/30/bebe2914-1a25-11eb-82db-60b15c874105_story.html

[2] [https://go.boarddocs.com/vsba/fairfax/Board.nsf/files/BVJV847F7247/\\$file/Q1%20Marks%20Rpt%20-%20v6%20lzh.pdf](https://go.boarddocs.com/vsba/fairfax/Board.nsf/files/BVJV847F7247/$file/Q1%20Marks%20Rpt%20-%20v6%20lzh.pdf)

[3] <https://www.mckinsey.com/~media/McKinsey/Industries/Public%20and%20Social%20Sector/Our%20Insights/COVID-19%20and%20student%20learning%20in%20the%20United%20States%20The%20hurt%20could%20last%20a%20lifetime/COVID-19-and-student-learning-in-the-United-States-FINAL.pdf>

