

### Where, and how, are schools reopening in the United States?

This report provides a high-level overview of shifts in school closures policies in 50 US states Washington D.C., and the Virgin Islands using data from the Oxford COVID-19 Government Response Tracker. It will be updated every two weeks to track trends in Fall 2020.

Indicator	C1 - School Closures
Country	United States
Date Range	August 1 to September 1
Reported by	Tetsekela Anyiam-Osigwe, Anna Bruvere, Laura Chamberlain, Laura Hallas, Thomas Hale, Zoha Imran, Mareeha Kamran, Jake Lerner, Saptarshi Majumdar, Mariam Raheem, Anthony Sudarmawan, Anna Welsh

### Executive summary

As the US emerges as an epidemiological and political focal point of the Covid-19 pandemic, the beginning of K-12 and university school years in August marks an important next stage in US Covid-19 policy. This report summarizes OxCGRT data gathered on US states, DC, and the US Virgin Islands to assess trends in school reopenings through August. Key findings include:

- School reopenings varied significantly between states and regions, contrasting with initial, coordinated March closures.
- 39 states reduced school-related containment policies in August, with the most extensive reopenings in Southern (16) and Western states (9).
- Targeted closures at all levels (3T) were the most common policy on August 1, and targeted closures at some levels (2T) the most common on August 31.
- August reopenings concentrated in the South and West, where COVID-19 cases remain high. The first 20 states to reopen in August (between August 1 and August 22) accounted for less than half the US population (45%) but more than half of new cases in August (55%).

These preliminary findings are highly relevant as September and October school reopenings continue in the US and around the world. This policy note will be updated regularly as school reopenings (and potential new closures) evolve.







### A decentralized education system

US education is highly decentralized, with control resting primarily with states and local districts [1]. Schools are stratified by K-12 levels covering ages 5-18, and higher education. Schools are further divided by public (tax-funded) or private (tuition-funded) status, with students at all levels more commonly attending public institutions [2]. Universities are more autonomous than K-12 school districts, though public universities especially are subject to state oversight [3]. The US school year generally begins in August/September with a spring break in March and summer break beginning May/June. Summer courses do take place, though only a small portion of students attend.

### States acted similarly during the initial Covid-19 response

March school closures were quick and coordinated. California first recommended school closures on March 7th, and by March 15th, officials in 19 states had at least encouraged schools to close, with the most restrictive level (closures at all levels) first occurring in New Mexico and West Virginia. New York City suburb New Rochelle was also subject to early targeted closures. Almost all states closed some or all levels by March 22, with lowa being the last to do so on April 2. Universities were less likely than K-12 schools to be included in state-ordered closures, and more likely to close voluntarily or as an indirect effect of other Covid-related policies (ex: gathering bans).



Figure 2. March 15, March 22, and March 31 OxCGRT school closure policy levels

### Ongoing policy and health debates

August reopenings saw the intensification of debates relating to school reopenings. Teachers' unions have opposed K-12 reopening out of safety concerns (particularly in states with rising infection rates), concerns sharpened by the teacher cases of Covid-19 in clusters [4]. Concerns surrounding lack of internet coverage in rural and low-income areas and the impact of school closures on childcare options for working parents have not been resolved, especially as online instruction requires significant parental supervision [5]. Still other parents—echoed by psychologists and pediatricians—have argued that virtual/remote schooling isolates students and affects their psychosocial development [4]. Universities have dealt with an equally pressing set of challenges as students continue to demand reduced tuition for online courses and struggle to contain off-campus activities.



Epidemiological questions also remain, specifically surrounding children's likelihood of Covid-19 infection and transmission [6]. While Covid-19-related Multisystem Inflammatory Syndrome emerged as a child-specific Covid-19 concern, CDC and KFF analyses indicate that children are more likely to be asymptomatic and to have less severe disease than adults, but evidence from other countries was mixed [7, 8]. The US was the first country to reopen schools with such high community spread, with high-profile K-12 clusters enforcing that children and teachers may become ill and influence school-level outbreaks.

### August school reopenings

General easing of school closures, but with rising variation across states

From August 1 to 31, 39 states showed a reduction in OxCGRT's 4-point ordinal school closure indicator (C1), with 30 experiencing an ordinal reduction of one or more (see appendix for further explanation of calculations). Within the 52 subnational jurisdictions, the most commonly coded level at the beginning of the month (29 jurisdictions) was that of targeted, required closures at all levels. By August 31 the most common policy was targeted, required closures at some levels (21 jurisdictions). The most common movement for an individual state was from the former to the latter, with university reopenings driving this change. on August 31, three states (Florida, Montana, and Arkansas) had reached the lowest level of stringency, with no state restrictions on school openings.

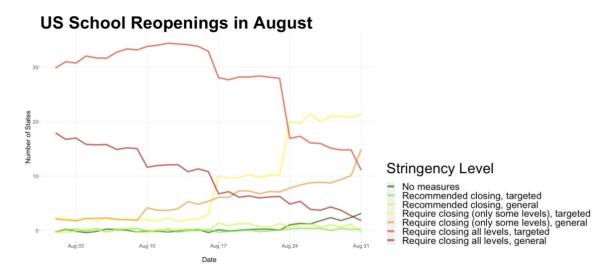


Figure 3. OxCGRT school closure policy levels over time

In contrast to previous months, in August 2020, states' school policies began to vary significantly, with 'targeted' policies especially varying in their application across time and between jurisdictions. For example, a targeted, required closure at all levels was common by July 1 as 23 states moved below the maximum stringency level to allow for targeted summer school



reopenings (Midwestern and Western states led this shift). Nonetheless, most universities and districts chose to remain closed to in-person instruction until August, at which point more targeted reopenings took place—even as the ordinal code remained unchanged. Similarly, states with 'targeted' policies vary in how widespread those closures are. The data do not capture differences between mostly-online and fully-in person reopenings.

### August reopenings concentrated in the South and West

August reopenings were concentrated in the Southern US census region (16 of 39 state reopenings), followed by the West, Midwest, and Northeast (9, 8, and 6 states reopening, respectively). Regional variations were particularly stark in the first half of the month, when reopenings were dominated by Southern and Western states—partly due to usual differences in school year starting dates [9]. Notably, the 20 states that experienced school stringency reductions from August 1 to August 22 accounted for less than half the US population (45%) but more than half of August's new cases (55%).

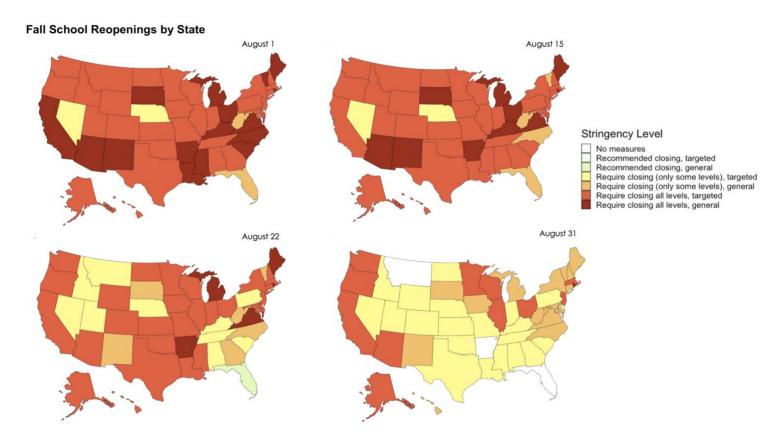


Figure 4. August 1, August 15, August 22, and and August 31 OxCGRT school closure policy levels





#### More state control of K-12 than of universities

University closures and reopenings were more autonomous and occurred earlier than K-12 districts' openings. Almost all states experienced some university reopenings in August, and by the end of the month there were no active state policies specifically requiring university closures. K-12 school reopenings displayed more state-level planning, with states commonly offering reopening guidance such as phased reopening plans or public health scenarios in which different learning models are most appropriate (including online-only). Other states, such as Idaho, required districts to gain local health officials' approval on public health precautions such as social distancing and sanitation requirements. While most states left final reopening decisions to localities, some states did have stricter, centralized requirements, described below.

Reopening framework	Description	Examples
Mandatory state order	States have ordered that inperson instruction for districts is not allowed before a certain date or pending further orders  OR states have ordered that inperson instruction for districts is required or otherwise compelled reopenings.	New Mexico The governor has prohibited in-person classes through September 8 [10].  Elorida After a court battle, a state order requiring in-person reopenings stands as of Aug. 31 [11].  Iexas The governor stated local officials cannot prevent schools from reopening, with the Texas Attorney General previously stating that districts who do not reopen within 8 weeks (and do not receive a waiver) may lose funding [12, 13].
State approvals required State governments provide centralized mandatory criteria for reopenings, or schools must otherwise apply to the state to gain reopening approval.		California Districts can reopen only once their counties meet state public health metrics and remain off of a central 'watchlist.'  Rhode Island Districts can reopen only once their counties meet state public health metrics [14].

Table 1. K-12 reopening governance models

Reopening adaptations: masks, testing, distancing, staggering and more

While OxCGRT does not systematically track school-specific policies, data collectors recorded a variety of adaptations used across K-12 and university reopenings. These adaptations range from simple face coverings and enhanced sanitation to the creation of contact-tracing apps to alteration of typical school year schedules. Table 2 lists commonly recorded policies. School-level public health measures often aim to supplement existing state or local policies. For example, Austin is currently subject to a mask mandate, with the University of Texas at Austin additionally including on-campus mask requirements in its reopening guidance.





Public Health Measures	Academic Year Scheduling	Online/In-Person Choice	
<ul> <li>Mandatory face         coverings</li> <li>Social distancing         measures (staggered         schedules, desk spacing,         cohorts)</li> <li>Symptom screenings</li> </ul>	<ul> <li>Moving up school start dates to allow for phased reopening</li> <li>Delay of in-person school start dates (though states may limit deferrals)</li> </ul>	<ul> <li>Farents offered choice of in-person or online models</li> </ul>	
<ul> <li>(temperature checks, visual checks)</li> <li>Enhanced sanitation</li> <li>Contact tracing (checkin apps, sign-in sheets)</li> </ul>	University  Moving up school start dates to allow for an end of inperson teaching after Thanksgiving, at which point students will remain home through winter break.  Delay of school start dates (or starting online)	<ul> <li>University</li> <li>Option to take all online classes</li> <li>Enhanced/expanded online course options % of online offerings varies by university)</li> </ul>	

Table 2. Common reopening adaptations

#### Additional K-12 Adaptations

At-risk and vulnerable students were a particular concern of K-12 school reopening policies. Inperson learning was commonly first opened to special needs students, even where the rest of the district would be learning primarily online. School districts and states also included provisions for technology access, such as California and Kentucky's plans to provide internet hotspots and procure and distribute iPads and Chromebooks, respectively.

#### Additional University Adaptations

Universities' unique position as residential institutions added additional considerations to reopening policies. In addition to previously-described measures, universities allowed for single-occupancy dorm rooms, staggered meal timings in cafeterias, closed shared facilities (water fountains, gyms, etc), and most non-residential buildings off-limits. Testing and contact tracing protocols are common among universities, including surveillance and pre-emptive testing, mandatory questionnaires, as well as dedicating dorm space for quarantines. These measures also hold importance to the college towns and countries surrounding universities with low non-student populations and Covid-19 case counts dependent on student activities outside of campus.



### Notable reopening examples

Nationwide, a number of school districts and universities have started in-person classes for the new academic year, with several gaining significant media interest following subsequent outbreaks.

- Paulding, Georgia (K-12) | Classes at Paulding County School District in Dallas, Georgia resumed on August 3 whereby a student's photo of overcrowded hallways of students without face masks made national news. At the time, Georgia's Department of Public Health did not closely monitor schools for adhering to reopening criteria [15]. More than 30 students and teachers tested positive [16].
- University of North Carolina Chapel Hill (Higher Ed) | UNC-Chapel Hill began on August 10 with in-person instruction. The university, however, moved all undergraduate courses online just one week into the term after nearly 650 COVID-19 cases were reported [17]. The majority of UNC-Chapel Hill students were sent home and were required to move out of oncampus housing.
- University of Alabama (Higher Ed) | The University of Alabama began on August 19 with most classes modelled as face-to-face instruction. The university reported a significant number of COVID-19 cases one week into the term [18]. No public announcements regarding campus closures or a transition to all virtual classes at UA have been issued thus far. In response to concerns over outbreaks of COVID-19, UA introduced interim policies on August 21 including a moratorium on on-campus activities, access restrictions to buildings, and prohibiting gatherings at Greek houses, off-campus housing, and residential community facilities.
- **SUNY Oneonta** | After opening on August 24, SUNY Oneonta became the first State University of New York system school to close amid a Covid-19 outbreak when five students organized parties in the college town, leading to 500 cases—13% of the campus' students 19, 20]. Students were sent home and the campus was closed for the remainder of the semester.
- **NEA Case Tracker** | A school reopening <u>tracker</u> run by the National Education Association (NEA) allows educators to self-report data on confirmed cases, in K-12 (and now university) school environments. As of August 23, the tracker reported 4282 cases and 75 deaths across 1081 K-12 schools, with Florida, Texas, and Georgia were reported as having the most cases [21, 22]. While cases cannot all be assumed to be transmitted in a school environment, the tracker has highlighted the potential for transmission, illness, and death among younger students.





#### Selected state summaries

A summary of reopening policies for selected states is presented below. We focus on:

- The 5 states with highest total case counts in August
- Two states with the highest ratio of cases to population in August
- Two of the most stringent and least stringent states in terms of OxCGRT school closure policies
- New York and Louisiana, for notable community spread early in the US outbreak.

The above categories overlapped among states, resulting in 10 total selected for summary.

State	State context	K-12 openings	University reopenings	CHIı	Cases <sub>2</sub>
Arkansas	One of least stringent states in August school reopenings	Yes, an August 5 order by the state Education Secretary required in- person instruction upon school reopening [11]	Yes, major public universities reopened to at least some inperson instruction (University of Arkansas has a blended model)	49.24, 44.70	61,224
California	Highest total case count, one of most stringent states in August school reopenings	Some, though in-person instruction may only resume if county remains off of state watchlist for 2 weeks [23]	Some, selected campuses reopening with in-person classes though most of California State University system remains remote	65.91, 63.26	712,475
Florida	One of highest total case count, one of least stringent states in August school reopenings	Yes, full-in person learning common following state reopening order, though some major cities' phased reopenings (including Miami-Dade) began online	Yes, major public universities reopened to at least some inperson instruction (University of Miami, Florida State University, University of Florida)	63.26, 48.11	623,471
Georgia	One of highest total case count states, one of highest cases per population ratios in August	Yes, districts make final reopening decisions and have adopted a range of instruction models. Many large Atlanta-area districts began online	Yes, major public universities reopened to at least some inperson instruction (University of Georgia, Georgia Tech, Georgia State University)	57.58, 37.88	270,471
Illinois	One of highest total case count states	Some late-August reopenings, though major districts such as Chicago did not begin in August	Yes, large public universities including University of Illinois system's 3 campuses reopened to at least some in-person instruction	54.55, 51.89	236, 724
Louisiana	Experienced early community spread	Yes, districts make final reopening decisions and have adopted a range of instruction models in line with the state's phased guidance.	Yes, the largest public universities reopened to at least some inperson instruction in August. In mid-July there was a meeting with Trump administration officials in which Louisiana college and university leadership were encouraged to reopen.	56.06, 51.52	148,193

<sup>1</sup> Values as of August 1 and August 31 in OxCGRT database. CHI calculation described in Appendix.

<sup>2</sup> Cases as of August 31 in OxCGRT database as reported by Johns Hopkins University.



Mississippi	One of highest cases per population ratios in August	Yes, districts make final reopening decisions and have adopted a range of instruction models. District plans were required to be submitted to the state, and districts are required to report test results.	Yes, the largest public universities reopened to at least some inperson instruction in August (University of Mississippi, Mississippi State University)	49.24, 45.45	82,950
New York	Experienced early community spread	No, are permitted but K- 12 opening in September (NYC public schools pushed back date to September 21 on September 1) [24]	Yes, though after case surges, Governor Cuomo set a closure threshold of Aug. 27—universities will return to remote learning if more than 100 cases are positive, or if the outbreak is more than 5% of the population [25]	71.72, 69.70	434,756
Rhode Island	One of most stringent states in August school reopenings	Not yet, but reopening approved by governor for all but 2 districts based on public health criteria	Most public universities remained closed to-in person instruction through August	67.42, 75,00	21,949
Texas	One of highest total case count states	Yes, though Austin and Dallas school districts remain online until Sept 8, Houston school district until October.	Yes, most public universities reopened for at least some inperson instruction in August. As tracked by the New York Times, Texas has the most university Covid-19 cases in a single state [26]	54.17, 51.54	632,739

Table 3. Selected state examples of August reopenings with OxCGRT closure and containment index and case values.

School reopenings show further fragmentation of US COVID-19 response

August reopenings have further highlighted the fragmented nature of US school reopenings. State and local policies drove US Covid-19 education policy responses, with federal school closures policies remaining at the level of a recommendation for the duration of the pandemic, with no top-down use of executive authority to close schools or universities.

National guidance has been inconsistent throughout the pandemic—on March 13, the CDC released guidance recommending school closures of eight weeks or more in some cases of community transmission, but when the Center for Disease Control and Prevention (CDC) issued school reopening guidelines in early July, the White House and the Department of Education publicly disagreed, with President Trump threatening to withhold funding for schools that did not reopen—with similar messages repeated later in the summer by Texas and Florida state leadership [27]. The CDC reissued reopening guidelines on July 23, which strongly recommend reopening ahead of the usual school year [7,8]. States' divergent August reopening strategies shows how the spread of school policy responses has continued.



While this review did not find significant association with the extent of August reopenings patterns and governors' political parties, previous OxCGRT analysis has found that on average, Republican-leaning states have not implemented as robust government responses as Democratic-leaning states, and they rolled measures back more quickly [28].





### **Appendix**

#### About OxCGRT

The Oxford COVID-19 Government Response Tracker (OxCGRT) provides a systematic measure across governments and across time to understand how government responses have evolved over the full period of the disease's spread. In addition to covering around 180 countries and Brazilian states and capital cities, as of August 6 OxCGRT includes data for the 50 US states, as well as the District of Columbia and the US Virgin Islands from January 1, 2020 to the present. The project tracks governments' policies and interventions across a standardized series of indicators and creates a suite of composite indices to measure the extent of these responses. Data is collected and updated in real time by a team of over one hundred Oxford students, alumni, staff, as well as external collaborators. More than 50 trained volunteers have contributed to the collection and review of US data.

US state data are presented in OxCGRT outputs in two main modes 1) data with imputed values from the national level to reflect all policies affecting a jurisdiction, and 2) data representing only the state government level and below. The latter, non-imputed OxCGRT data was the focus of this analysis to better highlight differences between US states and territories. This data is continually updated on the OxCGRT USA Covid Policy GitHub. Data collection is ongoing and provisional.

#### About the School Closure indicator

US state data is collected in line with the OxCGRT <u>Codebook</u> to ensure standardization across national and subnational entities. School closures (indicator C1) are coded across four ordinal levels with the option of a targeted/general binary flag. A general flag refers to an additional half-point value in calculations (3T=3, 3G=3.5) For the purposes of this brief, listed below are each code and example scenarios warranting their application in US subnational data collection.

- **3G**: State order closing K-12 and university levels; state order + indirect university closures (ex. gatherings)
- **3T**: State order specifically allowing reopening of school levels (even if not much evidence of reopenings happening); voluntary university closures + voluntary K-12 district closures.
- **2G**: University reopenings widespread but state order preventing K-12 reopenings; university reopenings but very confident all K-12 are closed
- 2T: University reopenings widespread + K-12 reopenings
- **1G:** Widespread reopenings, but significant public health restrictions imposed by local/state levels that inhibit reopenings
- **1T**: Widespread reopenings, but significant public health restrictions imposed by local/state levels that inhibit reopenings
- **0**: Widespread in-person teaching across all levels

For consistency, volunteers' coding for the OxCGRT C1 indicator focuses on public school districts and public four-year residential university systems as a baseline, though additional school types may be discussed in coding notes. This choice was made because US students are more likely to



attend public than private educational institutions, because state oversight extends to these educational levels. Public four-year universities are particularly relevant to reflecting impacts of less stringent US school closure policies, as the Chronicle of Higher Education reports that these institutions are more likely to allow in-person instruction [29]

#### About the Containment and Health Index

OxCGRT's containment and health index (CHI), shows how many, and how forceful the measures to contain the virus and protect citizen health are. This combines 'lockdown' restrictions (including school closures), with health measures such as testing policy and contact tracing.

### August reopening summary tables

Level	Start August	End August
No policy	0	3
1T	0	0
1G	0	0
2T	2	21
2G	3	16
3T	29	10
3G	18	2
Total	52	52



### References

- 1. Education in the United States of America. WENRhttps://wenr.wes.org/2018/06/education-in-the-united-states-of-america (2019, accessed September 6, 2020).
- 2. Public School Choice Programs. National Center for Education Statistics (NCES) Home Page, a part of the U.S. Department of Educationhttps://nces.ed.gov/fastfacts/display.asp?id=6#:~:text=Also in 2016, some 20, percent attended a private school. (2019, accessed September 6, 2020).
- 3. United States Network for Education Information (USNEI). Organization of U.S. Education: State Role II Tertiary Education. 2008. Available from: <a href="https://www2.ed.gov/about/offices/list/ous/international/usnei/us/edlite-org-us.html">https://www2.ed.gov/about/offices/list/ous/international/usnei/us/edlite-org-us.html</a>. [Accessed 30th August 2020].
- 4. North A. The debate over reopening America's K-12 schools, explained. Voxhttps://www.vox.com/2020/7/10/21310099/schools-reopen-open-reopening-trump-public-covid (2020, accessed September 6, 2020).
- 5. Joe Heim SC. Working parents face tough decisions as schools reopen. The Washington Posthttps://www.washingtonpost.com/education/for-many-parents-the-return-to-work-depends-on-how-schools-reopen/2020/08/17/ff1a2682-de81-11ea-8051-d5f887d73381\_story.html (2020, accessed September 6, 2020).
- 6. Josh M, Jennifer K. Published: Jul 29 2020, 2020 J. What Do We Know About Children and Coronavirus Transmission? KFFhttps://www.kff.org/coronavirus-covid-19/issue-brief/what-do-we-know-about-children-and-coronavirus-transmission/ (2020, accessed September 6, 2020).
- 7. Help Stop the Spread of COVID-19 in Children. Centers for Disease Control and Preventionhttps://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/children/protect-children.html#:~:text=Based on available evidence, children,the known cases to date. (accessed September 6, 2020).
- 8. Preparing K-12 School Administrators for a Safe Return to School in Fall 2020. Centers for Disease Control and Prevention https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/prepare-safe-return.html#impact (accessed September 6, 2020).
- 9. DeSilver D. Depending on where in the U.S. you live, "back to school" means anytime from late July to after Labor Day. Pew Research Centerhttps://www.pewresearch.org/fact-tank/2019/08/14/back-to-school-dates-u-s/ (2020, accessed September 6, 2020).
- 10. State updates school reopening guidance, hits pause on 'hybrid model' for start of school year. Welcome to NewMexico.govhttps://www.newmexico.gov/2020/07/24/state-updates-school-reopening-guidance-hits-pause-on-hybrid-model-for-start-of-school-year/ (2020, accessed September 6, 2020).
- 11. Map: Where schools are reopening in the US. CNN https://www.cnn.com/interactive/2020/health/coronavirus-schools-reopening/ (accessed September 6, 2020).
- 12. Pollock C, Swaby A. With school reopening, Gov. Greg Abbott sets off another debate over whether local or state officials are in control. The Texas Tribunehttps://www.texastribune.org/2020/08/07/texas-schools-reopening-coronavirus/ (2020, accessed September 6, 2020).
- 13. Swaby A. Texas attorney general says local health authorities cannot "indiscriminately" shut down schools. The Texas Tribunehttps://www.texastribune.org/2020/07/28/texas-schools-ken-paxton/ (2020, accessed September 6, 2020).
- Metrics for Reopening Our Schools Safely. Back 2 School Rhode Island https://www.back2schoolri.com/reopening-metrics/ (2020, accessed September 6, 2020).
- 15. Nieto GM. Suspension Lifted of Georgia Student Who Posted Photos of Crowded Hall. The New York Timeshttps://www.nytimes.com/2020/08/06/us/north-paulding-high-school-coronavirus-georgia.html (2020, accessed September 6, 2020).
- 16. Velasquez A. 35 students, teachers test positive for COVID-19 at North Paulding HS. CBS46 News Atlantahttps://www.cbs46.com/news/35-students-teachers-test-positive-for-covid-19-at-north-paulding-hs/article\_b13360f4-dcd9-11ea-b1fb-d3fd7502051e.html (2020, accessed September 6, 2020).
- 17. Murphy, K. More than 200 new COVID-19 cases among students reported at UNC Chapel Hill. The News & Observer: Coronavirus. (2020).



- 18. Hawkins, D. Coronavirus update: Infections rise to more than 1,000 on University of Alabama campus. Washington Post: National. 2020 August 30.
- 19. Rosa A. A Few Students Threw Parties. Now an Entire SUNY Campus Is Shut Down. The New York Timeshttps://www.nytimes.com/2020/09/03/nyregion/new-york-suny-oneonta-coronavirus.html (2020, accessed September 6, 2020).
- 20. Editor RCM. SUNY Oneonta closes campus for semester. The Daily Starhttps://www.thedailystar.com/news/local\_news/suny-oneonta-closes-campus-for-semester/article\_67342ec1-d617-5e69-b9da-64848d31f274.html (2020, accessed September 6, 2020).
- 21. Popperl S, Hamby B, Inskeep S. How Many Coronavirus Cases Are Happening In Schools? This Tracker Keeps Count. NPRhttps://www.npr.org/sections/health-shots/2020/08/28/906263926/how-many-coronavirus-cases-are-happening-in-schools-this-tracker-keeps-count (2020, accessed September 6, 2020).
- 22. NEA School and Campus Covid-19 Reporting Sitte https://app.smartsheet.com/b/publish?EQBCT=00a2d3fbe4184e75b06f392fc66dca13 (accessed September 6, 2020).
- 23. Lambert D. Governor's order means most California school campuses won't reopen at the beginning of school year. EdSourcehttps://edsource.org/2020/governors-order-means-most-california-school-campuses-wont-reopen-at-the-beginning-of-school-year/636590 (2020, accessed September 6, 2020).
- 24. Shapiro E, Rubinstein D, Fitzsimmons EG. New York City Delays Start of School to Ready for In-Person Classes. The New York Timeshttps://www.nytimes.com/2020/09/01/nyregion/schools-open-coronavirus-nyc.html (2020, accessed September 6, 2020).
- 25. Millman J. Cuomo Tweaks Standards for Re-Closing NY Colleges, Hints at NYC Indoor Dining Return. NBC New Yorkhttps://www.nbcnewyork.com/news/local/alarming-indefensible-cuomo-ny-health-chief-blast-cdc-overguidelines-change/2588146/ (2020, accessed September 6, 2020).
- 26. The New York Times. Tracking Coronavirus Cases at U.S. Colleges and Universities. The New York Timeshttps://www.nytimes.com/interactive/2020/us/covid-college-cases-tracker.html (2020, accessed September 6, 2020).
- 27. Sprunt B, Turner C. White House Stumbles Over How Best To Reopen Schools, As Trump Blasts CDC Guidance. NPRhttps://www.npr.org/2020/07/08/888898194/trump-blasts-expensive-cdc-guidelines-for-reopening-schools (2020, accessed September 6, 2020).
- 28. Hale T, Atav T, Hallas L, Kira B, Phillips T, Petherick A, Pott A. "Variation in US states' responses to COVID-19." Blavatnik School of Government Working Paper. Available: <a href="https://www.bsg.ox.ac.uk/covidtracker">www.bsg.ox.ac.uk/covidtracker</a>\
- 29. Staff C. Heres Our List of Colleges Reopening Models. CHEhttps://www.chronicle.com/article/heres-a-list-of-colleges-plans-for-reopening-in-the-fall/?cid=gen\_sign\_in (2020, accessed September 6, 2020).