

**IN THE UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION**

L.E., et al.,

Plaintiffs,

v.

Civil Action No. 1:21-cv-04076-TCB

CHRIS RAGSDALE, et al.,

Defendants.

**DEFENDANTS’ RESPONSE TO PLAINTIFFS’ MOTION FOR TRO AND  
PRELIMINARY INJUNCTION**

Defendants<sup>1</sup> file this Response in Opposition to Plaintiffs’ Motion for a Temporary Restraining Order and/or Preliminary Injunction [Doc. 2-1].

**I. INTRODUCTION**

This Court should reject Plaintiffs’ invitation to weigh in on matters of local politics by second-guessing the wisdom of CCSD’s COVID-19 mask policy. Georgia law defers to local school districts in “develop[ing] policies, regulations, and

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<sup>1</sup> In addition to Cobb County School District (“CCSD” or “District”), Plaintiffs have sued Superintendent Chris Ragsdale and all members of the Cobb County Board of Education in their official capacities. Claims against government officials in their official capacities are in reality claims against the government entity they serve. *City of Atlanta v. Mitcham*, 296 Ga. 576, 583 (2015); *Everson v. DeKalb Cnty. Sch. Dist.*, 344 Ga. App. 665, 666 (2018).

procedures related to the impact of infectious diseases on school system management and operations.” Ga. Comp. R. & Regs. § 160-1-3-.03(2)(a). Though reasonable minds might disagree over whether schools should mandate masks, school districts have exclusive domain over these operational decisions. CCSD has made its safety decisions based on verified public health data, scientific guidance, and consideration of the needs of all students. It has chosen what it believes is right for Cobb County. Plaintiffs’ request for a TRO and preliminary injunction is just the latest attempt by one side of the political debate to usurp a school district’s operational autonomy over COVID-19 policy.

Under Federal Rule of Civil Procedure 65, Plaintiffs have a high burden to demonstrate entitlement to such extraordinary and dramatic relief. Plaintiffs miss the mark completely. They cannot demonstrate a substantial likelihood of prevailing on their disability discrimination claims because the challenged mask policy does not treat them any differently than their non-disabled peers, and CCSD has reasonably accommodated their disabilities with its numerous other pandemic safety measures, robust virtual offerings and individualized supports. They cannot show irreparable harm because they are simply complaining about not receiving their *preferred* educational services—not a deprivation of access to education altogether. And their requested relief would unduly burden District-wide operations and disserve the

public interest by trying to address individualized disability issues with a one-size-fits-all approach.

Given how politically charged mask policies have become, it is impossible for a school district to please everyone. When CCSD mandated masks, it was sued. And when it made masks optional, Plaintiffs sued. Fortunately for this Court, it need not referee these types of disputes, because, regardless of whether CCSD requires masks, that decision is CCSD's alone to make. The majority of courts that have heard legal challenges to school mask policies have deferred to school district discretion on how best to protect the health and safety of students and employees.<sup>2</sup> This Court should do the same here.

## **II. STATEMENT OF FACTS**

### **A. Plaintiffs' claims and the injunctive relief sought**

Plaintiffs filed their Complaint on behalf of four minor children, L.E., B.B., A.Z., and C.S. [Doc. 1 ¶¶ 18-21.] Notably, because Plaintiffs have not brought this as a class action, the only students at issue in this Complaint are the four named

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<sup>2</sup> See, e.g., *Hayes v. DeSantis*, No. 1:21-CV-22863-KMM, 2021 WL 4236698 (2021) (denying TRO motion requesting court-ordered mask mandate in schools); *Disability Rts. S.C. v. McMaster*, No. CIV 3:21-02728-MGL, 2021 WL 4444841, \*11 (D. S.C. Sept. 28, 2021) (“allowing school districts, at their discretion” to decide appropriate mask policy); *ARC of Iowa v. Reynolds*, No. 4:21-CV-00264, 2021 WL 4166728, at \*12 (S.D. Iowa Sept. 13, 2021) (same).

Plaintiffs. Thus, the only issue before this Court is the impact the District’s mask policy has on these four individuals alone.

Plaintiffs allege the District violated their rights under Title II of the Americans with Disabilities Act (the “ADA”) and Section 504 of the Rehabilitation Act of 1973 when it implemented a mask-optional policy for the 2021-2022 school year and did not follow all CDC guidelines. [*Id.* at ¶¶ 1, 30, 38.] Plaintiffs ask this Court to “Order Defendants to develop and implement policies, practices, procedures, and protocols for a multilayered COVID-19 mitigation strategy that follows existing CDC guidelines for COVID-19 Prevention in K-12 Schools...and to maintain consistency with CDC guidelines in the event of subsequent changes.” [Doc. 1 at 45-46.]

## **B. CCSD’s District-wide COVID-19 mitigation measures**

The District has developed robust COVID-19 response and intervention strategies based on guidance from public health agencies. (See Floresta Decl. ¶ 5 attached here to as Exhibit 1.) The District currently implements most of the recommendations listed in CDC Guidance. A non-exhaustive sampling of the District’s current safety measures includes: strongly recommending masks and making them available for those who do not have one; strict disinfection procedures; replacing over 27,000 air filters regularly and using ionization devices to clean air



in ventilation systems; enhanced daily cleaning procedures; contact tracing in combination with quarantine and isolation; vaccination events for staff; vaccination education for students and families;<sup>3</sup> protective partitions in select locations; physical distancing where possible including signs and guides to promote same; hand sanitizing stations; encouraging staff and students to stay home when sick and get tested; protocols for responding to staff or students that show symptoms; promotion of handwashing and respiratory etiquette; social, emotional and mental health support; education, dissemination, and reinforcement of safety measures; in addition to a long list of other efforts. (*Id.* ¶ 16-32.) A complete description of the District’s current COVID-19 safety measures is included in the declaration of John Floresta and the District’s 2021-2022 Reopening Plan. (Floresta, Decl. at Ex. 1-B.)

### **C. GDPH and District data supports the District’s decisions.**

The District uses data-driven decision making to guide its multi-layered approach of prevention strategies, as recommended by the CDC and GDPH. (Floresta, Decl. ¶¶ 29-31, 34, 53.) The data the District relies upon is collected by

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<sup>3</sup> Plaintiffs acknowledge that “Vaccines against COVID-19 are now available and are both highly efficacious and effective against infection and symptoms.” [Doc. 1 ¶ 32.] Despite three of the four Plaintiffs being age-eligible to receive the COVID-19 vaccine, only one has been fully vaccinated. (Coleman Decl. ¶ 5).

the GDPH and distributed weekly in the School Surveillance Reports.<sup>4</sup> (*Id.* ¶¶ 34-37.) The GDPH School Surveillance Reports are the most reliable source of data available to Georgia school districts on the prevalence and transmission of COVID-19 for school-aged children ages 5-17. (*Id.* ¶ 36.)<sup>5</sup>

While Plaintiffs argue that the District's 2021-2022 Reopening Plan has been ineffective to date, the GDPH and District data indicate that throughout the pandemic, the total incidence rate of infection in all District schools has oscillated between 0 and 1% regardless of masking requirements. (*Id.* ¶ 44.) The District's current incidence rate is 0.2%, the lowest it has been since school began in August. (*Id.* ¶ 42.) The District's most recent data, released on October 8, 2021, shows a 73% drop in incidence rate for school-aged children in Cobb County from the peak this school year (*Id.* ¶ 40) and a 78% decrease in District-reported cases since the peak

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<sup>4</sup> The GDPH publishes the School Surveillance Reports on its website, generally on Fridays, which are available at: <https://dph.georgia.gov/school-aged-covid-19-surveillance-data>.

<sup>5</sup> Notably, the information contained in the Cobb County numbers is inclusive of not only 5-17 year-olds enrolled in the CCSD, but also all 5-17 year-olds located within Cobb County, including those who attend Marietta City Schools, independent schools, home schools, and those who do not attend school at all. (*Id.* ¶ 35.) That means the 14-day-case-rates per 100,000 included in District's data are often higher than the cases that occurred among District students, but it is still the best measure the District has for monitoring the rate of infection among school-aged children located in Cobb County. (*Id.* ¶ 36.)

this school year. (*Id.* ¶ 43.) Put simply, COVID-19 incidence rates are currently on a downward trend and the best they have been in a long time.

In fact, Cobb County school-aged children had lower rates of infection than two of its mask-mandated neighboring counties during the September peak, and it often had the same or lower rates of infection than the five neighboring mask-mandated counties since the start of the 2021-2022 school year. (*Id.* ¶ 41.) Cobb County's school-aged infection rate has been equal to or below the state-wide rate through this entire school year. (*Id.*)

For Cobb County, local data simply does not support the conclusion that masks have made an appreciable difference in CCSD schools. (*Id.*) Whether this is true for all districts across the state or country is irrelevant, the District does not need to look to other patterns of community transmission to guide its local decision making.

The District's position is supported by Dr. Jay Bhattacharya, MD, PhD, and Professor of Health Policy at Stanford University School of Medicine. (See attached Dr. Jay Bhattacharya's Declaration, attached hereto as Exhibit 4.) Dr. Bhattacharya has published over 154 scholarly articles in peer-reviewed journals in the fields of medicine, economics, health policy, epidemiology, statistics, law, and public health among others. To date, he has published six peer-reviewed publications on COVID,

including some of the most highly cited pieces during the pandemic. (Bhattacharya Decl. ¶¶ 3, 6, Ex. 4-A.) Dr. Bhattacharya’s research concludes “there are no high-quality randomized evaluations that establish that masks on children are particularly effective in slowing disease spread.” (*Id.* at Ex. 4-A, Pg. 3.) Rather, “[t]he highest quality observational evidence from the U.S. suggests no correlation between mandating that children wear masks and disease outcomes.” (*Id.*)

“The effectiveness of masks differ based on the type of mask (cloth vs. surgical vs. N95), protocols for replacing contaminated masks, how well trained the mask-wearer is in maintaining good mask fit, and a large number of other factors, including other non-pharmaceutical interventions such as hand washing, social distancing, and ventilation upgrades.” (*Id.*, Pg. 26.) “The best guide to the effectiveness of masks – the highest quality evidence – are randomized controlled trials that reduce bias from many sources on the effectiveness estimates.” (*Id.*) There is to date only a single peer-reviewed randomized study published on the effectiveness of masks in self-protection against COVID-19. The study, which did not enroll children, found no statistically significant difference between the treatment group and control group regarding the probability of infection.” (*Id.* citing study.)

After summarizing and citing numerous research studies, Dr. Bhattacharya concludes that “[t]he overwhelming bulk of scientific studies that have examined the topic – including the best studies, which take pains to distinguish correlation from causation – find that children play a limited role in spreading COVID-19 infection to adults. It is striking that this conclusion holds even in situations where children were not required to wear masks.” (*Id.*, Pg. 25.)

Even the study cited by Plaintiffs comparing school masking policies in two Arizona counties is flawed. “Besides the obvious problem with the study – that it does not adopt a randomized design and should thus not be interpreted as providing causal evidence of the efficacy of mask mandates – there is another important problem with it. The study presents data on “outbreaks” rather than cases, hospitalizations or deaths among children or staff members. An outbreak is defined by two or more COVID cases at a school within a 14 day period. From the data presented in the paper, it is not possible to rule out the possibility that schools with mask mandates actually had more cases than schools without mask mandates.” (*Id.*, Pg. 32.)

Many of Plaintiffs’ other claims are not supported by the GDPH School Surveillance Data Reports. Plaintiffs attempt to scare this Court into action by asserting there have been more than 1,150 COVID-19 deaths in Cobb County. [Doc.

1 ¶ 31.] However, the GDPH has reported no school-aged (5-17) deaths in Cobb County since the start of the pandemic. (Floresta Decl. ¶ 46.) Cobb County school-aged children have made up only 2% of COVID-19 hospitalizations. (*Id.*) Further, “[t]he CDC estimates that compared to adults 40 to 49 years of age, children 5 to 17 years of age have 160 times lower risk of death from COVID-19 and 27 times lower risk of hospitalization from COVID-19.” (Bhattacharya Decl. at Ex. 4-B Pg. 13.) The District has provided credible expert testimony based on respected scientific research that severe health complications, long-lasting symptoms, and MIS-C are all rare among children. (*Id.* at Ex. 4-B Pg. 19.) Though cases did increase from the Delta variant across the state of Georgia during the month of August, those numbers are now steadily decreasing in Cobb County, and have been since the September 2<sup>nd</sup> GDPH Report. (*Id.* ¶41.) The current 14-day-case rate in Cobb County is 390/100,000 or 3.9/1,000, which is significantly lower than the numbers Plaintiffs cite to from the peak in early-to-mid September. (*Id.*)

While the current 14-day-case rate in Cobb County is 390/100,000 as of October 8, 2021 as opposed to 35/100,000 in October 8, 2020, the scenarios are not comparable. In fall of 2020, most workplaces were still remote, and schools were only just beginning to phase in face-to-face learning. The case count would naturally be much lower in those circumstances. Many of the state-wide measures enacted

during the beginning months of the pandemic that were in place then have since been lifted also, making Plaintiffs' attempt to pin the difference in Cobb County's numbers from then to now as resulting from the lack of a universal mask mandate a misleading and inapposite conclusion.

To illustrate this point further, according to GDPH, the peak of the pandemic occurred in January 2021 for Cobb County, with a 7-day moving average of 734 total COVID-19 cases reported. During that time, the District was under a universal indoor masking mandate. Conversely, the 7-day moving average in September of 2021 (including this school year's peak) never exceeded 500 total cases, while the District has been mask optional. As of October 8, 2021, the District is currently at a 7-day moving average of 143 total cases reported, without a mask mandate. (*Id.* ¶ 45.) Thus, at it stands now, the District's 7-day moving average is 81% lower than it was when it had a mask mandate during last school year's peak.

There is also little evidence to indicate that a District-wide mask mandate will enable these individual Plaintiffs to attend in-person school. During the 2020-2021 school year, when the District had a mask-mandate in place, none of the Plaintiffs attended school in-person. (Coleman Decl. ¶¶ 7, 12, 22, 32, 42.) Unfortunately, significantly immunocompromised and medically fragile children have always faced

an increased risk from communicable viruses such as influenza,<sup>6</sup> pneumonia, RSV, etc. Thus, to adopt Plaintiffs' logic would be setting the stage for year-round mask-wearing in school, long beyond the end of the current pandemic.

To exemplify this point, one of the Plaintiffs has received Hospital Homebound (HHB) services for at least some portion of the last eight school years. (*Id.*) The HHB program is designed to provide home-based services for students who are too medically fragile to attend school. (*Id.* ¶ 21.) This Plaintiff could not consistently attend in-person school long before the COVID-19 pandemic. Requiring over 125,000 other staff and students to wear a mask so these four Plaintiffs can attend in-person school is non-sensical, especially when they were unable or unwilling to attend in-person when a mask-mandate was in place.

#### **D. Consequences of implementing a mask-mandate**

To be clear, Plaintiffs' requested relief is not without consequence. Plaintiffs are not just seeking a District-wide mask-mandate; they are also asking this Court to order that the District comply with all of the CDC's guidelines for mitigating COVID-19 in schools.<sup>7</sup> Because some of these guidelines are operationally

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<sup>6</sup> "For most of the population, including the vast majority of children and young adults, COVID-19 infection poses less of a mortality risk than seasonal influenza." (Bhattacharya Decl. at Ex. 4-B Pg. 8.)

<sup>7</sup> It should be noted the CDC currently recommends that all age-eligible individuals be vaccinated. If this Court orders the District to follow every single CDC



impossible, the District will be unable to continue providing in-person instruction if Plaintiffs get their requested relief. (Floresta Decl. ¶ 52.)

With respect to masks, the District received over 50,000 emails, letters, phone calls, meetings, and in-person protests by parents and community members objecting to its prior mask requirement. (*Id.* ¶ 47.) It received numerous complaints from parents and students with disabilities that its prior mask-mandate prevented some students with disabilities from attending in-person school because they could not wear a mask to school all day without harmful side effects. (*Id.* ¶ 48.) These families’ concerns are supported by Dr. Bhattacharya. As one example of harm (he lists many), he cites research that supports that “Covering the lower half of the face of both teacher and pupil reduces the ability to communicate.” (Bhattacharya, Decl. at Ex. 4-B Pg. 36.) He further concludes, “children lose the experience of mimicking expressions, an essential tool of nonverbal communication. Positive emotions such as laughing and smiling become less recognizable, and negative emotions get amplified. Bonding between teachers and students is significantly and negatively affected. Masking exacerbates the chances that a child will experience anxiety and depression, which are already at pandemic levels themselves.” (*Id.* Pg. 36-37.)

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guideline—depriving the District of any discretion in crafting its COVID-19 policy—there will surely be parents who ask for a court-ordered vaccine mandate as well. And then there will be parents who challenge the legality of that mandate.

Many families have also implored the District not to reimpose a mask mandate because their students with disabilities would not be able to continue attending in-person instruction if the District did so. Thus, if the District must reinstate its mask mandate, it has a good faith reason to believe that some students with disabilities currently attending in-person school will no longer be able to do so. (*Id.* ¶ 48.)

The community is deeply divided over whether to require masks in schools. While the District always welcomes input and feedback from the community, it received approximately 39,000 emails from the community regarding a mask mandate or mask requirement. This volume of complaints caused administrators to divert their time and attention from other functions to respond to these parental concerns. (*Id.* ¶¶ 50-51.) The District has also had to defend litigation over its prior mask mandate. And while it was successful, it cost the District significant time and expense. The District has received additional threats of suit if it reinstates a mask mandate. (*Id.* ¶ 49.)

The burden of implementing a mask mandate in Cobb County currently outweighs its benefits. This is especially true given that the District has provided the Plaintiffs with full access to its educational programs and benefits.

**E. The District has reasonably accommodated the Plaintiffs.**

All Plaintiffs are performing well in school, meeting grade level standards and mostly earning As and Bs. (Coleman Decl. ¶¶ 14, 27, 37, 49.) They all “have received appropriate accommodations to enable them to access their education.” (*Id.* ¶ 50.) “Two of the named Plaintiffs have Section 504 plans and two have Individual Education Plans (IEPs).” (*Id.* ¶ 4.) “The Plaintiffs’ 504 and IEP teams have met to make determinations on the unique needs of each student and the required supports, services, and accommodations that each individual student may require to access their education. These are individualized decisions and none of the Plaintiffs have the same circumstances or needs.” (*Id.* ¶ 8.)<sup>8</sup>

“To provide flexibility and meet the needs of students no matter their individual circumstances, the Cobb County School District expanded and developed several part-time and full-time virtual learning options during the 2021-2022 school year. These online learning options include full-time elementary, middle, and high options as well as part-time middle and high options.” (Fuller Decl. ¶ 5.) “All of the Plaintiffs are eligible to receive full educational services via a virtual learning program offered by the Cobb County School District.” (Coleman Decl. ¶ 6.)

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<sup>8</sup> A description for each is set forth in Jessica Coleman’s declaration attached as Exhibit 2.

However, only one of the Plaintiffs has chosen to participate. (*Id.*) That Plaintiff is currently earning all As and taking advanced honors classes. (*Id.* ¶¶ 13, 14.)

“The District’s virtual programming provides curriculum designed to meet national, state and District standards.” (Fuller Decl. ¶ 17.) The various District options align to the Georgia Standards of Excellence, the International Standards for Technology Education (ISTE), and the National Standards of Quality Online Learning. (*Id.* ¶ 21.) “Classes are led by highly qualified teachers specifically trained in the delivery of online courses.” (*Id.* ¶ 17.)

“Over 84% of the students enrolled in the District’s virtual programs are non-disabled students.” (*Id.* ¶ 16.) Thus, a virtual option does not segregate Plaintiffs from their non-disabled peers. “Students with IEPs or Section 504 plans receive the services and supports in those plans that are appropriate to a virtual environment.” (*Id.* ¶ 23.) The District’s virtual options allow robust opportunities to interact with fellow students and teachers, much the same way they would in a physical classroom. (*Id.* ¶ 20.) Additionally, virtual students have access to a variety of academic supports. (*Id.* ¶ 19.)<sup>9</sup>

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<sup>9</sup> A description of each of the District’s virtual options is set forth in Ryan Fuller’s declaration, attached as Exhibit 3.

### III. ARGUMENT AND CITATION OF AUTHORITIES

This Court should deny Plaintiffs’ Motion because they have not carried their burden of demonstrating entitlement to a TRO or preliminary injunction. Under Rule 65, a movant must prove four factors to justify temporary or preliminary injunctive relief: (1) a substantial likelihood of success on the merits; (2) a threat of irreparable harm to the plaintiff, absent an injunction; (3) the threatened injury outweighs harm to the defendant; and (4) an injunction would serve the public interest. *Callahan v. U.S. Dep’t of Health & Human Servs.*, 939 F.3d 1251, 1257 (11th Cir. 2019). Because preliminary or temporary injunctive relief is “an extraordinary and drastic remedy,” the district court may not grant it unless the movant “clearly establishes” each of these prerequisites. *Id.* “Failure to show any of the four factors is fatal...” *ACLU of Fla., Inc. v. Miami-Dade Cnty. Sch. Bd.*, 557 F.3d 1177, 1198 (11th Cir. 2009). Plaintiffs fail to satisfy any of the four.

They are unlikely to prevail on their ADA/504 claims because the challenged policy is non-discriminatory, and CCSD has reasonably accommodated their disabilities. They cannot show irreparable harm because they complain only that they have not received the educational services they prefer. And Plaintiffs’ requested relief would substantially harm CCSD and disserve the public interest.

**A. Plaintiffs have not shown a substantial likelihood of prevailing on the merits of their ADA/504 claim.**

When plaintiffs seek temporary or preliminary injunctive relief, the most common shortcoming is not showing a substantial likelihood of prevailing on the merits. *ACLU of Fla.*, 557 F.3d at 1198. If a plaintiff fails to do so, the court need not consider the remaining factors. *Callahan*, 939 F.3d at 1265 n.13; *GeorgiaCarry.Org, Inc. v. U.S. Army Corps of Eng'rs*, 788 F.3d 1318, 1329 (11th Cir. 2015). Plaintiffs have not demonstrated a substantial likelihood of prevailing on their ADA/504 claims.

Title II and Section 504 both prohibit disability discrimination in public services. *U.S. v. Fla.*, 938 F.3d 1221, 1228 (11th Cir. 2019). Courts therefore apply the same legal standards when analyzing claims under those statutes. *J.S., III by and through J.S. Jr. v. Houston Cnty. Bd. of Educ.*, 877 F.3d 979, 985 (11th Cir. 2017). To prevail on a disability discrimination claim, the plaintiff must prove that: (1) “he is a qualified individual with a disability;” (2) “he was either excluded from participation in or denied the benefits of a public entity’s service, programs, or activities,” or the public entity “otherwise discriminated against” him; and (3) “the exclusion, denial of benefit, or discrimination” was because of his disability. *J.S., III by and through J.S. Jr. v. Houston Cnty. Bd. of Educ.*, 877 F.3d 979, 985 (11th Cir. 2017). A plaintiff may proceed under theories of disparate treatment or failure to

make a reasonable accommodation. *Schwarz v. City of Treasure Island*, 544 F. 3d 1201, 1212 n.6 (11th Cir. 2008).

Plaintiffs cannot prove either theory. They cannot show disparate treatment because the challenged policy is facially neutral and applies to all CCSD students, regardless of disability status. Plaintiffs' accommodation theory fails because CCSD has reasonably accommodated their disabilities, and their request for a mask mandate is unreasonable. Furthermore, Plaintiffs' claims are barred because they failed to exhaust their administrative remedies before filing suit.

**i. Plaintiffs cannot show disparate treatment.**

Plaintiffs cannot show disparate treatment, because CCSD's mask-optional policy applies to all students, regardless of whether they have disabilities. Title II and Section 504 only require "evenhanded treatment and the opportunity for [disabled] individuals to participate in and benefit from programs receiving federal assistance." *Medina v. City of Cape Coral, Fla.*, 72 F. Supp. 3d 1274, 1279 (M.D. Fla. 2014). They do not guarantee persons with disabilities "equal results." *Id.* Thus, to show disparate treatment in the education context, it is not enough merely to show that the school district denied the student a free appropriate public education as required under special education laws. *J.S.*, 877 F.3d at 985. Rather, the plaintiff must prove he "was treated differently or excluded from something that other

students received.” *Id.*; see *Lewis v. City of Union City, Ga.*, 918 F.3d 1213, 1222 (11th Cir. 2019) (“[D]iscrimination consists of treating *like* cases differently.”).

Accordingly, a disabled student cannot show disparate treatment based on a school district’s facially neutral COVID-19 policy that applies to both disabled and non-disabled students. See, e.g., *Borishkevich v. Springfield Pub. Schs. Bd. of Educ.*, \_\_\_ F. Supp. 3d \_\_\_, 2021 WL 2213237, \*7 (W.D. Mo. 2021). For instance, in *Borishkevich v. Springfield Public Schools Board of Education*, a group of disabled students claimed that a school district’s COVID-19 re-entry plan, which provided both in-person and virtual learning options for all students, discriminated against them because of their disabilities. 2021 WL 2213237 at \*2. The district court rejected that theory, reasoning that the challenged re-entry plan applied equally to all students, regardless of disability status. *Id.* at \*7. The plaintiffs, like their non-disabled peers, “had the option to attend classes in-person part-time, or only attend classes virtually.” *Id.* There was therefore no disparate treatment. *Id.*

Plaintiffs’ theory of disparate treatment is similarly infirm. They make a conclusory allegation of disparate treatment, yet their own factual allegations show otherwise. CCSD’s COVID-19 policies, including its mask-optional policy, apply to all students, regardless of whether they have disabilities. Like their non-disabled peers, Plaintiffs have the option of attending class in person or virtually. Attending



classes virtually would not segregate Plaintiffs, as 84% of CCSD’s virtual students are non-disabled. (Fuller Decl. ¶ 16.) And Plaintiffs have the same opportunities to take advantage of in-person instruction as any other CCSD student. Accordingly, Plaintiffs cannot prove their disparate treatment theory.

**ii. Plaintiffs cannot prevail on their failure-to-accommodate claim.**

To prevail on a failure-to-accommodate claim, a plaintiff must prove three elements: “(1) she is a qualified individual with a disability; (2) she is unable, because of her disability to meaningfully access a public benefit to which she is entitled; and (3) the public entity failed, despite her request, to provide a reasonable accommodation for her disability.” *Todd v. Carstarphen*, 236 F. Supp. 3d 1311, 1328 (N.D. Ga. 2017). Under both Title II and Section 504, the reasonable accommodation requirements “are materially identical.” *Alboniga v. Sch. Bd. of Broward Cnty., Fla.*, 87 F. Supp. 3d 1319, 1332 (S.D. Fla. 2015). School districts need provide “only those accommodations that are necessary to ameliorate a disability’s effect of preventing meaningful access to the benefits of, or participation in, the program at issue.” *Todd*, 236 F. Supp. 3d at 1311; *Redding v. Nova Se. Univ., Inc.*, 165 F. Supp. 3d 1274, 1299 (S.D. Fla. 2016). And a plaintiff does not lack “meaningful access” simply because the benefit is difficult to access. *Todd*, 236 F. Supp. 3d at 1329.

Plaintiffs’ accommodation claims fail because (1) CCSD’s current COVID-19 safety measures reasonably accommodate Plaintiffs’ disabilities, (2) their request for a mask mandate is unreasonable, and (3) they have failed to exhaust their administrative remedies before filing suit.

**a. CCSD has reasonably accommodated Plaintiffs.**

The purpose of federal disability laws “is to place those with disabilities on an equal footing. . . .” *Kornblau v. Dade Cty.*, 86 F.3d 193, 194 (11th Cir. 1996). They “do not displace the basic requirements of a public program.” *Raines v. State of Fla.*, 983 F. Supp. 1362, 1372 (N.D. Fla. 1997). To pass muster under Title II or Section 504, an accommodation must provide the plaintiff with meaningful access to the public benefit sought. *Todd*, 236 F. Supp. 3d at 1334. “Meaningful access does not mean equal access or preferential treatment.” *Id.* (cleaned up). To prevail under a failure-to-accommodate theory, the plaintiff must show that the defendant’s offered accommodations are not reasonable. *Duvall v. City of Kitsap*, 260 F.3d 1124, 1137 (9th Cir. 2001).

For instance, in *Chew v. Legislature of Idaho*, two state legislators sought to enjoin a legislative procedural rule that required in-person voting, arguing that remote participation would mitigate the risk of COVID-19 exposure during legislative session. 512 F. Supp. 3d 1124, 1130 (D. Idaho 2021). Both plaintiffs had

severe disabilities that made them more vulnerable to COVID-19 exposure. *Id.* at 1126. The district court rejected their argument, finding they had not demonstrated that the Legislature’s other COVID-19 safety measures, *including a mask-optional policy*, were not a reasonable accommodation of their disabilities. *Id.*

Here, Plaintiffs similarly have not carried their burden of showing that the District’s numerous accommodations are unreasonable or insufficient to provide meaningful access. The District has implemented a robust COVID-19 response plan adopting most of the recommendations from public health and education agencies. (Floresta Decl. ¶ 5.) The District’s safety measures set forth over 50 distinct actions the District is taking to mitigate against the risk of COVID-19. (Floresta Decl. at Ex. 1-B.) The District’s measures span from contact tracing, quarantine and isolation, vaccination events and education, strict cleaning and disinfection protocols, enhanced ventilation, protection partitions and physical distancing where possible, protocols for individuals with symptoms; provision of masks and strongly encouraging wearing of masks, in addition to many others. (*Id.* ¶ 16-32.)

Even if Plaintiffs choose not to attend in-person classes, they are not excluded from or denied meaningful access to an education, because CCSD offers them the same quality educational options as non-disabled students. “There are almost 2,000 CCSD students participating in one or more of the District’s virtual offerings. Over

84% of the students enrolled in the District’s virtual programs are non-disabled students.” (Fuller Decl. ¶ 16.) Students have opportunities to interact with one another in many ways. The District offers virtual programs at all grade levels for students to have significant synchronous (real-time) instruction, where students can interact with teachers and peers in much the same way they would in a face-to-face classroom. (*Id.* ¶ 20.) The District’s virtual programming is designed to meet national, state and District standards, is taught by highly qualified and specifically trained teachers, and delivers the services and supports needed for students with IEPs and Section 504 plans. (*Id.* ¶¶ 17, 21, 23.) All of the Plaintiffs are performing well in school, meeting grade level standards, and mostly earning As and Bs. (Coleman Decl. ¶¶ 14, 27, 37, 49.) Each of their respective 504/IEP teams has met and decided upon the appropriate supports, services, and accommodations each individual Plaintiff needs to access their education. (*Id.*)

Though Plaintiffs might prefer a mask-mandate policy, CCSD is not required to provide Plaintiffs with their preferred or optimal accommodation. *See Todd*, 236 F. Supp. 3d at 1336; *Medina*, 72 F. Supp. 3d at 1279. CCSD’s COVID-related policies provide all students “the *opportunity* . . . to participate in” CCSD’s educational programs. *See Medina*, 72 F. Supp. 3d at 1279 (emphasis added). If Plaintiffs choose not to attend in-person classes, that is their choice, but CCSD’s

numerous safety measures and virtual offerings provide them with meaningful access to both in-person and equitable virtual instruction. Title II and Section 504 do not guarantee Plaintiffs “equal results” under CCSD’s policies—only equal opportunity. *See id.* Because CCSD’s COVID-19 safety measures accomplish that goal, Plaintiffs’ accommodation claims fail.

**b. Requiring CCSD to impose a mask mandate is unreasonable.**

Plaintiffs’ accommodation claim also fails because their request for a mask mandate is unreasonable. Title II and Section 504 only require schools to provide reasonable accommodations—not a plaintiff’s requested or preferred accommodation. *Redding v. Nova Se. Univ., Inc.*, 165 F. Supp. 3d 1274, 1296-97 (S.D. Fla. 2016) (citing *Stewart v. Happy Herman’s Cheshire Bridge, Inc.*, 117 F.3d 1278, 1285-86 (11th Cir. 1997)). School districts need not provide “the maximum...or every conceivable accommodation possible.” *Alabi v. Atlanta Pub. Schs.*, No. 1:12-CV-0191-AT, 2011 WL 11785485, \*8 (N.D. Ga. Sept. 26, 2011).

To prevail under a failure-to-accommodate theory, the plaintiff must prove her requested accommodation was reasonable. *Todd*, 236 F. Supp. 3d at 1334 (citing *Shannon v. Postmaster Gen. of U.S. Postal Serv.*, 335 F. App’x 21, 25 (11th Cir. 2009)). Whether a requested accommodation is legally required is a “highly fact-specific, requiring case-by-case determination.” *Loren v. Sasser*, 309 F.3d 1296,

1302 (11th Cir. 2002). “An accommodation is not reasonable if it imposes undue financial and administrative burdens on the defendant or requires a fundamental alteration in the nature of the program.” *Cohen v. Monroe Cty.*, 749 F. App’x 855, 857 (11th Cir. 2018) (internal quotation marks omitted).

The District has demonstrated that imposing a mask-mandate is not reasonable, because its mask protocols have not made a meaningful difference in the spread of COVID-19 within the District. Throughout the pandemic, the total incidence rate of infection in all District schools has oscillated between 0 and 1% regardless of masking requirements. (Floresta Decl. ¶ 44.) Even without a mask-mandate, Cobb County school-aged children often had the same or lower rates of infection than five neighboring mask-mandated counties. (*Id.* ¶ 41.) Cobb County’s school-aged infection rate has been equal to or below the state-wide rate through this entire school year. (*Id.*) And, after extensive research, Dr. Bhattacharya has concluded that “permitting parents to opt out of a mandated mask policy is unlikely to have a significant effect on COVID disease spread and may relieve some children from the harms of masking.” (Bhattacharya Decl. at Ex. 4-B Pg. 3)

Additionally, current data shows COVID-19 is on a downward trend in Cobb County and throughout District schools. The District’s current incidence rate is 0.2%, the lowest it has been since school began in August. (*Id.* ¶ 42.) October 8,

2021 data shows a 78% decrease in District-reported cases since the peak this school year. (Floresta Decl. ¶ 43.) The current 7-day moving average (without a mask mandate) is 143 total cases reported compared to last year's peak of 734 with a mask mandate—an 81% drop. (*Id.* ¶ 45.)

Plaintiffs' requested mask mandate is also unreasonable because it would place an undue burden on CCSD. Plaintiffs ask this Court to order over 125,000 District students and employees to wear a mask, when none of the four Plaintiffs even attended in-person school when CCSD mandated masks. (*Id.* ¶ 4; Coleman Decl. ¶ 7.) As this Court has surely noted, the community is deeply divided over masks. The District has received over 50,000 emails, letters, phone calls, meetings, and in-person protests by parents and community members objecting to its prior mask mandate. (Floresta Decl. ¶ 47.) Responding to this level of complaints requires District administrators to divert their time and attention from other functions. (*Id.* ¶¶ 50-51.) The District was sued and has been threatened with additional lawsuits if it re-imposes its mask mandate. (*Id.* ¶ 49.) While the four Plaintiffs claim a mask-mandate will aid them in attending in-person school, the District has received the exact opposite message from numerous other parents and students who claim that the mask mandate prevented their children from attending school. (*Id.* ¶ 48.) Thus, if this Court orders a District-wide mask mandate to benefit these four Plaintiffs,

there is a good faith reason to believe that many other students, including those with disabilities, will no longer be able to attend in-person school. (*Id.*)

In arguing that mask mandates are a reasonable accommodation, Plaintiffs misconstrue the holding in *Disability Rights South Carolina v. McMaster*. There, the trial court did not order a school district to impose a mask mandate, as Plaintiffs request here. *Disability Rights S. Car. v. McMaster*, No. 3:21-02728-MGL, 2021 WL 4444841, \* 6 (D. S.C. Sept. 28, 2021). Rather, it held that the State could not prohibit school districts from imposing mask mandates, instead—“allowing school districts, at their discretion” to decide whether to require masks. *Id.* Hence, *Disability Rights South Carolina* only reinforces the principle that school districts must have autonomy over their COVID-19 mask policies.

**iii. Plaintiffs’ claims are barred because they did not exhaust their administrative remedies.**

Under the IDEA, a school district must provide disabled students with a free appropriate public education (“FAPE”), including special education and related services. *Fry v. Napoleon Cmty. Schs.*, 137 S. Ct. 743, 748 (2017). The student’s IEP usually sets forth these services. *Id.* at 749. The IDEA has a detailed administrative remedial scheme to resolve FAPE-related disputes with school districts. *Id.* Under 20 U.S.C. § 1415(l), if the gravamen of a student’s claim is the denial of FAPE, she must first exhaust the IDEA’s administrative remedies before filing suit under the



ADA, Section 504, or other federal statutes. *Id.* at 752. A plaintiff cannot avoid this exhaustion requirement simply by suing under non-IDEA statutes. *Id.* at 754. Nor can a plaintiff plead around it by eschewing the words “FAPE”, “IEP,” “IDEA”, or other similar terms in the complaint. *Id.* at 755.<sup>10</sup>

As the Supreme Court has instructed, courts apply a two-factor test to determine whether a claim is FAPE-related and therefore subject to the IDEA’s exhaustion requirements. *Id.* at 756. “First, could the plaintiff have brought essentially the same claim if the alleged conduct had occurred at a public facility that was not a school—say, a public theater or library?” *Id.* “[S]econd, could an adult at the school—say, an employee or visitor—have pressed essentially the same grievance?” *Id.* If the answer to both questions is no, the complaint probably concerns a denial of FAPE, and the IDEA’s exhaustion requirement applies. *Id.*

Under these factors, Plaintiffs’ claims challenging CCSD’s mask-optional policy are really claims for a denial of FAPE and therefore subject to administrative exhaustion. Plaintiffs do not contend that the mask-optional policy deprives them of an education altogether—only that it deprives them of an *appropriate* education. [See, e.g., Doc. 1 ¶ 13, 77, 86, 188, 201-02.] Plaintiffs cannot establish the first *Fry*

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<sup>10</sup> This Circuit requires exhaustion regardless of the type of academic plan the child has. See, e.g., *Durbrow v. Cobb Cty. Sch. Dist.*, 887 F.3d 1182, 1190 (11th Cir. 2018) (requiring exhaustion where student had a 504 plan but no IEP).

factor because their alleged injury could not arise in non-educational public setting. Plaintiffs fare no better under the second *Fry* factor, because adults could not allege that CCSD discriminates against them when it “denies educational opportunities of an in-person education.” *Hayes*, 2021 WL 4236698, at \*8 (“it strains credulity for Plaintiffs to insist that an adult could bring a Complaint” alleging the denial of in-person educational benefits).

For instance, in *Hayes*, the plaintiffs sought a TRO against a mask-optional policy, alleging it violated their ADA/504 rights, and the district court denied that motion on exhaustion grounds. *See Hayes*, 2021 WL 4236698, at \*3. The court noted the complaint—like here—was “replete with explicit references to alleged denials of FAPE.” *Hayes*, 2021 WL 4236698, at \*7. The court rejected “plaintiffs’ attempt to characterize” the case as “one that involves a denial of access, and not a denial of FAPE” and refused to “avert its eyes to the obvious nature of this case.” *Hayes*, 2021 WL 4236698, at \*9; *see also Borishkevich*, 2021 WL 2213237 at \*7.

This Court should do the same here. Plaintiffs’ allegations confirm the gravamen of their lawsuit is an alleged denial of FAPE. [*See, e.g.*, Doc. 1 ¶¶ 13, 77, 86, 188, 201-02.] Because they did not exhaust their IDEA administrative remedies, their claims are now barred, and their motion should be denied.

**B. A mask optional policy will not irreparably harm Plaintiffs.**

“A showing of irreparable injury is the sine qua non of injunctive relief.” *Siegel v. LePore*, 234 F.3d 1163, 1176 (11th Cir. 2000) (internal quotation marks omitted). The absence of irreparable harm makes a preliminary injunction improper. *Id.* To show irreparable harm, the plaintiff must show that the threat of future injury is both certain and immediate rather than speculative and remote. *Winter v. Natural Res. Def. Council, Inc.*, 129 S. Ct. 365, 376 (2008). The injury must occur *during* the litigation. *Ala. v. Army Corps of Eng’rs*, 424 F.3d 1117, 1128 (11th Cir. 2005). Even if a plaintiff establishes a substantial likelihood of prevailing on the merits, the court may not presume irreparable harm. *Home Legend, LLC v. Mannington Mills, Inc.*, No. 4:12-CV-237-HLM, 2013 WL 12086791, \*14 (N.D. Ga. Apr. 11, 2013) (citing *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 399, 393-94 (2006)).

Plaintiffs cannot satisfy this requirement because an alleged deprivation of their preferred educational service does not justify disrupting the parties’ status quo.

**i. Plaintiffs have not shown an imminent threat of irreparable harm.**

An alleged “loss of educational opportunities” does not constitute an irreparable injury when the school has not denied educational services to students altogether. *See C.B. v. Bd. of Sch. Comm’rs of Mobile Cnty., Ala.*, 261 F. App’x at 194 (11th Cir. 2008). For instance, in *C.B. v. Board of School Commissioners*, the

plaintiff's request for a transfer from one school to another "to better address his medical needs" was denied. *Id.* at 196. He sought injunctive relief, contending the "denial of an educational benefit constitute[d] irreparable harm *per se*." *Id.* The Eleventh Circuit rejected that argument and denied a TRO, reasoning that the school board had only placed limits on the location of the services—not denying him access to educational services altogether. *Id.*

Plaintiffs have likewise fallen woefully short of demonstrating irreparable harm. Though they contend the mask optional policy deprives them of educational opportunities [Doc. 2-1 at 23], their dissatisfaction with a virtual instruction model does not constitute *irreparable* harm. *See C.B.*, 261 F. App'x at 194; *Hayes*, 2021 WL 4236698 at \*13 (district's offering of virtual learning did not irreparably harm students). And the District has clearly demonstrated that quality, non-discriminatory education opportunities are available to them. (Coleman, Decl.; Fuller Decl.)

There is also no merit to Plaintiffs' conclusory argument [*see* Doc. 2-1 at 22] that a violation of federal disability laws constitutes a *per se* irreparable harm. *See C.B.*, 261 F. App'x at 194 (rejecting plaintiff's argument that irreparable harm should be presumed when an ADA violation is alleged); *see Siegel*, 234 F.3d at 1177 (recognizing that no authority from the Supreme Court or the Eleventh Circuit has held that the irreparable injury needed for a preliminary injunction can be presumed

for a substantially likely violation of constitutional rights) (collecting cases)). The absence of irreparable harm requires denial of Plaintiffs' Motion. *See Siegel*, 234 F.3d at 1176.

**ii. Plaintiffs are not entitled a mandatory injunction altering the status quo because they have not shown extreme injury.**

The purpose of temporary or interlocutory injunctive relief is to preserve the status quo between the parties during the litigation. *U.S. v. DBB, Inc.*, 180 F.3d 1277, 1282 (11th Cir. 1999). Where the movant—as here—seeks a mandatory injunction altering the status quo, she must meet a “heightened standard” of showing that “*extreme or serious damage* would result absent the relief.” *Verizon Wireless Pers. Commc'ns LP v. City of Jacksonville, Fla.*, 670 F. Supp. 2d 1330, 1346 (M.D. Fla. 2009) (emphasis added); *see also Innovation L. Lab v. Nielsen*, 310 F. Supp. 3d 1150, 1156–57 (D. Or. 2018).

Plaintiffs cannot meet that heightened standard. The status quo between the parties is CCSD's mask-optional policy, which has been in place since June 2021. (Floresta, Decl. ¶ 38.) By asking this Court to require CCSD to impose a mask mandate or follow any other additional CDC guidelines not currently in place, Plaintiffs seek a mandatory injunction that would disrupt that status quo. Plaintiffs, however, have not demonstrated an “extreme” threat of “serious damage” that would justify such relief. *See Verizon*, 670 F. Supp. 2d at 1346. At most, they argue only

that they are not receiving the educational services of their choice. This, despite each of them meeting grade level standards and earning mostly As and Bs. (Coleman Decl. ¶¶ 14, 27, 37, 49.) Accordingly, their requested relief must be denied.

**C. Enjoining CCSD’s mask-optional policy would substantially harm CCSD’s operations and disserve the public interest.**

When the opponent of a preliminary injunction is a governmental entity, the last two Rule 65 factors (balancing of harms and public interest) merge. *Nken v. Holder*, 556 U.S. 418, 435 (2009). Here, the balance of equities tilts heavily in CCSD’s favor because a court-ordered mask mandate would be unduly burdensome on CCSD’s operations, and it would disserve the public interest.

**i. This Court should not interfere in local politics by supplanting CCSD’s autonomy in making operational decisions about the health and safety of its students and employees.**

A court-ordered mask mandate would impose substantial burdens on the CCSD. “Courts are ill-equipped to make fundamental, legislative, and administrative policy decisions which are involved in the everyday administration of a public school system.” *Parents Against Realignment v. Ga. High Sch. Ass’n*, 271 Ga. 114, 114 (1999). Hence, under the Georgia Constitution, school districts fall under exclusive local control. *Gwinnett Cnty. Sch. Dist. v. Cox*, 289 Ga. 265, 710 S.E.2d 773, 775 (2011); *Lightfoot v. Henry Cty. Sch. Dist.*, 771 F.3d 764, 772 (11th

Cir. 2014). In recognition of that principle, the State Board of Education (“SBOE”) has tasked local school districts, like CCSD, with “develop[ing] policies, regulations, and procedures related to the impact of infectious diseases on school system management and operations.” Ga. Comp. R. & Regs. § 160-1-3-.03(2)(a). This rule also directs school districts to provide information, education or training based on CDC guidelines and recommendations, and to make “operational decisions related to employees or students infected with communicable diseases” in conjunction with the school nurse, state and/or local public health agency representatives, health care professionals, and school system administrators.” *Id.* 160-1-3-.03(2)(b), (e). But it does not mandate that the District’s preventative measures must be implemented in full alignment with CDC or GDCPH guidance. Nor does it impose a one-size-fits-all approach, such as a mask mandate. Instead, the CDC guidance itself is only that—guidance—and the CDC has stated, “Localities should monitor community transmission, vaccination coverage, screening testing, and occurrence of outbreaks *to guide decisions on the level of layered prevention strategies* (e.g., physical distancing, screening testing).”<sup>11</sup> State School Superintendent Richard Woods has reiterated that local districts have the authority

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<sup>11</sup> CDC Guidance for COVID-19 Prevention in K-12 Schools available at: <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-guidance.html>. (emphasis added)

to determine how to handle COVID-19, and that the Georgia Department of Education's ("GaDOE") role is to support whatever plan decided upon by local school districts.<sup>12</sup>

A court-ordered health and safety mandate would create an added administrative burden of requiring CCSD to become "enforcer" in order to comply with the Court's order—thus, taking away from CCSD's ability to focus on what has been most important: constantly responding to rapidly changing circumstances while balancing student safety with the best educational outcomes for all students.

At bottom, Georgia school districts have substantial autonomy over the creation of health and safety measures, and it severely disrupts school district operations when courts second-guess operational decision making, as they have been discouraged from doing in the past. *See Parents Against Realignment*, 271 Ga. at 114.

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<sup>12</sup> Richard Woods, "Local Districts Have Authority to Chart Their Course for Upcoming School Year. Our Role is to Support Them." Press Release, Georgia Department of Education website, July 21, 2020, *available at*: <https://www.gadoe.org/External-Affairs-and-Policy/communications/Pages/PressReleaseDetails.aspx?PressView=default&pid=787> ("Whatever a school district's decision, our issued guidance supports that model.")



**ii. A District-wide mandate disserves the public interest by trying to address individualized student needs with a blanket injunction.**

Granting Plaintiffs’ motion would also disserve the public interest, because a court-ordered District-wide mandate impacting over 125,000 staff and students is inconsistent with the principle of an individualized plan to accommodate the needs of disabled students on a case-by-case-basis. 28 C.F.R § 35.130(b)(7). Here, as in *Hayes*, each parent raises “unique concerns” about their child’s disabilities, and “a case-by-case review of each Plaintiff’s concerns would likely yield more effective solutions for each individual child than would a blanket injunction.” *Hayes*, 2021 WL 4236698, at \*17. “[I]t [is] ill-advised for a federal court to wade into the waters of localized education without at least affording state or local officials an opportunity to first attempt to remedy the problem and develop a record for a federal court’s subsequent review.” *Hayes*, 2021 WL 4236698 at \*12.

The sweeping breadth of Plaintiffs’ proposed injunction—a one-size fits all approach—may create even more barriers than bridges. The District will be forced to close to in-person instruction if Plaintiffs receive the totality of relief sought. (Floresta Decl. ¶ 52.) Plaintiffs’ demand for a mask-mandate triggers concerns from many other parents that masks adversely impact their children’s education and impede other disabled students from attending in-person school. (Floresta Decl. ¶¶ 47-48.) *See, e.g., Fletcher v. Giant Eagle, Inc.*, No. 2:20-cv-754 NBF (W.D. Pa.

Aug. 21, 2020) (Individuals with disabilities suing under the ADA where “they suffer from respiratory limitations...which allegedly prevents them from being able to wear masks [after being] asked to leave because they were not wearing masks.”). After all, the requested relief does not simply affect CCSD’s policies, practices, or activities. Instead, it affects the practices of third parties, as it requires all staff and students in Cobb County schools to wear masks and removes the ability of parents to make this decision based on their child’s particular needs.

#### IV. CONCLUSION

The District has made an informed choice, based on GDPH data, scientific evidence, and public-health guidance, that requiring masks in Cobb County schools does not make a meaningful difference in the local spread of COVID-19 and is outweighed by the benefits it could bring. The District will continue taking appropriate steps to mitigate and respond to COVID-19 and if the time is right, the District will amend its measures. But in the meantime, it is not the Court’s role to “usurp the functions of another branch of government” in deciding how best to protect public health, as long as the measures are not arbitrary or unreasonable. *Jacobson v. Massachusetts*, 197 U.S. 11, 28, 25 S. Ct. 358, 375, 49 L. Ed. 643, 660 (1905). Moreover, the “Constitution principally entrusts ‘[t]he safety and the health of the people’ to the politically accountable officials of the States ‘to guard and

protect.”” *S. Bay United Pentecostal Church v. Newsom*, 140 S. Ct. 1613, 1614, 207 L.Ed.2d 154 (2020) (Roberts, C.J., concurring). Granting the TRO and Preliminary Injunction Plaintiffs seek would rob the District of local discretion and control. Plaintiffs have articulated no legitimate reason for such drastic interference into the District’s operations.

For the foregoing reasons, this Court should deny Plaintiffs Motion for Declaratory and Injunctive Relief and award Defendants their fees and costs for defending this action.

Respectfully submitted this the 11<sup>th</sup> day of October, 2021.

/s/ Sherry H. Culves

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**CERTIFICATE OF COMPLIANCE**

I hereby certify that the foregoing was prepared using Times New Roman font, 14-point type, which is one of the font and print selections approved by the Court in L.R. 5.1(C).

This the 11<sup>th</sup> day of October, 2021.

/s/ Sherry H. Culves

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**CERTIFICATE OF SERVICE**

I hereby certify that I have this day filed the within and foregoing *Defendants'* *Response To Plaintiffs' Motion For TRO And Preliminary Injunction* upon all parties of record to this matter by CM/ECF system, which will serve via e-mail notice of such filing to any of the following counsel registered as CM/ECF users:

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**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION**

L.E., by and through their parent and next friend, SARA CAVORLEY; B.B., a minor, by and through their parent and next friend, ELIZABETH BAIRD; A.Z., a minor, by and through their parent and next friend, JESSICA ZEIGLER; and C.S., a minor, by and through their parent and next friend, TARASHA SHIRLEY,

Plaintiffs,

v.

Civil Action No. 1:21-cv-04076-TCB

CHRIS RAGSDALE, in his official capacity as Superintendent of Cobb County School District ; RANDY SCAMIHORN, in his official capacity, a member of the Cobb County Board of Education; DAVID BANKS, in his official capacity as member of the Cobb County School Board; DAVID CHASTAIN, in his official capacity as member of the Cobb County School Board; BRAD WHEELER, in his official capacity as member of the Cobb County School Board; JAHA HOWARD, in his official capacity as member of the Cobb County School Board; CHARISSE DAVIS, in her official capacity as member of the Cobb County School Board; LEROY TRE' HUTCHINS, in his official capacity as member of the Cobb County School

Board; and COBB COUNTY SCHOOL  
DISTRICT,

Defendants.

**DECLARATION OF JOHN FLORESTA**

This Declaration is given by John Floresta who, under penalty of perjury pursuant to 28 U.S.C. § 1746, states that the following is true and correct:

1.

My name is John Floresta. I am over twenty-one (21) years of age, legally competent to make this Declaration, and have personal knowledge of the statements made herein. I make this declaration on my own personal knowledge for use in supporting Defendants in the above-styled matter and for all other purposes permitted by law.

2.

I hold a bachelor's degree from Liberty University; a master's degree from Western Governor's University; a doctorate in education (ABD) from Northcentral University. I have 19 years of experience.

3.

**EXHIBIT**

**1**



I am currently employed as the Chief Strategy and Accountability Officer for the Cobb County School District (“District”). I have served in this position for 3.5 years, since March, 2018.

4.

As part of my duties and responsibilities, I have reviewed numerous reports and guidance documents from the Cobb and Douglas Counties Department of Public Health (CDPH), Georgia Department of Public Health (GDPH), the Georgia Department of Education (GADOE), and the Centers for Disease Control (CDC) on methods to reduce the transmission of COVID-19 in public spaces and especially in schools.

5.

The District has implemented its COVID-19 response and intervention strategies based on guidance from each of these public health agencies.

6.

Based on guidance from public health officials, the District required masks in schools and facilities during the entire 2020-2021 school year. The District’s 2020-2021 Reopening Plan was released in August, 2020. It is attached to this Affidavit as **Exhibit 1-A**. I certify that Exhibit 1-A is a true and correct copy of the District’s

health and safety measures for the mitigation of COVID-19 in District schools during the 2020-2021 school year.

7.

When the District analyzed data from the GDPH that failed to show a meaningful reduction in the spread of COVID-19 in the Cobb County Schools based on a mask mandate, it reconsidered this mandate.

8.

The District also considered the significant amount of feedback it has received since the start of the pandemic from the community on the adverse impact the mask mandate had on students' educational experiences.

9.

In sum, the District changed from a mask mandate to a strong recommendation for masks based on GDPH school surveillance data and the feedback from parents regarding the adverse impact on students wearing masks in school. As an example, staff has received over 39,000 emails from community members advocating both for and against masks.

10.

The District's 2021-2022 Reopening Plan was released in June, 2021. It is attached to this Affidavit as **Exhibit 1-B**. I certify that Exhibit 1-B is a true and correct copy of the District's current health and safety measures for the mitigation of COVID-19 in District schools.

11.

The District's position is not "anti-mask." The District strongly recommends wearing a mask. The District simply leaves the final decision on whether to wear one to the individual.

12.

Mask wearing is only one component of a robust COVID-19 safety plan and is not the only tool school districts can use to decrease the transmission of COVID-19 in its facilities.

13.

The District is dedicated to providing a safe environment for students and employees by implementing extensive safety measures to minimize the spread of COVID-19 and reduce risk to staff, students, and the community.

14.

The District's reopening plan for the 2021-2022 school year is a continuation of effective COVID-19 safety and mitigation measures implemented during the 2020-2021 school year the District deems necessary for safe in-person learning while posing the least disruption to students and families and the educational environment.

15.

The following are some of the examples of the District's safety and mitigation measures currently being implemented.

16.

The District has implemented strict disinfection procedures with fidelity since it reopened for face-to-face instruction in the fall of 2020. These disinfection procedures include a fogging and disinfecting system that is activated within the school or facility when a positive case is reported.

17.

The District has also implemented enhanced daily cleaning procedures of offices, restrooms, breakrooms, café areas, classrooms, gyms, and other facilities. These procedures include disinfecting desks, tables, Plexiglas shields, cabinets, and other horizontal surfaces; mopping, sweeping, and disinfecting floors; and wiping



down and disinfecting all high touchpoints, such as door handles, light switches, and push plates. In restrooms, custodial staff use a Kaivac machine to disinfect the entire restroom. After each class leaves the café area, all tables and chairs are wiped down and disinfected before the next class arrives. The District custodial staff vacuums all carpet areas with HEPA filtration vacuums, including under student desks.

18.

The District's 2021-2022 Reopening Plan allows students and employees to continue wearing masks if they wish to do so in school buildings, buses, and at school events. In addition, the District has repeatedly disseminated messages to employees, students, and the community strongly recommending that individuals wear masks. Masks are also available to students and visitors who do not have one.

19.

The District requires social distancing to the extent possible throughout schools, buses, and administrative facilities. The District provides physical guides to promote social distancing, such as tape on floors, signs, one-way routes in hallways, and other measures in high traffic areas.

20.

The District provides hand sanitizing stations on buses, throughout schools, and in facilities.

21.

The District utilizes contact tracing to identify close contacts of confirmed or probable COVID-19 infections so that these individuals can isolate and quarantine to reduce transmission.

22.

Prompt contact tracing is an essential part of the intervention strategy for reducing the spread of COVID-19 and keeping schools a safe place to learn and work and remains a major part of the District's Safe Reopening Plan.

23.

The District also encourages staff, students, and families to self-screen for fever, chills, cough, difficulty breathing, congestion, sore throat, nausea, and other typical COVID-19 symptoms prior to entering school or facilities.

24.

The District continues to utilize its school nurses and clinics to assist in the implementation of its health and safety protocols. School nurses and clinics maintain contact with CDPH and GDPH; report confirmed or suspected cases per the

reporting protocol; follow CDPH and GDCPH guidance and protocols for sick students and staff; triage sick students and staff during clinic visits; educate and inform students and staff on the necessity of staying home if they have COVID-19 symptoms or have been exposed to someone with symptoms or a confirmed/suspected case of COVID-19; coordinate drive-through vaccination events for staff; and provide education to students and staff on COVID-19 testing and vaccination opportunities.

25.

The District requires its schools to educate students on good hygiene measures, such as frequent handwashing, covering coughs and sneezes, and the optional use of face coverings.

26.

The District utilizes protective partitions in select locations in school buildings.

27.

In addition to standard health and safety mitigation measures, the District places a high priority on supporting the social, emotional, and mental health needs



for its students. The District school social workers and counselors are trained to support students and staff with guidance during times of crisis, such as the pandemic.

28.

The District has supplemented its ordinary provision of psychological and mental health services to account for the increased stress of the pandemic by applying for and receiving federal grant funds to provide additional wraparound services and supports for its students.

29.

The CDC Guidance for COVID-19 Prevention in K-12 Schools (the “CDC Guidance”) emphasizes the importance of layering multiple prevention strategies, which the District has done. [CDC Guidance, available at: <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-guidance.html>.]

30.

The most recent version of the CDC Guidance lists the following prevention strategies schools can adopt for a multi-layered approach: vaccination; universal indoor masking; physical distancing of at least three feet within classrooms; screening testing; ventilation; handwashing and respiratory etiquette; staying home



when sick and getting tested; contact tracing in combination with quarantine and isolation; and cleaning and disinfection. [*Id.*]

31.

The CDC Guidance also states: “Localities should monitor community transmission, vaccination coverage, screening testing, and occurrence of outbreaks *to guide decisions on the level of layered prevention strategies* (e.g., physical distancing, screening testing).” [*Id.* (emphasis added).]

32.

The District has adopted many of the recommendations listed in the CDC Guidance during the pandemic based on what was warranted by the community data available at the time. These strategies have included: universal indoor masking; vaccination events for staff; vaccination education for students and families; physical distancing where possible; handwashing and respiratory etiquette; staying home when sick and getting tested; contact tracing in combination with quarantine and isolation; replacing over 27,000 air filters regularly and using ionization devices to clean air in ventilation systems; in addition to other cleaning and disinfection.

33.

One of the core initiatives of the District is to make data-driven decisions.

34.

The District uses data-driven decision-making based on school surveillance data for Cobb and its surrounding counties collected and distributed by the GDPH to guide the level of layered prevention strategies it implements at any given time.

35.

The District utilizes school surveillance data reports collected and distributed by the GDPH to monitor the rate of COVID-19 cases of children ages 5-17 that live in Cobb County. The information contained in the Cobb County numbers is inclusive of not only 5-17 year-olds enrolled in the District, but all 5-17 year-olds located within Cobb County, including those who attend Marietta City Schools, independent schools, home schools, and those who do not attend school at all.

36.

The GDPH school surveillance reports are the most reliable measure of COVID-19 cases among school-aged children in the state.

37.

The District, like other school districts in Georgia, uploads new data of COVID-19 cases among District students on a weekly basis into the State Electronic Notifiable Disease Surveillance System (“SendSS”) Portal. This data is then pulled

by the GDPH, organized by county, and distributed to the public on the GDPH website on a weekly basis. It is usually published on Fridays.

38.

In June of 2021, when the District began allowing families and employees to choose whether to wear masks at school, the rate of COVID-19 infection among school-aged children in Cobb County over the last 14-day period was 22 per 100,000 students, or less than one case per 1,000 students. [GDPH School Surveillance Report June 17, 2021].

39.

County-wide data is reported by the GDPH on a rate per 100,000. Below, I reference county data per 1,000 students for illustrative purposes as most schools are less than 1,000 students. Additionally, Cobb County School District is the second largest district in the state. Most school systems in the state have significantly less than 100,000 students. Thus, a rate of 1,000 places the data closer to the context of the school level. The data is the same; it is simply scaled to 1,000 rather than 100,000.

40.

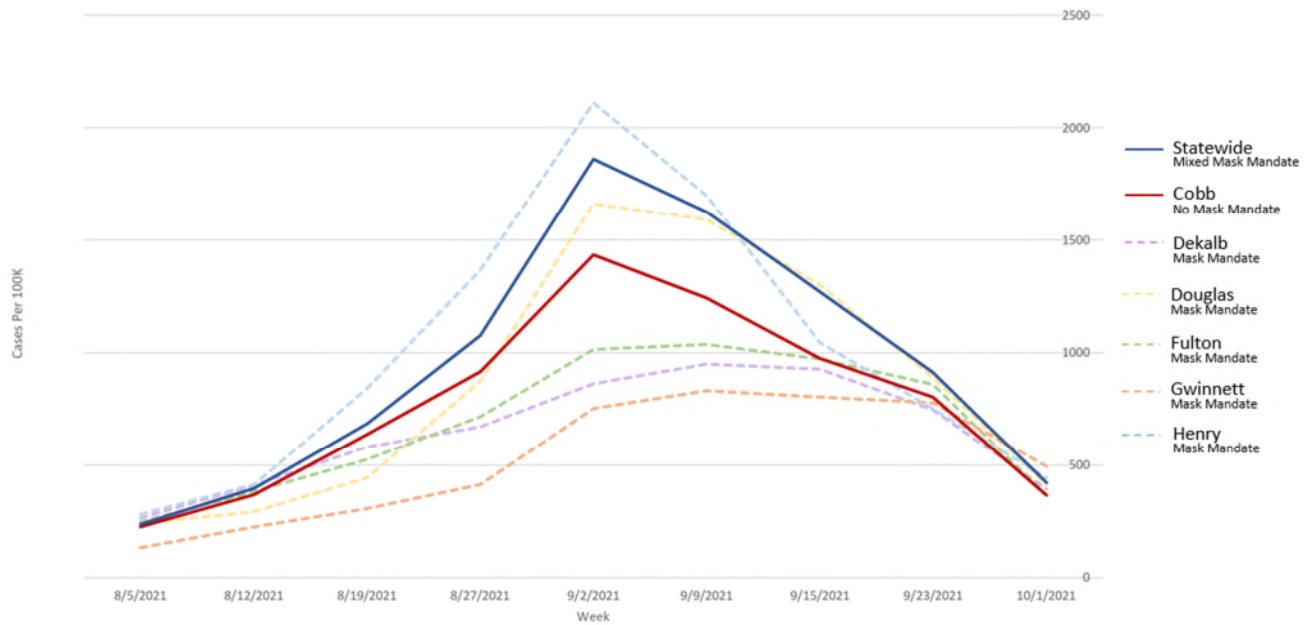


From the start of school in August of 2021 to October 8, 2021, the 14-day rate of COVID-19 infection among school-aged children in Cobb County ranged from 2 cases per 1,000 students to a high of 14 cases per 1,000 students. The trend has been steadily decreasing since September 2, 2021, which was when it peaked at 14 cases per 1,000 students. The most recent data from October 8, 2021 indicates that the county's rate of infection for school-aged children is 4 cases per 1,000 students. [GDPH School Surveillance Reports from July 30, 2021-October 8, 2021.] This most recent data shows a 73% percent drop in the incidence rate from the peak this school year. This percentage is derived using the following calculation:  $(14.3 - 3.9) / 14.3 = 72.72\%$ .

41.

Notably, Cobb County's rate of infection during the District's mask optional policy is similar to other counties whose local school districts mandated masks for the same time period. [*Id.*] Cobb County's infection rate has been equal to or below the state-wide rate through this entire school year. [*Id.*] The Cobb County rate of infection per 1,000 students, even at its peak on September 2, 2021, was not the highest rate of infection among its neighboring counties whose district's mandated masks.

Date of GDPH Report	Cobb (masks optional)	Statewide (mixed)	Fulton (masks required)	Gwinnett (masks required)	DeKalb (masks required)	Henry (masks required)	Douglas (masks required)
8/5/2021	<b>2</b>	2	3	1	3	3	2
8/12/2021	<b>4</b>	4	4	2	4	4	3
8/19/2021	<b>6</b>	7	5	3	6	8	4
8/27/2021	<b>9</b>	11	7	4	7	14	9
9/2/2021	<b>14</b>	19	10	8	9	21	17
9/9/2021	<b>12</b>	16	10	8	10	17	16
9/15/2021	<b>10</b>	13	10	8	9	11	13
9/23/2021	<b>8</b>	9	9	8	8	8	9
10/1/2021	<b>6</b>	7	7	6	6	6	5
10/8/2021	<b>4</b>	4	4	6	6	4	4



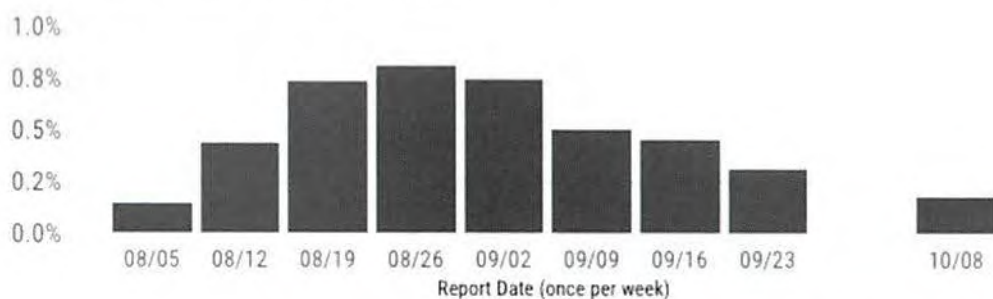
42.

In addition to tracking data on a county-wide basis, the District also reports positive cases from within the School District. As of the week-ending October 8, 2021, the District reported its lowest number of COVID-19 positive cases by staff

and students since school began in August. The District's October 8, 2021 positive case count is 232. The District currently has 125,290 students and staff. Thus, the District's positive rate for the week ending October 8, 2021 was 0.2%.

### **Incidence Rate of COVID-19: All District Schools**

Incidence rate is percentage of staff and students with a confirmed case each week



Confirmed positive cases obtained from Georgia DPH and posted each week to [www.cobbk12.org](http://www.cobbk12.org)  
Incidence rate calculated by dividing positive cases by number of students and staff at school  
Data not reported on 10/1 because district on fall break.

43.

The District's positive case count has decreased by 78% since its peak on September 2, 2021. This percentage is derived using the following calculation:  
 $(1033-232)/1033 = 77.5\%$ .

44.

Furthermore, the District's COVID-19 incidence rates with a mask-optional policy for the 2021-2022 school year are similar to the 2020-2021 school year where

the District operated under a mask mandate. From October 2020 through October 2021, the overall incidence rate of COVID-19 cases in the District ranged from 0-1% total, never exceeding 1%.

45.

According to GDPH, the peak of the COVID-19 pandemic occurred in January 2021 for Cobb County, with a 7-day moving average of 734 total COVID-19 cases reported. During that time, the District was under a universal indoor masking mandate. Conversely, the 7-day moving average in September of 2021 never exceeded 500 total cases, while the District has been mask optional. As of October 8, 2021, it is currently at a 7-day moving average of 143 total cases reported, without a mask mandate. [*Id.*]

46.

As of October 1, 2021, there have been no school-aged (5-17) deaths in Cobb County. One child, aged one years old, has died in Cobb County. [GDPH COVID-19 Daily Status Report, available at: <https://dph.georgia.gov/covid-19-daily-status-report>.]

age group	county name	cases	deaths	hospitalization
01-04 years	Cobb	1380	1	21
05-09 years	Cobb	3089	0	23
10-17 years	Cobb	7861	0	64



18-29 years	Cobb	19485	7	286
30-39 years	Cobb	13890	26	338
40-49 years	Cobb	12961	52	526
50-59 years	Cobb	11210	114	704
60-69 years	Cobb	6794	206	701
70-79 years	Cobb	3686	342	664
80 & Older years	Cobb	2136	471	598
<1 years	Cobb	340	0	22
Unknown years	Cobb	109	1	3

47.

When the District had a mask-mandate in place during the 2020-2021 school year, it received over 50,000 emails, letters, phone calls, meetings, and in-person protests by parents and community members objecting to the mask requirement. Many parents complained that it was difficult for students to effectively communicate and hear teachers while speaking with a mask. The District received thousands of complaints from parents that the mask mandate adversely impacted their children's education.

48.

The District received numerous complaints from parents and students with disabilities that its prior mask-mandate prevented some students with disabilities from attending in-person school because they were not able to wear a mask to school all day without harmful side effects. The District has also been contacted by many



families imploring it not to reimpose a mask mandate because their students with disabilities will not be able to continue attending in-person instruction if the District reinstates this requirement. Thus, if the District is required to reinstate its mask mandate, it has a good faith reason to believe that some students with disabilities currently attending in-person school will no longer be able to do so.

49.

Additionally, in the spring of 2021, a group of parents filed suit challenging the constitutionality of the District's then mask mandate. While the District was successful, defending the suit cost the District significant time and expense. The District has received additional threats of suit if it reinstates its mask mandate.

50.

The community is deeply divided over whether to require masks in schools. In fact, an email search using the phrases "mask mandate" and "mask requirement" returned approximately 39,000 emails received by the District from non-District email addresses since the start of the pandemic.

51.

While the District always welcomes input and feedback from the community, the volume of complaints associated with the mask mandate caused administrators

to divert their time and attention from other functions to respond to these parental concerns.

52.

The District will not be able to remain open to in-person instruction if it is required to comply with all of the CDC's guidelines for mitigating COVID-19 in schools. As described above, the District has made a concerted effort to comply with the vast majority of public health agencies' guidelines. However, some of the CDC's recommendations are operationally impossible. For example, there are spaces in the District where social distancing is not feasible; the District is not able to conduct screening testing; and even in the event of a mask-mandate, students will still need to remove masks to eat in the cafeteria as well as other times.

53.

The CDC's guidelines are only recommendations and not mandates. The District has not received any instructions from any local, state, or federal agency that it is required to implement a mask-mandate or any of the CDC's recommendations. The CDC has recognized that some interventions may not be necessary or appropriate for a particular school or community. This is why the CDC recommends a "layered" intervention approach. The CDC has not "mandated" any one particular intervention.

So sworn this 11<sup>th</sup> day of October, 2021.



JOHN FLORESTA

# RE-OPENING PLAN

2020-2021 SCHOOL YEAR

EXHIBIT  
1-A



COBB COUNTY  
SCHOOL DISTRICT



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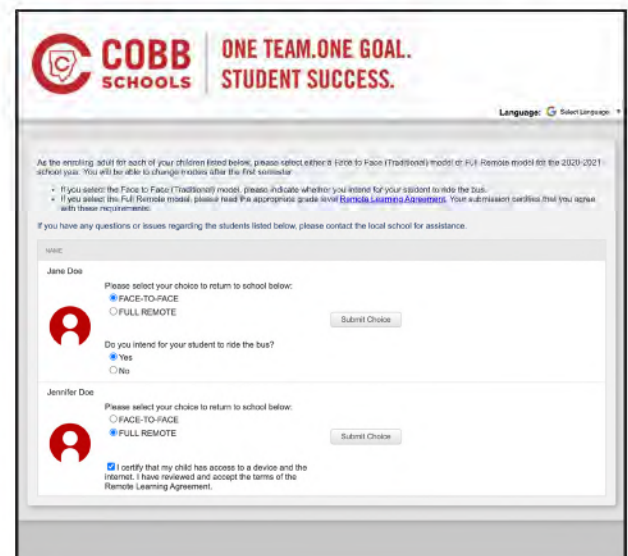
# PLAN FOR REOPENING 2020-2021 SCHOOL YEAR

## FACE-TO-FACE

Students will learn in face-to-face classrooms with masks strongly encouraged, social distancing, and cleaning practices in place.

## REMOTE CHOICE

Students will learn in remote learning classrooms, led by a Cobb County teacher, using the Cobb Teaching and Learning System (CTLS)



The screenshot shows the Cobb Schools registration portal. At the top, the Cobb Schools logo is on the left, and the slogan "ONE TEAM. ONE GOAL. STUDENT SUCCESS." is on the right. Below the header, there is a "Language" dropdown menu. The main content area contains instructions for parents to select a learning model for their child. It lists two options: "FACE-TO-FACE" and "FULL REMOTE". For each student listed (Jane Doe and Jennifer Doe), there are radio buttons to select the preferred model. Below the selection, there is a "Submit Choice" button. At the bottom, there is a checkbox for "I certify that my child has access to a device and the internet. I have reviewed and accept the terms of the Remote Learning Agreement."

**A semester long commitment**

**Registration begins on July 13 and closes on July 22**

**[www.olr.cobbk12.org](http://www.olr.cobbk12.org)**



# **HEALTH AND SAFETY PROTOCOLS**

## **2020-2021 SCHOOL YEAR**



**COBB COUNTY**  
SCHOOL DISTRICT



## MASKS/PPE

- Social distancing will be required of all students and staff in every possible circumstance
- In accordance with Federal, State, and local public health recommendations, masks or face coverings are strongly recommended and expected for faculty and students to help prevent the transmission of COVID-19 when social distancing is not possible during school or related activities
- Additional PPE in clinics
- Students and staff may wear face shields in accordance with CDC guidance



## PRACTICING PREVENTION

- Hand sanitizer will be provided at building entrances and throughout the building
- Teach, practice and reinforce good hygiene measures (frequent handwashing, covering coughs and sneezes, use of face coverings)
- Restricted use of high traffic areas with additional safety protocols (i.e. water fountains)
- Students are encouraged to bring their own water bottles
- Avoid shared classroom supplies between students
- Avoid shared food/snacks
- Strongly encourage that students and staff follow CDC/DPH recommendations to wear face coverings (sensitive to needs of students/staff with medical issues that make wearing a face covering inadvisable)
- Implement social distancing measures as possible
- Enhanced cleaning protocols will be implemented (high touch surfaces, restrooms, etc.)



## PROTECTIVE BARRIERS

- Protective partitions placed in select locations in school buildings





## SCHOOL CLINICS

- Encourage staff/students/families to self-screen before work/school for fever, chills, cough, difficulty breathing, congestion, sore throat, nausea/vomiting, body aches, etc.)
- Maintain ongoing contact with Cobb and Douglas Public Health, report COVID-19 cases(confirmed or suspected) per reporting protocol, follow Cobb and Douglas Public Health guidance and protocols for sick students and personnel, and review relevant local/state regulatory agency policies and orders for updates
- School Nurses/Clinic Substitutes will triage sick students/staff during School Clinic visit (assessment, temperature check, etc.) and follow district procedures for when students show signs of illness or injury
- Designated isolation area for individuals with COVID-19 symptoms
- Educate and inform staff and students/families to stay home, not come to school/ work, and notify school officials if they have COVID-19 symptoms, are diagnosed with COVID-19, are waiting for test results, or have been exposed to someone with symptoms or a confirmed or suspected case per CDC/DPH guidance
- Staff/students return to work/school per CDC/DPH guidance after COVID-19 illness or exposure
- School Nurses/Clinic Substitutes will use standard and transmission-based precautions when providing care to students/staff



## PUBLIC HEALTH SIGNAGE

- Post signage in classrooms, hallways, office spaces, and entrances to communicate the following: Covid-19 symptoms, how to stop the spread, and preventative measures (including staying home when sick), good hygiene, and school and district specific protocols
- Provide physical guides to promote social distancing (tape on floors, signs, one-way routes in hallways, lanes in hallways)



## TRANSPORTATION

- Hand sanitizer will be provided on the bus for Bus Drivers and Students
- Masks are strongly encouraged per CDC recommendations for Bus Drivers and Students as social distancing cannot be achieved on a school bus
- Continue our practice of assigned seating for students to facilitate safe and efficient loading and unloading
- Field trips will be suspended until further notice
- Viraseptic spray and cleaning supplies will be provided for each bus to wipe down and disinfect the buses after morning and afternoon routes



## INSTRUCTIONAL DAY

- Use of scheduling measures to balance class size to promote physical distancing to the extent possible
- Limit physical interaction through partner or group work
- Consider classroom arrangement to maximize physical distancing
- Large group gatherings will be eliminated
- Non-essential visitors will not be allowed
- Volunteering opportunities will be limited
- Eliminate activities that involve sharing of communal items
- Separate student's belongings from others' in individually labeled containers, cubbies, or designated areas



## FOOD AND NUTRITION SERVICES

- Handwashing before and after meals
- Some students will eat in the classroom (SpEd units, PreK, etc.)
- Conduct cleaning of cafeteria and high-touch surfaces throughout the day
- Pre-order meals for Remote Learners will be available
- Masks will be worn at all times by FNS staff
- Enhanced cleaning, sanitizing and disinfecting procedures will be implemented in addition to regular stringent cleaning measures for food safety
- Applications for Free or Reduced-Price meals can be completed online at <https://mealapps.cobbk12.org/>
- Parents will be encouraged to pay for meals online via [www.MyPaymentsPlus.com](http://www.MyPaymentsPlus.com)
- Modifying serving lines to eliminate students touching the line or food products while choosing meals
- Social distancing guidelines will be followed for student dining areas to the extent possible
- No parents/guests will be allowed in cafeteria

# **PREK-2 OVERVIEW**

**2020-2021 SCHOOL YEAR**



**COBB COUNTY**  
**SCHOOL DISTRICT**



# COBB COUNTY SCHOOL DISTRICT

## PREK - 2<sup>ND</sup> GRADE

### Instructional Day

**8:00-2:30 (M-F)**

Each day will begin and end with a LIVE class meeting with the teacher

### ELA Instruction

**70 Minutes**

20-minute LIVE session with the teacher (synchronous)

40-minute INDEPENDENT work session (asynchronous) that could include reteaching individual students, providing support, small group work, individual work time for students etc.

10-minute LIVE closing session with teacher

### Math Instruction

**70 Minutes**

20-minute LIVE session with the teacher (synchronous)

40-minute INDEPENDENT work session (asynchronous) that could include reteaching individual students, providing support, small group work, individual work time for students etc.

10-minute LIVE closing session with teacher

### Brain Breaks

**Two, 10-minute LIVE**

Sessions meet the cognitive and physical needs of young learners

### Science/Social Studies Instruction

**70 minutes (Alternating Days)**

20-minute LIVE session with the teacher (synchronous)

40-minute INDEPENDENT work session (asynchronous) that could include reteaching individual students, providing support, small group work, individual work time for students etc.

10-minute LIVE closing session with teacher

### Specials

**One, 60-minute Specials class will be offered**  
(synchronous & asynchronous instruction)

### Other

Lunch 30 minutes

Peer socialization and Social Emotional Learning (SEL) opportunities embedded throughout the day

Accommodations will be provided according to 504 Plans/IEPs

Special Education services will be virtually provided based on individual needs. English Language services will be virtually provided based on individual needs.

Remote Learners must comply with the Student Code of Conduct.

Families who choose remote learning are committed to one semester.

Orientation/training provided to parents regarding basics of remote learning and the platform, CTLS Learn



## PreK-2 STUDENT SCHEDULE

**NOTE:** The following schedules represent possible remote learning student schedules. The order of classes will vary from student to student depending on their class schedule (just as it does for students in a traditional learning environment).

**8:00-8:30** - Prepare Learning Area/Morning Meeting

### **ELA (70 minutes)**

**8:30-8:50 ELA LIVE** (synchronous) session with teacher

**8:50-9:30 INDEPENDENT Work Session** (asynchronous): This work session can include reteaching individual or small groups of students, independent reading or writing time, English Language support, and/or working on IEP goals and objectives.

**9:30-9:40 LIVE Closing** (synchronous) with teacher

**9:40-9:50** - LIVE Dance/Brain Break (as a class)

**9:50-10:10** - Independent Restroom break, Snack time

### **Math (70 minutes)**

**10:10-10:30 Math LIVE** (synchronous) session with teacher

**10:30-11:10 INDEPENDENT Work Session** (asynchronous): This work session can include reteaching individual or small groups of students, English Language support, and/or working on IEP goals and objectives.

**11:10-11:20 LIVE Closing** (synchronous) with teacher

**11:20-11:30** - LIVE Dance/Brain Break (as a class)

**11:30-12:00** - Lunch

### **Science/Social Studies - Alternating Days (70 minutes)**

**12:00-12:20 Science/Social Studies LIVE** (synchronous) session with teacher

**12:20-1:00 INDEPENDENT Work Session** (asynchronous): This work session can include reteaching individual or small groups of students, English Language support, and/or working on IEP goals and objectives.

**1:00-1:10 LIVE Closing** (synchronous) with teacher

### **Specials Class (60 minutes) Live (synchronous) or Independent (asynchronous)**

**1:10-2:10** Specials rotation: Art, Music, PE, Counseling, etc.

**2:10-2:30** - LIVE (synchronous) Closing Class Meeting with teacher



## Cobb County School District Elementary School Remote Learning Agreement

In order to ensure success in remote courses, students must understand and comply with certain expectations, policies, and procedures. This agreement is designed to help students and parents/guardians understand some of the unique aspects of remote learning. Choosing the Full Remote option serves as confirmation that families accept the following expectations. We have included signature boxes so that parents might print out and work through this agreement with their children, but the signed document does NOT need to be submitted to the district.

### **Part I: Remote Student and Parent Expectations**

Students and Parent/Guardians should read and initial each line to show that they understand and will follow each expectation.

Student Initials	Parent/Guardian Initials	Expectations
		1. The student and parent will follow the Course Syllabus and the student will follow the <b>Course Syllabus due dates</b> by submitting work on or before the due date.
		2. The student and parent will <b>create and maintain a regular work schedule</b> . Students should <b>plan to work ahead</b> if other school, work, or personal activities interfere with the student's ability to complete coursework as outlined on the Course Syllabus.
		3. The student has <b>daily access to a reliable internet connected computer with access to either the Microsoft Office Suite or Microsoft Office 365</b> .
		4. The student has demonstrated that s/he can <b>utilize the Microsoft Office Suite</b> (ie Word, PowerPoint, and Excel) to create documents and presentations, and save them to designated storage with parental assistance.
		5. The student has a <b>computer-based method</b> (computer folder, cloud storage, flash drive) to <b>organize and store coursework</b> .
		6. <b>CTLs Learn</b> is the primary form of communication. If a family has questions or concerns, they should proactively contact their teachers as soon as possible. Communication should be clear, respectful, and include the student's name and course. Students should <b>check CTLs Learn daily</b> and respond to teacher contacts promptly.
		7. <b>Parents should assist by encouraging students</b> to: actively participate in the course, ask for help when needed, and complete assignments in a timely manner. <b>Parents should also monitor</b> student progress and grades.
		8. Parents have multiple ways to monitor student progress in remote courses. A <b>CTLs Parent Account</b> is automatically created at enrollment. This account allows parents to view the course announcements, teacher contact information, and the student's grades. Teachers send <b>emails to the parent email account provided at registration</b> . These emails include individualized communication. Additionally, parents can view course information from a student's perspective through their child's <b>CTLs Learn</b> account.



**Part II: Remote Learning and CCSD Policies and Procedures**

Students and Parent/Guardians should read and initial each line to show that they understand each policy and/or procedure.

Student Initials	Parent/Guardian Initials	Policies and Procedures
		1. The student is expected to <b>complete the remote Student Orientation.</b>
		2. Students who <b>transfer</b> from one CCSD school to another <b>will remain enrolled</b> in their remote course(s).
		3. Students taking remote courses must <b>abide by all policies and procedures of the Cobb County School District.</b>
		4. Students <b>enrolled full time remote</b> who do not work productively in their remote courses <b>for ten (10) consecutive days</b> or more may be <b>withdrawn</b> from CCSD for lack of participation/attendance (per CCSD Board Rule JBC-R School Admissions/Withdrawal) and removed from their remote courses.



# **3-5 OVERVIEW**

## **2020-2021 SCHOOL YEAR**



**COBB COUNTY**  
SCHOOL DISTRICT



# COBB COUNTY SCHOOL DISTRICT

## 3<sup>RD</sup> - 5<sup>TH</sup> GRADE

### Instructional Day

**8:00-2:30 (M-F)**

Each day will begin and end with a LIVE class meeting with the teacher

### ELA Instruction

**95 Minutes**

25-minute LIVE session with the teacher (synchronous)

60-minute INDEPENDENT work session (asynchronous) that could include reteaching individual students, providing support, small group work, individual work time for students etc.

10-minute LIVE closing session with teacher

### Math Instruction

**95 Minutes**

25-minute LIVE session with the teacher (synchronous)

60-minute INDEPENDENT work session (asynchronous) that could include reteaching individual students, providing support, small group work, individual work time for students etc.

10-minute LIVE closing session with teacher

### Science/Social Studies Instruction

**60 minutes (Alternating Days)**

25-minute LIVE session with the teacher (synchronous)

25-minute INDEPENDENT work session (asynchronous) that could include reteaching individual students, providing support, small group work, individual work time for students etc.

10-minute LIVE closing session with teacher

Science/Social Studies provided on A/B days or another alternating schedule

### Specials

Breaks embedded throughout the day

Lunch 30 minutes

Peer socialization and Social Emotional Learning (SEL) opportunities embedded throughout the day

Orientation/training provided to parents regarding basics of remote learning and the platform, CTLS Learn.

### Other

Accommodations will be provided according to 504 Plans/IEPs

Special Education services will be virtually provided based on individual needs. English Language services will be virtually provided based on individual needs.

Remote Learners must comply with the Student Code of Conduct.

Families who choose remote learning are committed to one semester.



## 3-5 STUDENT SCHEDULE

**NOTE:** The following schedules represent possible remote learning student schedules. The order of classes will vary from student to student depending on their class schedule (just as it does for students in a traditional learning environment).

**8:00-8:30** Morning Meeting

**ELA (95 minutes)**

**8:30-8:55 ELA LIVE** (synchronous) session with teacher

**8:55-9:55 INDEPENDENT Work Session** (asynchronous): This work session can include reteaching individual or small groups of students, English Language support, and/or working on IEP goals and objectives.

**9:55-10:05 LIVE Closing** (synchronous) with teacher

**BREAK 10:05-10:15**

**Math (95 minutes)**

**10:15-10:40 Math LIVE** (synchronous) session with teacher

**10:40-11:40 INDEPENDENT Work Session** (asynchronous): This work session can include reteaching individual or small groups of students, English Language support, and/or working on IEP goals and objectives.

**11:40-11:50 LIVE Closing** (synchronous) with teacher

**11:50-12:20 Lunch**

**Science/Social Studies - Alternating Days (60 minutes)**

**12:20-12:45 Science/Social Studies LIVE** (synchronous) session with teacher

**12:45-1:10 INDEPENDENT Work Session** (asynchronous): This work session can include reteaching individual or small groups of students, English Language support, and/or working on IEP goals and objectives.

**1:10-1:20 LIVE Closing** (synchronous) with teacher

**Specials (55 minutes) Live (synchronous) or Independent (asynchronous)**

**1:20-2:15** Specials rotation: Art, Music, PE, Counseling, etc.

**2:15-2:30 LIVE** (synchronous) Closing Class Meeting with teacher



## Cobb County School District Elementary School Remote Learning Agreement

In order to ensure success in remote courses, students must understand and comply with certain expectations, policies, and procedures. This agreement is designed to help students and parents/guardians understand some of the unique aspects of remote learning. Choosing the Full Remote option serves as confirmation that families accept the following expectations. We have included signature boxes so that parents might print out and work through this agreement with their children, but the signed document does NOT need to be submitted to the district.

### **Part I: Remote Student and Parent Expectations**

Students and Parent/Guardians should read and initial each line to show that they understand and will follow each expectation.

Student Initials	Parent/Guardian Initials	Expectations
		1. The student and parent will follow the Course Syllabus and the student will follow the <b>Course Syllabus due dates</b> by submitting work on or before the due date.
		2. The student and parent will <b>create and maintain a regular work schedule</b> . Students should <b>plan to work ahead</b> if other school, work, or personal activities interfere with the student's ability to complete coursework as outlined on the Course Syllabus.
		3. The student has <b>daily access to a reliable internet connected computer with access to either the Microsoft Office Suite or Microsoft Office 365</b> .
		4. The student has demonstrated that s/he can <b>utilize the Microsoft Office Suite</b> (ie Word, PowerPoint, and Excel) to create documents and presentations, and save them to designated storage with parental assistance.
		5. The student has a <b>computer-based method</b> (computer folder, cloud storage, flash drive) to <b>organize and store coursework</b> .
		6. <b>CTLs Learn</b> is the primary form of communication. If a family has questions or concerns, they should proactively contact their teachers as soon as possible. Communication should be clear, respectful, and include the student's name and course. Students should <b>check CTLs Learn daily</b> and respond to teacher contacts promptly.
		7. <b>Parents should assist by encouraging students</b> to: actively participate in the course, ask for help when needed, and complete assignments in a timely manner. <b>Parents should also monitor</b> student progress and grades.
		8. Parents have multiple ways to monitor student progress in remote courses. A <b>CTLs Parent Account</b> is automatically created at enrollment. This account allows parents to view the course announcements, teacher contact information, and the student's grades. Teachers send <b>emails to the parent email account provided at registration</b> . These emails include individualized communication. Additionally, parents can view course information from a student's perspective through their child's <b>CTLs Learn</b> account.

**Part II: Remote Learning and CCSD Policies and Procedures**

Students and Parent/Guardians should read and initial each line to show that they understand each policy and/or procedure.

Student Initials	Parent/Guardian Initials	Policies and Procedures
		1. The student is expected to <b>complete the remote Student Orientation.</b>
		2. Students who <b>transfer</b> from one CCSD school to another <b>will remain enrolled</b> in their remote course(s).
		3. Students taking remote courses must <b>abide by all policies and procedures of the Cobb County School District.</b>
		4. Students <b>enrolled full time remote</b> who do not work productively in their remote courses <b>for ten (10) consecutive days</b> or more may be <b>withdrawn</b> from CCSD for lack of participation/attendance (per CCSD Board Rule JBC-R School Admissions/Withdrawal) and removed from their remote courses.

# MIDDLE SCHOOL OVERVIEW

2020-2021 SCHOOL YEAR



COBB COUNTY  
SCHOOL DISTRICT





# COBB COUNTY SCHOOL DISTRICT

## 6<sup>TH</sup> - 8<sup>TH</sup> GRADE

### Instructional Day

**9:00-4:00 (M-F)**

Each day will begin and end with a LIVE class meeting with the teacher

### ELA Instruction

**50 Minutes**

20-minute LIVE session with the teacher (synchronous)

25-minute independent work session (asynchronous) that could include reteaching individual students, providing support, small group work, individual work time for students etc.

5-minute LIVE closing session with teacher

### Math Instruction

**50 Minutes**

20-minute LIVE session with the teacher (synchronous)

25-minute independent work session (asynchronous) that could include reteaching individual students, providing support, small group work, individual work time for students etc.

5-minute LIVE closing session with teacher

### Science Instruction

**50 Minutes**

20-minute LIVE session with the teacher (synchronous)

25-minute independent work session (asynchronous) that could include reteaching individual students, providing support, small group work, individual work time for students etc.

5-minute LIVE closing session with teacher

### Social Studies Instruction

**50 Minutes**

20-minute LIVE session with the teacher (synchronous)

25-minute independent work session (asynchronous) that could include reteaching individual students, providing support, small group work, individual work time for students etc.

5-minute LIVE closing session with teacher

### Academic Extension Class

**50 Minutes**

LIVE session with the teacher (synchronous) and could include Foreign Language, Enrichment, and/or Intervention classes (i.e. Gifted Resource, Math Connections, Study Skills, etc.).

### Connections

**Two, 50-minute Connections classes will be offered**  
(synchronous & asynchronous instruction)

### Other

Breaks embedded throughout the day

Lunch 30 minutes

Peer socialization and Social Emotional Learning (SEL) opportunities embedded throughout the day

Orientation/training provided to parents regarding the platform, CTLS Learn, and basics of remote learning

Accommodations will be provided according to 504 Plans/IEPs

Special Education services will be virtually provided based on individual needs. English Language services will be virtually provided based on individual needs.

Remote Learners must comply with the Student Code of Conduct.

Families who choose remote learning are committed to one semester.



# MIDDLE SCHOOL SCHEDULE

**NOTE:** The following schedules represent possible remote learning student schedules. The order of classes will vary from student to student depending on their class schedule (just as it does for students in a traditional learning environment).

**9:00-9:15** Morning Meeting with first teacher of the day

## **Academic Class (50 minutes)**

**9:15-9:35 LIVE** (synchronous) session with teacher

**9:35-10:00 INDEPENDENT Work Session** (asynchronous): This work session can include reteaching individual or small groups of students, English Language support, and/or working on IEP goals and objectives.

**10:00-10:05 LIVE Closing** (synchronous) with teacher

## **BREAK 10:05-10:15**

## **Academic Class (50 minutes)**

**10:15-10:35 LIVE** (synchronous) session with teacher

**10:35-11:00 INDEPENDENT Work Session** (asynchronous): This work session can include reteaching individual or small groups of students, English Language support, and/or working on IEP goals and objectives.

**11:00-11:05 LIVE Closing** (synchronous) with teacher

## **11:05-11:35 Lunch**

## **Academic Class (50 minutes)**

**11:35-11:55 LIVE** (synchronous) session with teacher

**11:55-12:20 INDEPENDENT Work Session** (asynchronous): This work session can include reteaching individual or small groups of students, English Language support, and/or working on IEP goals and objectives.

**12:20-12:25 LIVE Closing** (synchronous) with teacher

## **Academic Extension Class (50 minutes)**

**12:25-1:15 LIVE** (synchronous) Foreign Language, Enrichment, and/or Intervention classes (i.e. Gifted Resource, Math Connections, Study Skills, etc.).

## **BREAK 1:15-1:25**

## **Connections (50 minutes each) Live (synchronous) or Independent (asynchronous)**

**1:25-2:15** Connections #1

**2:15-3:05** Connections #2

## **Academic Class (50 minutes)**

**3:05-3:25 LIVE** (synchronous) session with teacher

**3:25-3:50 INDEPENDENT Work Session** (asynchronous): This work session can include reteaching individual or small groups of students, English Language support, and/or working on IEP goals and objectives.

**3:50-3:55 LIVE Closing** (synchronous) with teacher



## Cobb County School District Middle School Remote Learning Agreement

In order to ensure success in remote courses, students must understand and comply with certain expectations, policies, and procedures. This agreement is designed to help students and parents/guardians understand some of the unique aspects of remote learning. Choosing the Full Remote option serves as confirmation that families accept the following expectations. We have included signature boxes so that parents might print out and work through this agreement with their children, but the signed document does NOT need to be submitted to the district.

### **Part I: Remote Student and Parent Expectations**

Students and Parent/Guardians should read and initial each line to show that they understand and will follow each expectation.

Student Initials	Parent/Guardian Initials	Expectations
		1. The student and parent will follow the Course Syllabus and the student will follow the <b>Course Syllabus due dates</b> by submitting work on or before the due date.
		2. The student and parent will <b>create and maintain a regular work schedule</b> . Students should <b>plan to work ahead</b> if other school, work, or personal activities interfere with the student's ability to complete coursework as outlined on the Course Syllabus.
		3. The student has <b>daily access to a reliable internet connected computer with access to either the Microsoft Office Suite or Microsoft Office 365</b> .
		4. The student has demonstrated that s/he can <b>utilize the Microsoft Office Suite</b> (ie Word, PowerPoint, and Excel) to create documents and presentations, and save them to designated storage with parental assistance.
		5. The student has a <b>computer-based method</b> (computer folder, cloud storage, flash drive) to <b>organize and store coursework</b> .
		6. <b>CTLS Learn</b> is the primary form of communication. If a family has questions or concerns, they should proactively contact their teachers as soon as possible. Communication should be clear, respectful, and include the student's name and course. Students should <b>check CTLS Learn daily</b> and respond to teacher contacts promptly.
		7. <b>Parents should assist by encouraging students</b> to: actively participate in the course, ask for help when needed, and complete assignments in a timely manner. <b>Parents should also monitor</b> student progress and grades.
		8. Parents have multiple ways to monitor student progress in remote courses. A <b>CTLS Parent Account</b> is automatically created at enrollment. This account allows parents to view the course announcements, teacher contact information, and the student's grades. Teachers send <b>emails to the parent email account provided at registration</b> . These emails include individualized communication. Additionally, parents can view course information from a student's perspective through their child's <b>CTLS Learn</b> account.

**Part II: Remote Learning and CCSD Policies and Procedures**

Students and Parent/Guardians should read and initial each line to show that they understand each policy and/or procedure.

Student Initials	Parent/Guardian Initials	Policies and Procedures
		1. The student is expected to <b>complete the remote Student Orientation.</b>
		2. Students who <b>transfer</b> from one CCSD school to another <b>will remain enrolled</b> in their remote course(s).
		3. Students taking remote courses must <b>abide by all policies and procedures of the Cobb County School District.</b>
		4. Students <b>enrolled full time remote</b> who do not work productively in their remote courses <b>for ten (10) consecutive days</b> or more may be <b>withdrawn</b> from CCSD for lack of participation/attendance (per CCSD Board Rule JBC-R School Admissions/Withdrawal) and removed from their remote courses.

# HIGH SCHOOL OVERVIEW

2020-2021 SCHOOL YEAR



COBB COUNTY  
SCHOOL DISTRICT



# COBB COUNTY SCHOOL DISTRICT

## 9<sup>TH</sup> - 12<sup>TH</sup> GRADE

### Instructional Day

**8:30-3:30 (M-F)**  
following the local bell schedule

### Scheduling

Block schedule students = 4 classes/semester  
Traditional schedule students = 6 classes/semester  
Students will be scheduled for each course for the entire semester.

### Courses

Remote learning classes will be taught using CCSD teachers and the CTLS Learn platform.

Remote teachers will primarily teach students from their own schools.

Courses offered through CTLS Learn will emphasize synchronous instruction blended with asynchronous work sessions.

Cobb Virtual Academy (CVA) and Georgia Virtual Schools (GAVS) classes will also be used to support CCSD remote learning. CVA and GAVS classes emphasize asynchronous instruction.

Remote courses will follow the same curriculum as face-to-face courses.

Remote courses will have the same grading policies as face-to-face courses. All graded assignments will be included in the gradebook. Grading will NOT follow the policies of last spring.

Attendance will be taken daily.

### Other

Accommodations will be provided according to 504 Plans/IEPs

Special Education services will be virtually provided based on individual needs.

English Language services will be virtually provided based on individual needs.

Remote Learners must comply with the Student Code of Conduct.

Families who choose remote learning are committed to one semester.

Orientation/training provided to parents regarding basics of remote learning and the platform, CTLS Learn.





# HIGH SCHOOL SCHEDULE

## SAMPLE REMOTE SCHEDULE - BLOCK SCHEDULE HIGH SCHOOLS

TIME	PERIOD	CLASS	PLATFORM	PRIMARY INSTRUCTION TYPE
8:30	1	AP US History	CTLS	Synchronous with asynchronous work sessions
10:00	2	GSE Precalculus	CVA	Asynchronous with synchronous support
11:30		Lunch		
12:00	3	Entrepreneurship	CTLS	Synchronous with asynchronous work sessions
1:30	4	AP Art History	GAVS	Asynchronous with synchronous support

## SAMPLE REMOTE SCHEDULE - TRADITIONAL SCHEDULE HIGH SCHOOLS

TIME	PERIOD	CLASS	PLATFORM	PRIMARY INSTRUCTION TYPE
8:30	1	Personal Fitness	CVA	Asynchronous with synchronous support
9:20	2	American Literature	CTLS	Synchronous with asynchronous work sessions
10:10	3	Chemistry A	CTLS	Synchronous with asynchronous work sessions
11:00	4	Lunch		
11:50	5	Japanese I A	GAVS	Asynchronous with synchronous support
12:40	6	US History A	CTLS	Synchronous with asynchronous work sessions
1:30	7	Geometry A	CTLS	Synchronous with asynchronous work sessions

# HIGH SCHOOL FAQ

2020-2021 SCHOOL YEAR



COBB COUNTY  
SCHOOL DISTRICT



# HS REMOTE LEARNING OPTION

## 1. What will the school day look like?

Students will follow the bell schedule of the local school.

## 2. How will remote classes work?

In most cases, teachers will utilize CTLS Learn to deliver the same curriculum as classes offered face-to-face. CTLS Learn is a single platform where teachers can post assignments and supplemental resources, where students can submit work, and where live sessions can be conducted. Students in CTLS Learn courses will log into the course each day following the bell schedule of their school. Daily instruction through CTLS may include an explanation of an assignment, live instruction (recorded for later viewing), question and answer sessions, class activities or individualized support.

## 3. How will my student's remote class schedule be determined?

Student schedules will follow the schedule established by their school—traditional or block. Remote teachers will be selected first to teach students from their own schools. In order to provide access to some specialized courses (for ex., AP, magnet, fine arts, etc.), some remote teachers may serve students from multiple schools using the CTLS Learn platform. Cobb Virtual Academy and Georgia Virtual School classes may also be used to deliver high quality online instruction that addresses student needs. Students should plan to be engaged in their online course during their normal school day.

## SAMPLE SCHEDULES:

**SAMPLE REMOTE SCHEDULE - BLOCK SCHEDULE HIGH SCHOOLS**

TIME	PERIOD	CLASS	PLATFORM	PRIMARY INSTRUCTION TYPE
8:30	1	AP US History	CTLS	Synchronous with asynchronous work sessions
10:00	2	GSE Precalculus	CVA	Asynchronous with synchronous support
11:30		Lunch		
12:00	3	AP US History	CTLS	Synchronous with asynchronous work sessions
1:30	4	AP AP History	CVA	Asynchronous with synchronous support

**SAMPLE REMOTE SCHEDULE - TRADITIONAL SCHEDULE HIGH SCHOOLS**

TIME	PERIOD	CLASS	PLATFORM	PRIMARY INSTRUCTION TYPE
8:30	1	Personal Fitness	CVA	Asynchronous with synchronous support
9:20	2	American Literature	CTLS	Synchronous with asynchronous work sessions
10:10	3	Chemistry A	CTLS	Synchronous with asynchronous work sessions
11:00	4	Lunch		
11:50	5	Chemistry A	CVA	Asynchronous with synchronous support
12:40	6	US History A	CTLS	Synchronous with asynchronous work sessions
1:30	7	Chemistry A	CTLS	Synchronous with asynchronous work sessions

## 4. Who will teach remote classes?

Certified teachers will teach all classes.

## 5. Are there any courses that cannot be offered remotely?

Yes, if there are not enough students registered for a course in the remote environment, it will not be offered. Also, we have determined some courses cannot be effectively taught in the remote environment.



**6. If my school does not offer a course I registered for, how will I pick a new course?**

Once the remote courses are created, counselors will contact any student for an alternative option when none of the primary and alternate course selections are available.

**7. Will my magnet student be able to take magnet courses if I choose the Remote option?**

Courses for students enrolled in magnet programs will be offered in the remote learning environment.

**8. Once I make a choice, is it binding for an entire semester?**

Parents are making a commitment for one semester.

**9. Will my child be ready to transition back to face-to-face in January if we choose to return?**

Yes, since our teachers will be teaching the remote courses, students will be exposed to the same curriculum and expectations of all students taking the course.

**10. How will grades be calculated?**

Remote courses will have the same grading policies as the face-to-face version of the course. All graded assignments will be included in the gradebook. The grading and credit earned will NOT follow the policies of last spring.

**11. Will attendance be taken in remote learning classes?**

Yes, attendance will be taken daily.

**12. Is the student code of conduct still in effect for remote students?**

The student code of conduct is still applicable for remote learners.





## Cobb County School District High School Remote Student Agreement

In order to ensure success in remote courses, students must understand and comply with certain expectations, policies, and procedures. This agreement is designed to help students and parents/guardians understand some of the unique aspects of remote learning. Choosing the Full Remote option serves as confirmation that families accept the following expectations. We have included signature boxes so that parents might print out and work through this agreement with their children, but the signed document does NOT need to be submitted to the district.

### **Part I: Remote Student and Parent Expectations**

Students and Parent/Guardians should read and initial each line to show that they understand and will follow each expectation.

Student Initials	Parent/Guardian Initials	Expectations
		1. The student should expect to <b>work productively</b> in each class for 12-15 hours per week for each full unit (Y) course and 6-8 hours per week for each half unit (A or B) course during Fall and Spring terms. <b>Students <u>enrolled full time remote</u> must work productively for 40-45 hours per week.</b> Productive work means submitting all work on or before the due date.
		2. The student and parent will follow the Course Syllabus and the student will follow the <b>Course Syllabus due dates</b> by submitting work on or before the due date.
		3. The student will <b>create and maintain a regular work schedule</b> . Students should <b>plan to work ahead</b> if other school, work, or personal activities interfere with the student's ability to complete coursework as outlined on the Course Syllabus.
		4. The student has <b>daily access to a reliable internet connected computer with access to either the Microsoft Office Suite or Microsoft Office 365.</b>
		5. The student has demonstrated that s/he can <b>utilize the Microsoft Office Suite</b> (ie Word, PowerPoint, and Excel) to create documents and presentations, and save them to designated storage.
		6. The student has a <b>computer-based method</b> (computer folder, cloud storage, flash drive) to <b>organize and store coursework</b> .
		7. <b>CTLS Learn</b> is the primary form of communication. If the students have questions or concerns, they should proactively contact their teachers as soon as possible. Communication should be clear, respectful, and include the student's name and course. Families should <b>check CTLS Learn daily</b> and respond to teacher contacts promptly.
		8. <b>Parents should assist by encouraging students</b> to: actively participate in the course, ask for help when needed, and complete assignments in a timely manner. <b>Parents should also monitor</b> student progress and grades.
		9. Parents have multiple ways to monitor student progress in remote courses. A <b>CTLS Parent Account</b> is automatically created at registration. This account allows parents to view the course announcements, teacher contact information, and the

		student's grades. Teachers send <b>emails to the parent email account provided at registration</b> . These emails include individualized communication. Additionally, parents can view course information from a student's perspective through their child's <b>CTLs Learn</b> account.
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**Part II: Remote Learning and CCSD Policies and Procedures**

Student Initials	Parent/ Guardian Initials	Policies and Procedures
		1. Students taking a remote course(s) as part of their state funded school schedule <b>cannot withdraw from the course after the first 10 days of a semester</b> per CCSD Board Rule IHA-R.
		2. The student is expected to <b>complete the remote Student Orientation</b> .
		3. Students who <b>transfer</b> from one CCSD school to another <b>will remain enrolled</b> in their remote course(s).
		4. Remote course <b>grades will appear on the student's transcript</b> and will be averaged into the Grade Point Average (GPA).
		5. Students taking remote courses must <b>abide by all policies and procedures of the Cobb County School District</b> .
		6. Students <b>enrolled full time remote who do not work productively</b> in their remote courses <b>for ten (10) consecutive days</b> or more may be <b>withdrawn</b> from CCSD for lack of participation/attendance (per CCSD Board Rule JBC-R School Admissions/Withdrawal) and removed from their remote courses.



# **STUDENT ACTIVITY GUIDANCE**

## **2020-2021 SCHOOL YEAR**



**COBB COUNTY**  
SCHOOL DISTRICT



## **Elementary School Student Activities**

Student Activities, including PTA/Foundation sponsored clubs/classes during ASP, will meet at local school discretion.

Remote Choice students will not be allowed to participate in these programs or activities face-to-face.

## **Middle School Student Activities and Intramurals Overview**

Student Activities, including intramurals, will meet at local school discretion.

Remote choice students will not be allowed to participate in student activities face-to-face.

## **High School Athletics and Student Activities Overview**

### **GHSA Activities (Athletics, One Act, Literary, Dance):**

Per Georgia High School Association guidelines, high school students who are otherwise eligible will be able to participate in GHSA activities whether they are learning face-to-face or remotely while they are actively enrolled in their school.

\*GHSA is an independent organization that changes its guidelines routinely. This statement will be updated in accordance with their guidelines.

### **Student Activities Eligibility:**

Remote choice students will be able to participate in face-to-face co-curricular activities (activities tied to specific courses, such as band or ROTC) after school hours if they meet all other eligibility requirements, such as being enrolled in the related course.

Remote choice students will not be able to participate in face-to-face extracurricular activities (activities that are not tied to a course).

All extracurricular sponsors will be subject to symptom checks and/or temperature screening

# **AFTER SCHOOL PROGRAMS GUIDANCE**

## **2020-2021 SCHOOL YEAR**



**COBB COUNTY**  
SCHOOL DISTRICT



# AFTER SCHOOL PROGRAM (ASP) INFORMATION

**Overview:** The After School Program (ASP) provides a safe, fun, and nurturing environment for the care of elementary students attending Face-to-Face instruction from time of school dismissal until 6:00 PM each school day.

ASP is a self-supporting program and receives no support from taxpayer funds for its operation. Funds earned or donated at local schools for the ASP are to be used by local Principals to benefit schools, students and faculty and are subject to District Policy.

OPERATIONAL	HEALTH/SAFETY GUIDELINES	FINACIAL	PTA/FOUNDATION SPONSORED EVENTS	STAFFING
<p><b>General Information:</b> ASP is offered to every elementary school student in the District who attends Face-to-Face instruction.</p> <p>ASP operates on the days school is in session from the time students are dismissed until 6:00 PM.</p> <p>Each ASP program is autonomous to the local school.</p> <p>The Principal and the local school ASP director are responsible for the operations of the program.</p> <p><b>Attendance:</b> ASP charges the daily fee for students who are present at the time attendance is taken.</p> <p><b>Student Check out:</b> Requires a parent/guardian identification and signature at time student(s) are picked-up.</p> <p>Other family/friend members may check out a student if given permission by the parent in written form (contact should be listed in emergency contact list for identification purposes); identification and signature are required at the time of pick up.</p> <p>ASP Director and local school principal will establish pick-up procedures for parent waiting area and student waiting area.</p>	<p>The ASP director and local school principal will review and recommend the health/safety guidelines in accordance with CCSD health/safety guidelines.</p> <p>Snacks will be distributed based on the recommendations of the ASP Director and local school principal.</p>	<p>ASP Charges a \$10 per student District-wide non-refundable annual registration fee. This registration fee follows the student if he/she transfers to another Cobb County School District school within the same school year.</p> <p>ASP requires a prepayment of \$7.00 tuition per day for students staying in the program.</p> <p>ASP charges a late fee of \$1.00 per minute/ per student after 6:00 PM until the time the student is picked up.</p> <p>Parents/guardians will be expected to pay for ASP online via <a href="https://www.mypaymentsplus.com">MyPaymentsPlus.com</a>.</p>	<p>PTA/Foundation President, ASP Director, and local school principal will recommend/ approve programs which will adhere to CCSD health/safety guidelines.</p> <p>Remote Choice students will not be allowed to participate in these programs face-to-face.</p>	<p>The ASP director and local school principal will review and recommend staff guidelines based on CCSD health/safety guidelines.</p> <p>The recommended student/ teacher ratio is 15:1.</p> <p>ASP custodial staff will follow the recommended CCSD health/ safety guidelines.</p>



**COBB COUNTY**  
**SCHOOL DISTRICT**

# **RE-OPENING PLAN**

## **2021-2022 SCHOOL YEAR**

**EXHIBIT**  
**1-B**

# PLAN FOR RE-OPENING

## 2021-2022 SCHOOL YEAR

### Face-To-Face

Students will learn five days a week in face-to-face classrooms with social distancing, and cleaning practices in place. Individuals will have the option to continue wearing a mask while attending school and/or school events.

Families had the opportunity March 22-April 2 to enroll their 6-12<sup>th</sup> grade students in the new digital learning options that will be available for the 2021-2022 school year. Digital learning registration for elementary families was open April 19-May 2. Families new to the District and students enrolling for the first time will be able to sign up for digital learning at the time of registration. Families who do not opt to enroll in digital learning will automatically be enrolled in face-to-face learning.

In response to the new needs of students, [parent surveys](#), and built on the experience of one of the longest-standing virtual academies in the country, we have created full-time and part-time online learning options for Cobb families. Students enrolled in online learning will attend five days a week. Complete details on the online learning options are available at: <https://www.cobbk12.org/learningeverywhere>.



## Learning Everywhere Flowchart



# LEARNING. EVERYWHERE.

**Full-Time  
Instruction**

**Part-Time  
Online Instruction**



**Elementary  
Full-Time  
Online School**  
Grades PreK - 5



**COBB ONLINE  
LEARNING ACADEMY**



**COBB HORIZON  
HIGH SCHOOL**

*\*For The 2021-2022  
School Year*

**VA** **Cobb  
Virtual  
Academy**



## School Calendar

For a complete list of events throughout the 2021-2022 school year, [click here](#).

## 2021-2022 School Year Highlights

### Leadership Kickoff (Harrison High School)

- Tuesday, July 13<sup>th</sup>

### Summer Commencement (Harrison High School)

- Thursday, July 29<sup>th</sup>, 7:00 PM

### First Day Of School

- Monday, August 2<sup>nd</sup>

### Labor Day Holiday (Schools Closed)

- Monday, September 6<sup>th</sup>

### Fall Break (Student/Teacher Holiday)

- Monday - Friday, September 27<sup>th</sup> - October 1<sup>st</sup>

### Election Day (Student Holiday/Local School Professional Learning)

- Tuesday, November 2<sup>nd</sup>

### Thanksgiving Holidays (Student/Teacher Holiday)

- Monday - Friday, November 22<sup>nd</sup> - 26<sup>th</sup>

### Winter Holidays

- December 20<sup>th</sup> - 31<sup>st</sup>

### First Day Of Second Semester

- Wednesday, January 5<sup>th</sup>

### MLK, Jr. Holiday

- Monday, January 17<sup>th</sup>

### Winter Break (Student/Teacher Holiday)

- Monday - Friday, February 21<sup>st</sup> - 25<sup>th</sup>

### Spring Break (Student/Teacher Holiday)

- Monday - Friday, April 4<sup>th</sup> - 8<sup>th</sup>

### Last Day Of School

- Wednesday, May 25<sup>th</sup>

### High School Commencements

- Monday - Saturday, May 23<sup>th</sup> - 28<sup>th</sup>

## **Cobb County School District's Disinfecting Procedures**

If a CCSD facility or classroom has reported a positive case, CCSD Maintenance will support the school's custodial staff in the disinfecting procedure. CCSD has adopted a fogging and disinfecting system that will allow students and staff to return immediately after the fogging procedure is safely completed.

All CCSD facilities were supplied with their own fogging equipment to start face-to-face learning in the 2020-2021 school year. All CCSD schools will again be supplied with their own disinfectant.

### **Daily Cleaning (Administrative Office)**

- Spot clean and disinfect horizontal surfaces of desks, tables, Plexiglas shields, cabinets, credenzas, etc.
- Mop, disinfect and sweep all hard surface floors in office areas.
- Wipe down and disinfect all high touchpoints: door handles, light switches, push plates, etc.

### **Daily Cleaning (Student Restrooms And Staff Restrooms)**

- Empty trash bins and disinfect.
- Disinfect all door handles, light switches, and partition handles.
- Clean and disinfect all sinks, urinals, toilet seats, and toilets.
- Properly sweep floors and use Kaivac machine to disinfect the entire restroom.

### **Daily Cleaning (Teacher Breakrooms)**

- Clean and disinfect waste receptacle touchpoints.
- Wipe clean and disinfect tables and chairs.
- Wipe clean and disinfect countertops, sinks, and drawer facings.
- Wipe clean and disinfect coffee machines and high touch areas on vending machines.
- Clean and disinfect the interior and exterior of microwaves.
- Wipe clean and disinfect exterior of refrigerator.

### **Daily Cleaning (Café Area)**

- Prep trash cans with liners.
- Wipe down tables and seats with disinfectant after each class departs the café.
- After lunch, remove all trash cans and place them in an area where all can be washed and disinfected.
- Run floor scrubber over entire café floor.

### **Daily Cleaning (Classrooms)**

- Empty trash and recycling receptacles, clean and disinfect waste receptacle touchpoints and replace liners.
- Clean and disinfect sinks and sink counter space.
- Mop, disinfect and sweep all hard surface floors.
- Vacuum all carpet areas with HEPA filtration vacuums (being sure to vacuum under desks).

### **Daily Cleaning (Gym And Misc.)**

- Wipe clean and disinfect all high touch points, door handles, push plates, water fountains, etc. throughout the day

## Guidelines For The Use of Masks

Individuals who would like to do so have the option to continue to wear masks while attending school and school events and riding the bus in the Cobb County School District.

## Cobb Cares:

### Supporting Social, Emotional, And Mental Health Needs For Our Students

- Using their specialized training in helping students with social, emotional issues, CCSD school counselors—both in-person and remotely—deliver classroom instruction, small group counseling, and individual interventions directed at improving student well-being.
- CCSD counselors and other trained CCSD staff members are available to support students and staff and provide guidance during times of crisis
- Whether a student is enrolled in virtual or in-person learning, CCSD Psychological Services will ensure comprehensive evaluations to help support their academic, social-emotional, and developmental needs.
- CCSD School Social Workers provide support to students and their families in need, both in-person and remotely
- CCSD School Social Workers help parents and teachers understand the social and emotional needs of their specific students.

## Health and Safety Protocols

### Transportation

- Bus routes will run as scheduled, and stops will remain the same.
- Visit <https://www.cobbk12.org/page/310/bus-route-finder> to find your bus stop and time.
- Track your bus in real-time using Here Comes the Bus! The Bus app is also available for you and can be downloaded from the Apple Store or through Google Play.
- Visit <https://www.cobbk12.org/page/19019/here-comesthe-bus> for more information about the app.
- Social distancing is encouraged at bus stops.
- Individuals have the option to continue wearing a mask while attending school or school events, riding the bus, or waiting at bus stops.
- Hand sanitizer stations will be available at the door of each bus.
- Students will continue to be assigned seating, so loading and unloading is as safe as possible and will support effective contact tracing
- Ventilation and fresh air will circulate, weather permitting.
- Buses will be disinfected after routes have been completed.

### Food And Nutrition Services (FNS)

- Conduct cleaning of cafeteria and high-touch surfaces throughout the day.
- Enhanced cleaning, sanitizing and disinfecting procedures will be implemented in addition to regular stringent cleaning measures for food safety.
- Parents will be encouraged to pay for meal accompaniments such as bottled water and snacks meals online via [MyPaymentsPlus.com](https://www.mypaymentsplus.com).
- Some food and nutrition details are handled on a school-by-school basis according to student need.

## Health and Safety Protocols - Continued

### School Nurses And Clinics

- Encourage staff/students/families to self-screen before work/school for fever, chills, cough, difficulty breathing, congestion, sore throat, nausea/vomiting, body aches, etc.)
- Maintain ongoing contact with Cobb and Douglas Public Health, report COVID-19 cases (confirmed or suspected) per reporting protocol, follow Cobb and Douglas Public Health guidance and protocols for sick students and personnel, assist with contact tracing, and review relevant local/state regulatory agency policies and orders for updates
- School Nurses/Clinic Substitutes will triage sick students/staff during School Clinic visit (assessment, temperature check, etc.) and follow district procedures for when students show signs of illness or injury
- Designated isolation area for individuals with COVID-19 symptoms
- Educate and inform staff and students/families to stay home, not come to school/work, and notify school officials if they have COVID-19 symptoms, are diagnosed with COVID-19, are waiting for test results, or have been exposed to someone with symptoms or a confirmed or suspected case per CDC/DPH guidance
- Staff/students return to work/school per CDC/DPH guidance after COVID-19 illness or exposure
- School Nurses/Clinic Substitutes will use standard and transmission-based precautions when providing care to students/staff
- School Nurses and other staff worked with our Cobb & Douglas Public Health partners to coordinate drive-through vaccine events for District staff.
- Educate and inform students and families on how to access the most updated testing and vaccine information, including how to get tested and vaccinated, from the Cobb & Douglass Public Health website:  
<https://www.cobbanddouglaspublichealth.com/>

### More On How We Keep Students And Staff Safe

- Hand sanitizer will be provided at building entrances and throughout the building
- Teach, practice, and reinforce good hygiene measures (frequent handwashing, covering coughs and sneezes, optional use of face coverings)
- Restrict use of high traffic areas with additional safety protocols
- Students are encouraged to bring their own water bottles
- Avoid shared classroom supplies between students
- Avoid shared food/snacks
- Implement social distancing measures as possible
- Enhanced cleaning protocols have been implemented (high touch surfaces, restrooms, etc.)
- Protective partitions placed in select locations in school buildings
- Public Health Signage posted in classrooms, hallways, office spaces, and entrances.
- Provide physical guides to promote social distancing (tape on floors, signs, one-way routes in hallways, lanes in hallways)
- Individuals who would like to do so have the option to continue to wear masks at school, while riding the bus, and when attending school events.

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***\*Cobb Schools will continue to make decisions which keep students and staff safe, healthy, and focused on teaching and learning.***

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**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION**

L.E., by and through their parent and next friend, SARA CAVORLEY; B.B., a minor, by and through their parent and next friend, ELIZABETH BAIRD; A.Z., a minor, by and through their parent and next friend, JESSICA ZEIGLER; and C.S., a minor, by and through their parent and next friend, TARASHA SHIRLEY,

Plaintiffs,

v.

Civil Action No. 1:21-cv-04076-TCB

CHRIS RAGSDALE, in his official capacity as Superintendent of Cobb County School District; RANDY SCAMIHORN, in his official capacity, a member of the Cobb County Board of Education; DAVID BANKS, in his official capacity as member of the Cobb County School Board; DAVID CHASTAIN, in his official capacity as member of the Cobb County School Board; BRAD WHEELER, in his official capacity as member of the Cobb County School Board; JAHA HOWARD, in his official capacity as member of the Cobb County School Board; CHARISSE DAVIS, in her official capacity as member of the Cobb County School Board; LEROY TRE' HUTCHINS, in his official capacity as member of the Cobb County School



Board; and COBB COUNTY SCHOOL  
DISTRICT,

Defendants.

**DECLARATION OF JESSICA COLEMAN**

This Declaration is given by Jessica Coleman who, under penalty of perjury pursuant to 28 U.S.C. § 1746, states that the following is true and correct:

1.

My name is Jessica Coleman. I am over twenty-one (21) years of age, legally competent to make this Declaration, and have personal knowledge of the statements made herein. I make this declaration on my own personal knowledge for use in supporting Defendants in the above-styled matter and for all other purposes permitted by law.

2.

I hold a specialist degree in educational leadership from Berry College. I have a master's degree in educational leadership from Kennesaw State University and a bachelor's degree in special education from the University of Georgia and a bachelor's degree in business administration from Kennesaw State University. I have 17 years of experience in education.

3.

I am currently employed as the director of special education compliance for the Cobb County School District (“CCSD”). I have served in this position for almost three years.

4.

Two of the named Plaintiffs have Section 504 plans and two have Individual Education Plans (IEPs).

5.

One of the named Plaintiffs has been fully vaccinated with the COVID-19 vaccine, and two of the other Plaintiffs are age-eligible to receive the vaccine. Only one of the Plaintiffs is currently ineligible to be vaccinated.

6.

All of the Plaintiffs are eligible to receive full educational services via a virtual learning program offered by the Cobb County School District. Only one of the Plaintiffs has chosen to participate in a virtual learning program.

7.

None of the ~~three~~ Plaintiffs that were enrolled in the Cobb County School District during the 2020-2021 school year attended in-person throughout the time that in-person instruction was offered. Thus, the District’s prior mask-mandate did

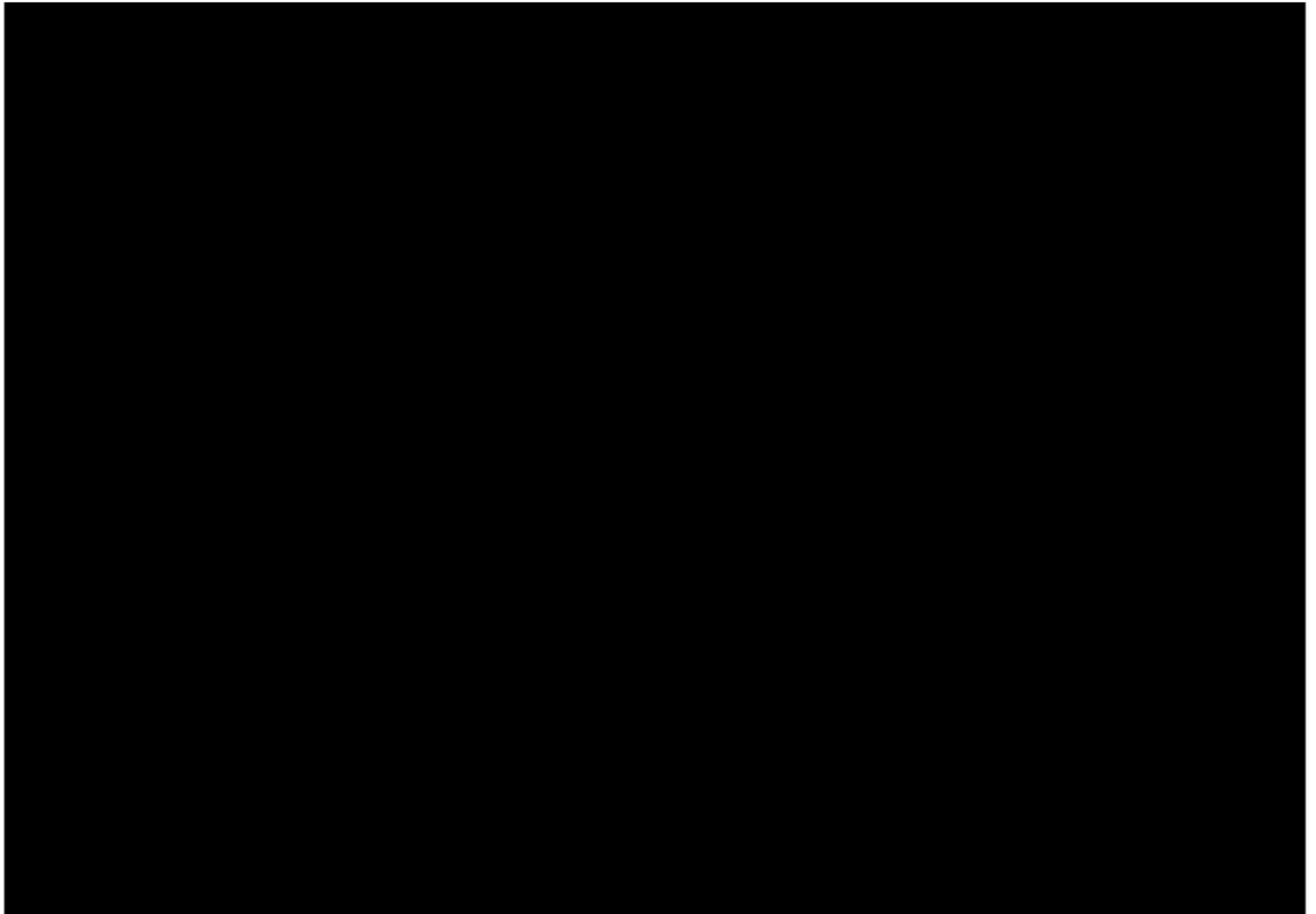


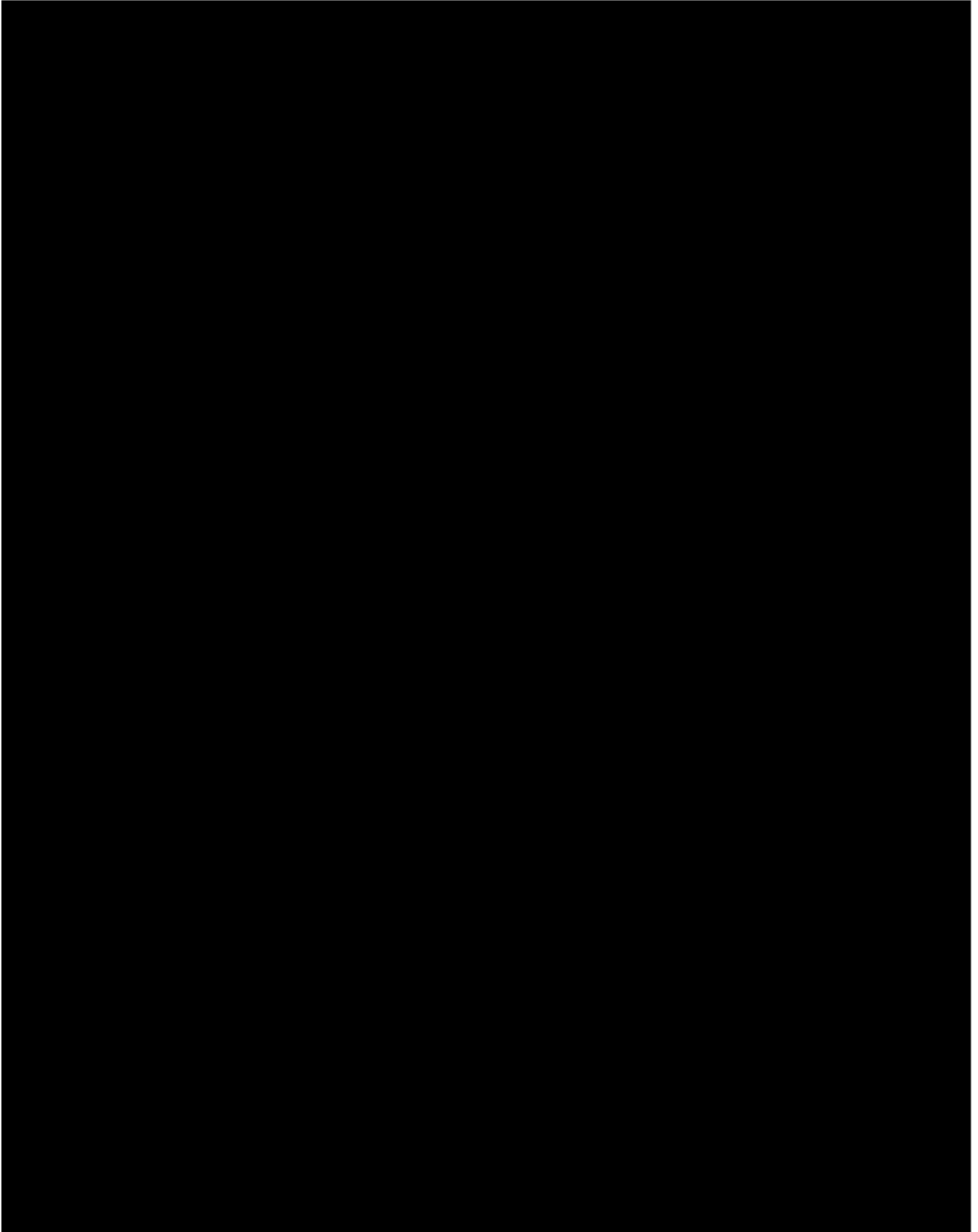
not enable any Plaintiff to attend in-person instruction.

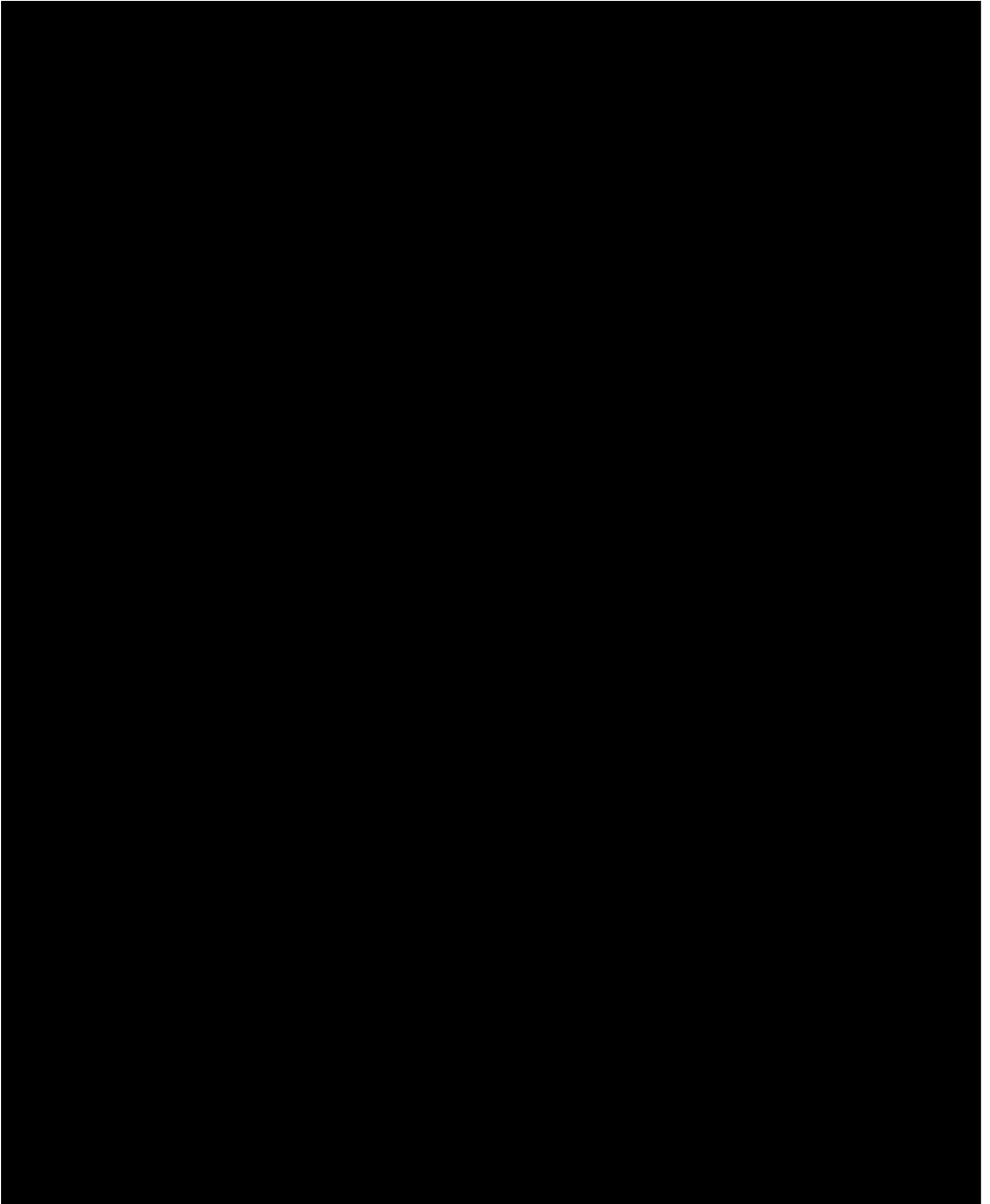
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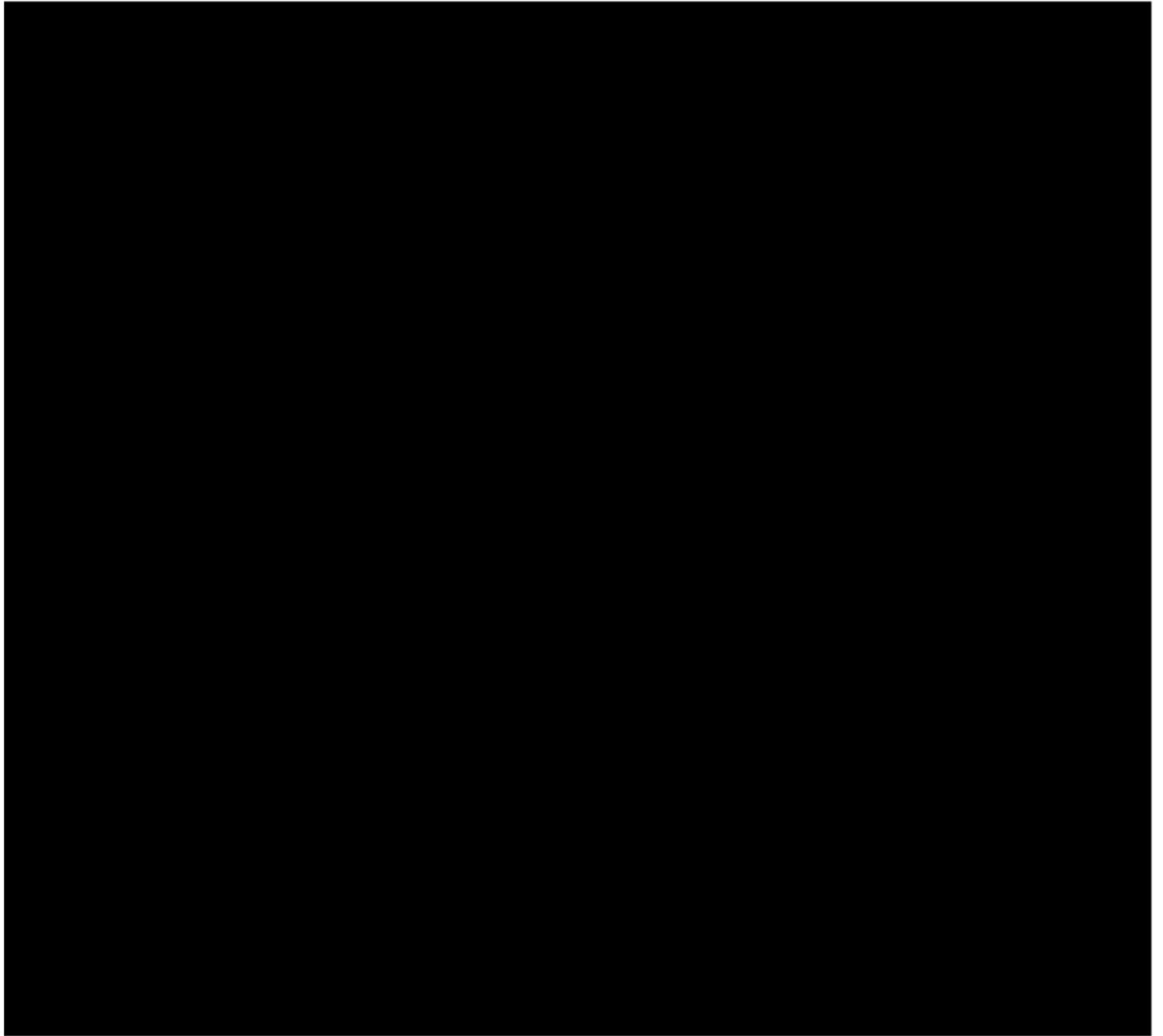
The Plaintiffs' 504 and IEP teams have met to make determinations on the unique needs of each student and the required supports, services, and accommodations that each individual student may require to access their education. These are individualized decisions and none of the Plaintiffs have the same circumstances or needs.

**Plaintiff C.S.**

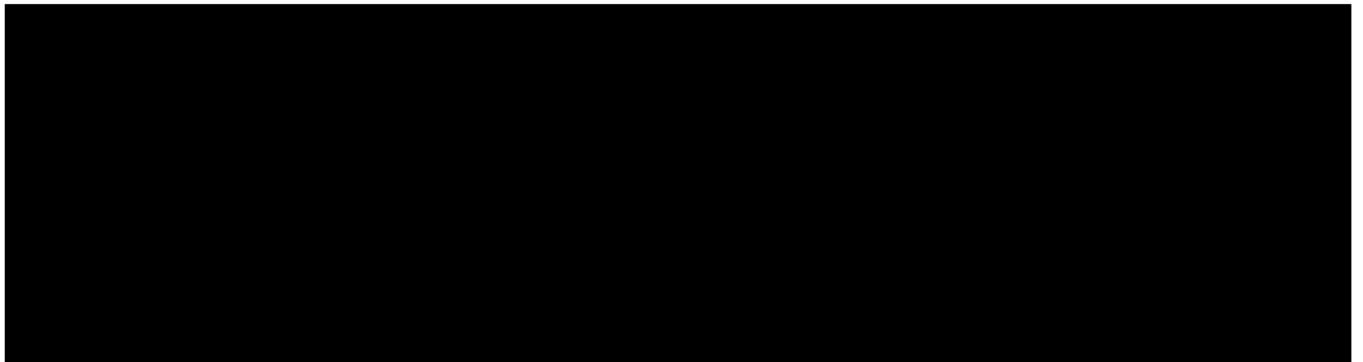


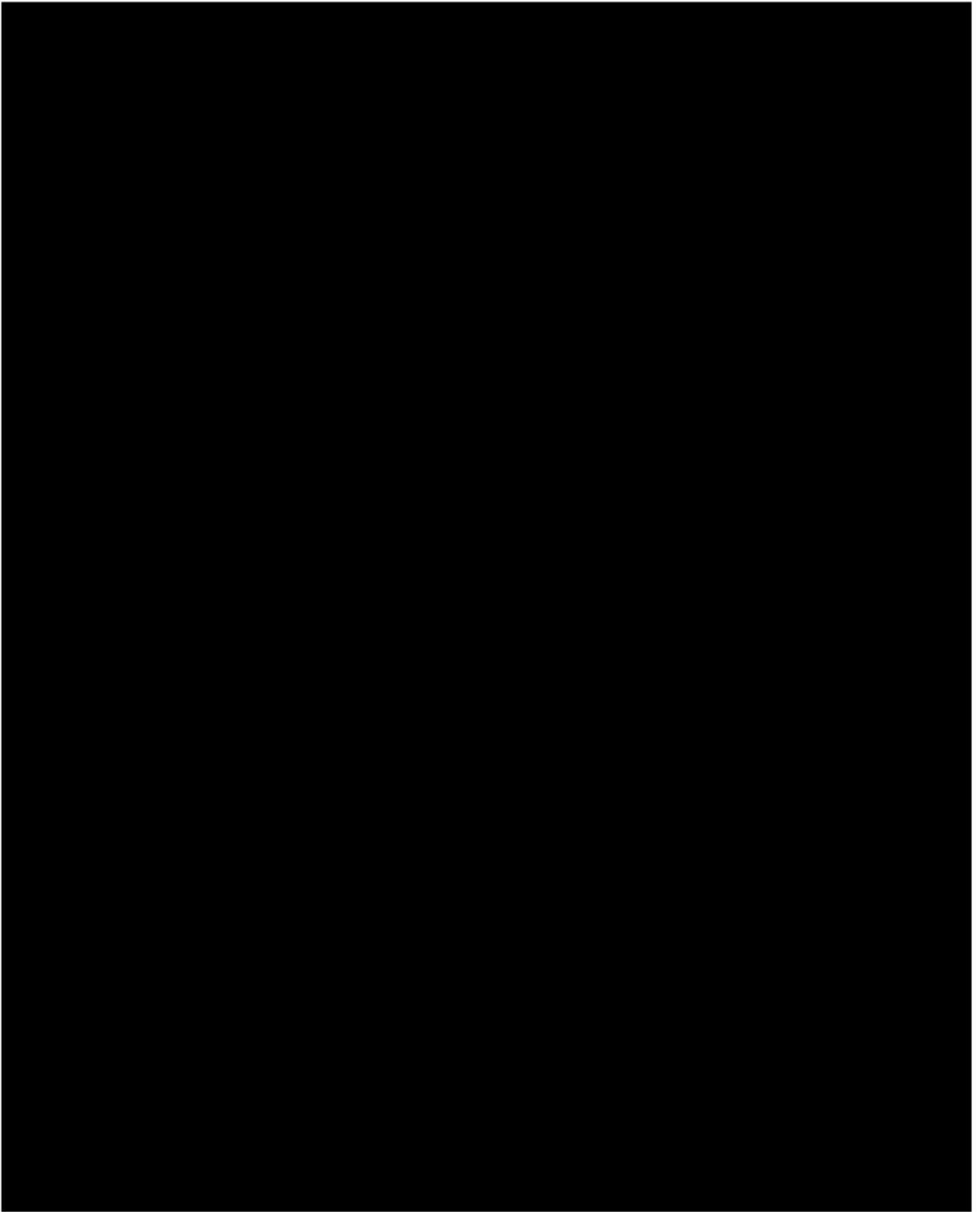


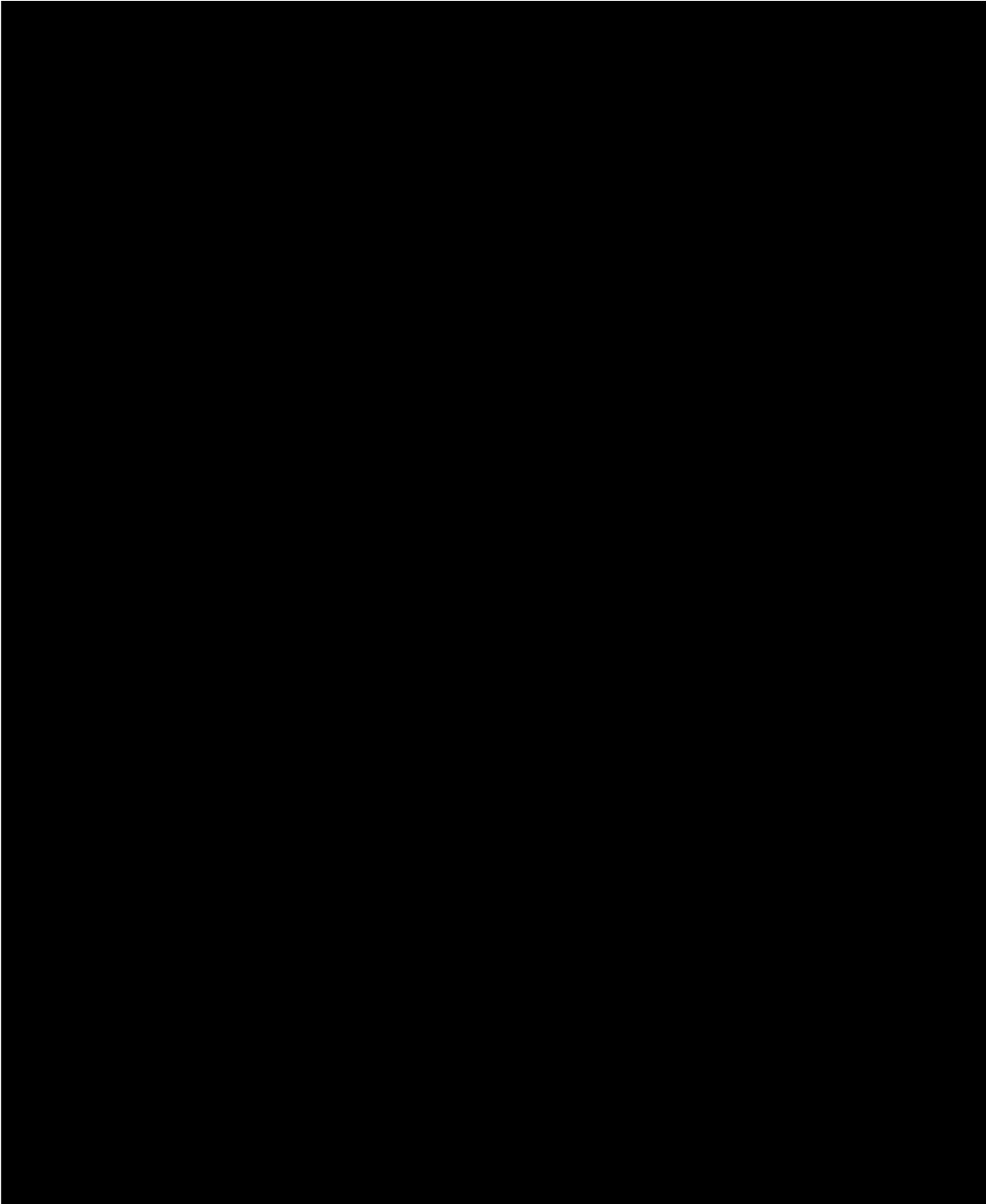




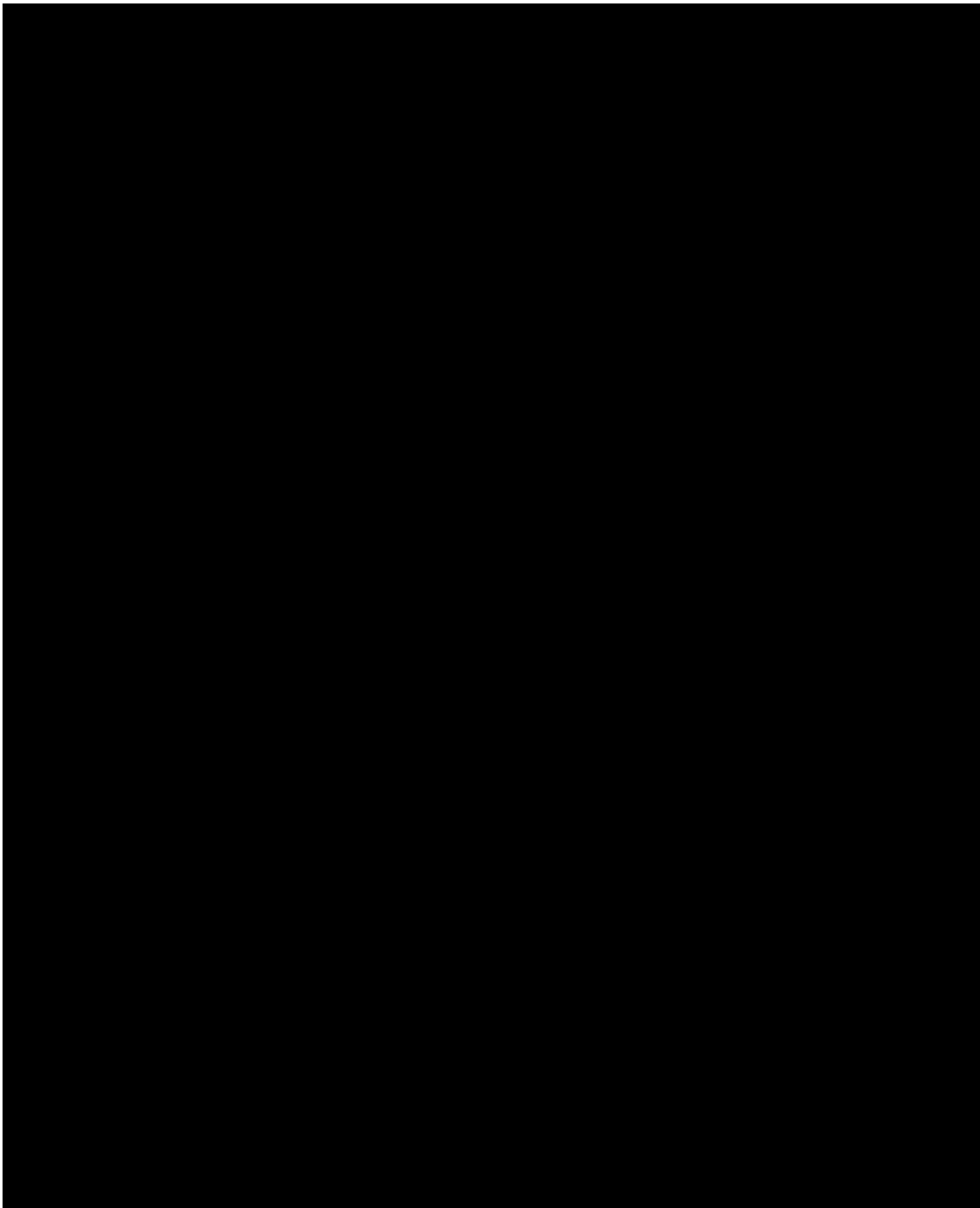
**Plaintiff L.E.**







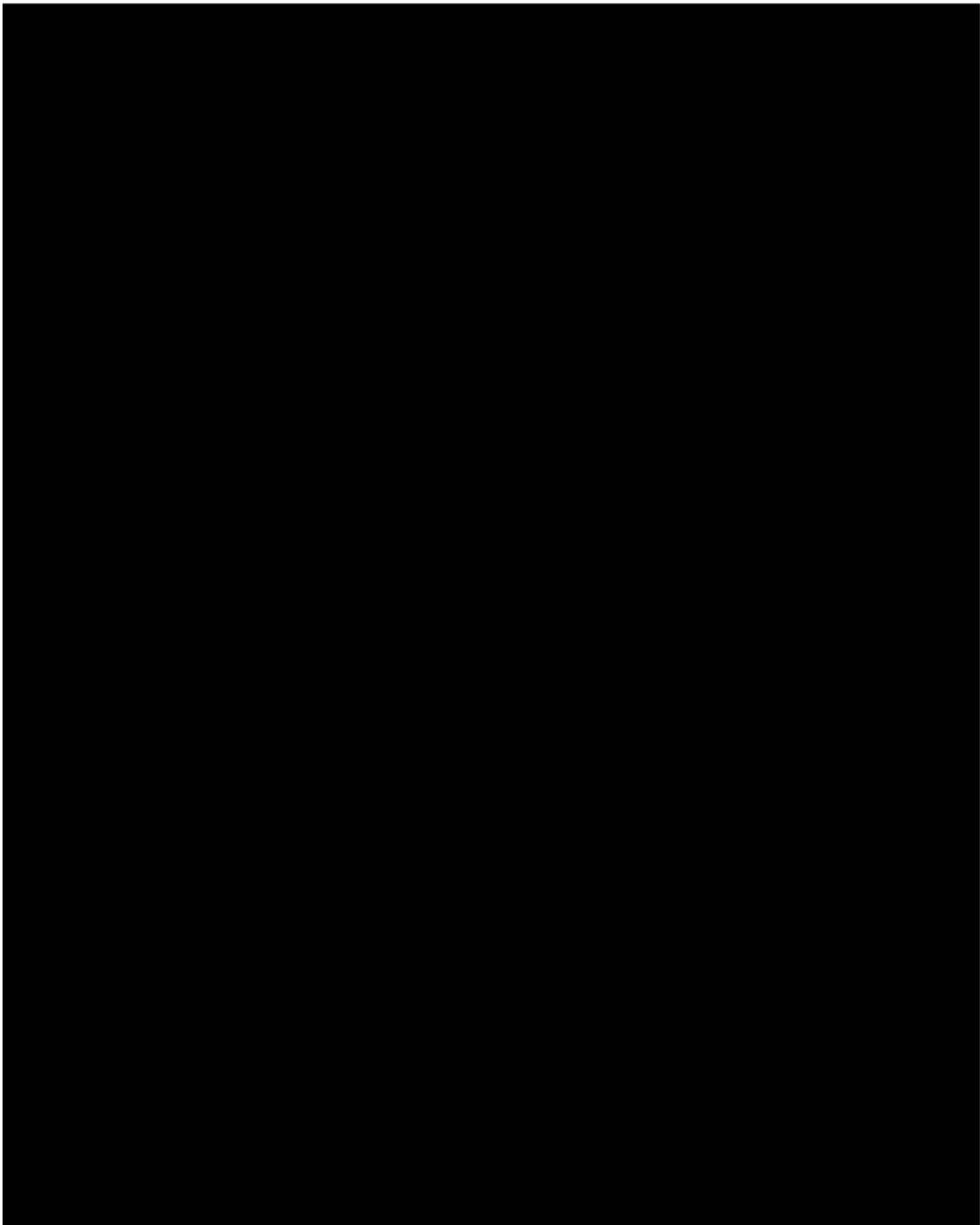


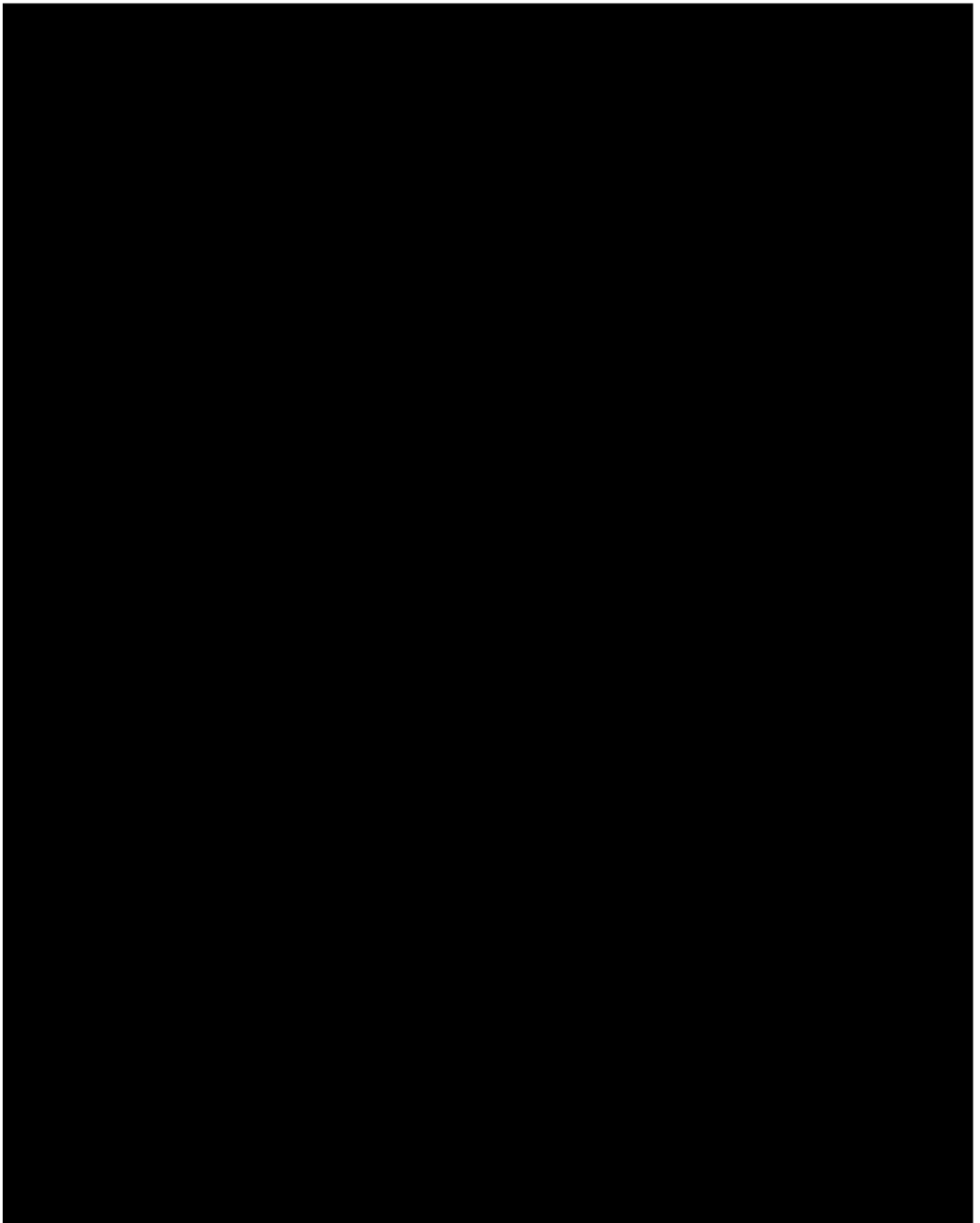


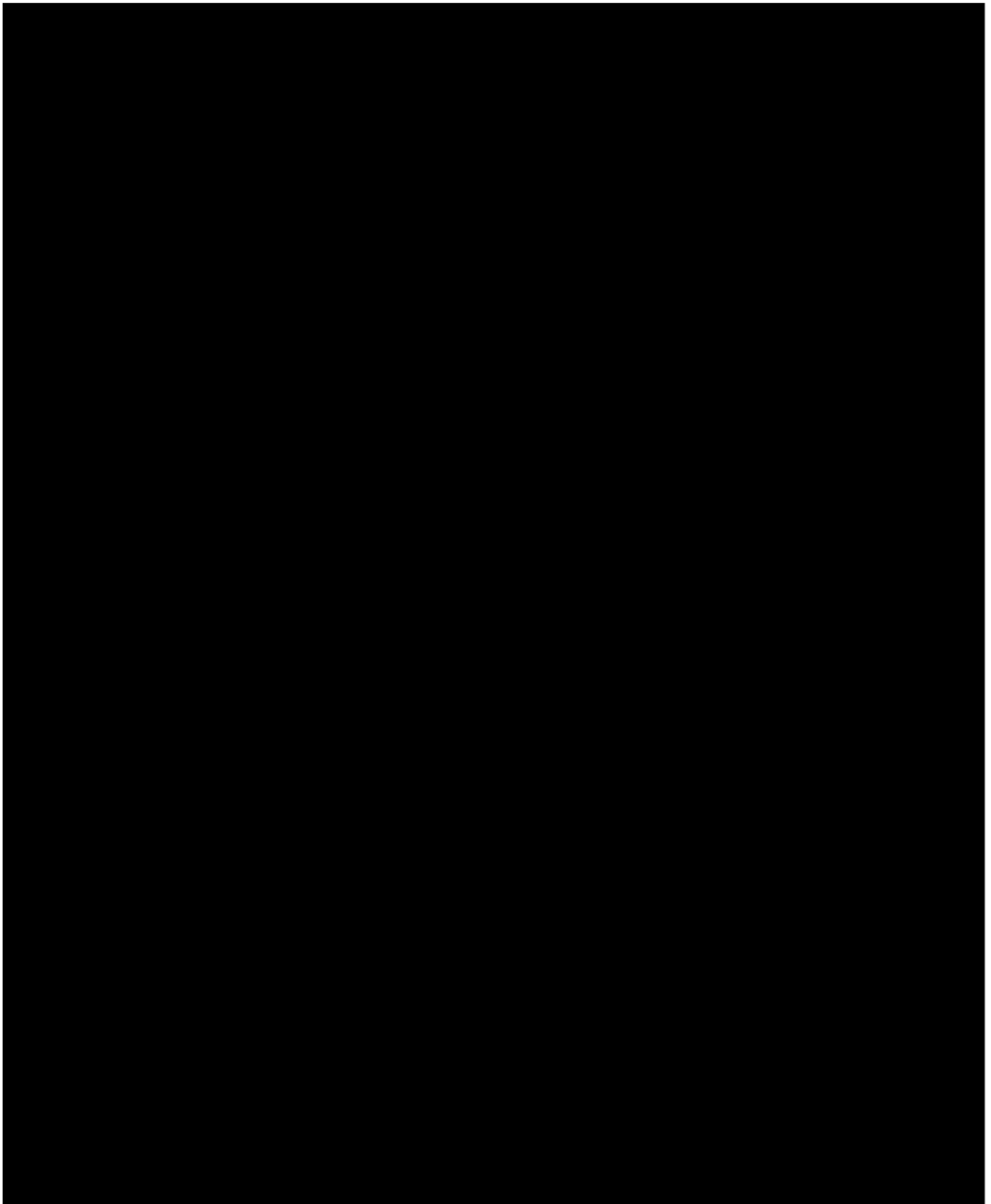
[REDACTED]

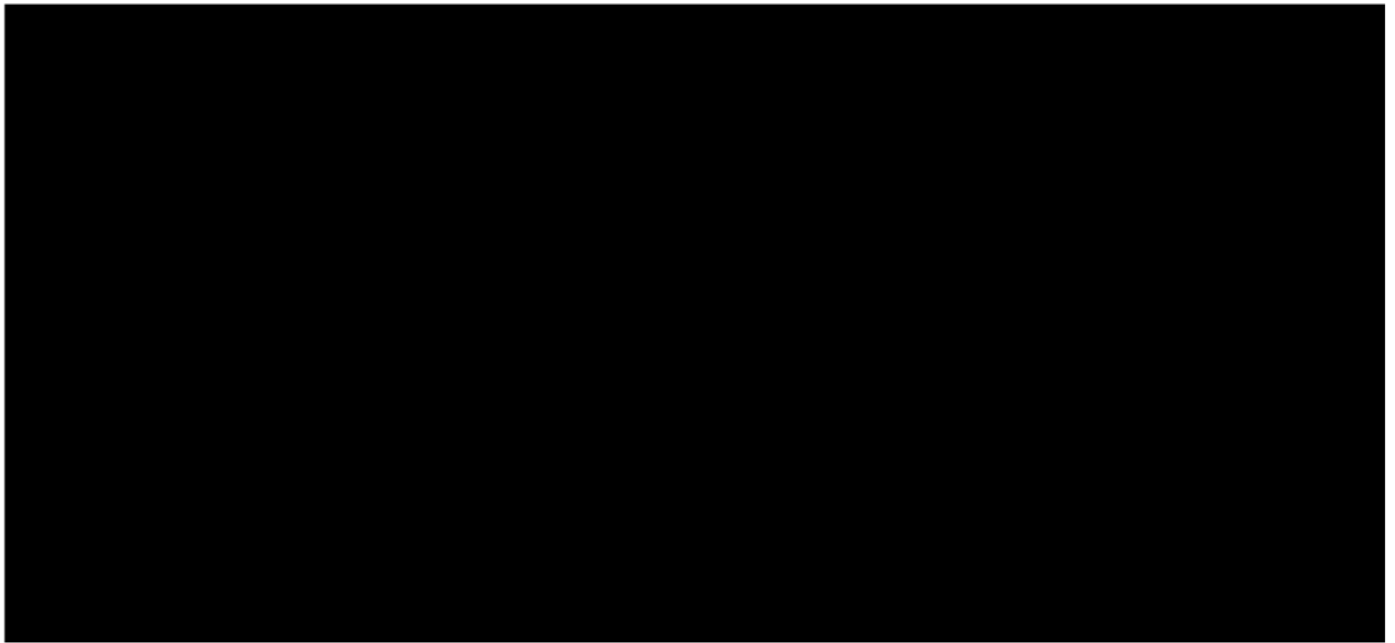
**Plaintiff A.Z.**

[REDACTED]

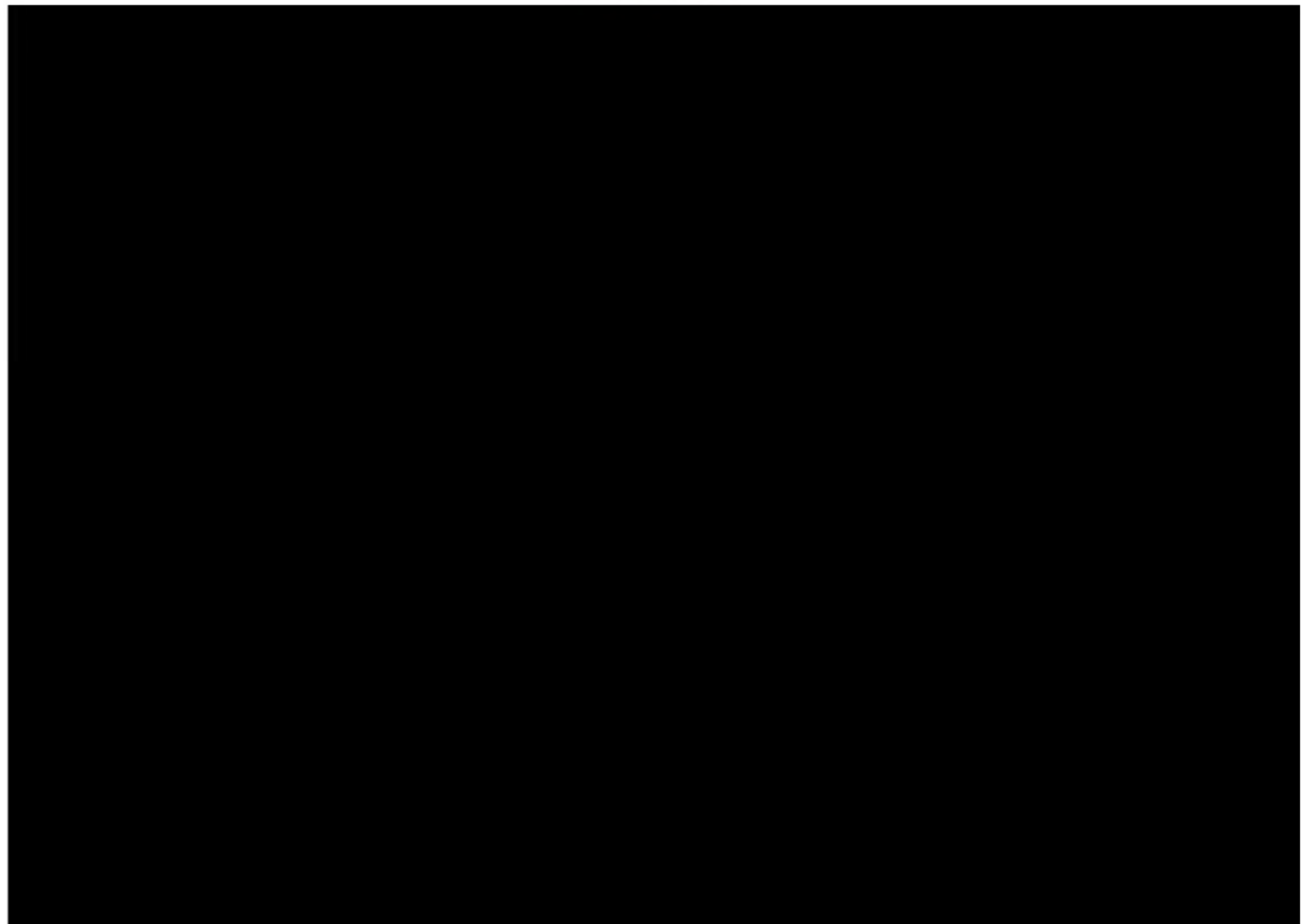


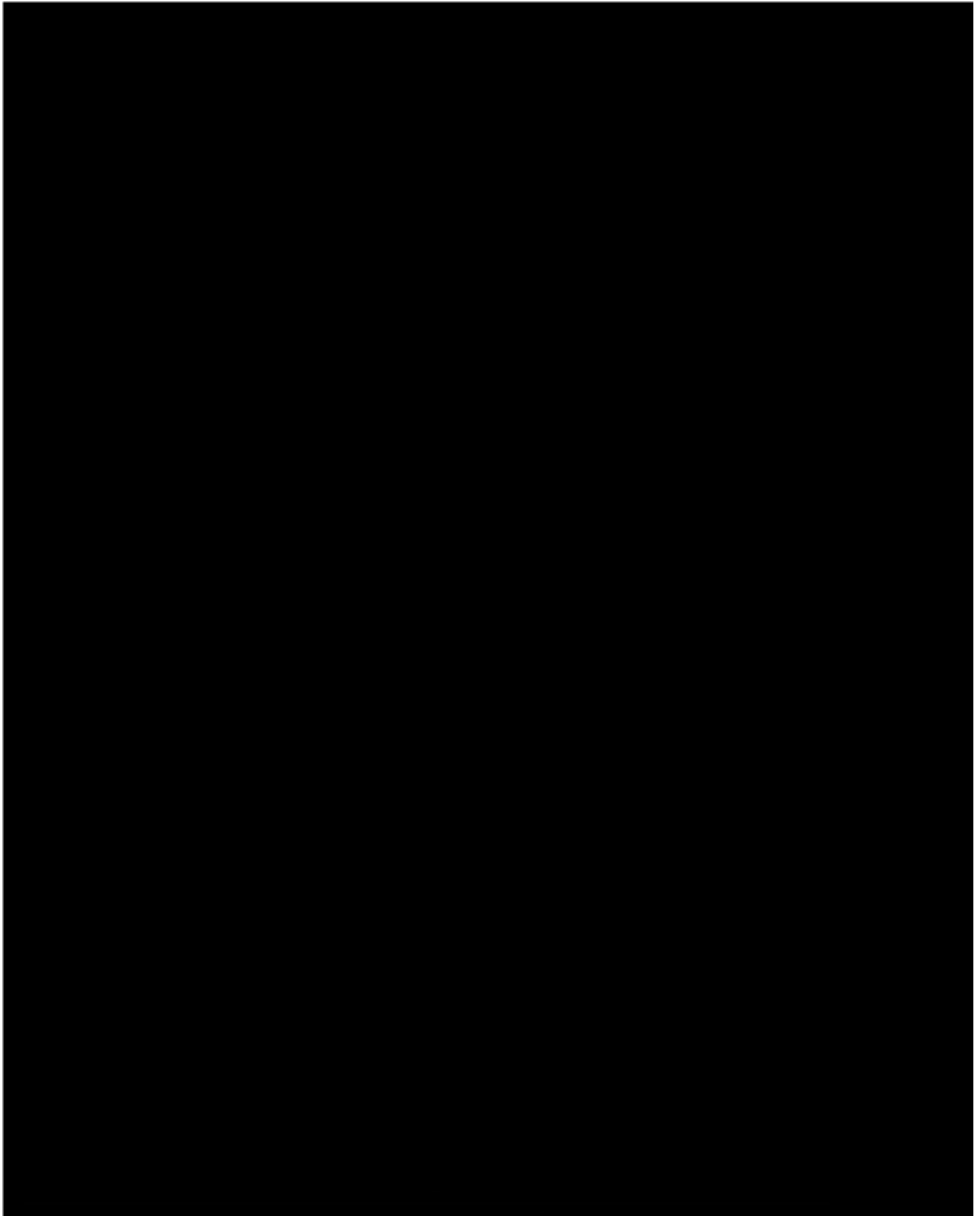




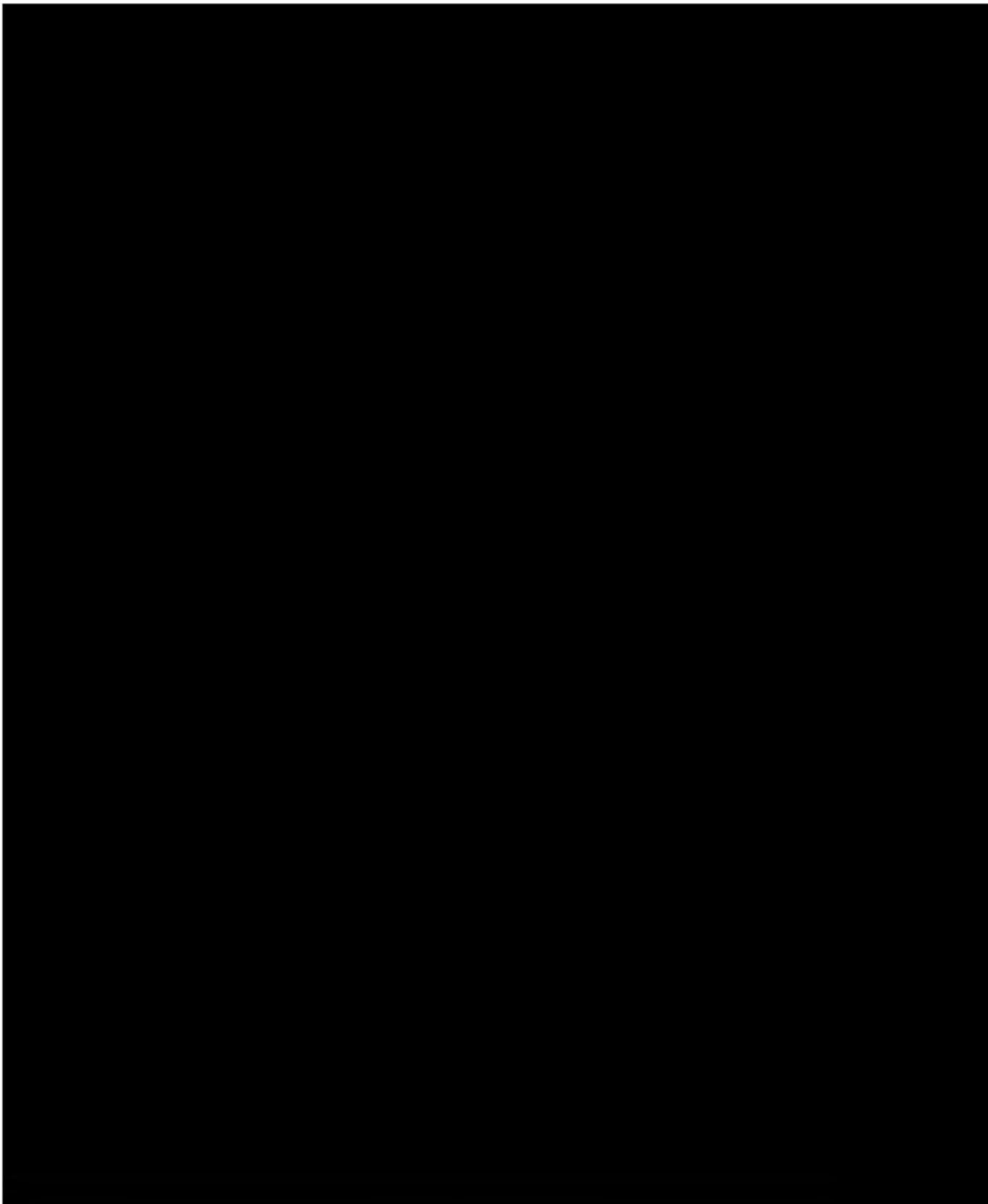


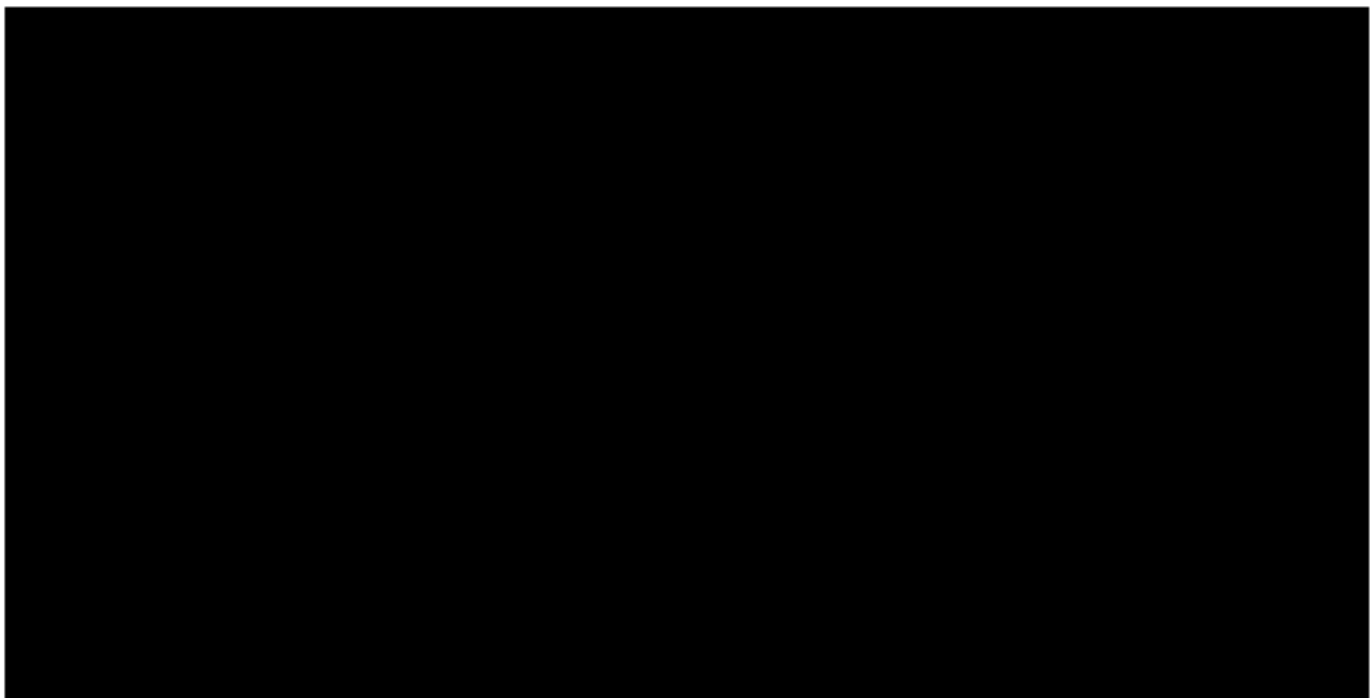
**Plaintiff B.B.**











50.

All of the Plaintiffs have received appropriate accommodations to enable them to access their education.

So sworn this 11<sup>th</sup> day of October, 2021.

  
JESSICA COLEMAN

**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION**

L.E., by and through their parent and next friend, SARA CAVORLEY; B.B., a minor, by and through their parent and next friend, ELIZABETH BAIRD; A.Z., a minor, by and through their parent and next friend, JESSICA ZEIGLER; and C.S., a minor, by and through their parent and next friend, TARASHA SHIRLEY,

Plaintiffs,

v.

Civil Action No. 1:21-cv-04076-TCB

CHRIS RAGSDALE, in his official capacity as Superintendent of Cobb County School District; RANDY SCAMIHORN, in his official capacity, a member of the Cobb County Board of Education; DAVID BANKS, in his official capacity as member of the Cobb County School Board; DAVID CHASTAIN, in his official capacity as member of the Cobb County School Board; BRAD WHEELER, in his official capacity as member of the Cobb County School Board; JAHA HOWARD, in his official capacity as member of the Cobb County School Board; CHARISSE DAVIS, in her official capacity as member of the Cobb County School Board; LEROY TRE' HUTCHINS, in his official capacity as member of the Cobb County School

Board; and COBB COUNTY SCHOOL  
DISTRICT,

Defendants.

**DECLARATION OF RYAN FULLER**

This Declaration is given by Ryan Fuller, who, under penalty of perjury pursuant to 28 U.S.C. § 1746, states that the following is true and correct:

1.

My name is Ryan Fuller. I am over twenty-one (21) years of age, legally competent to make this Declaration, and have personal knowledge of the statements made herein. I make this affidavit on my own personal knowledge for use in supporting Defendants in the above-styled matter and for all other purposes permitted by law.

2.

I hold a Bachelor's of Science in Applied Biology from the Georgia Institute of Technology, a Master's in Secondary Science Education from the State University of West Georgia, an Education Specialist's Degree in Education Leadership from Berry College, and a Doctorate of Education in School Improvement with a focus on Online Program Leadership from the State University of West Georgia. My Dissertation was titled "High School Principals' Perceptions toward Student Online

Learning Options: A Qualitative Study.” I hold the following education credentials: Renewable Certification in Biology 6-12, Science 6-12, and Tier II Educational Leadership. I have 25 years of education experience.

3.

I am currently employed as the Director of Cobb Virtual Academy for the Cobb County School District (“CCSD”). I have served in this position for 13 years, since 2008.

4.

The Cobb County School District currently has 16,146 employees and 109,144 students enrolled in the 2021-2022 school year. Thus, approximately 125,290 individuals will be impacted by a decision to make masks mandatory in the District.

5.

To provide flexibility and meet the needs of students no matter their individual circumstances, the Cobb County School District expanded and developed several part-time and full-time virtual learning options during the 2021-2022 school year. These online learning options include full-time elementary, middle, and high options as well as part-time middle and high options. Students may also attend school in person with COVID-19 mitigation measures in place.

**Elementary School:**

6.

The District currently has an Elementary Virtual Program in place for any student in grades Pre-K through five who wishes to attend school virtually rather than in-person. This is a full-time option for elementary students. The open-enrollment window for the Elementary Virtual Program closed on May 2, 2021 for the 2021-2022 school year. However, students with special circumstances or medical needs can still enroll by special request and approval. Students new to the District could also enroll in one of these options at the time of their registration until July 29, 2021, after which students with special circumstances or medical needs could still enroll by special request or approval. There are currently 728 students enrolled in the District's Elementary Virtual Program. Of those students, 85.4% are general education students, and 14.6% are students with disabilities.

**Middle School:**

7.

The District currently offers three middle school virtual options for students in sixth through eighth grade who wish to attend school virtually rather than in-person.

8.



The first middle school option is Cobb Online Learning Academy (COLA). This is a full-time virtual option for middle school students. The open-enrollment window for the Elementary Virtual Program closed on April 2, 2021 for the 2021-2022 school year. However, students with special circumstances or medical needs can enroll after that deadline by special request and approval. Students new to the district could also enroll in one of these options at the time of their registration until July 29, 2021, after which students with special circumstances or medical needs could still enroll by special request or approval. There are currently 440 middle school students enrolled in COLA. Of those students, 85.2% are general education students, and 14.8% are students with disabilities.

9.

The second option for middle school students is Cobb Virtual Academy (CVA). CVA offers high school courses for credit, and academically eligible middle school students may take courses offered by the program. CVA's enrollment window ran from May 15, 2021 through August 19, 2021, but students may still enroll under special circumstances with approval.

10.

In addition, the Georgia Department of Education offers middle school options through the Georgia Virtual School (GAVS). GAVS is an online learning



program. Middle school students may take middle school level courses in math, science, social studies, and English. In addition, academically eligible middle school students may take high school level courses offered through the program. Students may remain enrolled in the Cobb County School District and still take classes in GAVS.

**High School:**

11.

There are also three options for high school students wishing to attend school virtually rather than in-person. While the District had an official open-enrollment window this year that closed on April 2, 2021 for the 2021-2022 school year, enrollment for the District's high school virtual options never truly ends since students work directly with school counselors to enroll. Students new to the district could also enroll in one of these options at the time of their registration.

12.

Cobb Online Learning Academy (COLA) also offers high school classes for students. This is a full-time program. There are currently 451 high school students enrolled in COLA. Of those, 86% are general education students, and 14% are students with disabilities.

13.

Cobb Virtual Academy (CVA) is an online learning program offered by the District. CVA offers over 40 high school courses for credit in Math, Science, Social Studies, English, and Health & Personal Fitness.

14.

In addition, the Georgia Department of Education offers high school options through the Georgia Virtual School (GAVS) online learning program. GAVS offers over 100 high school courses for credit in Math, Science, Social Studies, English, World Languages, Health and Personal Fitness, and CTAE. Students may remain enrolled in the Cobb County School District and still take classes in GAVS.

15.

**Small Group Options.** The District also offers virtual program options for students with disabilities who require low incidence small-group (special education) classes. None of the Plaintiffs in this lawsuit require low incidence small-group classes so this information is not set forth here.

16.

If Plaintiffs were to choose to participate in virtual programming rather than attend in-person education, they would not be segregated from their general education peers. There are almost 2,000 CCSD students participating in one or more of the District's virtual offerings. Over 84% of the students enrolled in the District's

virtual programs are non-disabled students. Less than 16% of the students have disabilities. Thus, any student with disabilities requiring or choosing to attend virtual programming rather than in-person programming will have the same access to educational services as their non-disabled peers.

17.

The District's virtual programming provides curriculum designed to meet national, state and District standards. Classes are led by highly qualified teachers specifically trained in the delivery of online courses.

18.

During the current school year, teachers are not simultaneously teaching both in-person and virtual students as they were last year. Instead, teachers have received additional training and are only instructing the students taking their virtual courses. Thus, the District's virtual programming has improved significantly over last year.

19.

Virtual students and teachers communicate in a variety of ways, including but not limited to email, phone, text, live video, etc. Virtual students have access to a variety of academic support options. For example, CVA Facilitators at the CVA Learning Centers (both virtual and face-to-face) are available to assist students with getting started on CVA courses, navigating the system and answering technical

questions. They assist with explaining assignment directions as needed, and most importantly provide and model strategies for online learning success. The CVA Learning Centers are open for student support over 20 hours each week.

20.

Students interact with one another in a variety of ways in virtual programs. In the Elementary Virtual Program and Cobb Online Learning Academy, programs that contain significant synchronous (real-time) components, students can interact with one another in much the same way that they would in a face-to-face classroom by interacting with one another during a group Zoom call – real-time group discussions, raising their hands, sharing their work, etc. They may also collaborate on projects and participate in online discussion boards. In Cobb Virtual Academy and Georgia Virtual School, programs that are primarily asynchronous (not real-time), students interact through required discussion boards and collaboration on projects. This interaction varies by course. Optional weekly group Zoom calls also provide additional opportunities for student interaction.

21.

In the Elementary Virtual Program (EVP) and the Cobb Online Learning Academy (COLA), students participate in a combination of live (synchronous) and independent learning experiences (asynchronous) that align to the Georgia Standards



of Excellence, the International Standards for Technology Education (ISTE), and the National Standards of Quality Online Learning. Students learn in flexible groups to meet their individual learning needs. Students are taught by a certified Cobb County School District educator who has received training for teaching and supporting students in the virtual learning environment.

22.

The Cobb Virtual Academy has been in place in the District for twenty years. It has aligned its program design, course development, and teacher support and training with the National Standards of Quality Online Learning.

23.

Students with IEPs or Section 504 plans receive the services and supports in those plans that are appropriate to a virtual environment.

So sworn this 11<sup>th</sup> day of October, 2021.

  
\_\_\_\_\_  
RYAN FULLER

**UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION**

L.E., by and through their parent and next friend, SARA CAVORLEY; B.B., a minor, by and through their parent and next friend, ELIZABETH BAIRD; A.Z., a minor, by and through their parent and next friend, JESSICA ZEIGLER; and C.S., a minor, by and through their parent and next friend, TARASHA SHIRLEY,

Plaintiffs,

v.

Civil Action No. 1:21-cv-04076-TCB

CHRIS RAGSDALE, in his official capacity as Superintendent of Cobb County School District; RANDY SCAMIHORN, in his official capacity, a member of the Cobb County Board of Education; DAVID BANKS, in his official capacity as member of the Cobb County School Board; DAVID CHASTAIN, in his official capacity as member of the Cobb County School Board; BRAD WHEELER, in his official capacity as member of the Cobb County School Board; JAHA HOWARD, in his official capacity as member of the Cobb County School Board; CHARISSE DAVIS, in her official capacity as member of the Cobb County School Board; LEROY TRE' HUTCHINS, in his official capacity as member of the Cobb County School

Board; and COBB COUNTY SCHOOL  
DISTRICT,

Defendants.

**DECLARATION OF JAYANTA BHATTACHARYA, MD, PhD**

This Declaration is given by Jayanta Bhattacharya, MD, PhD, who, under penalty of perjury pursuant to 28 U.S.C. § 1746, states that the following is true and correct:

1.

My name is Dr. Jayanta Bhattacharya. I am over twenty-one (21) years of age, legally competent to make this Declaration, and have personal knowledge of the statements made herein. I make this affidavit on my own personal knowledge for use in supporting Defendants in the above-styled matter and for all other purposes permitted by law.

2.

I hold a Doctor of Medicine from Stanford University, and a PhD in Economics, also from Stanford University.

**EXHIBIT**

**4**



3.

I am a former Professor of Medicine (20 years) and current Professor of Health Policy at Stanford University School of Medicine. I am Director of Stanford's Center for Demography and Economics of Health and Aging. I have published 154 scholarly articles in peer-reviewed journals in the fields of medicine, economics, health policy, epidemiology, statistics, law, and public health, among others. My research has been cited in the peer-reviewed scientific literature more than 11,700 times. I am also a research associate at the National Bureau of Economics Research and a research associate at Acumen, LLC.

4.

I hold a courtesy appointment as a Professor of Economics at a senior fellow at the Stanford Institute for Economic Policy Research.

5.

I have not and will not receive any financial or other compensation to prepare this Declaration or to testify in this case. Nor have I received compensation for preparing declarations or reports or for testifying in any other case related to the COVID-19 pandemic, or any personal or research funding from any pharmaceutical company.

6.

My recent research focuses on the epidemiology of COVID, including the lethality of COVID infection and the effects of lockdown policies. Before COVID, I studied the health and well-being of vulnerable populations, emphasizing the role of government programs, biomedical innovation, and health policy. I have published many articles in top peer-reviewed scientific journals in medicine, economics, health policy, epidemiology, statistics, law, and public health, among other fields. I have published to date six peer-reviewed publications on COVID, including some of the most highly cited pieces published during the pandemic.

7.

A true and correct copy of my curriculum vitae, updated as of June 2021, is attached hereto as **Exhibit A**.

8.

I authored the report, “Scientific Evidence on COVID, Children, and Mask Mandates” dated October 10, 2021. A true and correct copy of this report is attached hereto as **Exhibit B**. This report reflects my expert opinion on the scientific evidence surrounding the efficacy and side-effects of a school mask mandate.

So sworn this 10<sup>th</sup> day of October, 2021.

A handwritten signature in black ink, consisting of stylized, overlapping loops and strokes.

---

Jayanta Bhattacharya, MD, PhD

JAY BHATTACHARYA, M.D., Ph.D.

June 2021

**Address**

Center for Primary Care and Outcomes Research  
Stanford University School of Medicine  
615 Crothers Way  
Stanford, CA 94305-6019

**Phone:** (650) 736-0404**Email:** [jay@stanford.edu](mailto:jay@stanford.edu)<http://web.stanford.edu/~jay>**RESEARCH INTERESTS**

Health economics, health policy, and outcomes research

**A. ACADEMIC HISTORY:**

Stanford University	A.M., A.B.	1990
Stanford University School of Medicine	M.D.	1997
Stanford University Department of Economics	Ph.D.	2000

**B. EMPLOYMENT HISTORY:**

2001 – present	Professor (Assistant to Full), Stanford University Department of Medicine, Department of Economics (by courtesy)
2013 – present	Senior Fellow, Stanford Institute for Economic Policy Research
2014 – present	Senior Fellow Stanford Freeman Spogli Institute
2007 – present	Research Associate, Sphere Institute / Acumen LLC
2002 – present	FRF to Research Associate, National Bureau of Economic Research
2001 – 2020	Professor (Assistant to Full) Department of Health Research and Policy (by courtesy)
2006 – 2008	Research Fellow, Hoover Institution
1998 – 2001	Economist (Associate to Full), RAND Corporation
1998 – 2001	Visiting Assistant Professor, UCLA Department of Economics

**C. SCHOLARLY PUBLICATIONS:**PEER-REVIEWED ARTICLES (152 total)

1. Yoshikawa A, Vogt W.B., Hahn J., **Bhattacharya J.**, "Toward the Establishment and Promotion of Health Economics Research in Japan," *Japanese Journal of Health Economics and Policy* 1(1):29-45, (1994).
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8. **Bhattacharya J**, Vail D, Moore D, Vogt W, Choradia N, Do R, Erickson K, Feinberg L, Isara F, Lin E, Narayanan V, Vaikath M, MaCurdy T. Medicare Current State and Future Trends Environment Scan. Center for Medicare and Medicaid Services (CMS) White Paper (2019)

BOOK CHAPTERS (15 total)

1. **Bhattacharya J**, Garber AM, MaCurdy T. "Cause-Specific Mortality Among Medicare Enrollees," in Inquires in the Economics of Aging, D Wise (ed.), Chicago, IL: University of Chicago Press. (1997).
2. MaCurdy T, Nechyba T, **Bhattacharya J**. "Ch. 2: An Economic Model of the Fiscal Impacts of Immigration," The Immigration Debate: Studies on the Economic, Demographic, and Fiscal Effects of Immigration, J Smith (ed.), National Academy of Sciences Commission on Behavioral and Social Sciences and Education: Washington D.C., (1998).
3. **Bhattacharya J**, Currie J. "Youths and Nutritional Risk: Malnourished or Misnourished?" in Risky Behavior Among Youths, J Gruber (ed.), (2001).
4. Yoshikawa A. and **Bhattacharya J**. "Japanese Health Care" in World Health Systems: Challenges and Perspectives, Bruce Fried and Laura M. Gaydos (eds.), Chicago, IL: Health Administration Press (2002).
5. **Bhattacharya J**, Cutler D, Goldman DP, Hurd MD, Joyce GF, Lakdawalla DN, Panis CWA, and Shang B, "Disability Forecasts and Future Medicare Costs" Frontiers in Health Policy Research, Vol. 6, Alan Garber and David Cutler (eds.) Boston, MA: MIT Press (2003).
6. **Bhattacharya J**, Choudhry K, and Lakdawalla D. (2007) "Chronic Disease and Trends in Severe Disability in Working Age Populations" Proceedings from the Institute of Medicine workshop, 'Disability in America: An Update,' Institute of Medicine: Washington, D.C.
7. **Bhattacharya J**, Garber AM, MaCurdy T. "Trends in Prescription Drug Use by the Disabled Elderly" in Developments in the Economics of Aging, D. Wise (ed), Chicago, IL, University of Chicago Press (2009).
8. **Bhattacharya J** and Richmond P "On Work and Health Among the American Poor" in Pathways to Self-Sufficiency: Getting Ahead in an Era Beyond Welfare



JAY BHATTACHARYA, M.D., Ph.D.

June 2021

Reform John Karl Scholz and Carolyn Heinrich (eds), New York, NY, Russell Sage Foundation (2009).

9. **Bhattacharya J**, Garber A, MaCurdy T "The Narrowing Dispersion of Medicare Expenditures 1997-2005" in Research Findings in the Economics of Aging, D. Wise (ed.), Chicago, IL, University of Chicago Press (2010)
10. **Bhattacharya J**, Bundorf MK, Pace N, and Sood N "Does Health Insurance Make You Fat?" in Economic Aspects of Obesity Michael Grossman and Naci Mocan (eds.), Chicago, IL, University of Chicago Press (2010)
11. **Bhattacharya J**, Garber A, Miller M, and Perloth D "The Value of Progress against Cancer in the Elderly" Investigations in the Economics of Aging, David Wise (ed), Chicago, IL, University of Chicago Press (2012)
12. Yoshikawa A. and **Bhattacharya J**. "Japanese Health Care" in World Health Systems: Challenges and Perspectives, 2<sup>nd</sup> edition, Bruce Fried and Laura M. Gaydos (eds.), Chicago, IL: Health Administration Press (2012).
13. Hanson, J., Chandra, A., Moss, E., **Bhattacharya, J.** Wolfe, B., Pollak, S.D.. Brain Development and Poverty: Preliminary Findings. In Biological Consequences of Socioeconomic Inequalities. B. Wolfe, T. Seeman, and W. Evans (Eds). NY: Sage. (2012)
14. **Bhattacharya J** "The Diffusion of New Medical Technologies: The Case of Drug-Eluting Stents (A Discussion of Chandra, Malenka, and Skinner)" In Explorations in the Economics of Aging, David Wise (ed.), Chicago, IL, University of Chicago Press (2014).
15. MaCurdy T and **Bhattacharya J** "Challenges in Controlling Medicare Spending: Treating Highly Complex Patients" in Insights in the Economics of Aging, David Wise (ed.) Chicago, IL, University of Chicago Press (2015).

#### ABSTRACTS (3)

1. Su CK and **Bhattacharya J**. Longitudinal Hospitalization Costs and Outcomes in the Treatment of the Medicare Breast Cancer Patient. *International Journal of Radiation Oncology Biology Physics* (1996); 36(S1): 282. [abstract]
2. Nguyen C, Hernandez-Boussard T., Davies S, **Bhattacharya J**, Khosla R, Curtin C. *Cleft Palate Surgery: Variables of Quality and Patient Safety*. Presented at the 69th Annual American Cleft-Palate Craniofacial Association (2012). [abstract]
3. Patel MI, Ramirez D, Agajanian R, Bhattacharya J, Milstein A, Bundorf MK. "The effect of a lay health worker-led symptom assessment intervention for patients on patient-reported outcomes, healthcare use, and total costs." *Journal of Clinical Oncology* 36(15 Suppl):6502 [abstract]

#### **D. PUBLIC AND PROFESSIONAL SERVICE:**

##### JOURNAL EDITING

JAY BHATTACHARYA, M.D., Ph.D.

June 2021

*Journal of Human Capital*, Associate Editor (2015-present)*American Journal of Managed Care*, Guest Editor (2016)*Journal of Human Resources*, Associate Editor (2011-13)*Forum for Health Economics & Policy*, Editorial Board Member (2001-2012)*Economics Bulletin*, Associate Editor (2004-2009)SERVICE ON SCIENTIFIC REVIEW AND ADVISORY COMMITTEES (Selected)

- Standing member of the Health Services Organization and Delivery (HSOD) NIH review panel, 2012-2016
- NIH reviewer (various panels, too numerous to list) 2003-present
- NIH Review Panel Chair: 2018 (P01 review), 2020 (DP1 review).
- Invited Reviewer for the European Research Council, ERC Advanced Grant 2015 RFP
- NIH Stage 2 Challenge Grant Review Panel, July 2009
- Appointed a member of an Institute of Medicine (IOM) panel on the regulation of work hours by resident physicians, 2007-8.
- Standing member of the NIH Social Science and Population Studies Review Panel, Fall 2004-Fall 2008
- Invited Reviewer for National Academy of Sciences report on Food Insecurity and Hunger, November 2005.
- Invited Reviewer for the National Academy of Sciences report on the Nutrition Data Infrastructure, December 2004
- Invited Reviewer for the National Institute on Health (NIH) Health Services Organization and Delivery Review Panel, June 2004, Alexandria, VA.
- Invited Reviewer for the Food Assistance and Nutrition Research Program US Department of Agriculture Economic Research Service Research Proposal Review Panel, June 2004, Stanford, CA.
- Invited Reviewer for the National Institute on Health (NIH) Social Science and Population Studies Review Panel, February 2004, Alexandria, VA.
- Invited Reviewer for the National Institute on Health (NIH) Social Sciences and Population Studies Review Panel, November 2003, Bethesda, MD.
- Invited Reviewer for the National Institute on Health (NIH) Social Science, Nursing, Epidemiology, and Methods (3) Review Panel, June 2003, Bethesda, MD.
- Invited Reviewer for the Food Assistance and Nutrition Research Program US Department of Agriculture Economic Research Service Research Proposal Review Panel, August 2002.
- Research Advisory Panel on Canadian Disability Measurement, Canadian Human Resources Development Applied Research Branch, June 2001 in Ottawa, Canada.
- Invited Reviewer for the National Institute of Occupational Safety and Health R18 Demonstration Project Grants Review panel in July 2000, Washington D.C.
- Research Advisory Panel on Japanese Health Policy Research. May 1997 at the Center for Global Partnership, New York, NY.

TESTIMONY TO GOVERNMENTAL PANELS AND AGENCIES (9)

JAY BHATTACHARYA, M.D., Ph.D.

June 2021

- US Senate Dec. 2020 hearing of the Subcommittee on Homeland Security and Governmental Affairs. Testimony provided on COVID-19 mortality risk, collateral harms from lockdown policies, and the incentives of private corporations and the government to invest in research on low-cost treatments for COVID-19 disease
- "Roundtable on Safe Reopening of Florida" led by Florida Gov. Ron DeSantis. September 2020.
- "Evaluation of the Safety and Efficacy of COVID-19 Vaccine Candidates" July 2020 hearing of the House Oversight Briefing to the Economic and Consumer Policy Subcommittee.
- US Senate May 2020 virtual roundtable. Safely Restarting Youth Baseball and Softball Leagues, invited testimony
- "Population Aging and Financing Long Term Care in Japan" March 2013 seminar at the Japanese Ministry of Health.
- "Implementing the ACA in California" March 2011 testimony to California Legislature Select Committee on Health Care Costs.
- "Designing an Optimal Data Infrastructure for Nutrition Research" June 2004 testimony to the National Academy of Sciences commission on "Enhancing the Data Infrastructure in Support of Food and Nutrition Programs, Research, and Decision Making," Washington D.C.
- "Measuring the Effect of Overtime Reform" October 1998 testimony to the California Assembly Select Committee on the Middle Class, Los Angeles, CA.
- "Switching to Weekly Overtime in California." April 1997 testimony to the California Industrial Welfare Commission, Los Angeles, CA.

#### REFeree FOR RESEARCH JOURNALS

American Economic Review; American Journal of Health Promotion; American Journal of Managed Care; Education Next; Health Economics Letters; Health Services Research; Health Services and Outcomes Research Methodology; Industrial and Labor Relations Review; Journal of Agricultural Economics; Journal of the American Medical Association; Journal of Health Economics; Journal of Health Policy, Politics, and Law; Journal of Human Resources; Journal of Political Economy; Labour Economics; Medical Care; Medical Decision Making; Review of Economics and Statistics; Scandinavian Journal of Economics; Social Science and Medicine; Forum for Health Economics and Policy; Pediatrics; British Medical Journal

#### **Trainee**

Peter Groeneveld, MD, MS  
 Jessica Haberer, MD, MS  
 Melinda Henne, MD, MS  
 Byung-Kwang Yoo, MD, PhD  
 Hau Liu, MD, MS, MBA  
 Eran Bendavid, MD, MS  
 Kaleb Michaud, MS, PhD

Kanaka Shetty, MD  
 Christine Pal Chee, PhD  
 Matthew Miller, MD

#### **Current Position**

Associate Professor of Medicine, University of Pennsylvania  
 Assistant Professor of Medicine, Harvard Medical School  
 Director of Health Services Research, Bethesda Naval Hospital  
 Associate Professor, Public Health, UC Davis  
 Chief Medical Officer at Shanghai United Family Hospital  
 Assistant Professor, General Medicine Disciplines, Stanford University  
 Associate Professor of Medicine, Rheumatology and Immunology, University of Nebraska Medical Center  
 Natural Scientist, RAND Corporation  
 Associate Director of the Health Economics Resource Center, Palo Alto VA  
 VP Clinical Strategy and Head of Innovation, Landmark Health

**JAY BHATTACHARYA, M.D., Ph.D.****June 2021**

Vincent Liu, MD	Research Scientist, Kaiser Permanente Northern California Division of Research
Daniella Perlroth, MD	Chief Data Scientist, Lyra Health
Crystal Smith-Spangler, MD	Internist, Palo Alto Medical Foundation
Barrett Levesque, MD MS	Assistant Professor of Clinical Medicine, UC San Diego Health System
Torrey Simons, MD	Clinical Instructor, Department of Medicine, Stanford University
Nayer Khazeni, MD	Assistant Professor of Medicine (Pulmonary and Critical Care Medicine), Stanford University
Monica Bhargava, MD MS	Assistant Clinical Professor, UCSF School of Medicine
Dhruv Kazi, MD	Assistant Professor, UCSF School of Medicine
Zach Kastenber, MD	Resident, Department of Surgery, Stanford University
Kit Delgado, MD	Assistant Professor, Department of Emergency Medicine and Faculty Fellow, University of Pennsylvania
Suzann Pershing, MD	Chief of Ophthalmology for the VA Palo Alto Health Care System
KT Park, MD	Assistant Professor, Department of Medicine, Stanford University
Jeremy Goldhaber-Fiebert, PhD	Associate Professor, Department of Medicine, Stanford University
Sanjay Basu, MD	Assistant Professor, Department of Medicine, Stanford University
Marcella Alsan, MD, PhD	Assistant Professor, Department of Medicine (CHP/PCOR), Stanford Univ.
David Chan, MD, PhD	Assistant Professor, Department of Medicine (CHP/PCOR), Stanford Univ.
Karen Eggleston, PhD	Senior Fellow, Freeman Spogli Institute, Stanford University
Kevin Erickson, MD	Assistant Professor, Department of Nephrology, Baylor College of Medicine
Ilana Richman, MD	VA Fellow at CHP/PCOR, Stanford University
Alexander Sandhu, MD	VA Fellow at CHP/PCOR, Stanford University
Michael Hurley	Medical Student, Stanford University
Manali Patel, MD	Instructor, Department of Medicine (Oncology), Stanford University
Dan Austin, MD	Resident Physician, Department of Anesthesia, UCSF School of Medicine
Anna Luan, MD	Resident Physician, Department of Medicine, Stanford University
Louse Wang	Medical Student, Stanford University
Christine Nguyen, MD	Resident Physician, Department of Medicine, Harvard Medical School
Josh Mooney, MD	Instructor, Department of Medicine (Pulmonary and Critical Care Medicine), Stanford University
Eugene Lin, MD	Fellow, Department of Medicine (Nephrology), Stanford University
Eric Sun, MD	Assistant Professor, Department of Anesthesia, Stanford University
Sejal Hathi	Medical Student, Stanford University
Ibrahim Hakim	Medical Student, Stanford University
Archana Nair	Medical Student, Stanford University
Trishna Narula	Medical Student, Stanford University
Daniel Vail	Medical Student, Stanford University
Tej Azad	Medical Student, Stanford University
Jessica Yu, MD	Fellow, Department of Medicine (Gastroenterology), Stanford University
Daniel Vail	Medical Student, Stanford University
Alex Sandhu, MD	Fellow, Department of Medicine (Cardiology), Stanford University
Matthew Muffly, MD	Clinical Assistant Professor, Dept. of Anesthesia, Stanford University

**Dissertation Committee Memberships**

Ron Borzekowski	Ph.D. in Economics	Stanford University	2002
Jason Brown	Ph.D. in Economics	Stanford University	2002
Dana Rapaport	Ph.D. in Economics	Stanford University	2003
Ed Johnson	Ph.D. in Economics	Stanford University	2003
Joanna Campbell	Ph.D. in Economics	Stanford University	2003
Neeraj Sood*	Ph.D. in Public Policy	RAND Graduate School	2003
James Pearce	Ph.D. in Economics	Stanford University	2004
Mikko Packalen	Ph.D. in Economics	Stanford University	2005
Kaleb Michaud*	Ph.D. in Physics	Stanford University	2006
Kyna Fong	Ph.D. in Economics	Stanford University	2007

**JAY BHATTACHARYA, M.D., Ph.D.****June 2021**

Natalie Chun	Ph.D. in Economics	Stanford University	2008
Sriniketh Nagavarapu	Ph.D in Economics	Stanford University	2008
Sean Young	Ph.D. in Psychology	Stanford University	2008
Andrew Jaciw	Ph.D. in Education	Stanford University	2010
Chirag Patel	Ph.D. in Bioinformatics	Stanford University	2010
Raphael Godefroy	Ph.D. in Economics	Stanford University	2010
Neal Mahoney	Ph.D. in Economics	Stanford University	2011
Alex Wong	Ph.D. in Economics	Stanford University	2012
Kelvin Tan	Ph.D. in Management Science	Stanford University	2012
Animesh Mukherjee	Masters in Liberal Arts Program	Stanford University	2012
Jeanne Hurley	Masters in Liberal Arts Program	Stanford University	2012
Patricia Foo	Ph.D. in Economics	Stanford University	2013
Michael Dworsky	Ph.D. in Economics	Stanford University	2013
Allison Holliday King	Masters in Liberal Arts Program	Stanford University	2013
Vilsa Curto	Ph.D. in Economics	Stanford University	2015
Rita Hamad	Ph.D. in Epidemiology	Stanford University	2016
Atul Gupta	Ph.D. in Economics	Stanford University	2017
Yiwei Chen	Ph.D. in Economics	Stanford University	2019
Yiqun Chen	Ph.D. in Health Policy	Stanford University	2020
Min Kim	Ph.D. in Economics	Iowa State Univ.	2021
Bryan Tysinger	Ph.D. in Public Policy	RAND Graduate School	2021

**E. GRANTS AND PATENTS****PATENT (2)**

1. “Environmental Biomarkers for the Diagnosis and Prognosis for Type 2 Diabetes Mellitus” with Atul Butte and Chirag Patel (2011), US Patent (pending).
2. “Health Cost and Flexible Spending Account Calculator” with Schoenbaum M, Spranca M, and Sood N (2008), U.S. Patent No. 7,426,474.

**GRANTS AND SUBCONTRACTS (42)****CURRENT (6)**

2019-2020	Funder: Acumen, LLC. Title: Quality Reporting Program Support for the Long-Term Care Hospital, Inpatient Rehabilitation Facility, Skilled Nursing Facility QRPs and Nursing Home Compare Role: PI
2018-2020	Funder: Acumen, LLC. Title: Surveillance Activities of Biologics Role: PI
2018-2020	Funder: France-Stanford Center for Interdisciplinary Studies Title: A Nutritional Account of Global Trade: Determinants and Health Implications Role: PI
2017-2023	Funder: National Institutes of Health



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	Title: The Epidemiology and Economics of Chronic Back Pain
	Role: Investigator (PI: Sun)
2017-2021	Funder: National Institutes of Health
	Title: Big Data Analysis of HIV Risk and Epidemiology in Sub-Saharan Africa
	Role: Investigator (PI: Bendavid)
2016-2020	Funder: Acumen, LLC.
	Title: MACRA Episode Groups and Resource Use Measures II
	Role: PI
PREVIOUS (36)	
2016-2018	Funder: University of Kentucky
	Title: Food acquisition and health outcomes among new SNAP recipients since the Great Recession
	Role: PI
2015-2019	Funder: Alfred P. Sloan Foundation
	Title: Public versus Private Provision of Health Insurance
	Role: PI
2015-2019	Funder: Natural Science Foundation
	Title: Health Insurance Competition and Healthcare Costs
	Role: Investigator (PI: Levin)
2014-2015	Funder: The Centers for Medicare and Medicaid Services
	Title: Effect of Social Isolation and Loneliness on Healthcare Utilization
	Role: PI
2014-2015	Funder: AARP
	Title: The Effect of Social Isolation and Loneliness on Healthcare Utilization and Spending among Medicare Beneficiaries
	Role: PI
2013-2019	Funder: National Bureau of Economic Research
	Title: Innovations in an Aging Society
	Role: PI
2013-2014	Funder: Robert Wood Johnson Foundation
	Title: Improving Health eating among Children through Changes in Supplemental Nutrition Assistance Program (SNAP)
	Role: Investigator (PI: Basu)
2011-2016	Funder: National Institutes of Health (R37)
	Title: Estimating the Potential Medicare Savings from Comparative Effectiveness Research
	Role: PI Subaward (PI: Garber)
2011-2016	Funder: National Institute of Aging (P01)
	Title: Improving Health and Health Care for Minority and Aging Populations
	Role: PI Subcontract (PI: Wise)

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2010-2018	Funder: National Institutes of Health Title: Clinic, Family & Community Collaboration to Treat Overweight and Obese Children Role: Investigator (PI: Robinson)
2010-2014	Funder: Agency for Health, Research and Quality (R01) Title: The Effects of Private Health Insurance in Publicly Funded Programs Role: Investigator (PI: Bundorf)
2010-2013	Funder: Agency for Healthcare Research and Quality Title: G-code" Reimbursement and Outcomes in Hemodialysis Role: Investigator (PI: Erickson)
2010-2013	Funder: University of Southern California Title: The California Medicare Research and Policy Center Role: PI
2010-2012	Funder: University of Georgia Title: Natural Experiments and RCT Generalizability: The Woman's Health Initiative Role: PI
2010-2011	Funder: National Bureau of Economic Research Title: Racial Disparities in Health Care and Health Among the Elderly Role: PI
2009-2020	Funder: National Institute of Aging (P30) Title: Center on the Demography and Economics of Health and Aging Role: PI (2011-2020)
2009-2011	Funder: Rand Corporation Title: Natural Experiments and RCT Generalizability: The Woman's Health Initiative Role: PI
2008-2013	Funder: American Heart Association Title: AHA-PRT Outcomes Research Center Role: Investigator (PI: Hlatky)
2007-2009	Funder: National Institute of Aging (R01) Title: The Economics of Obesity Role: PI
2007-2009	Funder: Veterans Administration, Health Services Research and Development Service Title: Quality of Practices for Lung Cancer Diagnosis and Staging Role: Investigator
2007-2008	Funder: Stanford Center for Demography and Economics of Health and Aging Title: The HIV Epidemic in Africa and the Orphaned Elderly



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	Role: PI
2007	Funder: University of Southern California Title: The Changes in Health Care Financing and Organization Initiative
	Role: PI
2006-2010	Funder: National Institute of Aging (K02) Title: Health Insurance Provision for Vulnerable Populations
	Role: PI
2006-2010	Funder: Columbia University/Yale University Title: Dummy Endogenous Variables in Threshold Crossing Models, with Applications to Health Economics
	Role: PI
2006-2007	Funder: Stanford Center for Demography and Economics of Health and Aging Title: Obesity, Wages, and Health Insurance
	Role: PI
2005-2009	Funder: National Institute of Aging (P01 Subproject) Title: Medical Care for the Disabled Elderly
	Role: Investigator (PI: Garber)
2005-2008	Funder: National Institute of Aging (R01) Title: Whom Does Medicare Benefit?
	Role: PI Subcontract (PI: Lakdawalla)
2002	Funder: Stanford Center for Demography and Economics of Health and Aging Title: Explaining Changes in Disability Prevalence Among Younger and Older American Populations
	Role: PI
2001-2003	Funder: Agency for Healthcare Research and Quality (R01) Title: State and Federal Policy and Outcomes for HIV+ Adults
	Role: PI Subcontract (PI: Goldman)
2001-2002	Funder: National Institute of Aging (R03) Title: The Economics of Viatical Settlements
	Role: PI
2001-2002	Funder: Robert Wood Johnson Foundation Title: The Effects of Medicare Eligibility on Participation in Social Security Disability Insurance
	Role: PI Subcontract (PI: Schoenbaum)
2001-2002	Funder: USDA Title: Evaluating the Impact of School Breakfast and Lunch
	Role: Investigator
2001-2002	Funder: Northwestern/Univ. of Chicago Joint Center on Poverty Title: The Allocation of Nutrition with Poor American Families
	Role: PI Subcontract (PI: Haider)
2000-2002	Funder: National Institute on Alcohol Abuse & Alcoholism (R03) Title: The Demand for Alcohol Treatment Services
	Role: PI
2000-2001	Funder: USDA Title: How Should We Measure Hunger?

JAY BHATTACHARYA, M.D., Ph.D.

June 2021

Role: PI Subcontract (PI: Haider)

#### F. SCHOLARSHIPS AND HONORS

- Phi Beta Kappa Honor Society, 1988
- Distinction and Departmental Honors in Economics, Stanford University, 1990
- Michael Forman Fellowship in Economics, Stanford University, 1991-1992
- Agency for Health Care Policy and Research Fellowship 1993-1995
- Outstanding Teaching Assistant Award, Stanford University, Economics, 1994
- Center for Economic Policy Research, Olin Dissertation Fellowship, 1997-1998
- Distinguished Award for Exceptional Contributions to Education in Medicine, Stanford University, 2005, 2007, and 2013.
- Dennis Aigner Award for the best applied paper published in the *Journal of Econometrics*, 2013

# Scientific Evidence on COVID, Children, and Mask Mandates

October 10, 2021

Jay Bhattacharya, MD, PhD

Professor, Stanford University School of Medicine

**EXHIBIT**  
**4-B**

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## Executive Summary

This report aims to assess the scientific evidence regarding the benefits and harms of mandating that children wear masks to attend school. I adopt an approach that contrasts the marginal benefits of required masking against the marginal harms. This stands in contrast to the approach that has characterized much decision-making during the pandemic, which typically ignores harms from interventions while at the same time assuming – even in the absence of high-quality scientific evidence – that the interventions will succeed in slowing disease spread. The primary findings I report in each section are as follows.

In “Public Health Decision-Making Principles,” I outline some key and uncontroversial principles that public health ought to follow if it is to claim that it has a reasonable basis for the policies it is implementing, including the consideration of both costs and benefits of the policy in both short and long run, the strength and quality of scientific evidence underlying the policy, whether the policy is consistent with democratic norms and ethical principles, and a requirement that the policy treat all members of society equitably. The imposition of mandatory childhood masking fails on several grounds because the balance of harms outweighs the benefits, and the strength of scientific evidence on benefits is weak.

In “COVID-19 Infection Fatality Risk”, I discuss the evidence on the risk of mortality posed by SARS-CoV-2 infection. For children, the mortality risk posed by infection is vanishingly low, with infection survival probabilities surpassing 99.99% in many studies. The risk of mortality after infection grows sharply with age. For elderly adults over 70, the survival probability after infection is 95%. The vaccination of the adult population has dramatically lowered the mortality risk faced by vaccinated individuals.

In “Children are unlikely to suffer serious side effects from COVID-19”, I present further evidence on the low likelihood that children face lasting harm from COVID infection, including evidence that severe inflammatory outcomes, such as MIS-C, are rare.

In “Children are Inefficient Transmitters of the Virus,” I present evidence from studies conducted worldwide that children are less efficient at spreading the disease than adults. Based on this evidence, which was available early in the epidemic, many countries opened their schools for in-

person instruction during the 2020-21 academic year, in many places with no masks required for children or staff. The results from this natural experiment yielded very low COVID-related mortality for children and COVID-infection rates for teachers and staff at lower rates than in the population at large.

In “No Randomized Evidence of Efficacy of Masking in Limiting Disease Spread,” I present evidence of structured reviews of the literature on the effect of masking on slowing the spread of COVID and other respiratory viruses. The primary conclusion is that there are no high-quality randomized evaluations that establish that masks on children are particularly effective in slowing disease spread. The highest quality observational evidence from the U.S. suggests no correlation between mandating that children wear masks and disease outcomes.

Finally, in “Harms to Children from Mask Wearing in Schools,” I present evidence from the scientific literature that masks can pose some harm to the emotional and social development of some children.

Overall, the evidence I present in this report shows that permitting parents to opt out of a mandated mask policy is unlikely to have a significant effect on COVID disease spread and may relieve some children from the harms of masking.



## Biography

I am a Professor of Medicine at Stanford University and a research associate at the National Bureau of Economic Research. I direct Stanford's Center for Demography and Economics of Health and Aging. My recent research focuses on the epidemiology of COVID, including the lethality of COVID infection and the effects of lockdown policies. Before COVID, I studied the health and well-being of vulnerable populations, emphasizing the role of government programs, biomedical innovation, and health policy. I have published many articles in top peer-reviewed scientific journals in medicine, economics, health policy, epidemiology, statistics, law, and public health, among other fields. I have published to date six peer-reviewed publications on COVID, including some of the most highly cited pieces published during the pandemic. I hold an M.D. and Ph.D. in economics, both earned at Stanford University.

## Public Health Decision-Making Principles

The justification for a benefit-harm approach is that it is consistent with the principles of good public health<sup>1</sup> and health policy<sup>2</sup> practice that predates the epidemic and is more likely to produce good decisions and better pandemic outcomes. Within the context of public health decisions, “decisions about which actions should be considered [during a pandemic] should take into account numerous factors, such as virus transmission parameters, severity of disease among different age and risk groups, availability and effectiveness of control measures and treatment options, and impact on health care, schools, business, and the community.”<sup>3</sup> That is because mitigation policies—especially severe ones—have “potential social, economic, and political consequences that need to be fully considered by political leaders as well as health officials” before their implementation.<sup>4</sup> Those consequences are evident and well-illustrated by the economic, physical, and psychological harms that extreme COVID-19 mitigation measures inflicted and, in many places, continue to inflict.

While the topic is voluminous, there are a few principles that are particularly relevant to COVID-19 policy making, including the following guidelines for decision-makers:

- Consider both the costs *and* benefits of alternative policies, choosing policies that appropriately balance the two.
- Appropriately account for uncertainty in the projected costs and benefits of policy options.
- Account for the strength of the scientific evidence.
- Be constrained in policy making by democratic norms and ethical principles.
- Choose policies that treat people in society equitably, and in particular, eschew policies that disproportionately favor more affluent members of society over poorer members.

Sound health policy decision-making requires a careful evaluation of both the costs and benefits over both the long and short term. It is striking that public health officials rarely discuss the collateral harms or, in the case of masks, often assume that there are none. The costs considered should include medical and psychological harms as well as economic damage.

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<sup>1</sup> Public Health Leadership Society (2002) Principles of the Ethical Practice of Public Health. American Public Health Association. [https://www.apha.org/-/media/files/pdf/membergroups/ethics/ethics\\_brochure.ashx](https://www.apha.org/-/media/files/pdf/membergroups/ethics/ethics_brochure.ashx)

<sup>2</sup> Bhattacharya J, Hyde T, Tu P. Health Economics, London: Palgrave-MacMillan, (2013).

<sup>3</sup> Rachel Holloway et al., *Updated Preparedness and Response Framework for Influenza Pandemics*, MORBIDITY & MORTALITY WEEKLY REP., Sept. 26, 2014, at 6.

<sup>4</sup> Thomas V. Inglesby et al., *Disease Mitigation Measures in the Control of Pandemic Influenza*, 4 BIOSECURITY & BIOTERRORISM: BIODEFENSE STRATEGY, PRACTICE, & SCIENCE 366, 369 (2006).

The costs and benefits of every potential policy involve some degree of uncertainty, including lockdowns and masking. Weighing the costs and benefits of a particular mitigation policy is, to be sure, a difficult task in the context of a pandemic. “[D]ata needed to make decisions might be limited,” especially early in a pandemic, but “delaying action might weaken the effectiveness of the response.”<sup>5</sup> But that does not justify taking blanket prophylactic action that may, in the end, cause significant harm with little benefit, which is precisely what occurred in the COVID-19 pandemic.

In the face of uncertainty, public health decision-making should be based on the best available evidence regarding the most likely outcomes from the imposition of the policy. Medicine and public health require the highest quality evidence – placebo-controlled randomized trials – for a good reason; too often, lower-quality evidence produces misleading conclusions. Public health decision-making should eschew decision-making based on worst-case or best-case assumptions about the outcomes that may happen if alternate policies are adopted. It is particularly bad practice to make decisions that assume worst-case scenarios regarding the costs of a policy and best-case assumptions regarding the benefits of a policy, or vice versa. So, for instance, it is poor public health practice to assume in the absence of high-quality evidence that masks, if mandated, will have a dramatic effect on disease transmission and mortality with no consideration of the harms associated with masking children.

In addition to the costs and benefits, public health policy must consider the strength of the scientific evidence regarding the measure in achieving the aims it proposes. Of course, without solid scientific evidence in favor of a policy – especially one with enormous costs – its imposition by a government on a population would be unethical. The greater the potential harms from the policy on some part of the population, the greater the evidentiary standard required to establish its necessity.

Finally, equity is a key principle of public health. Public health officials must consider whether the harms of a policy like lockdowns fall disproportionately on the poor, minority populations, or others of low socioeconomic status. Similarly, policies that accrue benefits disproportionately to

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<sup>5</sup> Rachel Holloway et al., *Updated Preparedness and Response Framework for Influenza Pandemics*, MORBIDITY & MORTALITY WEEKLY REP., Sept. 26, 2014, at 6.

the affluent, majority populations, and people of high socioeconomic status should be redesigned to comport with the requirement for equity in public health decision-making.

In summary, sound public-health practice adheres to key principles aimed at grounding policy in sound science, respecting human rights and democratic norms, appropriately accounting for costs and benefits of policies and uncertainty in outcomes, treating people equitably, as well as other principles not discussed here. Public health officials must make decisions within that framework to engage in non-arbitrary and non-capricious decision-making. That includes current decisions about COVID-19-related health policy, such as whether or not to mandate non-pharmaceutical interventions (“NPI’s”) like mask wearing for schoolchildren—the subject of this report. Instead, public health authorities should focus their resources on protecting the population of older, vulnerable people who have not yet been vaccinated and still face a high risk of death if infected. Direct protection through extended vaccination efforts for the vulnerable would more effectively reduce the direct harms from COVID, without some of the adverse effects – both social and personal – induced by mask mandates for children.

## COVID-19 Infection Fatality Risk

SARS-CoV-2, the virus that causes COVID-19 infection, entered human circulation some time in 2019 in China. The virus itself is a member of the coronavirus family of viruses, several of which cause typically mild respiratory symptoms upon infection. The SARS-CoV-2 virus, by contrast, induces a wide range of clinical responses upon infection. These presentations range from entirely asymptomatic infection to mild upper respiratory disease with unusual symptoms like loss of sense of taste and smell, hypoxia, or a deadly viral pneumonia that is the primary cause of death due to SARS-CoV-2 infection.

The mortality danger from COVID-19 infection varies substantially by age and a few chronic disease indicators.<sup>6</sup> For most of the population, including the vast majority of children and young adults, COVID-19 infection poses less of a mortality risk than seasonal influenza. By contrast, for older people – especially those with severe comorbid chronic conditions – COVID-19 infection poses a high risk of mortality, on the order of a 5% infection fatality rate.

The best evidence on the infection fatality rate from SARS-CoV-2 infection (that is, the fraction of infected people who die due to the infection) comes from seroprevalence studies. The definition of seroprevalence of COVID-19 is the fraction of people in a population who have specific antibodies against SARS-CoV-2 in their bloodstream. A seroprevalence study measures the fraction of a population who have antibodies that are produced specifically by people infected by the SARS-CoV-2 virus. The presence of specific antibodies in blood provides excellent evidence that an individual was previously infected.

Seroprevalence studies provide better evidence on the total number of people who have been infected than do case reports or positive reverse transcriptase-polymerase chain reaction (RT-PCR) test counts. PCR tests are the most common type of test used to check whether a person currently has the virus or viral fragments in their body (typically in the nasopharynx). The PCR test should

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<sup>6</sup> Public Health England (2020) Disparities in the Risk and Outcomes of COVID-19. August 2020. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/908434/Disparities\\_in\\_the\\_risk\\_and\\_outcomes\\_of\\_COVID\\_August\\_2020\\_update.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/908434/Disparities_in_the_risk_and_outcomes_of_COVID_August_2020_update.pdf)

not be used to count the total number of people who have been infected to date in a population. Case reports and PCR test counts both miss infected people who are not identified by the public health authorities or who do not volunteer for RT-PCR testing. That is, they miss people who were infected but recovered from the condition without coming to the attention of public health authorities. Because they ignore unreported, fatality rate estimates based on case reports or positive test counts are substantially biased toward reporting a higher fatality rate.

According to a meta-analysis<sup>7</sup> by Dr. John Ioannidis of every seroprevalence study conducted to date of publication with a supporting scientific paper (74 estimates from 61 studies and 51 different localities worldwide), the median infection survival rate—the inverse of the infection fatality rate—from COVID-19 infection is 99.77%. For COVID-19 patients under 70, the meta-analysis finds an infection survival rate of 99.95%. A separate meta-analysis<sup>8</sup> by other scientists independent of Dr. Ioannidis' group reaches qualitatively similar conclusions.

A study of the seroprevalence of COVID-19 in Geneva, Switzerland (published in *The Lancet*)<sup>9</sup> provides a detailed age breakdown of the infection survival rate in a preprint companion paper<sup>10</sup> 99.9984% for patients 5 to 9 years old; 99.99968% for patients 10 to 19 years old; 99.991% for patients 20 to 49 years old; 99.86% for patients 50 to 64 years old; and 94.6% for patients above 65.

I estimated the age-specific infection fatality rates from the Santa Clara County seroprevalence study<sup>11</sup> data (for which I am the senior investigator). The infection survival rate is 100% among people between 0 and 19 years (there were no deaths in Santa Clara in that age range up to that date); 99.987% for people between 20 and 39 years; 99.84% for people between 40 and 69 years; and 98.7% for people above 70 years.

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<sup>7</sup> John P.A. Ioannidis, *The Infection Fatality Rate of COVID-19 Inferred from Seroprevalence Data*, Bulletin of the World Health Organization BLT 20.265892.

<sup>8</sup> Andrew T. Levin, et al., *Assessing the Age Specificity of Infection Fatality Rate for COVID-19: Meta-Analysis & Public Policy Implications* (Aug. 14, 2020) MEDRXIV, <http://bit.ly/3gplolV>.

<sup>9</sup> Silvia Stringhini, et al., *Seroprevalence of Anti-SARS-CoV-2 IgG Antibodies in Geneva, Switzerland (SEROCoV-POP): A Population Based Study* (June 11, 2020) THE LANCET, <https://bit.ly/3187S13>.

<sup>10</sup> Francisco Perez-Saez, et al. *Serology- Informed Estimates of SARS-COV-2 Infection Fatality Risk in Geneva, Switzerland* (June 15, 2020) OSF PREPRINTS, <http://osf.io/wdbpe/>.

<sup>11</sup> Eran Bendavid, et al., *COVID-19 Antibody Seroprevalence in Santa Clara County, California* (April 30, 2020) MEDRXIV, <https://bit.ly/2EuLIFK>.



Those numbers are consistent with what the US CDC has reported. A US CDC report<sup>12</sup> found between 6 and 24 times more SARS-CoV-2 infections than cases reported between March and May 2020. Correspondingly, the CDC's estimate of the infection fatality rate for people ages 0-19 years is 0.003%, meaning infected children have a 99.997% survivability rate. For people ages 20-49 years, it was 0.02%, meaning that young adults have a 99.98% survivability rate. For people age 50-69 years, it was 0.5%, meaning this age group has a 99.5% survivability rate. Finally, for people ages 70+ years, it was 5.4%, meaning seniors have a 94.6% survivability rate.<sup>13</sup> There is thus no substantial qualitative disagreement about the infection fatality rate reported by the CDC and other sources in the scientific literature. This should come as no surprise since they all rely on seroprevalence studies to estimate infection fatality rates.

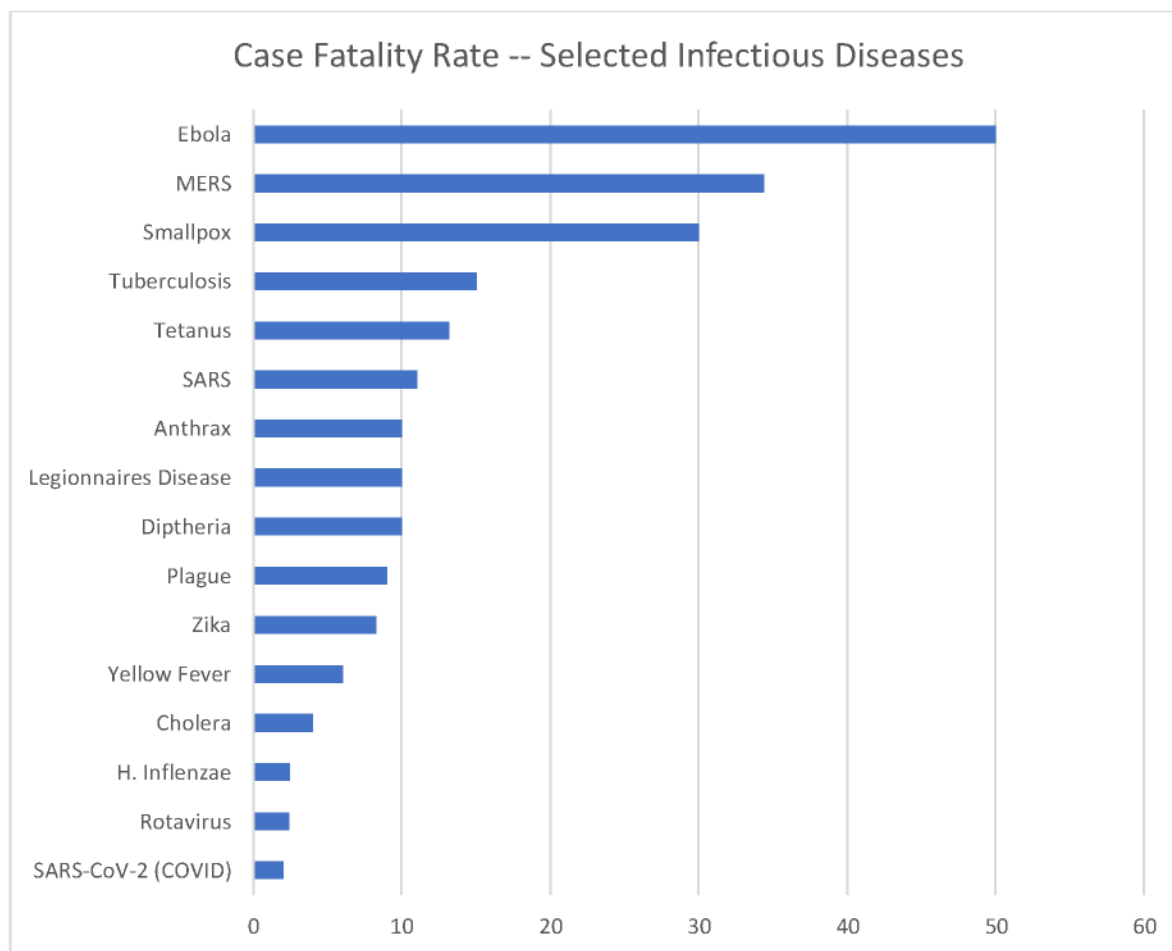
It is helpful to provide some context for how large the mortality risk is posed by COVID infection relative to the risk posed by other infectious diseases. Since seroprevalence-based mortality estimates are not readily available for every disease, in the figure immediately below, I plot case fatality rates, defined as the number of deaths due to the disease divided by the number of identified or diagnosed cases of that disease. The case fatality rate for SARS-CoV-2 is ~2% (though that number has decreased with the availability of vaccines and effective treatments). By contrast, the case fatality rate for SARS is over five times higher than that, and for MERS, it is 16 times higher than that.

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<sup>12</sup> Fiona P. Havers, et al., *Seroprevalence of Antibodies to SARS-CoV-2 in 10 Sites in the United States, March 23-May 12, 2020* (Jul. 21, 2020) JAMA INTERN MED., <https://bit.ly/3goZUgy>.

<sup>13</sup> COVID- 19 Pandemic Planning Scenarios, Centers for Disease Control and Prevention, <https://www.cdc.gov/coronavirus/2019-ncov/hcp/planning-scenarios.html>.





Perhaps the most important implication of these estimates is that they identify two distinct populations of people who face a very different risk from COVID infection. One segment – the elderly and others with severe chronic disease – faces a higher risk of mortality if infected (especially if unvaccinated). A second segment – typically non-elderly people – face a very low risk of mortality if infected and instead face much greater harm from lockdowns, school closures, and other non-pharmaceutical interventions than from COVID infection itself. The right strategy, then, is focused protection of the vulnerable population by prioritizing them for vaccination while lifting lockdowns and other restrictions on activities for the rest since they cause harm without corresponding benefit for the non-vulnerable. The Great Barrington Declaration, of which I am a primary co-author, describes an alternate policy of focused protection. This policy would lead to fewer COVID-related deaths and fewer non-COVID-related deaths than universal lockdowns or a strategy that lets the virus rip through the population. My co-authors of this Declaration include Prof. Martin Kulldorff of Harvard University and Prof. Sunetra Gupta of Oxford University. Over

12,000 epidemiologists and public health professionals and 35,000 medical professionals have co-signed the Declaration.<sup>14</sup>

These infection fatality rate estimates presented in this section are drawn from data before widespread vaccination in the U.S. and elsewhere. The COVID-19 vaccines approved for use in the U.S. are very effective in substantially reducing the infection fatality rate. According to the US Centers for Disease Control, the mRNA vaccines were 94% effective against COVID-19 hospitalization for patients 65 and older.<sup>15</sup> So infection fatality rates that I provide above are overestimated by at least one order of magnitude. Fully vaccinated, non-elderly teachers in classrooms face a vanishingly small risk of mortality even if the SARS-CoV-2 virus infects them.

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<sup>14</sup> Bhattacharya J, Gupta S, Kulldorff M (2020) Great Barrington Declaration. <https://gbdeclaration.org>

<sup>15</sup> Tenforde MW, Olson SM, Self WH, et al. Effectiveness of Pfizer-BioNTech and Moderna Vaccines Against COVID-19 Among Hospitalized Adults Aged  $\geq 65$  Years — United States, January–March 2021. *MMWR Morb Mortal Wkly Rep* 2021;70:674–679. DOI: <http://dx.doi.org/10.15585/mmwr.mm7018e1>external icon

## Children are unlikely to suffer serious side effects from COVID-19 despite the delta variant

As the previous section indicates, COVID-19 is not a severe threat to schoolchildren, especially younger children—even if they contract the disease.<sup>16</sup> To begin, COVID-19 is almost never fatal for schoolchildren. According to Bravata et al., 2021 “[t]he CDC estimates that compared to adults 40 to 49 years of age, children 5 to 17 years of age have 160 times lower risk of death from COVID-19 and 27 times lower risk of hospitalization from COVID-19.”<sup>17</sup> Since the start of the pandemic in the U.S. in January 2020 through Sept. 15, 2021, 439 children under 18 have died with a COVID-19 diagnosis code in their record. This is fewer children than die during a typical five-month influenza season each year.<sup>18</sup>

And in Georgia, there have been few COVID-19 linked deaths among those under 18 years old.<sup>19</sup> The figure, taken from the Georgia Department of Public Health Daily Status Report, plots a histogram of confirmed deaths by age in Georgia using data from the pandemic’s start through October 8, 2021. It should not be surprising, given the evidence shown in the previous section, how uncommon mortality is for children relative to older people, especially those over the age of 70, where the bulk of the COVID-19 deaths have occurred.

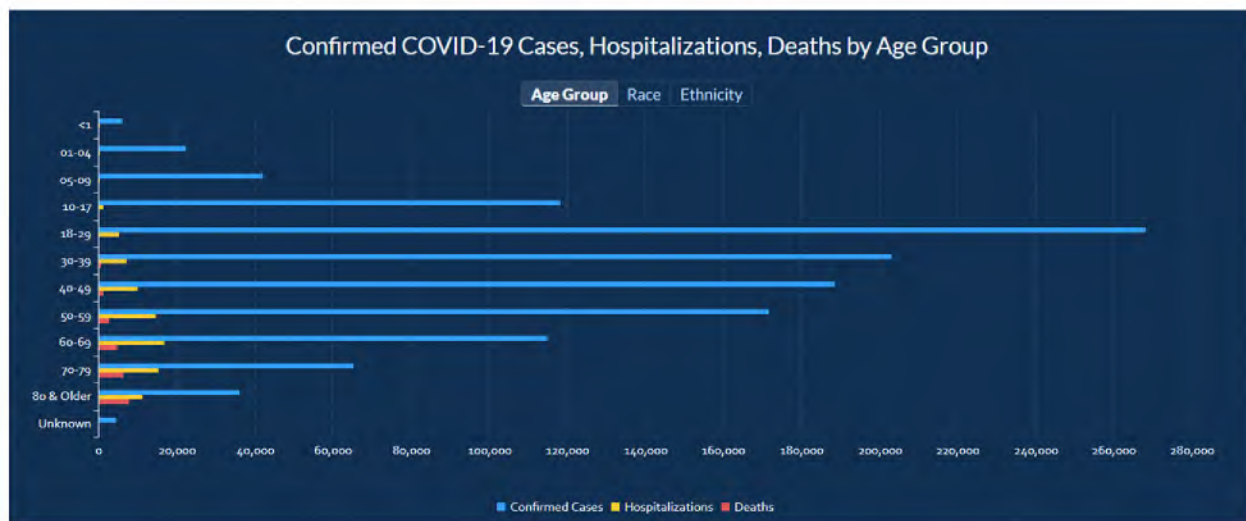
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<sup>16</sup> Especially children without preexisting conditions—“[i]t appears that children who become severely ill with acute Covid-19 often have one or more underlying conditions, including medical complexity, obesity, asthma, sickle cell disease, and immunosuppression.” Jessica H. Rubens et al., *Acute COVID-19 and Multisystem Inflammatory Syndrome in Children*, BMJ: CLINICAL UPDATES, Mar. 1, 2021, at 2.

<sup>17</sup> Dena Bravata, et al. *Back to School: The Effect of School Visits During COVID-19 on COVID-19 Transmission* 9 (Nat’l Bureau of Econ. Research, Working Paper No. 28645, Apr. 2021).

<sup>18</sup> Marty Makary, Opinion, *The Flimsy Evidence Behind the CDC’s Push to Vaccinate Children*, WALL ST. J. (July 19, 2021), <https://on.wsj.com/2VYqit1>. See also National Center for Health Statistics, “COVID-19 Data from the NCHS”. Table 1. Table 1. Deaths involving coronavirus disease 2019 (COVID-19), pneumonia, and influenza reported to NCHS by sex and age group. United States. Accessed September 24, 2021. <https://www.cdc.gov/nchs/covid19/index.htm>

<sup>19</sup> Georgia Department of Public Health Daily Status Report. COVID-19 Case Demographics. <https://ga-covid19.ondemand.sas.com/>. Data accessed October 10, 2021 and current through October 8, 2021.

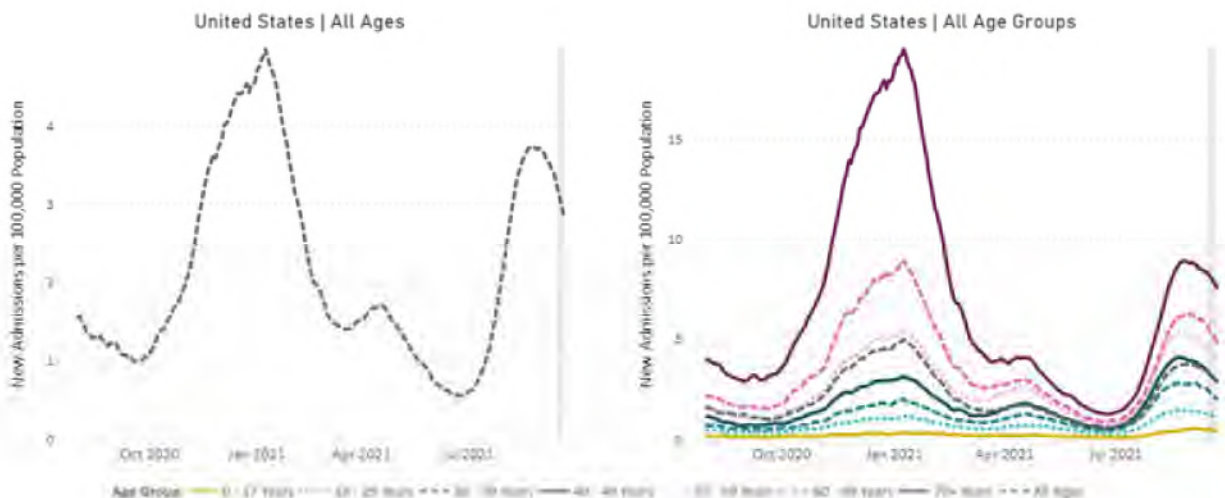


Indeed, data from the U.K. regarding fatality rates from the Delta variant show the case fatality rate from delta is lower than other variants. It is near 0.0% for those under fifty years old.<sup>20</sup> Given the death rate from COVID-19 is positively related to age, and the data from the U.K. indicate that the relationship still holds despite the new variant, the U.K. data show that the delta variant is *not* particularly lethal for schoolchildren.

The incidence of school-age children requiring hospitalizations due to COVID-19 is also rare. The latest data from the CDC, shown immediately below, plots hospitalization rates per 100,000 population for different age groups from September 2020 through Sept. 22, 2021. The rate of hospitalization for the 0-17 age group, even at the peak of the epidemic this past summer, was below five children per million population on any given date. Children make up by far the smallest share of the total hospitalized population at any given time, while the elderly make up the bulk of the hospitalized.<sup>21</sup>

<sup>20</sup> See Public Health England (2021) SARS-CoV-2 variants of concern and variants under investigation in England. Technical Briefing 20. August 6, 2021. (showing that only 48 of the 147,612 unvaccinated people under 50 who were infected with the Delta variant died, or 0.03%). [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1009243/Technical\\_Briefing\\_20.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1009243/Technical_Briefing_20.pdf).

<sup>21</sup> CDC COVID Data Tracker. United States at a Glance. <https://covid.cdc.gov/covid-data-tracker/#new-hospital-admissions>. Accessed September 24, 2021



Even those advocating for stricter non-pharmaceutical interventions in school settings acknowledge that COVID-19 “infection in children is generally characterized by mild illness. Only a minority of children require hospitalization...”<sup>22</sup> The public health agency in the Netherlands similarly concludes, “Worldwide, relatively few children have been reported with COVID-19. . . Children become less seriously ill and almost never need to be hospitalized because of” COVID-19.”<sup>23</sup>

Experience over the last year and a half bears this out. For example, in Sweden, “[f]rom March through June 2020, a total of 15 children with Covid-19 were admitted to an ICU (0.77 per 100,000 children in this age group).”<sup>24</sup> Furthermore, data published by Public Health England shows that hospitalization rates and case fatality rates from delta variant infections are lower than hospitalization and case fatality rates from the previously common alpha variant for the younger population.<sup>25</sup>

<sup>22</sup> Zoe Hyde, Perspective, *COVID-19, Children and Schools: Overlooked and at Risk*, 213 MED. J. AUSTL. 444, 444 (2020).

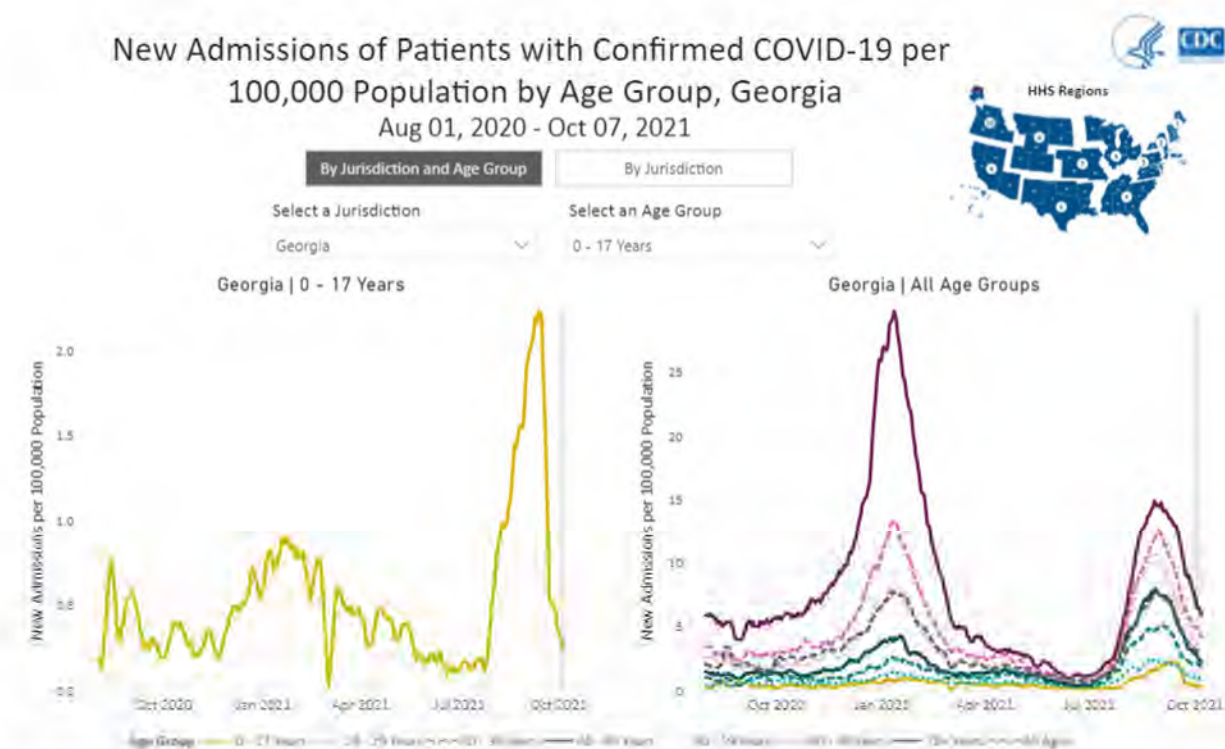
<sup>23</sup> See *Children, School and COVID-19*, NAT’L INST. PUB. HEALTH & ENV’T (last updated July 14, 2021), <https://www.rivm.nl/en/coronavirus-covid-19/children-and-covid-19>.

<sup>24</sup> Jonas F. Ludvigsson, Letter to the Editor, *Open Schools, Covid-19, and Child and Teacher Morbidity in Sweden*, 384 NEW ENG. J. MED. 669, 669 (2021).

<sup>25</sup> Public Health England. SARS-CoV-2 variants of concern and variants under investigation in England Technical briefing 23. 17 September 2021. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1018547/Technical\\_Briefing\\_23\\_21\\_09\\_16.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1018547/Technical_Briefing_23_21_09_16.pdf)



And the data from the CDC shows that, in Georgia, children age 0-17 made up a minuscule fraction of new admissions over the whole epidemic and over the past three months:<sup>26</sup>

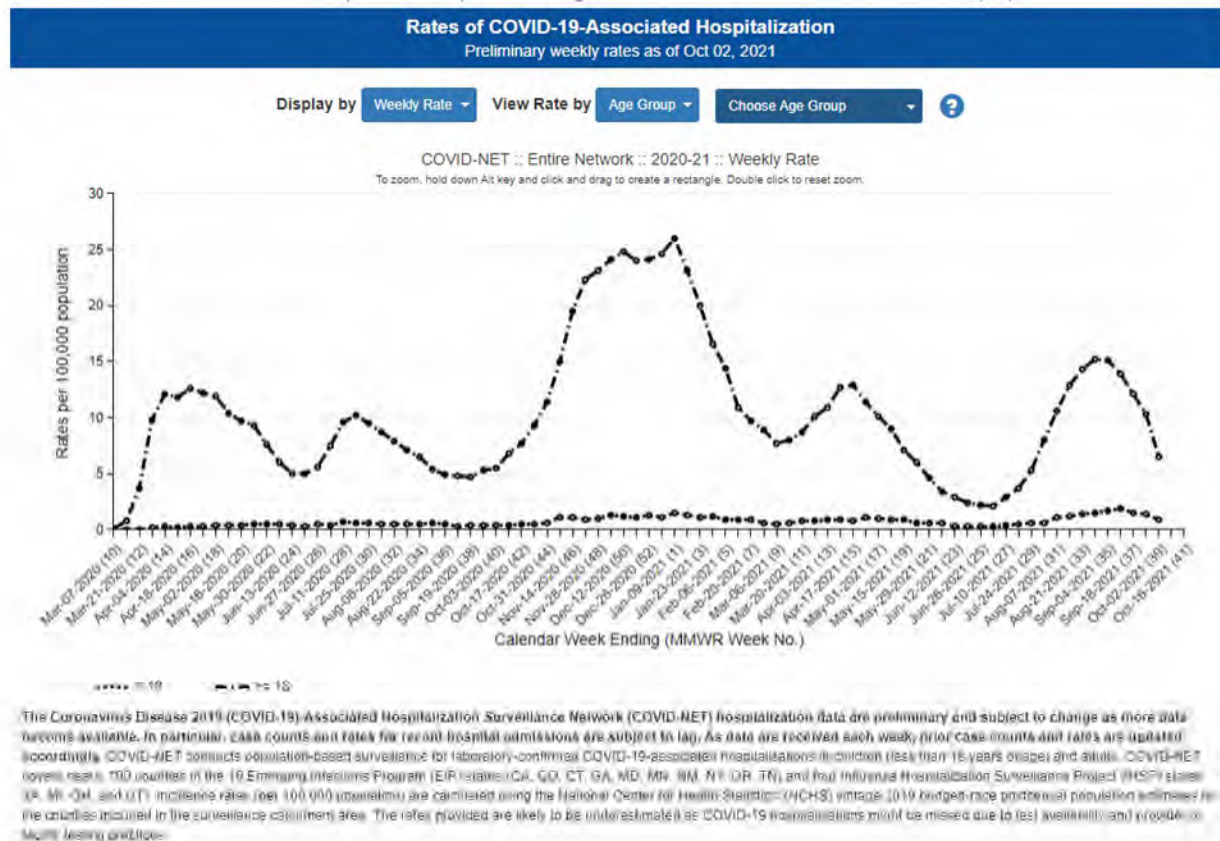


The chart on the left above does show a spike in hospitalizations that correspond to the prevalence of the Delta variant—but even that is low, a little over 2 admissions per 100,000 population. At least some part of the more recent spike is due to coinfection with Respiratory Syncytial Virus (RSV), which had an out-of-season surge this summer in the U.S.<sup>27</sup> As the right-hand chart above reflects, it is still a tiny percentage of all hospital admissions. These data suggest outcomes for children infected with the delta variant are similar to outcomes from prior variants. Data from across the country (shown in the chart below) confirm that conclusion, with the weekly admission rate for those under 18 years old much lower than those over 18.<sup>28</sup>

<sup>26</sup>CDC. *COVID Data Tracker*. <https://covid.cdc.gov/covid-data-tracker/#new-hospital-admissions>

<sup>27</sup> James Ducharme. Why the Respiratory Disease RSV is Having an Off-Season Surge. *Time*. July 22, 2021. <https://time.com/6082836/rsv-spike-summer-2021/>

<sup>28</sup> *COVID Data Tracker*, CDC (last visited October 10, 2021), <https://covid.cdc.gov/covid-data-tracker/#covidnet-hospitalization-network>.



The U.K. has seen a similar pattern, with hospital admission rates for school-age children near their prior peak for each age cohort, though still much smaller compared to other age cohorts<sup>29</sup>. Two possible explanations for this include age prioritization of vaccination—which prioritized older individuals and hence protected them differentially—and a surge in RSV, rather than increasing virulence of the delta variant against children.

In addition to hospitalizations, severe health complications from COVID-19 are also rare. Long-lasting symptoms that persist after recovery from COVID-19 infections (“long COVID”) and Multisystem Inflammatory Syndrome (MIS-C) are also rare among children. As to the latter, “a small fraction of children can experience a severe post-infectious multisystem inflammatory syndrome.”<sup>30</sup> The data from the CDC bears this out: in total, there have been 4,404 cases of MIS-

<sup>29</sup> See *Coronavirus (COVID-19) Latest Insights: Hospitals*, OFF. NAT’L STAT. (Aug. 13, 2021), <https://bit.ly/3ALzikG>.

<sup>30</sup> Hyde, *supra*, at 444; see also Ludvigsson, *Open Schools*, *supra*, at 669 (“[A] total of 15 children [between the ages of 1 and 16] with Covid-19 (including those with MIS-C) were admitted to an ICU (0.77 per 100,000 children in this age group).”) (emphasis added).



C in children between the ages of 0 and 20 in the country since mid-May 2020.<sup>31</sup> That is roughly 0.1% of children identified as COVID-19 cases in that age group.<sup>32</sup> Rubens et al. confirm that MIS-C is rare: “Overall, MIS-C is a rare complication of SARS-CoV-2. A May 2020 systematic review from 26 countries reported an MIS-C incidence of 0.14% among all children with SARS-CoV-2 infection, but this estimated incidence may be imprecise because of potential underestimation of overall SARS-CoV-2 infections in children.”<sup>33</sup>

As for long COVID, the evidence “suggests a very low prevalence of [it]” in children.<sup>34</sup> Indeed, “[s]eropositive children, all with a history of pauci-symptomatic SARS-CoV-2 infection, did not report long COVID more frequently than seronegative children.”<sup>35</sup> Another study found that symptomatic COVID-19 infection in schoolchildren (5 to 17 years old) “is usually of short duration (6 days vs. 11 days in adults), with low symptom burden.”<sup>36</sup> Further, the authors note that “[o]nly a small proportion of children had illness duration beyond four weeks, and their symptom burden decreased over time. Almost all children had symptom resolution by eight weeks.”<sup>37</sup> This result is consistent with other studies showing that long COVID is rare among the general population.<sup>38</sup>

The most reliable study was recently published by the Office of National Statistics in the U.K.<sup>39</sup> It is the most reliable study because of its large sample size and, notably, a control group of children

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<sup>31</sup> *Multisystem Inflammatory Syndrome*, CDC (last updated July 30, 2021), <https://bit.ly/3xMxdTC>.

<sup>32</sup> For data for total COVID-19 cases broken out by age, see *Demographic Trends of COVID-19 Cases and Deaths in the US Reported to CDC*, CDC (last updated Aug. 14, 2021), <https://bit.ly/3iPfCpW>. The number is a rough approximation due to the difference in reporting periods and because the CDC’s age breakdown does not allow for totaling of cases in people aged 0 to 20. To approximate this number, the analysis totals cases for people aged 0 to 17, which would tend to increase the percentage presenting with MIS-C.

<sup>33</sup> Jessica H. Rubens et al., *Acute COVID-19 and Multisystem Inflammatory Syndrome in Children*, *BMJ: CLINICAL UPDATES*, Mar. 1, 2021, at 3.

<sup>34</sup> Thomas Radtke et al., *Long-Term Symptoms After SARS-CoV-2 Infection in School Children: Population-Based Cohort with 6-Months Follow-Up 6* (MedRxiv, Preprint, May 18, 2021).

<sup>35</sup> *Id.* at 6.

<sup>36</sup> Erika Molteni et al., *Illness Duration and Symptom Profile in Symptomatic UK School-Aged Children Tested for SARS-CoV-2*, *LANCET ADOLESCENT HEALTH*, Aug. 3, 2021, at 7.

<sup>37</sup> *Id.* at 2.

<sup>38</sup> See Alex J. Walker, *Clinical Coding of Long COVID in English Primary Care: A Federated Analysis of 58 Million Patient Records In Situ Using OpenSAFELY*, *BRIT. J. GEN. PRAC.*, 2021, at 3 (“Up to 25 April 2021, there were 23,273 (0.04%) patients with a recorded code indicative of a long-COVID diagnosis.”) (emphasis added).

<sup>39</sup> Office of National Statistics, UK. Technical article: Updated estimates of the prevalence of post-acute symptoms among people with coronavirus (COVID-19) in the UK: 26 April 2020 to 1 August 2021. <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/technic>

who had no history of COVID-19 infection. Strikingly, among children age 2 – 11 years, the children in the control group (who had never previously had COVID) had a higher rate of “long-COVID” symptoms (4.1%) than the kids who had previously had COVID (3.2%) four months after recovery from infection. Among children 12-16, the rates of long-COVID symptoms at four months were similar and low in the control (1.3%) and COVID-recovered groups (3.0%). Among young adults age 17-24, the rates of “long-COVID” were identical in the control and COVID-recovered groups (3.6%).

To be sure, there is a chance that COVID-19 results in severe, adverse outcomes among children—as there is with any disease. But the evidence, thankfully, shows children infected with COVID-19 are overwhelmingly likely to recover fully with only mild illness while sick and no lingering effects.

## Children are Inefficient Transmitters of the Virus

Even without masks, the overwhelming weight of scientific data suggests that the risk of transmission of the virus from children aged six and below to older people is negligible and from children between 7 and 12 to older people is small relative to the risk of transmission from people older than 18 to others. Data also show that the risk of child-to-child transmission in school settings is low.

The most important evidence on the childhood spread of the disease comes from a study conducted in Iceland and published in the *New England Journal of Medicine*<sup>40</sup>. The data for this study come from Iceland's systematic screening of its population to check for the virus. This is the most important study on this topic because it is the only study that definitively establishes the direction of the spread of the virus from contact to contact. The study reports on a population-representative sample and a sample of people who were tested because of the presence of symptoms consistent with COVID-19 infection. The study team isolated SARS-CoV-2 virus samples from every positive case, sequenced the virus's genome for every patient, and tracked the mutation patterns in the virus. This analysis, along with contact tracing data, allowed the study team to identify definitively who passed the virus to whom. There have been hundreds of minor mutations of the virus identified, which typically do not alter the function of the virus much, but which provide a unique fingerprint, of sorts, that makes it possible to tell whether two patients could possibly have passed the virus to one another. From this analysis, the senior author of the study, Dr. Kari Stefansson, concluded<sup>41</sup> that "even if children do get infected, they are less likely to transmit the disease to others than adults. We have not found a single instance of a child infecting parents. There is amazing diversity in the way in which we react to the virus."

Though the Iceland study is the only definitive study, many other studies use contact tracing methods to investigate the role of children in disease spread. The bulk of such studies conclude that children play a small role in disease spread, consistent with the Iceland data.

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<sup>40</sup> Daniel F. Gudbjartsson, Ph.D., Agnar Helgason, Ph.D., et al., *Spread of SARS-CoV-2 in the Icelandic Population*, *The New England Journal of Medicine*, <https://www.nejm.org/doi/full/10.1056/NEJMoa2006100> (June 11, 2020).

<sup>41</sup> Roger Highfield, *Coronavirus: Hunting Down COVID-19*, Science Museum Group, <https://www.sciencemuseumgroup.org.uk/blog/hunting-down-covid-19/> (April 27, 2020).

A French study<sup>42</sup>, conducted by scientists at the L'Institut Pasteur, examined data from late April 2020 on schoolteachers, students, and their parents in Crepy-en-Valois in France. The schools in France were closed from the end of January on, at first because of the February holiday and then the late February lockdown. During this period, French schools implemented no restrictions on students – neither social distancing nor mask requirements. The authors found three cases among kids in January using antibody tests but found no evidence of virus spread to other kids or teachers from those early cases. Any spread between the end of January and April (when the authors collected samples) must have occurred during the lockdown. The authors' main conclusion<sup>43</sup> from these facts is that parents were the source of infections in school children; children were not the source. Those kids who tested antibody positive at the end of April, because of the circumstances of the lockdown, must have become positive from a source other than their school. The primary contacts of the young children were their parents, of whom 61% were positive, which is consistent with parent-to-child spread. This is also consistent with the results showing that only 6.9% of parents tested positive for the virus among antibody-negative kids in April. The authors' main conclusion mirrors the one reached in the Icelandic study showing that the disease spreads less easily from children to adults than from adults to adults, *even in the absence of masking requirements*.

Researchers in Ireland conducted a similar study<sup>44</sup> which analyzed 1,160 children and adults in Ireland who were physically present in a school at some time between March 1st and March 13th, where a COVID-19 case was identified. (Schools were closed in Ireland on March 12th). The authors found three children (between 10 and 15 years old) and three adults with COVID-19 infections. Their study followed students and families after the school closures to see if there was any evidence of disease spread from these identified cases. While the study authors mention

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<sup>42</sup> Arnaud Fontanet, MD, DrPH, Rebecca Grant, et al., *SARS-CoV-2 Infection in Primary Schools in Northern France: A Retrospective Cohort Study in an Area of High Transmission*, Institut Pasteur, <https://www.pasteur.fr/fr/file/35404/download> (last visited July 9, 2020).

<sup>43</sup> *COVID-19 In Primary Schools: No Significant Transmission among Children or From Students to Teachers*, Institut Pasteur, <https://www.pasteur.fr/en/press-area/press-documents/covid-19-primary-schools-no-significant-transmission-among-children-students-teachers> (June 23, 2020).

<sup>44</sup> Laura Heavey, Geraldine Casey, et al., *No Evidence of Secondary Transmission of COVID-19 from Children Attending School in Ireland, 2020*, Eurosurveillance, [https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.21.2000903#html\\_fulltext](https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.21.2000903#html_fulltext) (May 28, 2020).

physical distancing, hand hygiene, and cough etiquette as interventions implemented in Irish schools at the time, they do not mention required masking. All six patients had PCR confirmed COVID-19 disease but contracted the virus from contacts outside of school. Despite identifying 722 contacts, the study authors reported finding no instance of an infected child infecting another child. The infected adults, by contrast, had many fewer contacts – 102 – but did pass on the infection to a few adult contacts. This, even though the infected children engaged in “music lessons (woodwind instruments) and choir practice, both of which are reportedly high-risk activities for transmission.” *Ibid.* As with the French study mentioned above, the Irish schools did not mandate masking at the time of the study, and they still do not require them for children under 13.<sup>45</sup>

Based on contact tracing data, a report<sup>46</sup> by the ministry of health in the Netherlands finds almost no disease spread by infected patients 20 and under at all, and only limited spread by adults 20-25 to others outside their own age category. The authors of the study concluded: “Data from the Netherlands also confirms the current understanding: that children play a minor role in the spread of the novel coronavirus. The virus is mainly spread between adults and from adult family members to children. The spread of COVID-19 among children or from children to adults is less common.” Hygiene standards in the Netherlands promulgated by its National Institute for Public Health and the Environment make no recommendation of masking for either primary school or secondary school students.<sup>47</sup>

A German<sup>48</sup> study reports a strikingly similar finding on the likelihood of pediatric disease spread. The German Society for Pediatric Infectious Diseases collected data on all children and adolescents admitted to a hospital for COVID-19 treatment between mid-March and early May 2020 – 128 patients were admitted to 66 different hospitals. The authors sourced the infection for

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<sup>45</sup> Citizens Information Ireland. Face Coverings During COVID-19.

[https://www.citizensinformation.ie/en/health/covid19/face\\_coverings\\_during\\_covid19.html#](https://www.citizensinformation.ie/en/health/covid19/face_coverings_during_covid19.html#) (Sept. 25, 2021)

<sup>46</sup> *Children and COVID-19*, National Institute for Public Health and the Environment, <https://www.rivm.nl/en/novel-coronavirus-covid-19/children-and-covid-19> (July 2, 2020).

<sup>47</sup> Hygiene Guideline for Primary Schools, National Institute for Public Health and the Environment. <https://www.rivm.nl/hygienerichtlijnen/basisscholen> (September 25, 2021); and General Hygiene Guideline. National Institute for Public Health and the Environment. <https://www.rivm.nl/hygienerichtlijnen/algemeen> (Sept. 25, 2021).

<sup>48</sup> Armann, J. P., Diffloth, N., Simon, A., Doenhardt, M., Hufnagel, M., Trotter, A., Schneider, D., Hübner, J., & Berner, R. (2020). Hospital Admission in Children and Adolescents With COVID-19. *Deutsches Arzteblatt international*, 117(21), 373–374. <https://doi.org/10.3238/arztebl.2020.0373>



38% of these patients, which turned out to be a parent 85% of the time. Though the authors document a limitation of small sample size, they conclude that “In contrast to other epidemic viral respiratory infections, the primary source of infection with SARS-CoV-2 appears not to be other children.” The authors reported a single death among these 128 pediatric patients.

A study of 23 family disease clusters in Greece, published on August 7, 2020, in the *Journal of Medical Virology*, found that in 91% of the clusters, an adult was the first person to be infected. Their contact tracing effort attempted to clarify the direction of disease spread by careful questioning about the relative timing of the development of symptoms. They found no evidence of either child to adult spread or even child to child spread. They concluded that “[w]hile children become infected by SARS-CoV-2, they do not appear to transmit the virus to others. Furthermore, children more frequently have an asymptomatic or mild course compared to adults.”<sup>49</sup>

A study by the Federal Office of Public Health of Switzerland analyzed 793 cases reported by Swiss doctors in late July 2020.<sup>50</sup> The reports included the place where each patient most likely contracted the infection. The most common source of infection was at home, with 27.2% tracing their disease there. School, by contrast, consisted of only 0.3% of the infections; exactly two of the 793 cases could be tracked to a school. This study has some limitations: first, it is a contact tracing study without genetic sequencing verification, so it is impossible to judge the direction of diseases spread with certainty (i.e., from adult to child or child to adult). Second, the report provides no details about the age of the cases, so it is not possible to separately glean the disease acquisition frequencies for children and adults; and third, only summer schools were in session during this period. Nevertheless, the results strongly suggest that schools are a minor source of community spread of the infection.

A large study of 1,900 children attending an urban summer school in Barcelona, Spain, found only

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<sup>49</sup> Helena C. Maltezou Rengina Vorou Kalliopi Papadima, et al. (2020) “Transmission dynamics of SARS-CoV-2 within families with children in Greece: a study of 23 clusters” *Journal of Medical Virology*, <https://doi.org/10.1002/jmv.26394> (accessed August 12, 2020).

<sup>50</sup> Office fédéral de la santé publique OFSP (2020) “Rectificatif : les lieux de contamination sont les contextes familiaux et non les boîtes de nuit” Aug. 2, 2020. available at <https://www.bag.admin.ch/bag/fr/home/das-bag/aktuell/news/news-02-08-2020.html>



39 new index cases (30 pediatric) over five weeks.<sup>51</sup> (An index case is an initial person identified by a positive test for the virus, from whom close contacts are identified). The investigators chose this setting because they viewed it as a model for what to expect from school openings in the fall. Those 39 index cases interacted with another 253 children within their “cohabitation groups,” of whom only 12 developed an infection”— a secondary attack rate of 4.7%. The low secondary attack rate was similar for children of all ages attending the programs, ranging up to 17 years old. The report does not mention masks as a disease prevention method. Rather, the investigators attributed the success in controlling the spread of the disease to frequent handwashing by the children and organizing the children into “bubbles” so that the kids interacted with the same group of children all day long.

A comprehensive official report by Public Health England of the role of English schools, which were reopened on June 1, 2020, despite high community case numbers, in spreading the pandemic.<sup>52</sup> The author of this report found that cases and outbreaks were “uncommon across all educational settings” and that “[s]taff members had an increased risk of SARS-CoV-2 infections compared to students in any educational setting, and the majority of cases linked to outbreaks were in staff.” In response to this study, U.K. education minister Gavin Williamson said: “The latest research, which is expected to be published later this year – one of the largest studies on the coronavirus in schools in the world – makes it clear there is little evidence that the virus is transmitted at school.”<sup>53</sup>

Perhaps the best observational evidence (outside of the Iceland study) on the risk children pose to teachers comes from Sweden’s COVID-19 policy. Swedish primary schools have been open for in-person instruction throughout the epidemic (high schools were closed briefly at the height of the epidemic), even when cases ran high in the community at large, with no masking required of

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<sup>51</sup> Oriol Guell (2020) *Major coronavirus study in Spanish summer camps shows low transmission among children*. El Pais. (Aug. 26, 2020) available at <https://english.elpais.com/society/2020-08-26/major-coronavirus-study-in-spanish-summer-camps-shows-low-transmission-among-children.html>

<sup>52</sup> Sharif Ismail et al. (2020) “SARS-CoV-2 infection and transmission in educational settings: cross-sectional analysis of clusters and outbreaks in England” Public Health England, Aug. 12, 2020 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/911267/School\\_Outbreaks\\_Analysis.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/911267/School_Outbreaks_Analysis.pdf)

<sup>53</sup> Peter Walker (2020) “Little Evidence COVID Spreads in Schools, says Gavin Williamson” *The Guardian*, Aug. 10, 2020. <https://www.theguardian.com/world/2020/aug/10/little-evidence-covid-spreads-in-schools-says-gavin-williamson>

its children.<sup>54</sup> In spring 2020, of the 1.8 million kids in school, ages 1-15, zero died from COVID.<sup>55</sup> Furthermore, there is no evidence the teachers were at greater risk of COVID infections than others, despite their pupils not wearing masks. On the contrary, the rate of COVID-19 infection among teachers was lower than the average rate of COVID-19 infection among other Swedish essential workers. This result is confirmed by studies of the effect of school closures in the U.S. and elsewhere on overall excess mortality, which finds that school closures – much less mask mandates – on COVID risk were at best minimal.<sup>56, 57</sup>

The overwhelming bulk of scientific studies that have examined the topic – including the best studies, which take pains to distinguish correlation from causation – find that children play a limited role in spreading COVID-19 infection to adults. It is striking that this conclusion holds even in situations where children were not required to wear masks.

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<sup>54</sup> Ludvigsson JF, Engerström L, Nordenhäll C, Larsson E. Open Schools, Covid-19, and Child and Teacher Morbidity in Sweden. *N Engl J Med*. 2021 Feb 18;384(7):669-671. doi: 10.1056/NEJMc2026670. Epub 2021 Jan 6. PMID: 33406327; PMCID: PMC7821981.

<sup>55</sup> Public Health Agency of Sweden (2020) “COVID-19 in Schoolchildren: A Comparison between Finland and Sweden” <https://www.folkhalsomyndigheten.se/contentassets/c1b78bffbde4a7899eb0d8ffdb57b09/covid-19-school-aged-children.pdf>

<sup>56</sup> Dena Bravata, Jonathan H. Cantor, Neeraj Sood & Christopher M. Whaley (2021) Back to School: The Effect of School Visits During COVID-19 on COVID-19 Transmission. NBER Working Paper # 28645. April 2021. <https://www.nber.org/papers/w28645> DOI 10.3386/w28645

<sup>57</sup> Walsh S, Chowdhury A, Braithwaite V, et al Do school closures and school reopenings affect community transmission of COVID-19? A systematic review of observational studies *BMJ Open* 2021;11:e053371. doi: 10.1136/bmjopen-2021-053371

## No Randomized Evidence of Efficacy of Masking in Limiting Disease Spread

There is by now a vast empirical literature purporting to evaluate the effectiveness of mask-wearing in limiting the spread of the SARS-CoV-2 virus. The question is complicated because it is unlikely that there is a single answer. The effectiveness of masks differ based on the type of mask (cloth vs. surgical vs. N95), protocols for replacing contaminated masks, how well trained the mask-wearer is in maintaining good mask fit, and a large number of other factors, including other non-pharmaceutical interventions such as hand washing, social distancing, and ventilation upgrades. The effectiveness of masks in protecting the wearer against infection (self-protection) will also differ from the effectiveness of masks in protecting people near the wearer from becoming infected (source control). Studies conducted in laboratories on mannequins, for instance, are unlikely to translate well into real-world settings, where conditions differ sharply from the laboratory. Many ecological studies also estimate the correlation between the imposition of mask mandates and the subsequent spread of COVID-19 disease in various locations rather than at the individual level. However, it is notoriously difficult to adjust for bias caused by factors that researchers do not observe in such studies.

The best guide to the effectiveness of masks – the highest quality evidence – are randomized controlled trials that reduce bias from many sources on the effectiveness estimates. Though some have argued that randomized evaluations of the effectiveness of masking are impossible in the context of respiratory virus spread, there were more than a dozen randomized evaluations of masking in the context of the flu published before the pandemic in peer-reviewed journals. It has been more than 18 months since the beginning of the pandemic and the imposition of lockdown orders, and the efficacy of masking has been of intense policy interest. Nevertheless, there is to date only a single peer-reviewed randomized study published on the effectiveness of masks in self-protection against COVID-19. The study, which did not enroll children, found no statistically significant difference between the treatment group and control group regarding the probability of infection.<sup>58</sup>

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<sup>58</sup> Bundgaard H, Bundgaard JS, Raaschou-Pedersen DET, von Buchwald C, Todsén T, Norsk JB, Pries-Heje MM, Vissing CR, Nielsen PB, Winslow UC, Fogh K, Hasselbalch R, Kristensen JH, Ringgaard A, Porsborg Andersen M, Goecke NB, Trebbien R, Skovgaard K, Benfield T, Ullum H, Torp-Pedersen C, Iversen K. Effectiveness of Adding

Shockingly, there are no randomized evaluations of the effectiveness of masks on children in source control for COVID-19 (that is, the effectiveness of masks in protecting others in the context of schools or children). In the context of adults, there is a preprint (not yet peer-reviewed) randomized study on the efficacy masking as source control. The study, conducted in Bangladesh, randomly assigned villages in that country to cloth masks, surgical masks, and control villages. In the villages chosen for masking, residents were offered masks for free, and various measures were implemented to encourage masking. Ultimately, about 40% of villagers in the villages chosen for masking wore masks, while about 10% wore masks in the control villages. Despite the sharp increase in masking, there was no statistically significant difference in the symptomatic seroprevalence of COVID-19 disease in the villages with cloth masks and the control villages. The villages assigned surgical masks had a slightly lower symptomatic seroprevalence rate than the control villages (0.76% vs. 0.69%), with a 95% statistical confidence bound that included zero effect and no measured difference in hospitalization or mortality. The study did not include children.

So in the context of COVID-19, there is no high-quality evidence supporting the notion that masks on children work to control disease spread, either self-protection or source control. By contrast, in the context of the flu, there is considerable randomized evidence that masks are not effective in reducing disease spread for both source control and self-protection.<sup>59</sup>

The literature on the efficacy of masks to control respiratory viruses is vast, so it is fortunate that four prominent groups have conducted comprehensive literature reviews. I will reproduce here the key conclusions conducted by teams of researchers at the Cochrane Collaborative, at the European CDC, at the Oxford University Centre for Evidence-Based Medicine, and at the US Centers for Disease Control. All of the reviews acknowledge the lack of randomized evidence in this area.

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a Mask Recommendation to Other Public Health Measures to Prevent SARS-CoV-2 Infection in Danish Mask Wearers : A Randomized Controlled Trial. *Ann Intern Med.* 2021 Mar;174(3):335-343. doi: 10.7326/M20-6817. Epub 2020 Nov 18. PMID: 33205991; PMCID: PMC7707213.

<sup>59</sup> Jefferson T, Del Mar CB, Dooley L, Ferroni E, Al-Ansary LA, Bawazeer GA, van Driel ML, Jones MA, Thorning S, Beller EM, Clark J, Hoffmann TC, Glasziou PP, Conly JM. Physical interventions to interrupt or reduce the spread of respiratory viruses. *Cochrane Database of Systematic Reviews* 2020, Issue 11. Art. No.: CD006207. DOI: 10.1002/14651858.CD006207.pub5.

Each differs in their conclusions about the effectiveness of masks, but those conclusions rest on the relative weight each research group put on randomized studies showing no benefit in masking versus poor quality correlational evidence that provided mixed results on mask effectiveness based on the setting.

The Cochrane Collaborative is an organization of academics with a reputation for writing high-quality evidence summaries on a full range of important topics within medicine using a standardized approach to evidence evaluation. The Cochrane review of the mask literature separately evaluates the effectiveness of medical/surgical masks and N95 respirator masks.<sup>60</sup> Because there were no randomized studies in the context of COVID-19 when the study was published, the review focuses on the randomized studies in the influenza context. The authors conclude:

**“Medical/Surgical Masks:** Seven studies took place in the community, and two studies in healthcare workers. Compared with wearing no mask, wearing a mask may make little to no difference in how many people caught a flu-like illness (9 studies; 3507 people); and probably makes no difference in how many people have flu confirmed by a laboratory test (6 studies; 3005 people). Unwanted effects were rarely reported, but included discomfort.  
**N95/P2 respirators:** Four studies were in healthcare workers, and one small study was in the community. Compared with wearing medical or surgical masks, wearing N95/P2 respirators probably makes little to no difference in how many people have confirmed flu (5 studies; 8407 people); and may make little to no difference in how many people catch a flu-like illness (5 studies; 8407 people) or respiratory illness (3 studies; 7799 people). Unwanted effects were not well reported; discomfort was mentioned.”

In other words, according to a comprehensive evidence summary of mask effectiveness in the context of the flu – a virus that shares many physical properties with the SARS-CoV-2 virus and is transmitted similarly to SARS-CoV-2 – high-quality evidence finds no effect of masks on the spread of disease, even when the masks are employed by health care workers who are trained to use them properly.

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<sup>60</sup> *Ibid.*



The US CDC review, conducted last year, evaluates the randomized studies on the effectiveness of various personal protective measures, including face masks to protect against the spread of influenza.<sup>61</sup> The review's conclusion is straightforward:

“In this review, we did not find evidence to support a protective effect of personal protective measures or environmental measures in reducing influenza transmission. Although these measures have mechanistic support based on our knowledge of how influenza is transmitted from person to person, randomized trials of hand hygiene and face masks have not demonstrated protection against laboratory-confirmed influenza, with one exception.”

The one exception they note is a randomized study that found that regular hand washing may slow influenza spread in health care settings. The CDC review – conducted in mid-2020 – emphasizes the need for high-quality studies on masks and COVID-19. It is striking that there has only been two randomized evaluation published since this call for high-quality evidence last year (that is, the Danish and Bangladeshi mask studies I cite above) since the publication of this review by the CDC.

The review by the team at the Oxford University Centre for Evidence-Based Medicine – a group that (like the Cochrane Collaborative) is famous for its careful evidence summaries on a wide variety of health care topics – makes the same observations as the other groups.<sup>62</sup> Namely, they lament the lack of high-quality evidence evaluating the effectiveness of masks in the context of COVID-19. Unlike the other groups, the CEBM review documents several randomized studies in progress (including the Danish mask study referenced above). Though the CEBM study was published in July 2020, to my knowledge, none of these planned randomized studies have been completed or published beside the Danish and Bangladeshi mask studies referenced above.<sup>63</sup> The

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<sup>61</sup> Xiao J, Shiu E, Gao H, et al. Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Personal Protective and Environmental Measures. *Emerging Infectious Diseases*. 2020;26(5):967-975. doi:10.3201/eid2605.190994.

<sup>62</sup> Tom Jefferson, Carl Heneghan (2020) Masking Lack of Evidence with Politics. Centre for Evidence Based Medicine working paper. Oxford University. <https://www.cebm.net/covid-19/masking-lack-of-evidence-with-politics/>

<sup>63</sup> During a person conversation on August 14, 2021, Prof. Carl Heneghan (Oxford University) confirmed to me that none of the planned randomized studies listed in the CEBM review (except for the Danish mask study cited here) had been completed, released as a working paper, or published to date.



CEBM summary emphasizes the danger of making policy decisions (such as making masks mandatory) when the scientific evidence on the topic is so inadequate.

“What do scientists do in the face of uncertainty on the value of global interventions? Usually, they seek an answer with adequately designed and swiftly implemented clinical studies as has been partly achieved with pharmaceuticals. We consider it is unwise to infer causation based on regional geographical observations as several proponents of masks have done. Spikes in cases can easily refute correlations, compliance with masks and other measures is often variable, and confounders cannot be accounted for in such observational research... The small number of trials and lateness in the pandemic cycle is unlikely to give us reasonably clear answers and guide decision-makers. This abandonment of the scientific *modus operandi* and lack of foresight has left the field wide open for the play of opinions, radical views, and political influence.”

The literature review by the European CDC covers both the randomized evidence on masks and influenza spread that the other teams’ review and the early observational evidence on masks and COVID-19.<sup>64</sup> The team evaluating this evidence places more weight on the low-quality observational studies than do some of the other teams. For this reason, I place less importance on the conclusions of this review than I do on the others. Still, they emphasize in their conclusions the need for more high-quality (i.e., randomized) evidence on the topic.

“The evidence regarding the effectiveness of medical face masks for the prevention of COVID-19 in the community is compatible with a small to moderate protective effect, but there are still significant uncertainties about the size of this effect. Evidence for the effectiveness of non-medical face masks, face shields/visors and respirators in the community is scarce and of very low certainty. Additional high-quality studies are needed to assess the relevance of the use of medical face masks in the COVID-19 pandemic.”

Since there is so little randomized data available to answer whether masks effectively protect the user or slow disease spread, it is natural to look to observational evidence. Observational data are most important when randomized evaluations are impossible for logistical or ethical reasons. However, this is not true for masks since there have been randomized studies on their effect on reducing transmission of respiratory viruses conducted – including one in the context of COVID-19. The problem with observational studies is that the adoption of a mask mandate (either in schools or in the community) is not a random decision and may be induced by the perceived threat

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<sup>64</sup> European Centre for Disease Prevention and Control. Using face masks in the community: first update. 15 February 2021. ECDC: Stockholm; 2021.

of COVID cases near the time of adoption. Therefore, the correlation observed in observational data does not necessarily imply a causal relationship between a mask mandate and COVID outcomes.

That said, a comprehensive analysis of the correlation between COVID spread in the U.S. in the fall/winter wave of late 2020/early 2001, and the imposition of mask mandates found no correlation between them.<sup>65</sup> The authors of this peer-reviewed study concluded that “Earlier mask mandates were not associated with lower total cases or lower maximum growth rates. Growth rates and total growth were comparable between U.S. states in the first and last mask use quintiles during the Fall-Winter wave...We did not observe an association between mask mandates or use and reduced COVID-19 spread in U.S. states.” If there is no correlation between mask mandates and COVID case growth, it seems unlikely that there is a causal relationship.

For mask mandates in schools, the observational evidence is mixed, with some studies finding correlations between mask requirements and cases and others finding no correlation.<sup>66</sup> No randomized studies have been conducted. Some studies given prominence by the CDC have been of particularly poor quality. For instance, the CDC cited one study conducted by Duke researchers in North Carolina as showing that masks on children reduced disease spread.<sup>67</sup> However, the study includes only 11 school districts that required masks and *no* control districts that did not require masks. Writing in the *Wall Street Journal* about the study, Duke University researcher Tom Nicholson wrote:

In an inversion of logic, the report concluded that the only nonvariable in the data set [masks] must be the cause of low transmission rates in North Carolina schools. It should be obvious that proving some components of a strategy as useless doesn’t demonstrate that others are effective. Such a claim requires a control group or appropriate statistical methods. The researchers might as well have attributed the low Covid rate in schools to wearing shoes.

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<sup>65</sup> Damian D.Guerra, Daniel J.Guerra. Mask mandate and use efficacy for COVID-19 containment in US States. *International Research Journal of Public Health*, 2021; 5:55. DOI: 10.28933/irjph-2021-08-1005

<sup>66</sup> Gettings J, Czarnik M, Morris E, et al. Mask Use and Ventilation Improvements to Reduce COVID-19 Incidence in Elementary Schools — Georgia, November 16–December 11, 2020. *MMWR Morb Mortal Wkly Rep* 2021;70:779–784. DOI: <http://dx.doi.org/10.15585/mmwr.mm7021e1>external icon

<sup>67</sup> US CDC. Science Brief: Transmission of SARS-CoV-2 in K-12 Schools and Early Care and Education Programs – Updated July 9, 2021. Accessed Sept. 25, 2021. [https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/transmission\\_k\\_12\\_schools.html#in-person](https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/transmission_k_12_schools.html#in-person)

Another recent study of mandated masking in two counties in Arizona published by the CDC presents evidence that mask mandates in schools correlate with fewer COVID “outbreaks” during the first two weeks of school.<sup>68</sup> Besides the obvious problem with the study – that it does not adopt a randomized design and should thus not be interpreted as providing causal evidence of the efficacy of mask mandates – there is another important problem with it. The study presents data on “outbreaks” rather than cases, hospitalizations or deaths among children or staff members. An outbreak is defined by two or more COVID cases at a school within a 14 day period. From the data presented in the paper, it is not possible to rule out the possibility that schools with mask mandates actually had more cases than schools without mask mandates. In any case, the title of the paper emphasizes that it presents an “association” (as opposed to causal evidence), and should be treated as such.

One particularly notable observational study—notable for its detailed measurement of masking policies at the school and district level, for its accounting for other factors such as school-level ventilation upgrades, and its consideration of outcomes throughout the 2020/21 school year – reported on the correlation between masking and COVID-19 case rates in Florida, New York, and Massachusetts.<sup>69</sup> In Florida, school mask policies fell into one of three categories: masks required for both staff and students; masks required only for staff; and no masks required. The figure (Figure 4, reproduced exactly from the paper) shows how case rates evolved over the school year (between October 2020 and April 2021) for each of the three groups. Through much of the school year,

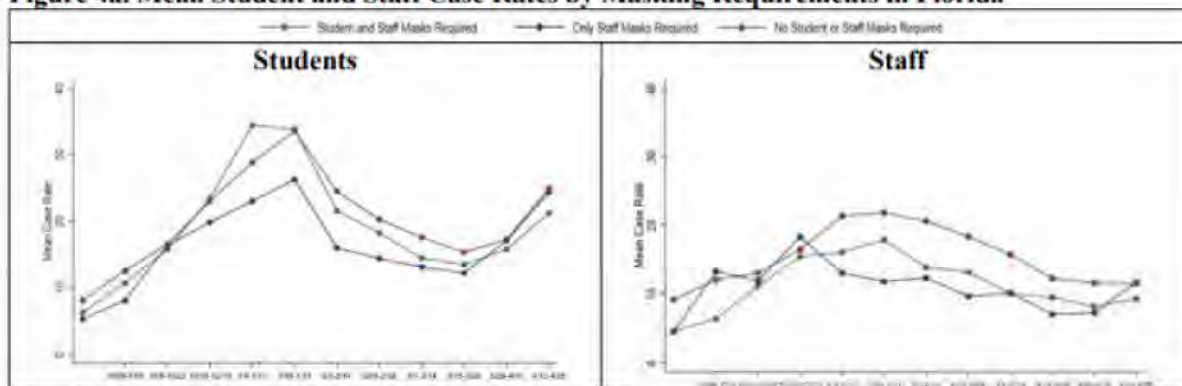
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<sup>68</sup> Jehn M, McCullough JM, Dale AP, et al. Association Between K–12 School Mask Policies and School-Associated COVID-19 Outbreaks — Maricopa and Pima Counties, Arizona, July–August 2021. *MMWR Morb Mortal Wkly Rep* 2021;70:1372–1373. DOI: <http://dx.doi.org/10.15585/mmwr.mm7039e1>

<sup>69</sup> Emily Oster, Rebecca Jack, Clare Halloran, John Schoof, Diana McLeod (2021) “COVID-19 Mitigation Practices and COVID-19 Rates in Schools: Report on Data from Florida, New York and Massachusetts” *medRxiv*, May 21, 2021, doi: <https://doi.org/10.1101/2021.05.19.21257467>

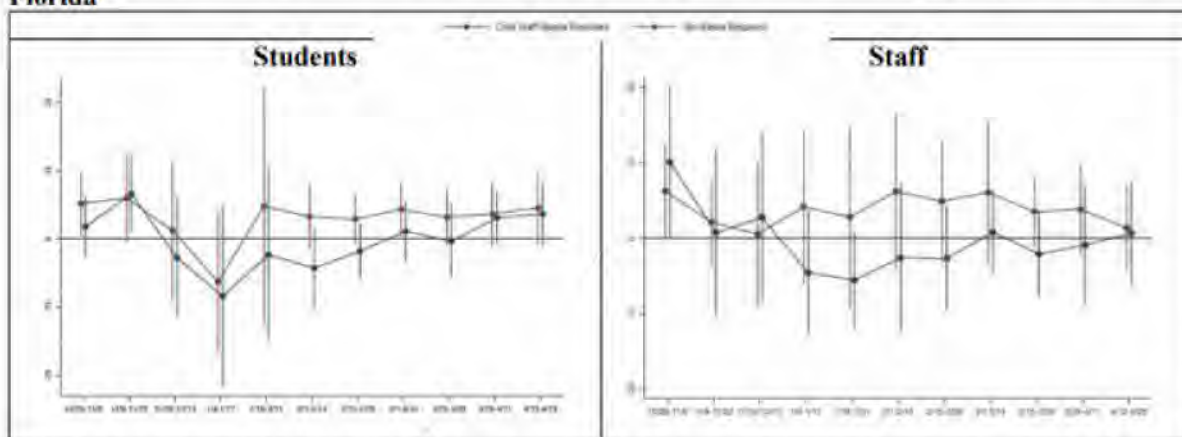
COVID case rates were lowest among both staff and children for locations that required only staff to mask (top panel). In fact, there were no statistically significant differences in the case rates among the three groups; that is, locations with mask mandates on either staff or students did no better in case rates relative to locations with no mandates (bottom panel). The primary finding for Florida extends to the other states the authors analyzed: mask mandates for students are effectively uncorrelated with COVID-19 infection rates in either students or teachers.

**Figure 4a. Mean Student and Staff Case Rates by Masking Requirements in Florida**



*Note.* Florida masking practices are categorized into three groups: masks required for both students and staff, masks required for staff only, and no masks required for either students or staff. Case rates are reported as daily COVID-19 case rates per 100,000. Mean daily case rate is calculated by group per biweekly wave in the data. Means do not control for community case rates or population demographics.

**Figure 4b. Regression Coefficients of Student and Staff Case Rates on Masking Requirements in Florida**



*Note.* The regression coefficients are from regressions of masking groups (i.e. staff-only masks required and no masks required) interacted with each biweekly wave group on student and staff case rates. The comparison is masks required for both students and staff. Regressions control for community case rates, time fixed effects, racial demographics, density groups, ventilation upgrades, and school level. Regressions are weighted by total student enrollment and standard errors are clustered by school districts.

Given the negative evidence from high-quality randomized studies on the efficacy of masking in

the context of the flu, the fact that the only two randomized trials on the efficacy of masking in adults both found minimal and statistically insignificant (Danish study) or barely statistically significant (Bangladeshi study) effects of masking on self-protection and source control, that there are no randomized trials in the contexts of masking children in schools, and that there is mixed evidence from observational studies, it is not correct to conclude that masking children in schools has limited the spread of COVID-19. The correct conclusion is that there is no established correlation, and hence no scientific basis for mandating the children be masked.



## Harms to Children from Mask Wearing in Schools

In contrast with the poor quality evidence that masking children in schools has any effect whatsoever on COVID-19 disease spread, there is ample evidence of some physical and developmental harms to children that accrue from wearing masks.

The World Health Organization's guidance document on child masking says that up to age five, masking children may harm the achievement of "childhood developmental milestones."<sup>70</sup> For children between six and eleven, the same document says that mask guidance should consider the "potential impact of mask-wearing on learning and psychosocial development." The WHO explicitly recommends against masks during exercise because masks make breathing more difficult. The US CDC, which recommends masking toddlers as young as two years old, has not explained why its guidance departs from the WHO on this point.

A study surveying parents and pediatricians documents that a substantial fraction of children required to wear masks experience immediate physical side-effects, including speaking difficulties, changes in mood, discomfort breathing, headache, and cutaneous disorders (i.e., face rashes).<sup>71</sup> In addition to these physical problems, masking children causes psychological stress in children and disrupts learning.

Covering the lower half of the face of both teacher and pupil reduces the ability to communicate.<sup>72</sup> In particular, children lose the experience of mimicking expressions, an essential tool of nonverbal communication. Positive emotions such as laughing and smiling become less recognizable, and negative emotions get amplified. Bonding between teachers and students is significantly and

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<sup>70</sup> World Health Organization. Advice on the use of masks for children in the context of COVID-19. Annex to the Advice on the use of masks in the context of COVID-19. Geneva, 2020. [https://www.who.int/publications/i/item/WHO-2019-nCoV-IPC\\_Masks-Children-2020.1](https://www.who.int/publications/i/item/WHO-2019-nCoV-IPC_Masks-Children-2020.1)

<sup>71</sup> Assathiany R, Salinier C, Béchet S, Dolard C, Kochert F, Bocquet A, Levy C. Face Masks in Young Children During the COVID-19 Pandemic: Parents' and Pediatricians' Point of View. *Front Pediatr*. 2021 Jun 23;9:676718. doi: 10.3389/fped.2021.676718. PMID: 34249814; PMCID: PMC8260829.

<sup>72</sup> Carbon CC, Serrano M. The Impact of Face Masks on the Emotional Reading Abilities of Children-A Lesson From a Joint School-University Project. *Iperception*. 2021 Aug 19;12(4):20416695211038265. doi: 10.1177/20416695211038265. PMID: 34447567; PMCID: PMC8383324.



negatively affected. Masking exacerbates the chances that a child will experience anxiety and depression, which are already at pandemic levels themselves. Another review concludes:<sup>73</sup>

“[C]overing the lower half of the face reduces the ability to communicate, interpret, and mimic the expressions of those with whom we interact. Positive emotions become less recognizable, and negative emotions are amplified. Emotional mimicry, contagion, and emotionality in general are reduced and (thereby) bonding between teachers and learners, group cohesion, and learning – of which emotions are a major driver.”

One interesting study compares the hemoglobin content of blood collected before the pandemic led to lockdown versus blood collected during the pandemic through December 2020. The study analyzes a large sample size of over 19,500 blood donors.<sup>74</sup> The study’s basic premise is that if masking creates hypoxia (sometimes experienced as difficulty breathing when masked), a donor’s body will respond by making a larger quantity of hemoglobin to compensate. This is precisely what the researchers observe. They conclude that “prolonged use of face mask by blood donors may lead to intermittent hypoxia and consequent increase in hemoglobin mass.” Of course, if this conclusion is true for blood donors, it is likely to be true for school children.

Finally, a perspective piece by the first author of the New England Journal of Medicine article on the Swedish experience with open schools (cited above) raises the likely possibility that children are less likely to comply with optimal mask-wearing protocols than adults.<sup>75</sup> The author’s reasoning against the wisdom of masking children is worth quoting in full:

“Face masks also have potential disadvantages, such as hindering verbal and non-verbal communication. There is a risk that children will keep touching their masks and actually increase the viral load on their hands. Using face masks also risks replacing social distancing, as some parents may be tempted to send their children to school or daycare wearing a mask if they have minor symptoms rather than keeping them at home. Finally, the commercially made masks that are currently available, especially the N95 masks that are said to offer greater protection, rarely fit children. Hence the

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<sup>73</sup> Spitzer M. Masked education? The benefits and burdens of wearing face masks in schools during the current Corona pandemic. *Trends Neurosci Educ.* 2020;20:100138. doi:10.1016/j.tine.2020.100138 /

<sup>74</sup> Setia R, Dogra M, Handoo A, Yadav R, Thangavel GP, Rahman AE. Use of face mask by blood donors during the COVID-19 pandemic: Impact on donor hemoglobin concentration: A bane or a boon. *Transfus Apher Sci.* 2021 May 26:103160. doi: 10.1016/j.transci.2021.103160. Epub ahead of print. PMID: 34217601; PMCID: PMC8152240.

<sup>75</sup> Ludvigsson JF. Little evidence for facemask use in children against COVID-19. *Acta Paediatr.* 2021 Mar;110(3):742-743. doi: 10.1111/apa.15729. Epub 2021 Jan 3. PMID: 33393117.

use of such masks might lead to a false sense of safety, despite leaking viruses due to their poor fit. However, the most important drawback of face masks in children may well be that their use could reduce the focus from other measures that may be more important, such as hand washing, social distancing and staying at home when they are sick.”

Good medicine is conservative about intervening when there is the possibility of harm. In the case of child masking, though some have asserted that it is proven that masking children never cause harm, that is clearly incorrect. The burden is not simply to prove that there exist children for whom masks never cause harm. Rather, the burden for someone advocating for mandated universal masking of children is to prove that no children are ever harmed. This is an impossible burden given the weight of the scientific evidence.

## Conclusion

To summarize, the medical and epidemiological literature has documented conclusively that children face a vanishingly small risk of mortality from COVID-19 infection relative to other risks that children routinely face. Furthermore, the evidence also indicates that – even without masks – children are less efficient at spreading the disease to adults than adults are at spreading the infection to children or each other. There is no high-quality evidence that requiring children to wear masks has any appreciable effect on the likelihood that teachers or other school staff will acquire COVID-19 disease. On the contrary, empirical evidence from Sweden and elsewhere where masks were not required shows that schools are low-risk environments of disease spread. Finally, there is considerable evidence that requiring children to wear masks all day at school correlates with harms to their learning and development and with both physical and psychological harms.

Today, adult teachers and staff have no reason to put their safety ahead of the well-being of school kids. Vaccinations are highly effective at keeping adults out of the hospital and at preventing death. A healthy, fully vaccinated teacher is strongly protected by threats posed by COVID spread in the classroom. By now, every teacher in America has been offered the vaccine; many were in the first priority group, even above vulnerable older people. Given these facts, there is no scientific or medical reason to require masking school children.