



6-2-2021

Legal Education During the COVID-19 Pandemic: Put Health, Safety and Equity First

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**LEGAL EDUCATION DURING THE COVID-19
PANDEMIC: PUT HEALTH, SAFETY AND EQUITY
FIRST***

Catherine J.K. Sandoval, Patricia A. Cain,*** Stephen F.
Diamond,**** Allen S. Hammond,***** Jean C. Love,*****
Stephen E. Smith,***** & Solmaz Nabipour, M.D.*******

The COVID-19 viral pandemic exposed equity and safety culture gaps in American legal education. Legal education forms part of America's Critical Infrastructure whose continuity is important to the economy, public safety, democracy, and the national security of the United States. To address the COVID-19 pandemic and prepare for future viral pandemics and safety risks, this article recommends law schools develop a safety culture to foster health, safety, robust educational dialogue, and equity. To guide safety-and-equity-centered decision-making and promote effective legal education during and following the COVID-19 pandemic, this article contends legal education must put health, safety, and equity first. It proposes an ethical framework for legal education that centers diversity and inclusion as the foundation of robust educational dialogue.

This article's interdisciplinary analysis of COVID-19 scientific studies recommends law schools follow the science and exercise extreme

* Special thanks to Santa Clara University Philosophy Professor Brian Buckley for his comments on the ethics analysis in this article. Thanks to Robert Murillo II and Rosa Rico, third-year law students at SCU Law, for their research assistance and contributions to this article.

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caution before convening classes in person or in a hybrid fashion. COVID-19 infection risks serious illness, long-lasting complications, and death. It has preyed on America's inequities. African-Americans, Native Americans, Latinx Americans, older Americans, and those with certain underlying health conditions including pregnant women face higher levels of hospitalization and death from COVID-19 infection. COVID-19's inequitable risks may separate those participating in class in person, or online, by race, ethnicity, tribe, age, and health. Law schools must ensure that during the COVID-19 health emergency, hybrid or in-person pedagogical models do not undermine diversity and inclusion that supports educational dialogue and First Amendment values. The COVID-19 pandemic underscores the imperative of putting health, safety, and equity first in legal education.

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I. THE COVID-19 PANDEMIC REQUIRES LEADERSHIP IN AMERICAN
LEGAL EDUCATION THAT PRIORITIZES HEALTH, SAFETY, DIVERSITY,
AND INCLUSION

*A. The COVID-19 Pandemic Calls for Ethical, Resilient, and Effective
Online Legal Education*

The COVID-19 pandemic has exposed safety culture and equity gaps in American legal education. This coronavirus pandemic challenges the model of in-person teacher-student pedagogy characteristic of American legal education since 1784.¹ Legal education forms part of America's Critical Infrastructure, whose continuity is important to the economy, public safety, and national security of the United States.² The Carnegie Report characterizes the legal profession as "fundamental to the flourishing of American democracy."³ Law schools train students to analyze legal issues, develop legal arguments, and engage with and represent clients in the legal system. Continuing access to legal education during this pandemic is essential to maintaining a healthy legal system and democracy.

Commitment to health, safety, and equity should form the cornerstone of ethical and effective legal education. This article proposes an ethical framework for legal education that centers diversity and inclusion as the foundation of robust educational dialogue and recognizes the inherent worth and dignity of every human being. Consistent with the ethical standards expected of lawyers and law schools, this article recommends American law schools develop a safety culture and prepare safety plans to put health, safety, and equity first.

The COVID-19 pandemic underscores the urgency of developing a safety culture and equity-based framework to guide twenty-first century legal education. The U.S. Department of Health and Human Services (HHS) declared COVID-19 a public health emergency on January 31,

1. See The Ledger, *Litchfield Law School History*, LITCHFIELD HIST. SOC'Y, https://ledger.litchfieldhistoricalsociety.org/ledger/studies/history_school (last visited July 24, 2020) (reporting Litchfield Law School, founded in 1784, was the first Law School in what became the United States). Cf. Davison M. Douglas, *Jefferson's Vision Fulfilled*, WM. & MARY L. SCH. (2010), <https://law.wm.edu/about/ourhistory/index.php> (contending the College of William and Mary, which offered lectures in law as part of its undergraduate curriculum beginning in 1779, should be credited as the first American Law School).

2. *Government Facilities Sector*, CYBERSECURITY & INFRASTRUCTURE SECURITY AGENCY, <https://www.cisa.gov/government-facilities-sector> (last visited Feb. 27, 2021).

3. WILLIAM M. SULLIVAN ET AL., EDUCATING LAWYERS, PREPARATION FOR THE PROFESSION OF LAW 3 (2007), http://archive.carnegiefoundation.org/publications/pdfs/elibrary/elibrary_pdf_632.pdf [hereinafter CARNEGIE REPORT].

2020.⁴ On March 11, 2020, the World Health Organization (WHO) declared COVID-19, also known as SARS-CoV-2, a pandemic.⁵

Infections, hospitalizations, and deaths from COVID-19 escalated in many areas of the United States during summer 2020 as people under age forty-five, many of whom are in the largest age cohort for law students, led the surge in COVID-19 cases.⁶ By December 2020, the post-Thanksgiving COVID surge dwarfed the summer infection peak, resulting in hospitals reaching or approaching intensive care bed hospital and staffing capacity in many American communities.⁷ The 2020 holidays created a “viral wildfire,” Dr. Robert Kim-Farley at UCLA observed, resulting in increased infection, hospitalization, and death prior to widespread availability of COVID-19 vaccines.⁸

In December 2020, the U.S. Food and Drug Administration approved COVID-19 vaccines developed by Pfizer and Moderna for

4. Press Release, U.S. Dep’t of Health & Human Servs., Secretary Azar Declares Public Health Emergency for United States for 2019 Novel Coronavirus (Jan. 31, 2020), <https://www.hhs.gov/about/news/2020/01/31/secretary-azar-declares-public-health-emergency-us-2019-novel-coronavirus.html>.

5. See *WHO Director-General’s opening remarks at the media briefing on COVID-19 - 11 March 2020*, WORLD HEALTH ORG. (Mar. 11, 2020), <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>; *Naming the coronavirus disease (COVID-19) and the virus that causes it*, WORLD HEALTH ORG., [https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-\(covid-2019\)-and-the-virus-that-causes-it](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it) (last visited Mar. 21, 2021).

6. See Jayme Fraser et al., *Younger people are a factor in surge of COVID-19 cases, analysis shows*, USA TODAY (June 26, 2020, 9:07 AM), <https://www.usatoday.com/story/news/2020/06/26/covid-19-surge-featured-rapid-growth-among-younger-people/3258221001/>; see Jessica Tomer, *Should you go to law school immediately after undergrad?*, ABA FOR L. STUDENTS (Aug. 21, 2018), <https://abaforlawstudents.com/2018/08/21/should-you-go-to-law-school-immediately-after-undergrad/> (explaining that the Law School Admission Council reported that students age twenty-two to twenty-four made up about fifty percent of all applicants between 2011 and 2015).

7. Matthew Conlen et al., *New data shows intensive care units filling up across the U.S.*, N.Y. TIMES, <https://www.nytimes.com/live/2021/01/04/world/covid-19-coronavirus#new-data-shows-intensive-care-units-filling-up-across-the-us> (last visited Mar. 21, 2021) (“Just over one-fifth of U.S. hospitals with intensive care units reported that at least 95 percent of their I.C.U. beds were full in the week ending Dec. 31”); see *COVID Data Tracker*, COVID-19 Weekly Cases and Deaths per 100,000 Population by Age, Race/Ethnicity, and Sex, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://covid.cdc.gov/covid-data-tracker/#demographicsovertime> (last visited Mar. 21, 2021).

8. Soumya Karlamangla et al., *A new post-Christmas COVID-19 surge as holidays create ‘viral wildfire’*, L.A. TIMES (Dec. 27, 2020, 5:30 AM), <https://www.latimes.com/california/story/2020-12-27/los-angeles-county-health-officials-brace-for-another-coronavirus-wave-after-christmas>; see *COVID Data Tracker*, *supra* note 7 (showing that a surge occurred over the 2020 winter holiday period, as predicted).

emergency use authorization.⁹ Initial vaccine rollout resulted in administration of just over two million COVID-19 vaccines by the end of December 2020, one tenth of the Trump Administration's goal for that month.¹⁰ At that pace, it would have taken ten years to vaccinate enough Americans to bring the pandemic under control.¹¹

President Biden's plan to deliver 100 million COVID-19 vaccine doses in his administration's first 100 days was achieved by March 12, 2021, leading President Biden to proclaim that all American adults would be eligible for COVID-19 vaccination by April 19, 2021.¹² On March 31, 2021, Pfizer announced that its vaccine approved for people over sixteen years of age and older was one hundred percent effective for twelve to fifteen year olds.¹³ Moderna's vaccine, approved for those over eighteen, was in clinical trials as of spring 2021 to test its

9. Press Release, U.S. Food & Drug Admin., FDA Takes Key Action in Fight Against COVID-19 By Issuing Emergency Use Authorization for First COVID-19 Vaccine (Dec 11, 2020), <https://www.fda.gov/news-events/press-announcements/fda-takes-key-action-fight-against-covid-19-issuing-emergency-use-authorization-first-covid-19>; Press Release, U.S. Food & Drug Admin., FDA Takes Additional Action in Fight Against COVID-19 By Issuing Emergency Use Authorization for Second COVID-19 Vaccine (Dec. 18, 2020), <https://www.fda.gov/news-events/press-announcements/fda-takes-additional-action-fight-against-covid-19-issuing-emergency-use-authorization-second-covid>.

10. *Over 11.4 million doses of COVID-19 vaccines distributed, 2.1 million administered*: U.S. CDC, REUTERS (Dec. 28, 2020, 1:20 PM), <https://www.reuters.com/article/us-health-coronavirus-usa-cdc-idUSKBN2921VY>. Cf. Berkeley Lovelace, Jr., *The U.S. has vaccinated just 1 million people out of a goal of 20 million for December*, CNBC (Dec. 23, 2020, 2:44 PM), <https://www.cnbc.com/2020/12/23/covid-vaccine-us-has-vaccinated-1-million-people-out-of-goal-of-20-million-for-december.html>.

11. Joe Murphy & Corky Siemaszko, *Operation Warp Speed at a crawl: Adequately vaccinating Americans will take 10 years at current pace*, NBC NEWS (Dec. 29, 2020, 12:42 PM), <https://www.nbcnews.com/news/us-news/current-rate-it-ll-be-10-years-americans-adequately-vaccinated-n1252486>.

12. Robert Schroeder, *Biden pledges 100 million vaccine shots in 100 days to fight COVID*, MARKETWATCH (Dec. 8, 2020, 2:29 PM), <https://www.marketwatch.com/story/biden-pledges-100-million-vaccine-shots-in-100-days-to-fight-covid-11607455764>; Will Feuer, *U.S. tops 100 million Covid vaccine doses administered, 13% of adults now fully vaccinated*, CNBC (Mar. 12, 2021, 5:32 PM), <https://www.cnbc.com/2021/03/12/us-tops-100-million-covid-vaccine-doses-administered-13percent-of-adults-now-fully-vaccinated.html>; Press Release, White House, Fact Sheet: President Biden to Announce All Americans to be Eligible for Vaccinations by May 1, Puts the Nation on a Path to Get Closer to Normal by July 4th (Mar. 11, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/11/fact-sheet-president-biden-to-announce-all-americans-to-be-eligible-for-vaccinations-by-may-1-puts-the-nation-on-a-path-to-get-closer-to-normal-by-july-4th/>; Rachel Treisman, *Biden Says All Adults Will Be Vaccine Eligible By April 19*, KQED (Apr. 6, 2021, 5:56 PM), <https://www.npr.org/sections/coronavirus-live-updates/2021/04/06/984745020/biden-will-direct-states-to-make-all-adults-vaccine-eligible-by-april-19>.

13. Meredith Deliso & Sony Salzman, *Pfizer says its COVID-19 vaccine is 100% effective in children ages 12-15*, ABC NEWS (Mar. 31, 2021, 3:45 AM), <https://abcnews.go.com/Health/pfizer-covid-19-vaccine-100-effective-children-ages/story?id=76779737>.

effectiveness on children.¹⁴ In late February 2021, the Johnson & Johnson one-dose vaccine was approved for emergency use and administration in the U.S.¹⁵

Vaccination administration expanded in the U.S. in late 2020-2021 as more infectious COVID-19 variants such as the U.K., South African, Brazilian, Indian, California, and other variants continued to emerge and circulate.¹⁶ “Right now, we’re in a race between the variants and the vaccine,” Santa Clara County Health Officer Dr. Sara Cody said in April 2021.¹⁷

Research continued in spring 2021 as to whether the COVID-19 vaccine deters virus spread.¹⁸ As vaccination expanded in the United States, COVID-19 cases were rising in some states in spring 2021, leading to coronavirus U.S. death rates comparable to June 2020 mortality levels, but down from the January 2021 height.¹⁹ As vaccine delivery proceeds with an uncertain timeline, it remains unknown

14. Eric Levenson & Jacqueline Howard, *What we know about Moderna’s coronavirus vaccine and how it differs from Pfizer’s*, CNN HEALTH (Dec. 20, 2020, 3:58 PM), <https://www.cnn.com/2020/12/17/health/moderna-vaccine-what-we-know/index.html>; *Moderna announces COVID-19 vaccine trials for children*, YAHOO! NEWS (Mar. 16, 2021), <https://news.yahoo.com/moderna-announces-covid-19-vaccine-121224330.html>.

15. Jen Christensen, *Johnson & Johnson’s Covid-19 vaccine gets emergency use authorization from FDA*, CNN (Feb. 27, 2021), <https://www.cnn.com/2021/02/27/health/johnson-johnson-covid-19-vaccine-fda-eua/index.html>.

16. Stephanie Soucheray, *New COVID-19 variants found in New York, California*, U. MINN. CTR. FOR INFECTIOUS DISEASE RES. & POL’Y (2021); Apoorva Mandavilli, *The Coronavirus Is Threatening a Comeback. Here’s How to Stop It.*, N.Y. TIMES (Feb. 25, 2021), <https://www.nytimes.com/2021/02/25/health/coronavirus-united-states.html>; Lisa M. Krieger, *‘Double mutant’ COVID-19 variant from India found in Bay Area*, *Mercury News*, <https://www.mercurynews.com/2021/04/02/indian-double-mutant-covid-19-variant-found-in-bay-area/> (last updated Apr. 5, 2021, 11:35 AM) (reporting this variant “carries two worrisome mutations in a key part of the virus which help it latch onto cells.”); Elliott Ramos, *MAP: Covid-19 vaccination tracker across the U.S.*, NBC NEWS (Dec. 22, 2020, 8:02 AM), <https://www.nbcnews.com/health/health-news/map-covid-19-vaccination-tracker-across-u-s-n1252085>.

17. Krieger, *supra* note 16.

18. See Kate Baggaley, *Can you spread COVID-19 after vaccination? Here’s what we know*, POPULAR SCI. (Dec. 28, 2020), <https://www.popsoci.com/story/health/covid-19-vaccine-effective-prevent-spread-infection>; Press Release, Pfizer, *Real-World Evidence Confirms High Effectiveness Of Pfizer-Biontech Covid-19 Vaccine And Profound Public Health Impact Of Vaccination One Year After Pandemic Declared* (Mar. 11, 2021), <https://investors.pfizer.com/investor-news/press-release-details/2021/Real-World-Evidence-Confirms-High-Effectiveness-of-Pfizer-BioNTech-COVID-19-Vaccine-and-Profound-Public-Health-Impact-of-Vaccination-One-Year-After-Pandemic-Declared/default.aspx> [hereinafter *Pfizer-Biontech Vaccine*] (reporting results of a study by the Israel Ministry of Health (MoH), Pfizer Inc. (NYSE: PFE) and BioNTech SE yielding data suggesting Pfizer-BioNTech vaccine prevents asymptomatic SARS-CoV-2 infection).

19. See Baggaley, *supra* note 18; *Pfizer-Biontech Vaccine*, *supra* note 18; *COVID Data Tracker*, *supra* note 7.

whether COVID-19 will persist as an endemic virus or reemerge as a localized pandemic.²⁰

This article recommends that during the COVID-19 pandemic as defined by WHO and local, state, or national coronavirus public health emergencies, online education is the safest course for legal education and should remain an option for in-person or hybrid learning models. Law schools considering in-person or hybrid education should consider requiring COVID-19 vaccinations for campus participants. Some universities have announced COVID-19 vaccination requirements for fall 2021, with religious and health exemptions available.²¹ Exemptions and lack of vaccination requirements may result in some unvaccinated students, faculty, and staff participating in classes or campus activities, which may increase transmission risks as early studies indicate COVID-19 vaccination decreases transmission risks.²²

Law schools should adopt a people-centered, safety and equity-centric approach to decision-making about pedagogical methods and campus activities. Law schools must remain vigilant to health conditions on campus and in their community and extended campus network. Law schools must be prepared to switch to online education and work for some class members, faculty, or staff, and for the entire school or university depending on health and safety conditions, and equity and pedagogical assessments of hybrid education. During the COVID public health emergency, masks should be required for classes indoors, particularly where everyone in the room is not vaccinated, and

20. Muhammad Bilal et al., *Coronaviruses And COVID-19 – Complications and Lessons Learned for the Future*, 14 J. PURE & APPLIED MICROBIOLOGY 725, 729 (2020), <https://doi.org/10.22207/JPAM.14.SPL1.09>.

21. See, e.g., Martha E. Pollack & Michael I. Kotlikoff, *COVID-19 Vaccination and Fall Instruction*, CORNELL U. (Apr. 2, 2021), <https://statements.cornell.edu/2021/20210402-vaccination-fall-instruction.cfm> (requiring COVID-19 vaccination for students returning to Cornell's Ithaca, Geneva, and Cornell Tech campus activities in fall 2021, with religious and health exemptions available); Andy Thomason, *Here's a List of Colleges That Will Require Students to Be Vaccinated Against Covid-19*, CHRON. OF HIGHER EDUC., https://www.chronicle.com/blogs/live-coronavirus-updates/heres-a-list-of-colleges-that-will-require-students-to-be-vaccinated-against-covid-19?utm_source=Iterable&utm_medium=email&utm_campaign=campaign_2190284_nl_Academe-Today_date_20210407&cid=at&source=&sourceId=&cid2=gen_login_refresh&cid2=gen_login_refresh (last updated Apr. 19, 2021, 2:52 PM).

22. Cf. Anoop S.V. Shah et al., *Effect of vaccination on transmission of COVID-19: an observational study in healthcare workers and their households*, MEDRXIV (Mar. 21, 2021), <https://www.medrxiv.org/content/medrxiv/early/2021/03/21/2021.03.11.21253275.full.pdf> (preprint) ("Vaccinating healthcare workers for SARS-CoV-2 reduces documented cases and hospitalisation in both those individuals vaccinated and members of their households. This is reassuring for healthcare workers, and has wide reaching implications for vaccination strategies and societal control measures.").

until health officials approve larger gatherings. Partitions, ventilation, and other infrastructure investments are appropriate, along with promoting personal, building, and equipment hygiene.

This article's interdisciplinary analysis of scientific studies on COVID-19, and the limits of mitigation measures, concludes that gathering adults indoors in physical classes is a high-risk activity during this pandemic.²³ COVID-19 infection risks serious illness, long-lasting complications, and death, and has preyed on America's inequities. African-Americans, Native Americans, Latinx Americans, older Americans, and those with certain underlying health conditions, including pregnant women, face increased perilous COVID-19 infection risks including higher levels of hospitalization and death.²⁴

This article theorizes that the hybrid educational model that blends in-person and online learning may cleave students, faculty, and staff by race, ethnicity, tribe, age, and health. Such a division undermines commitments to diversity and inclusion and First Amendment values that support educational dialogue. Law schools should monitor whether in-person or hybrid classes divide participants by demography, tribal affiliation, health, disability, or other factors, and take steps to promote diversity, inclusion, educational dialogue, and excellence. Assessment and training are highly recommended for online, hybrid, and in-person models, recognizing the challenges of the hybrid model where students are participating on different platforms. Faculty should also be allowed to offer office hours on-line as meetings in faculty offices pose challenges and risks—even when all participants are vaccinated and wearing masks.

COVID-19 is unlikely to be the last virus that threatens global health and challenges prevailing educational, work, and societal paradigms. "Pandemic influenza is not a theoretical threat; rather, it is a recurring threat," the HHS Pandemic Influenza Plan warned in 2017.²⁵ Zoonotic diseases such as COVID-19, believed to have mutated in animals before infecting human beings, "represent up to 75 per cent of all emerging infectious diseases."²⁶ Michael Ryan, Director of

23. See *infra* Parts III-IX for an analysis of the science of COVID-19 and mitigation measures.

24. See *Risk of Severe Illness or Death*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/racial-ethnic-disparities/disparities-illness.html> (last updated Dec. 10, 2020).

25. U.S. DEP'T OF HEALTH & HUMAN SERVS., PANDEMIC INFLUENZA PLAN 3 (2017), <https://www.cdc.gov/flu/pandemic-resources/pdf/pan-flu-report-2017v2.pdf?web=1&wdLOR=c4B64E5AC-9F77-254F-A9B2-BFA3DEC7491B>.

26. *Wildlife crime putting environment and health at risk: UN Report*, UN NEWS (July 10, 2020), <https://news.un.org/en/story/2020/07/1068121>; Kristian Anderson et al., *The proximal origin of SARS-CoV-2*, 26 NATURE MED. 450, 451 (2020),

Emergencies at the World Health Organization, warned COVID-19 is not necessarily “the big one” and called for increased collaboration between the scientific community, government and the public as “these threats will continue.”²⁷

This lengthy pandemic and the prospect of further viral contagions underscore the urgency of developing a safety culture in legal education. Law schools and universities must examine the role of technology and online resources as a substitute for—or a complement to—in-person education as we face public health and safety threats. Developing a safety culture that promotes ethical, inclusive, and effective legal education is critical to legal education’s resilience and fulfillment of its educational and societal mission.

The ethical imperative of safety in legal education, and the relationship of safety to diversity, inclusion and education’s First Amendment values have received scant scholarly attention. Safety has neither been the focus of the American Bar Association (ABA) Section on Legal Education and Admission to the Bar, nor an organizational principle that grounds Law School administration. ABA Standard 301 charges law schools with maintaining a “rigorous program of legal education that prepares its students, upon graduation, for admission to the bar and for effective, ethical, and responsible participation as members of the legal profession.”²⁸ Legal education and ethics training often fail to address the principle that “lawyers have responsibilities to the profession and the public that transcend the letter of the law.”²⁹ Most legal ethics programs focus on attorney conduct, including the attorney-client relationship, but skim over ethical issues at the root of valuing and protecting safety.

<https://www.nature.com/articles/s41591-020-0820-9.pdf>; E.J. Mundell, *Pangolins, Bats, or What? How Did Coronavirus Get to Humans?*, MED. NET (June 2, 2020), <https://www.medicinenet.com/script/main/art.asp?articlekey=234337>; Erin Schumaker & Sony Salzman, *COVID-19 virus origin likely animal to human transmission; concerns about WHO report linger*, ABC NEWS (Mar. 30, 2021, 7:13 AM), <https://abcnews.go.com/Health/covid-19-virus-origin-animal-human-transmission-report/story?id=76746997>.

27. Ciara Linnane, *WHO says coronavirus pandemic is ‘not the big one’ the world needs to brace for*, MARKETWATCH (Dec. 29, 2020, 1:44 PM), <https://www.marketwatch.com/story/who-says-coronavirus-pandemic-is-not-the-big-one-the-world-needs-to-brace-for-2020-12-29>.

28. AM. BAR ASS’N, STANDARDS AND RULES OF PROCEDURE FOR APPROVAL OF LAW SCHOOLS: STANDARD 301(2020) [hereinafter ABA STANDARDS].

29. See Deborah L. Rhode, *Legal Ethics in Legal Education*, 16 CLINICAL L. REV. 43, 50 (2009).

Safety is an organizational value grounded in the recognition of the inherent worth and dignity of every human being.³⁰ The “basic concept of the essential dignity and worth of every human being—a concept at the root of any decent system of ordered liberty,”³¹ underlies the first amendment’s constitutional values foundational to education. Thomas Aquinas recognized dignity as a “value inherent to its possessor, i.e., it is not possessed by that being in virtue of their relation to other worldly beings.”³²

Many law schools proclaim their community’s health and safety a top priority, though they have not developed and articulated a safety culture.³³ Yet, in an effective safety culture, safety is an espoused value that renders each person in an organization responsible for safety and empowers all to call attention to safety issues.³⁴ Safety citizenship behavior “is an individual’s safety behavior that supports the workplace’s overall safety conditions and goes beyond safety compliance.”³⁵

Leadership is integral to safety and is often “the primary influence on organizational culture and safety culture.”³⁶ As an example, Cindy Caldwell’s analysis of corporate decisions leading to large-scale injuries,

30. Cf. U.N. Charter pmb., <https://www.un.org/en/sections/un-charter/un-charter-full-text/> (last visited July 23, 2020) (“We the peoples of the United Nations . . . reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women . . .”).

31. *Rosenblatt v. Baer*, 383 U.S. 75, 92 (1966) (Stewart, J., concurring); *Hardin v. Obstetrical & Gynecological Assocs. P.A.*, 527 S.W.3d 424, 439 n.21 (Tex. App. 2017) (citing William J. Brennan, Jr., Justice, U.S. Supreme Court, Address at the Georgetown University Text and Teaching Symposium (Oct. 12, 1985)) (“[T]he Constitution embodies the aspiration of . . . human dignity that brought this nation into being . . . [f]or the Constitution is a sublime oration on the dignity of man . . . [It] is a sparkling vision of the supremacy of the human dignity of every individual.”).

32. Paweł Łuków, *A Difficult Legacy: Human Dignity as the Founding Value of Human Rights*, 19 HUM. RTS. REV. 313, 324 (2018), <https://doi.org/10.1007/s12142-018-0500-z>.

33. See CINDY L. CALDWELL, SAFETY CULTURE AND HIGH-RISK ENVIRONMENTS: A LEADERSHIP PERSPECTIVE 19, fig.2.2 (2018) (describing the relationship between leadership and safety culture); *id.* at 3 (“The International Nuclear Safety Advisory Group (INSAG) first coined the term *safety culture* when referring to the failure at the Chernobyl Nuclear Power station . . . [acknowledging] that after a certain point in the maturation of safety systems, technology alone cannot achieve further improvements in safety; instead, organizational and cultural factors become more important.”).

34. See NATHAN CRUTCHFIELD & JAMES ROUGHTON, SAFETY CULTURE: AN INNOVATIVE LEADERSHIP APPROACH 14 (2014) (“Safety is an espoused value in most organizations . . . [t]he “espoused” values of both safety management and the organization have to be aligned to ensure values are real and underlay the decisions that establish the priorities that drive the organization.”).

35. Dan Wang et al., *Safety stressors, safety-specific trust, and safety citizenship behavior: A contingency perspective*, 142 ACCIDENT ANALYSIS & PREVENTION 105572 (2020), <https://www.sciencedirect.com/science/article/abs/pii/S0001457519313089>.

36. CALDWELL, *supra* note 33, at 9.

including death, concludes that “disasters were not causally linked to one bad decision, but instead were socially organized and systematically produced by bureaucratic social structures.”³⁷ “[P]rior to disaster, there is a long incubation period where the potential for disaster builds.”³⁸ Man-made disasters are “based on a failure of foresight to detect a drift from organizational norms.”³⁹ Failure to establish safety plans and to identify organizational values fuels safety risk.

COVID-19’s safety risks prey on America’s inequities. “Long-standing systemic health and social inequities have put many people from racial and ethnic minority groups at increased risk of getting sick and dying from COVID-19,” the U.S. Centers for Disease Control and Prevention’s (CDC) reported.⁴⁰ Hospitalization for COVID-19 infection is more than three times more likely for Latinx Americans and Native Americans, and African-Americans than for White [non-Hispanic] Americans.⁴¹ Notably, “Latino and African-American residents of the United States have been three times as likely to become infected as their white neighbors,” and “nearly twice as likely to die from the virus as white people.”⁴²

Dr. Joia Crear-Perry observes that “exposure to racism,” not race, is a health risk factor.⁴³ COVID-19’s disparate and devastating health and social consequences call on us to act as ethical educators and an ethical profession. Consistent with “data feminism” as conceptualized by Catherine D’Ignazio and Lauren Klein, it is “not enough to unmask

37. *Id.* at 17.

38. *Id.* at 15-16.

39. *Id.* at 15 (citing BARRY A. TURNER & NICK PIDGEON, MAN-MADE DISASTERS (1978)).

40. *Health Equity Considerations & Racial & Ethnic Minority Groups*, CTRS. FOR DISEASE CONTROL & PREVENTION (Feb. 12, 2021), <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html> [hereinafter CDC, *COVID-19 & Minority Groups*]; *The COVID Racial Data Tracker*, COVID TRACKING PROJECT, <https://covidtracking.com/race> (last visited June 27, 2020).

41. *Risk for COVID-19 Infection, Hospitalization and Death by Race/Ethnicity*, CTRS. FOR DISEASE CONTROL & PREVENTION (Mar. 12, 2021), <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-race-ethnicity.html>.

42. Richard A. Oppel Jr., et al., *The Fullest Look Yet at the Racial Inequity of Coronavirus*, N.Y. TIMES (July 5, 2020), <https://www.nytimes.com/interactive/2020/07/05/us/coronavirus-latinos-african-americans-cdc-data.html>; see generally Jazmyn T. Moore et al., *Disparities in Incidence of COVID-19 Among Underrepresented Racial/Ethnic Groups in Counties Identified as Hotspots During June 5–18, 2020—22 States, February–June 2020*, 69 MORBIDITY & MORTALITY WKLY. REP. 1122 (Aug. 21, 2020), https://www.cdc.gov/mmwr/volumes/69/wr/mm6933e1.htm?s_cid=mm6933e1_w.

43. Joia Crear-Perry, *Race Isn’t a Risk Factor in Maternal Health. Racism Is*, REWIRE NEWS GROUP (Apr. 11, 2018, 11:50 AM), <https://rewire.news/article/2018/04/11/maternal-health-replace-race-with-racism/>.

and expose unequal power relations in data collection and data science; we must commit to righting and rebalancing the distribution of power.”⁴⁴

COVID-19 stalks the world as we confront violence committed under the color of law by police and other institutions. Black Lives Matter affirmations, pledges to stop hateful conduct, and commitments to equity and inclusion reflect respect for each human being’s inherent worth and dignity. Aligned with those values and commitments, law schools must act to protect the health and safety of each member of our diverse community and those with whom we are interconnected.

Law schools are not islands. This article conceptualizes law schools as hubs of Extended Campus Networks (ECNs) that convene people from many regions. Throughout the academic year, law students, faculty, staff, and their families interact with each other, with their communities, and extended networks. Reframing law schools as hubs interconnected to and serving our society challenges conceptualizations of law schools as insular institutions.⁴⁵ This perspective also unveils viral transmission pathways in-person classes, meetings, and off-campus activities can propagate.

In-person classes that meet for an hour or more at a time, several times a day or week, form hubs conducive to virus transmission as participants meet in and out of class. Such networks support epidemiological “transmission clusters and pathways as well as virus introduction routes.”⁴⁶ Networks can “link infected hosts from the same epidemiological transmission clusters,”⁴⁷ undermining public health, safety, and education.

“Our paramount duty is and should be to ensure the health, safety, and wellbeing of our students, staff, local communities, and faculty,” Peter Huang and Debra Austin urge in their article *Unsafe at Any Campus: Don’t Let Colleges Become the Next Cruise Ships, Nursing*

44. Catherine D’Ignazio & Lauren F. Klein, *Seven Intersectional Feminist Principles for Equitable and Actionable COVID-19 Data*, 7 *BIG DATA & SOC’Y* 1, 2 (2020), <https://doi.org/10.1177/2053951720942544>.

45. Cf. Jamin B. Raskin, *The Marshall-Brennan Constitutional Literacy Project: American Legal Education’s Ambitious Experiment in Democratic Constitutionalism*, 90 *DENV. U. L. REV.* 833, 852 (2013) (“[L]aw schools are famously insular and competitive places, divided ever more deeply by commercial rankings.”).

46. See Pavel Skums et al., *Global Transmission Network of SARS-Cov-2: From Outbreak To Pandemic*, *MEDRXIV* 1, 2 (2020), <https://doi.org/10.1101/2020.03.22.20041145> (preprint) (analyzing COVID-19 transmission networks); Andrea M. Matwyshyn, *Technoconsen(t)us*, 85 *WASH. U. L. REV.* 529, 571 (2007) (“Scale-free networks consist of different points or ‘nodes’ in the network, which evidence drastically different levels of connectivity—some nodes are connected to a very large number of other nodes and some nodes are connected to only a few others.”).

47. Skums et al., *supra* note 46, at 11.

Homes, and Food Processing Plants.⁴⁸ Law schools are charged with providing an ethical and rigorous legal education that trains students to serve the profession and the community.

As vaccination availability and administration increases, many law schools are planning to return to in-person teaching by fall 2021, recognizing that public health developments may derail those plans.⁴⁹ The question law schools should ask is whether conditions have sufficiently changed to *safely* convene in-person classes and meetings.

Harvard Law School's analysis highlights concerns about the hybrid educational model that led it to continue online legal instruction in spring 2021. Harvard faculty observed that mask wearing required of those attending a hybrid classroom in person makes it more difficult for all participants—particularly for those participating online, to hear each other and see facial expressions.⁵⁰ Hybrid “classes are not equally accessible to students who come from countries subject to a travel ban, who face other difficulties securing visas,” as well as those “who have family or personal obligations or challenges that compel them to remain where they are now, or who suffer from underlying conditions that place them at high risk of serious illness should they contract COVID-19.”⁵¹ The Harvard law faculty determined that “considerations of equity strongly favor continuing with online instruction” in spring 2021.⁵²

The factors that informed Harvard Law School's decision to hold classes online in spring 2021 may persist into fall 2021 and beyond as vaccination gaps, COVID health disparities, and more infectious COVID variants continue. Classes where students must wear masks will still make being heard more challenging and limit visibility of facial expressions. Individual student microphones may help in some classes but have yet to be widely adopted. Travel bans and visa limitations may continue to limit options for international students who are part of the law school student body. Underlying health and equity conditions still put many people, including communities of color, at higher risk.

48. Peter H. Huang & Debra S. Austin, *Unsafe at Any Campus: Don't Let Colleges Become the Next Cruise Ships, Nursing Homes, and Food Processing Plants*, 96 IND. L.J. SUPPLEMENT 25, 41 (2020), http://ilj.law.indiana.edu/articles/Huang_Unsafe_at_any_Campus.pdf.

49. See, e.g., John Manning & L. Tracee Whitley, *Update on Fall Planning Efforts*, HARV. U. (Mar. 23, 2021), <https://hls.harvard.edu/update-on-fall-planning-efforts/>; Lee C. Bollinger, *Message Regarding Commencement and the Fall Term*, COLUM. UNIV. (Mar. 17, 2021), <https://president.columbia.edu/news/message-regarding-commencement-and-fall-term>; Pollack & Kotlikoff, *supra* note 21.

50. John Manning, *HLS Winter and Spring Terms 2021*, HARV. L. SCH. (Oct. 20, 2020), <https://hls.harvard.edu/hls-winter-and-spring-terms-2021/>.

51. *Id.*

52. *Id.*

COVID-19 vaccination needs to reach a greater range of the American public including young adults who form a large portion of the law school cohort, communities of color, and those who have hesitated to receive the vaccine.

As vaccination, health, and equity gaps persist, law schools must exercise caution before returning to in-person or hybrid teaching, particularly while more infectious COVID-19 variants circulate. This article urges law schools and universities to adopt a safety culture, pandemic, and disaster preparation plans to save lives and protect the health of the communities we serve, consistent with our educational mission.

B. Organization of this Article

The COVID-19 pandemic calls for legal education to reevaluate its pedagogical model and values. This article proposes an ethical framework for legal education rooted in respect for the dignity and worth of each person and inclusive dialogue among diverse participants to prepare students to be effective, ethical, and responsible members of the legal profession and the community.

Section II examines legal education as a Critical Infrastructure service that prepares students to serve as ethical members of the legal profession and society, consistent with ABA standards. Section III evaluates CDC guidance for institutions of higher education and ABA standards that give law schools flexibility to address emergencies and increase options for online education. Section IV analyzes the science of COVID-19 transmission, viral mutation, the virus's disparate effects, and mitigation strategies. It examines COVID-19 infection rates among people under forty-five, the age cohort constituting the bulk of American law students. It incorporates the lessons of network theory to examine the role of in-person gatherings as the incubator of virus transmission.

Section V explores delays in COVID-19 testing and screening and examines the limits of strategies that trail and attempt to trace infection. Section VI explores physical factors at universities that may contribute to virus spread. Section VII highlights increased risks of poor COVID-19 outcomes for people with certain underlying conditions, several communities of color, and older Americans.

Section VIII analyzes online, hybrid, or in-person legal education models and argues that in-person or hybrid education during the Covid-19 pandemic will not be law school "as usual." It examines challenges to executing the hybrid model, and contends this model increases health and safety dangers, undermines education, and conflicts with ethical obligations and commitments to diversity and inclusion.

Section IX examines ethical decision-making frameworks using Santa Clara University's Markkula Ethics App as a construct to guide ethical analysis. This section proposes an ethical framework to guide legal education based on respect for the inherent worth and dignity of every human being, safety, and a commitment to diversity and inclusion that fosters the robust dialogue central to legal education.

Section X analyzes legal theories that center diversity as the foundation of robust dialogue and education. It highlights the demographic divisions hybrid classrooms may create. This separation undercuts the diverse dialogue law schools have long sought to foster to promote robust education.

Section XI discusses online education and virtual platforms that foster educational excellence and prepare lawyers for the contemporary legal profession. Section XII of this article concludes that online legal education is the safest option during this pandemic. It suggests a decision-making framework to determine methods for conducting legal education during the COVID-19 pandemic or declared health emergency. It emphasizes the need for safety and equity-centered decision-making to ensure that hybrid or in-person education does not undermine health, safety, and equity. It suggests assessments and training to ensure that law schools deliver safe, effective, ethical, diverse, and inclusive legal education.

II. LAW SCHOOLS AS CRITICAL INFRASTRUCTURE

"Laws help create the infrastructure through which emergencies are detected, prevented, declared, and addressed."⁵³ The Critical Infrastructures Protection Act of 2001 (CIPA), adopted as part of the U.S.A. Patriot Act, defines critical infrastructure as those "systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters."⁵⁴ "Education including K-12 and Higher Education are among the sectors designated as Critical Infrastructure and are part of the Government Facilities Sector."⁵⁵

53. James G. Hodge, Jr. & Evan D. Anderson, *Principles and Practice of Legal Triage During Public Health Emergencies*, 64 N.Y.U. ANN. SURV. AM. L. 249, 250 (2008).

54. Catherine J.K. Sandoval, *Net Neutrality Powers Energy and Forestalls Climate Change*, 9 SAN DIEGO J. CLIMATE & ENERGY L. 1, 8 (2018) (citing 42 U.S.C. § 5195c(e) (2001)).

55. Broadband Institute of California @ Santa Clara University School of Law, Comment Letter on the Matter of Restoring Internet Freedom, at 11 (WC Docket Nos. 17-108, 17-287, 11-42) (Apr. 21, 2020).

In 2006, the U.S. Department of Homeland Security initiated a process to develop Sector-Specific Plans as part of a national infrastructure protection plan to withstand operational threats during emergencies, including pandemics.⁵⁶ Adopted in 2010, the principles of the Education Facilities Sector Critical Infrastructure Plan are designed “to enhance school safety, to minimize disruption, and to ensure continuity of the learning environment.”⁵⁷ CIPA sector plans define categories of “essential workers” and support continuity of government and services during conditions that challenge normal practices.

Bruce Jennings and John Arras developed an ethical decision-making framework for the CDC Ethics Subcommittee, for implementation in a public health pandemic.⁵⁸ They recommended emergency preparedness planning and response to “protect public safety, health, and well-being,” and deploying interventions to “minimize the extent of death, injury, disease, disability, and suffering during and after an emergency.”⁵⁹ This prescient article written in response to the H1N1 flu argued that ethical principles should “inform advance planning and organization of emergency response so as to minimize the number of tragic choices that must be made” during an emergency.⁶⁰ In 2008, CDC’s Ethics Subcommittee recommended seven ethical guideposts for decision-making in a pandemic.⁶¹ To foster public health emergency preparedness and response (PHEPR), the Ethics Subcommittee report recommended:

Harm reduction and benefit promotion. PHEPR activities should protect public safety, health, and well-being. They should minimize the extent of death, injury, disease, disability, and suffering during and after an emergency.

<https://ecfsapi.fcc.gov/file/104211478729214/BBIC%20Comments%20FCC%20Net%20Neutrality%20Mozilla%20remand%20final.pdf> (citing *Government Facilities Sector*, *supra* note 2).

56. U.S. DEP’T. HOMELAND SEC. & U.S. DEP’T. OF EDUC., EDUCATION FACILITIES SECTOR SPECIFIC PLAN 1, 5 (2010), <https://www.dhs.gov/xlibrary/assets/nipp-ssp-education-facilities-2010.pdf>.

57. *Id.* at 13.

58. See generally Bruce Jennings & John Arras, *Ethical Guidance for Public Health Emergency Preparedness and Response: Highlighting Ethics and Values in a Vital Public Health Service*, CDC (Oct. 30, 2008), https://www.cdc.gov/os/integrity/phethics/docs/White_Paper_Final_for_Website_2012_4_6_12_final_for_web_508_compliant.pdf (Report prepared for the Centers for Disease Control and Prevention Ethics Subcommittee, Advisory Committee to the Director).

59. *Id.* at 10.

60. *Id.* at 8.

61. *Id.* at 10.

Equal liberty and human rights. PHEPR activities should be designed so as to respect the equal liberty, autonomy and dignity of all persons.

Distributive justice. PHEPR activities should be conducted so as to ensure that the benefits and burdens imposed on the population by emergency response measures and mitigations are shared equitably and fairly.

Public accountability and transparency. PHEPR activities should be based on and incorporate decision-making processes that are inclusive, transparent and sustain public trust.

Community resiliency and empowerment. A principal goal of PHEPR should be to develop resilient, as well as safe communities. PHEPR activities should strive towards the long-term goal of developing community resources that will make them more hazard-resistant and allow them to recover appropriately and effectively after emergencies. Resilient communities have robust internal support systems and networks of mutual assistance and solidarity. They also maintain sustainable and risk mitigating relationships with their local ecosystems and their natural environment.

Public health professionalism. PHEPR activities should recognize the special obligations of certain public health professionals and promote competency of and coordination among these professionals.

Responsible civic response. PHEPR activities should promote a sense of personal responsibility and citizenship.⁶²

The first principle for public health emergency planning—minimizing death, injury, disease, disability, and suffering during and after an emergency—must be the first priority of law schools, the portals to the legal profession. Americans confront myriad legal issues during the COVID-19 pandemic. Maintaining access to effective and ethically responsible legal education, calibrated to serve the diversity of Americans and their legal needs, is critical to American democracy and resiliency.

III. COVID-19 GUIDANCE FOR INSTITUTIONS OF HIGHER EDUCATION AND ABA STANDARDS

During the more than year-long COVID-19 pandemic, U.S. public health guidance for Institutions of Higher Education (IHE) shifted as more was learned about viral transmission, and as policy priorities, vaccination, and testing strategies changed between the Trump and Biden administrations. The CDC under the Trump Administration

62. *Id.* at 10-11.

issued Guidance for Institutions of Higher Education (IHE) classifying educational activities by risk:

Lowest Risk: Faculty and students engage in virtual-only learning options, activities, and events.

Some Risk: [S]mall in-person classes, activities, and events that allow individuals to remain spaced at least 6 feet apart (e.g., lecture room with individual seating spaced 6 feet apart) [and] do not share objects.

Higher Risk: Students and faculty engage in in-person only learning, activities, and events . . . attend several small out-of-class social gatherings and events . . . dine in indoor dining rooms while maintaining social distancing . . . share some objects (e.g., sharing of objects is limited to one group of students at a time for laboratory, art, or recreational equipment and supplies that cannot be purchased or assigned individually and that are wiped down with disinfectant, as possible, between uses).⁶³

The Biden Administration updated its guidance to IHE in March 2021 to “recommend universal entry screening prior to the beginning of each term and serial screening testing when testing capacity is sufficient.”⁶⁴ In the first one hundred days of the Biden Administration, the CDC recommended “[t]esting to rapidly detect and isolate infectious individuals” to reduce SARS-CoV-2 transmission as “one component of written comprehensive COVID-19 prevention plans for IHEs.”⁶⁵

CDC’s COVID-19 guidance for IHE includes “considerations for COVID-19 surveillance, vaccination, and health equity.”⁶⁶ Those “[p]eople living and working in congregate settings, including institutions of higher education (IHEs), are at increased risk for COVID-19.”⁶⁷ Therefore, “[p]revention strategies (e.g., vaccination, physical distancing, correct and consistent use of face masks, hand hygiene, enhanced cleaning, and appropriate ventilation) should be implemented along with all testing strategies,” CDC counseled.⁶⁸

63. *Considerations for Institutions of Higher Education*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/community/colleges-universities/considerations.html> (last updated Dec. 31, 2020) [hereinafter *Considerations for Institutions of Higher Education*].

64. *Interim Guidance for SARS-CoV-2 Testing and Screening at Institutions of Higher Education (IHEs)*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/community/colleges-universities/ihe-testing.html> (last updated Mar. 17, 2021) [hereinafter *Testing in Institutions of Higher Education*].

65. *Id.*

66. *Id.*

67. *Id.*

68. *Id.*

CDC's IHE guidelines highlight the COVID-19 Response Health Equity Strategy developed in August 2020 "to reduce the impact of COVID-19 among racial and ethnic minority populations and other population groups (e.g., essential and frontline workers, people living in rural or frontier areas) who have experienced a disproportionate burden of COVID-19."⁶⁹ As part of the Paycheck Protection Act signed into law in March 2020, the HHS Secretary was required to issue a report on COVID-19 testing including "data on demographic characteristics, including, in a de-identified and disaggregated manner, race, ethnicity, age, sex, geographic region and other relevant factors of individuals tested for or diagnosed with COVID-19, to the extent such information is available."⁷⁰ In March 2021, the CDC emphasized the importance of complete race and ethnicity data to understand "the impact of COVID-19 on racial and ethnic minority populations."⁷¹ Data gaps hamper analysis, development of prevention and response measures, and create barriers to educational and community safety.

The ABA, the governing body for law school accreditation, issued an emergency order in February 2020 emphasizing the flexibility given to law schools to address disasters and extraordinary circumstances.⁷² The ABA recognized that "[d]istance learning often may be a good solution to emergencies or disasters that make the law school facilities unavailable or make it difficult or impossible for students to get to the law school."⁷³

ABA standard 306(e) limits the amount of credit hours a law school can provide through distance education to "up to one-third of the credit hours required for the J.D. degree[.]" and up to 10 credits during the first one-third of legal education.⁷⁴ Prior to the COVID-19 pandemic, ABA Standard 306 required law schools offering distance education to possess the "technological capacity, staff, information resources, and facilities necessary to assure the educational quality of distance education."⁷⁵

69. *Id.* (citing *CDC COVID-19 Response Health Equity Strategy: Accelerating Progress Towards Reducing COVID-19 Disparities and Achieving Health Equity*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/cdc-strategy.html> (last updated Aug. 21, 2020)).

70. Paycheck Protection Program and Health Care Enhancement Act, Pub. L. 116-139, 134 Stat. 626 (2020).

71. *Testing in Institutions of Higher Education*, *supra* note 64.

72. Memorandum from Managing Dir. of Am. Bar Ass'n on Emergencies and Disasters (Feb. 2020), https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/20-feb-guidance-on-disasters-and-emergencies.pdf.

73. *Id.* at 1.

74. AM. BAR ASS'N., DISTANCE EDUCATION (2020), https://www.americanbar.org/groups/legal_education/resources/distance_education/.

75. ABA STANDARDS, *supra* note 28, at standard 306(c).

ABA Standard 701 now requires all law schools to have “facilities, equipment, technology, and technology support that enable it to operate in compliance with the Standards and carry out its program of legal education,” rather than making technological facilities a requirement of distance education.⁷⁶

Prior to the COVID-19 pandemic, ABA Standard 306(d) permitted distance learning on three conditions: if “(1) there is opportunity for regular and substantive interaction between faculty member and student and among students; (2) there is regular monitoring of student effort by the faculty member and opportunity for communication about that effort; and (3) the learning outcomes for the course are consistent with Standard 302.”⁷⁷ “Distance education course” was redefined by ABA standards in 2020-2021 as involving “the use of technology to support regular and substantive interaction among students and between the students and the faculty member, either synchronously or asynchronously.”⁷⁸

ABA Standard 107(a)(1) provides for variances from the requirements of the standards in “extraordinary circumstances in which compliance . . . would create or constitute extreme hardship for the law school and/or its students.”⁷⁹ At its August 2020 meeting, the ABA House of Delegates approved a resolution to allow the Council of the Section of Legal Education and Admissions to the Bar to “adopt emergency policies and procedures in response to extraordinary circumstances in which compliance with the Standards would create or constitute extreme hardship for multiple law schools,” effective upon the Council’s adoption “for a term certain and limited to the duration of the extraordinary circumstance.”⁸⁰ This resolution authorizes the “Council to act quickly to address an emergency impacting multiple law schools—either regionally or nationally. Examples of emergencies include, but are not limited to, weather disasters and pandemics.”⁸¹

The ABA’s resolution does not address the need for long-term emergency planning and the development of a safety culture. Disaster planning often focuses on short-term dangers that quickly shift to

76. *Id.* at standard 701.

77. *Id.* at standard 306(d).

78. AM. BAR ASS’N., DEFINITIONS, at 7, https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/standards/2020-2021/2020-21-aba-standards-and-rules-definitions.pdf (last visited Apr. 4, 2021).

79. ABA STANDARDS, *supra* note 28, at standard 107.

80. AM. BAR ASS’N., SECTION OF LEGAL EDUCATION AND ADMISSIONS TO THE BAR REPORT TO THE HOUSE OF DELEGATES RESOLUTION 109B (2020), <https://www.americanbar.org/content/dam/aba/administrative/news/2020/08/2020-am-resolutions/109b.pdf> (adopted).

81. *Id.* at 1.

recovery periods. Pandemics require long-term planning. Pandemic emergencies may last for months or years. This elongated time frame challenges models that envision disasters as a short-term phenomenon that quickly shifts from response to recovery.

Many factors may thwart plans to offer in-person or hybrid classes during a viral pandemic including state or local orders, campus, regional, national, or global virus outbreaks, emergence of more infectious viral variants, testing bottlenecks, vaccination and health gaps. Aden Hayes listed several “deal breakers” that would “derail a return to campus” including: 1) “a severe outbreak occurs, and local hospitals reach or exceed capacity;” 2) “the state governor forbids or strongly recommends against students returning to campus;” 3) “national organizations speak out against reopening;” 4) “faculty members broadly refuse to teach face-to-face out of health concerns.”⁸² Equity and distribution of COVID infection and vaccination should also be considered in academic planning. Universities should track and report the collective demography of students, staff, faculty, or community members experiencing COVID infection.

Experience with online, in-person, and hybrid classes between the initial March 2020 declaration of the pandemic through spring 2021 should inform decision-making for future semesters, and temper hastened plans to return to in-person learning during the COVID-19 public health emergency. By July 29, 2020, more than fifty percent of universities announced their classes would be conducted online in fall 2020.⁸³

Law schools convening classes and activities online in fall semester 2020 included UC Berkeley, Harvard Law, Santa Clara University (SCU Law), UC Hastings, UC Davis, UC Irvine, UCLA, Vermont, the University of Connecticut, Western Michigan University Cooley Law School, Pepperdine Caruso School of Law, the George Washington Law School, and the University of North Carolina School of Law (UNC).⁸⁴

82. Aden Hayes, *First, Consider the Deal Breakers*, INSIDE HIGHER ED (July 16, 2020), <https://insidehighered.com/views/2020/07/16/key-threatening-developments-colleges-should-consider-if-planning-reopening-fall>.

83. *Live Coronavirus Updates from July 2020*, CHRON. HIGHER EDUC. (July 31, 2020), <https://www.chronicle.com/blogs/live-coronavirus-updates/live-coronavirus-updates-from-july-2020>.

84. *See, e.g.*, Karen Sloan, *Online or In Person? Law Schools Diverge in Fall Semester Plans*, LAW.COM (July 1, 2020, 2:25 PM), <https://www.law.com/2020/07/01/online-or-in-person-law-schools-diverge-in-fall-semester-plans/>; Erwin Chemerinsky, *Dean's announcement: Fall 2020 classes will be conducted remotely*, BERKELEY L. (June 26, 2020), <https://www.law.berkeley.edu/article/fall-instruction-memo-6-26-20/>; John Manning, *HLS Fall Term 2020*, HARV. L. SCH. (June 3, 2020), <https://hls.harvard.edu/hls-fall-term-2020/>; E-mail from Anna Han, Dean, Santa Clara Univ. Sch. of Law, to the Santa Clara Law

Georgetown University Law Center held its fall 2020 classes online, citing “the significant increase in COVID cases nationwide, the long delays in processing COVID tests at national and local labs,” and DC government’s requirement for “a two week quarantine period for all individuals arriving in the District from more than 25 states” designated as COVID hotspots.⁸⁵

Columbia Law School offered classes in one of three formats:

In-person classes where most, if not all, students are physically present during each class session in a classroom large enough to accommodate safe physical distancing

Online classes where both the instructor and students attend virtually

Hybrid classes where at least one-third of students are able to be physically present in a classroom on a rotating basis, with the remaining students attending virtually.⁸⁶

Despite plans for in-person or hybrid classes, campus and community outbreaks prompted shifts to online education at many universities.

Columbia switched to online classes for the end of November 2020 through the fall exam period.⁸⁷ Columbia held classes in the three formats listed above for spring 2021 and announced a goal of returning to in-person learning in fall 2021, subject to community health conditions.⁸⁸

Community (July 6, 2020) (on file with the author, Catherine Sandoval) (announcing classes will be conducted one-hundred percent online in fall 2020 due to safety concerns as COVID-19 cases rise); Kevin R. Johnson, *Communication: October 2, 2020 – Spring 2021 Instruction*, UC DAVIS SCH. L. (Oct. 2, 2020), <https://law.ucdavis.edu/coronavirus/communication.html>; Paul L. Caron, *Fall Semester at Pepperdine Caruso Law*, PEPP. CARUSO SCH. L. (July 22, 2020), <https://law.pepperdine.edu/surf-report/posts/fall-semester-at-pepperdine-caruso-law-2020.htm>; Thomas J. LeBlanc et al., *Important Fall Update: Adjusting GW’s On-Campus Plans*, GW TODAY (July 27, 2020), <https://gwtoday.gwu.edu/important-fall-update-adjusting-gw%E2%80%99s-campus-plans>; D.L. Chandler, *UNC-Chapel Hill Switches Back To Remote Classes After COVID-19 Spike*, HIP-HOP WIRED (Aug. 18, 2020), <https://hiphopwired.com/899308/unc-chapel-hill-covid-19/>.

85. William M. Treanor, *Message from Dean Treanor: Update on Fall 2020 Plan*, GEO. L., <https://www.law.georgetown.edu/covid-19-updates/message-from-dean-treanor-update-on-fall-2020-plan/> (last visited Mar. 21, 2021).

86. Gillian Lester, *Columbia Law School Announces Plans for Returning to Campus*, COLUM. U. CITY OF N.Y. (July 7, 2020), <https://covid19.columbia.edu/news/columbia-law-school-announces-plans-returning-campus>; Gillian Lester, *Proceeding with Hybrid Instruction*, COLUM. L. SCH. (Aug. 14, 2020), <https://www.law.columbia.edu/news/archive/proceeding-hybrid-instruction>.

87. Gillian Lester, *Important Reminders: Concluding the Fall Semester and Planning for Spring*, COLUM. L. SCH. (Nov. 19, 2020), <https://www.law.columbia.edu/news/archive/important-reminders-concluding-fall-semester-and-planning-spring>.

88. Gillian Lester, *Planning for Spring 2021*, COLUM. L. SCH. (Oct. 21, 2020), <https://www.law.columbia.edu/news/archive/planning-spring-2021>; *COVID-19 Information*

UNC switched in mid-August 2020 from in-person to all remote instruction following COVID-19 outbreaks within two weeks of campus move-ins and one week of in-person classes.⁸⁹ During the first week of classes at UNC, the COVID-19 positivity rate rose from two point eight percent to thirteen point six percent, leaving 177 in isolation and 349 in quarantine.⁹⁰ More than 1,200 students at the University of Alabama were infected with COVID-19 by the end of August 2020, while the University continued in-person classes.⁹¹ In December 2020, seventy faculty members at UNC Chapel Hill signed a petition asking for spring 2021 classes to be held online as COVID-19 cases increased nationally, and the campus experienced a coronavirus surge in November prior to fall campus moveout.⁹²

On September 11, 2020, SCU Law announced that its spring 2021 semester would be offered online.⁹³ Harvard Law School planned to continue online education in spring 2021 to foster equity among the class and protect community health.⁹⁴ Yale and Cornell Law School commenced spring semester 2021 in February, rather than in January, eliminated Spring Break, and held hybrid classes with extensive COVID-19 testing for students studying on campus.⁹⁵ The University of Chicago and Wayne State University switched to online classes for at

& Resources, COLUM. L. SCH., <https://www.law.columbia.edu/community-life/covid-19-information-resources> (last visited Apr. 6, 2021); Lee C. Bollinger, *Message Regarding Commencement and the Fall Term*, *supra* note 49.

89. Kevin M. Guskiewicz & Robert A. Blouin, *Message from University leaders on important changes for Fall 2020 Roadmap*, U.N.C. CHAPEL HILL (Aug. 17, 2020), <https://www.unc.edu/posts/2020/08/17/shift-to-remote-cm/> (shifting all undergraduate in-person instruction to remote learning, and noting that graduate, professional and health affairs schools will be taught as directed by the schools, due to the increase of COVID-19 cases on campus since the commencement of the fall 2020 semester).

90. *Id.*

91. Erin Schumaker, *More than 1,200 students test positive for COVID-19 at major university*, ABC NEWS (Aug. 29, 2020, 9:44 AM), <https://abcnews.go.com/Health/1200-students-test-positive-covid-19-major-university/story?id=72699871>.

92. Kate Murphy, *UNC-CH faculty say spring semester must be remote or COVID-19 cases will likely spike*, NEWS & OBSERVER (Dec. 2, 2020, 11:41 AM), <https://www.newsobserver.com/news/local/education/article247548345.html>.

93. E-mail from Michael Flynn, Assoc. Dean, Santa Clara Univ. Sch. of Law, to the Santa Clara Law Community (Sept. 11, 2020) (on file with author, Catherine Sandoval) (announcing classes will be conducted 100% online in fall 2020 due to safety concerns as COVID-19 cases rise).

94. Manning, *HLS Winter and Spring Terms 2021*, *supra* note 50.

95. Peter Salovey & Scott Strobel, *COVID-19 Information: Plans for the Spring Semester*, YALE U. (Oct. 6, 2020), <https://covid19.yale.edu/community-messages/plans-spring-semester>; *Cornell University and Cornell Law School COVID-19 Resources and Plans for Reopening*, CORNELL L. SCH., <https://www.lawschool.cornell.edu/COVID-19/Academics.cfm> (last visited Dec. 30, 2020); *Yale Law School COVID-19 Information*, YALE L. SCH., <https://law.yale.edu/yls-today/media-inquiries/office-public-affairs/yale-law-school-covid-19-information> (last visited Mar. 21, 2021).

least seven days and ten days, respectively, in April 2021 due to campus COVID-19 outbreaks, increasing prevalence of the U.K. variant in the Chicago community, and coronavirus outbreaks in Michigan equal to December 2020 levels.⁹⁶

The University of Pennsylvania School of Law (Penn) convened hybrid classes in spring 2021 as it did in fall 2020 and required a weekly COVID test to enter the law school building.⁹⁷ Penn imposed a twenty-five-person limit on in person class attendance and reported diligent compliance with “strict masking, social distancing, and testing protocols.”⁹⁸ Some Penn classes were fully remote throughout the semester and all classes shifted online after Thanksgiving 2020.⁹⁹ Some Penn students characterized online learning as more conducive to academic discussion during the pandemic, especially in small classes.¹⁰⁰

The timeline necessary to distribute a COVID-19 vaccine in the United States and globally elongates the period during which in-person education remains risky and online education is the safer option. This extended vaccine distribution timeline and circulation of more infectious variants of COVID-19 requires consideration of online legal education throughout the duration of the pandemic.

Even with increased vaccination rates, vaccination against the coronavirus is “not 100% effective at preventing the virus entirely, though those who receive the vaccine are far less likely to be hospitalized or die from it.”¹⁰¹ In Chicago, the Public Health Commissioner reported the city has observed fewer than one hundred “breakthrough” cases—cases of confirmed coronavirus infections in fully vaccinated individuals.¹⁰² While vaccination may decrease the severity of those infections, health experts explain “[w]e shouldn’t be surprised about

96. Rosemary Sobol & Elyssa Cherney, *Stay-at-home order issued at University of Chicago as COVID-19 spikes, school eyes link to fraternity parties, cancels in-person classes*, CHI. TRIB. (Apr. 8, 2021, 3:56 PM), <https://www.chicagotribune.com/coronavirus/ct-covid-19-university-of-chicago-spike-restrictions-20210408-xk432koinbfazmoqrwnkquzy4-story.html>; Cassidy Johncox, *Wayne State University halts in-person learning for 10 days amid virus surge*, CLICKONDETROIT (Apr. 7, 2021, 7:48 AM), <https://www.clickondetroit.com/news/local/2021/04/07/wayne-state-university-halts-in-person-learning-for-10-days-amid-virus-surge/>.

97. Hadriana Lowenkron & Jonah Charlton, *Penn Law brought 551 students to campus for a hybrid fall semester deemed a ‘success story’*, DAILY PENNSYLVANIAN (Dec. 11, 2020, 12:26 AM), <https://www.thedp.com/article/2020/12/coronavirus-penn-law-hybrid-learning-in-person-classes>.

98. *Id.*

99. *Id.*

100. *Id.*

101. *Yes, You Can Still Get COVID After Being Fully Vaccinated. But What Are the Odds?*, NBC CHI. 5 (Apr. 1, 2021), <http://www.nbcchicago.com/news/local/yes-you-can-still-get-covid-after-being-fully-vaccinated-but-what-are-the-odds/2476593/>.

102. *Id.*

some people still getting infected, especially if they have high risk exposures, like household exposure[.]”¹⁰³

Still, law schools and universities should evaluate prevention strategies as vaccination eligibility opens up for all people over sixteen, and determine whether COVID-19 vaccines should be required to participate in class and campus activities in person. The potential for additional viruses to circulate globally underscores the need for long-term pandemic and emergency planning,¹⁰⁴ and development of a safety culture as a central component of legal education.

IV. COVID-19 SCIENCE: TRANSMISSION, MUTATION, AND LIMITS OF MITIGATION STRATEGIES

A. COVID-19 Contagion Underscores the Risks of In-Person and Hybrid Classes

The COVID-19 virus (SARS-CoV-2) enters the body by “using its spike to latch onto a receptor—called an ACE-2 receptor—inside someone’s airways. ACE-2 receptors are essentially tiny gateways that the virus uses to get into the blood and then multiply rapidly, destroying cells around them in the process and triggering illness.”¹⁰⁵ “If we think of the human body as a house and 2019-nCoV as a robber, then ACE2 would be the doorknob of the house’s door. Once the S-protein [the surface spike on SARS-CoV-2] grabs it, the virus can enter the house.”¹⁰⁶

As of April 11, 2021, more than 136.5 million cases of COVID-19 infection were reported globally since November 2019, and more than

103. *Id.* (also noting how “what we shouldn’t expect are severe infections because we know the vaccines were highly protective against . . . any hospitalizations[.]”).

104. Victoria Y. Fan et al., *Pandemic Risk: How Large Are The Expected Losses?*, 96 BULL. WORLD HEALTH ORG. 129, 129 (2018), <https://www.who.int/bulletin/volumes/96/2/17-199588/en/> (“Few doubt that major epidemics and pandemics will strike again and few would argue that the world is adequately prepared.”).

105. Sam Blanchard, *World’s dominant strain of coronavirus ‘is 10 TIMES more infectious than the one that jumped to humans in China’ because it mutated so its vital spike protein doesn’t snap as often in the body, scientists say*, DAILY MAIL (June 29, 2020), <https://www.msn.com/en-us/health/medical/world-s-dominant-strain-of-coronavirus-is-10-times-more-infectious-than-the-one-that-jumped-to-humans-in-china-because-it-mutated-so-its-vital-spike-protein-doesn-t-snap-as-often-in-the-body-scientists-say/ar-BB167e7l?ocid=spartan-dhp-feeds>.

106. *Researchers at Westlake University Unveiled Structure of the RBD-ACE2-B0ATI Complex*, WESTLAKE U. (Feb. 25, 2020), https://en.westlake.edu.cn/news_events/westlakenews/202002/t20200225_3069.shtml.

2.9 million died from COVID-19 infection.¹⁰⁷ More than 558,843, Americans died from COVID-19 as of April 11, 2021.¹⁰⁸

The New York Times reported 530,000 COVID-19 cases at U.S. universities, and at least one hundred campus-related deaths since the pandemic began through March 2, 2021, with university staff bearing the brunt of the death toll.¹⁰⁹ Underreporting by universities resulted in an undercount of cases, the New York Times reported.¹¹⁰ Infection rates were lower at Historically Black Colleges and Universities where student cooperation rates with COVID-19 protocols were high.¹¹¹

The New York Times examined COVID-19 mortality in college towns and found that since the “end of August, deaths from the coronavirus have doubled in counties with a large college population, compared with a fifty-eight percent increase in the rest of the nation. Few of the victims were college students, but rather older people and others living and working in the community.”¹¹² Consistent with those findings, Lu *et al.* studied thirty colleges that reported more than 100 COVID positive cases during fall 2020, most of which occurred during the first two weeks after fall classes began. Their study found that following campus COVID outbreaks, COVID infections “rapidly spread across the entire county and triggered a peak in new infections in neighboring communities,” and that “neighboring communities were less successful in controlling the spread of the virus,” than were college campuses.¹¹³ The effect of campus infections on the community must

107. *Coronavirus/COVID-19 World Map Data & Stats*, COVID STAT., <https://covidstatistics.org/> (last visited Apr. 11, 2021).

108. *COVID Data Tracker, supra* note 7; *Forecasts of COVID-19 Deaths*, CTNS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/forecasting-us.html> (last updated Mar. 17, 2021); *cf.* Stephen Pate, *Law in a Time of Pandemic: How Texas Courts and Lawyers Responded to the Pandemic of 1918-1920.*, 83 TEX. B.J. 384, 384 (2020); *The Flu Pandemic of 1918*, NAT'L ARCHIVES, <https://www.archives.gov/news/topics/flu-pandemic-1918> (last updated Sept. 30, 2020) (reporting that more than 550,000 people died in the United States from the “Spanish flu”).

109. *Tracking the Coronavirus at U.S. Colleges and Universities*, N.Y. TIMES, <https://www.nytimes.com/interactive/2021/us/college-covid-tracker.html> (last updated Mar. 2, 2021).

110. *Id.*

111. Lauren Aratani, *America's Black colleges take measured approach in bid to weather Covid crisis*, GUARDIAN (Oct 17, 2020, 4:00 PM), <https://www.theguardian.com/world/2020/oct/17/americas-black-colleges-hbcus-covid-crisis>.

112. Danielle Ivory et al., *Young People Have Less Covid-19 Risk, but in College Towns, Deaths Rose Fast*, N.Y. TIMES (Dec. 12, 2020), <https://www.nytimes.com/2020/12/12/us/covid-colleges-nursing-homes.html?auth=login-email&login=email>.

113. Hannah Lu et al., *Are College Campuses Superspreaders? A Data-driven Modeling Study*, COMPUTER METHODS BIOMECHANICS & BIOMEDICAL ENGINEERING, Jan. 13, 2021, at 1, 6, 9, <https://www.tandfonline.com/doi/full/10.1080/10255842.2020.1869221>.

be an ethical and public health priority in educational, public health, and safety decision-making.

Fall semester 2020 started after people under forty-five years old led the surge in diagnosed COVID-19 cases during summer 2020.¹¹⁴ COVID-19 infections rose among people ages eighteen to thirty-four throughout summer 2020, the age cohort of a large portion of American law students, while “adults aged 20-49, and in particular adults aged 35-49” drove the pandemic’s resurgence before and after school reopening in fall and winter 2020-2021.¹¹⁵ Some in this demographic, even those without underlying medical conditions, have become extremely ill or died from COVID-19 complications.¹¹⁶ One study of “excess mortality” among adults aged twenty-five to forty-four years old found an increase of deaths among this age group over levels expected, surmising that COVID-19 fatalities among younger adults may be underreported.¹¹⁷

Bars, parties, and small gatherings created fertile ground for COVID-19 spread. Outbreaks in several states “have been traced to bars that cater to college students.”¹¹⁸ “There are certain counties where a majority of the people who are tested positive in that county are under the age of 30, and this typically results from people going to bars,” Texas Governor George Abbott said.¹¹⁹ Fraternity and sorority parties at UC Berkeley during the 2020 summer session spread COVID-19 on the Berkeley campus.¹²⁰

114. Fraser et al., *supra* note 6.

115. Berkeley Lovelace, Jr., *Fauci warns of ‘more and more’ coronavirus complications in young people*, CNBC (June 23, 2020, 1:38 PM), <https://www.cnbc.com/2020/06/23/fauci-warns-of-more-and-more-coronavirus-complications-in-young-people.html>; Mélodie Monod et al., *Age groups that sustain resurging COVID-19 epidemics in the United States*, SCIENCE, Feb. 2021, at 5, <https://science.sciencemag.org/content/sci/early/2021/02/01/science.abe8372.full.pdf>.

116. Meredith Cohn, *Experts alarmed by coronavirus surge among young adults in Maryland. Some are saying bars should be closed*, BALTIMORE SUN (July 15, 2020), <https://www.baltimoresun.com/coronavirus/bs-hs-young-adults-fueling-covid-rise-20200715-odzy2oin3zbcvh24eglr5yteey-story.html>; Ariana Eunjung Cha, *Healthy people in their 30s and 40s, barely sick with coronavirus, are dying from strokes*, MSN (Apr. 24, 2020), <https://www.msn.com/en-us/health/medical/healthy-people-in-their-30s-and-40s-barely-sick-with-coronavirus-are-dying-from-strokes/ar-BB13bJst>.

117. Jeremy S. Faust et al., Research Letter, *All-Cause Excess Mortality and COVID-19-Related Mortality Among US Adults Aged 25-44 Years, March-July 2020*, 2020 JAMA 785, 785, <https://jamanetwork.com/journals/jama/fullarticle/2774445>.

118. Jordan Rau & Elizabeth Lawrence, *Packed Bars Serve Up New Rounds Of COVID Contagion*, KHN (June 25, 2020), <https://khn.org/news/packed-bars-serve-up-new-rounds-of-covid-contagion/>.

119. *Id.*

120. CBS Los Angeles, *University of California, Berkeley blames spike in coronavirus cases on frat, sorority parties*, CBS NEWS (July 9, 2020, 4:55 AM), <https://www.cbsnews.com/news/coronavirus-university-of-california-berkeley-cases-blamed-on-fraternity-and-sorority-parties/>.

The majority of these new cases stem from a series of recent parties connected to the CalGreek system . . . and led to some secondary spread within households and within other smaller gatherings, . . . Generally, these infections are directly related to social events where students have not followed basic safety measures such as physical distancing, wearing face coverings, limiting event size, and gathering outside.¹²¹

Many young adults did not embrace social distancing guidelines: “less than 30% of people aged 18-24 said they were consistently staying 6 feet away from other people.”¹²² “Young invincibles” who flouted COVID-19 health precautions spread infection, even as many young people fell ill due to the virus.¹²³ At some institutions, many private parties, including student parties on or off-campus, spawned super-spreader events, student suspensions, and a switch to online classes during fall semester 2020.¹²⁴

Parties and gatherings that spread infection were not confined to young adults. In one example, “[a]t least 17 anesthesiologist residents and a fellow at one of the premier university hospital systems in Florida contracted COVID-19” in July 2020 “after attending a private party together.”¹²⁵ The Trump White House held many maskless gatherings in 2020 leading to superspreading events and fueling mask-wearing resistance that in turn promoted infection.¹²⁶

121. *Id.*

122. Mark É Czeisler et al., *Public Attitudes, Behaviors, and Beliefs Related to COVID-19, Stay-at-Home Orders, Nonessential Business Closures, and Public Health Guidance - United States, New York City, and Los Angeles, May 5-12, 2020*, 69 MORBIDITY MORTALITY WEEKLY REP. 751, 755 (2020), <http://dx.doi.org/10.15585/mmwr.mm6924e1>.

123. Rong-Gong Lin II et al., *Young adults who think ‘they are invincible’ increasingly infected by coronavirus, Newsom says*, L.A. TIMES (July 6, 2020, 4:55 PM), <https://www.latimes.com/california/story/2020-07-06/young-adult-who-think-they-are-invincible-hit-hard-by-coronavirus-newsom-says>.

124. See Tommy Beer, *‘Reckless’ And ‘Reprehensible’ Frat Party Linked To Coronavirus Outbreak At UNH: Here Are The Latest College Coronavirus Updates*, FORBES (Sept. 7, 2020, 4:53 PM), <https://www.forbes.com/sites/tommybeer/2020/09/07/reckless-and-reprehensible-frat-party-linked-to-coronavirus-outbreak-at-unh-here-are-the-latest-college-coronavirus-updates>; see also Scott Stump, *Summer parties causing COVID-19 clusters by creating ‘false sense of security’*, TODAY (July 27, 2020, 8:03 AM), <https://www.today.com/health/summer-parties-causing-covid-19-clusters-t187852>.

125. Lauren E. Johnson, *After Private Party, At Least 17 UF Health Anesthesiologist Residents Contract Coronavirus*, WUSF PUB. MEDIA (July 27, 2020, 1:31 PM), <https://wusfnews.wusf.usf.edu/post/after-private-party-least-17-uf-health-anesthesiologist-residents-contract-coronavirus>.

126. See William Cummings, *‘The data speak for themselves’: Dr. Anthony Fauci says White House held a ‘superspreader event’ for coronavirus*, USA TODAY (Oct. 9, 2020, 2:51 PM), <https://www.usatoday.com/story/news/politics/2020/10/09/anthony-fauci-white-house-held-covid-superspreader-event/5940483002/>; see also Bridget Read, *The White House Is Already Throwing Maskless Holiday Parties*, CUT (Dec. 1, 2020), <https://www.thecut.com/2020/12/the-white-house-is-already-throwing-maskless-holiday->

Small, indoor gatherings have also been a major source of COVID infection.¹²⁷ The COVID-19 pandemic transformed social gatherings, a normal feature of extended family, college, law school, community, and professional socialization, into a source of infection and even death. The double peril of COVID-19 and flu season led to higher flu vaccination rates in late 2020 and to lower levels of flu contagion, even as coronavirus cases soared in winter.¹²⁸ In December 2020, COVID-19 became the leading cause of death in the United States.¹²⁹ At the same time, the highly infectious U.K. COVID-19 variant began circulating around the world,¹³⁰ raising infection risks as vaccination commenced at a slow pace in the United States.

B. Viral Mutation Increases Risk of Infection and Viral Recombination

The “Spanish flu” pandemic of 1918-1920, believed to be first identified among World War I soldiers at Camp Funston, Kansas, augurs grim predictions for virus spread.¹³¹ The war effort, decisions to keep businesses and schools open, and limited virus information contributed to the Spanish flu’s death toll.¹³² “Almost 50 million people died

parties.html. Robert Calandra, *Mystery Persists: How Many Infected at Rose Garden Event?*, MED. DAILY (Oct. 12, 2020), <https://www.medicaldaily.com/no-contact-tracing-after-rose-garden-covid-19-superspreader-event-456667> (“We had a super-spreader event in the White House,” said Dr. Anthony Fauci, describing the Sept. 26, 2020 reception at the White House where many people were mask-less, resulting in the COVID-19 infection of at least thirty-four people.)

127. Adjoa Smalls-Mantey, *Where COVID-19 spreads most easily, according to experts*, ABC NEWS (Dec. 24, 2020, 3:08 AM), <https://abcnews.go.com/Health/covid-19-spreads-easily-experts/story?id=74783036> (“In New York, for example, contact tracing has shown that 70% of new cases come from small gatherings and households.”)

128. See generally Berkeley Lovelace Jr. & Kevin Breuninger, *Dr. Anthony Fauci warns US could ‘be in for a bad fall’ if coronavirus treatments don’t work*, CNBC (Apr. 28, 2020, 10:40 AM), <https://www.cnn.com/2020/04/28/fauci-warns-us-could-be-in-for-a-bad-fall-if-coronavirus-treatments-dont-work.html>; see generally Len Strazewski, *What’s ahead on COVID-19? Expert offers forecast for summer, fall*, AMA PUB. HEALTH (Apr. 6, 2020), <https://www.ama-assn.org/delivering-care/public-health/what-s-ahead-covid-19-expert-offers-forecast-summer-fall>; see Robert King, *Flu shot rates increasing this year as experts worry of double whammy with COVID-19 this season*, FIERCE HEALTHCARE (Oct. 19, 2020, 4:30 PM), <https://www.fiercehealthcare.com/payer/flu-shot-rates-increasing-year-as-experts-worry-double-whammy-covid-19-season>.

129. Carolyn Crist, *COVID-19 Ranks as a Leading Cause of Death in U.S.*, WEBMD (Dec. 17, 2020), <https://www.webmd.com/lung/news/20201217/covid-19-ranks-as-a-leading-cause-of-death-in-us>.

130. *SARS-CoV-2 Variant – United Kingdom of Great Britain and Northern Ireland*, WORLD HEALTH ORG. (Dec. 21, 2020), <https://www.who.int/csr/don/21-december-2020-sars-cov2-variant-united-kingdom/en/>.

131. Eric Adler, *A coronavirus lesson? How KC’s response to 1918 flu pandemic caused needless death*, KAN. CITY STAR (Mar. 15, 2020, 9:45 AM), <https://www.kansascity.com/news/business/health-care/article241058181.html>.

132. *Id.*

worldwide [from the Spanish flu] in a world already ravaged and weakened by World War I.”¹³³ “In the United States, an estimated 25 million—some 25% of the population—had the disease; over 550,000 died.”¹³⁴ In the month of October 1918, 195,000 Americans died from the Spanish flu, not counting those abroad.¹³⁵ A virus mutation made the flu more deadly in fall 1918 than the strain appearing earlier that year.¹³⁶ By April 2021, the COVID-19 death toll in the United States exceeded the Spanish flu’s death toll, and continued to rise as more infectious variants of COVID-19 spread.¹³⁷

Viral mutation is a common feature of coronaviruses.¹³⁸ In spring 2020, a genetic mutation in the SARS-CoV-2 virus, called G614, increased viral infectiousness as it spread from China through Europe and the United States.¹³⁹ While the more contagious mutation of the virus circulated in early 2020 in the United States and Europe, President Trump did not share information with the public that COVID was airborne, leaving people vulnerable to infection, particularly if they eschewed mask-wearing or social distancing.¹⁴⁰

133. *The Flu Pandemic of 1918*, *supra* note 108.

134. Stephen Pate, *Law in A Time of Pandemic, How Texas Courts and Lawyers Responded to the Pandemic of 1918-1920*, 83 TEX. B.J. 384 (2020); *The Flu Pandemic of 1918*, *supra* note 108.

135. See Christopher Klein, *Why October 1918 Was America’s Deadliest Month Ever*, HIST. CHANNEL, <https://www.history.com/news/spanish-flu-deaths-october-1918> (last updated May 15, 2020).

136. See Dave Roos, *Why the Second Wave of the 1918 Flu Pandemic Was So Deadly*, HIST. CHANNEL, <https://www.history.com/news/spanish-flu-second-wave-resurgence> (last updated Dec. 22, 2020).

137. Jordan Allen et al., *Coronavirus in the U.S.: Latest Map and Case Count*, N.Y. TIMES, <https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html> (last updated Apr. 15, 2021) (reporting 563,926 deaths in the U.S. due to COVID-19 as of April 15, 2021).

138. Bette Korber et al., *Tracking Changes in SARS-CoV-2 Spike: Evidence that D614G Increases Infectivity of the COVID-19 Virus*, 182 CELL 812, 813 (2020) (“[W]ith extended human-to-human transmission, SARS-CoV-2 could also acquire mutations with fitness advantages and immunological resistance.”); Bilal et al., *supra* note 20, at 727 (“COVID-19 may behave more like SARS-CoV and will continue to adapt to the human hosts.”).

139. See generally Bette Korber et al., *Spike Mutation Pipeline Reveals the Emergence of a More Transmissible Form of SARS-CoV-2*, BIORXIV 1, 12 (May 5, 2020), <https://www.biorxiv.org/content/10.1101/2020.04.29.069054v2.full.pdf> (preprint) (“[V]iruses bearing the mutation Spike D614G are replacing the original Wuhan form of the virus rapidly and repeatedly across the globe.”); see generally Korber et al., *Tracking Changes*, *supra* note 138; *Mutated coronavirus shows significant boost in infectivity*, SCRIPPS RES. (June 12, 2020), <https://www.scripps.edu/news-and-events/press-room/2020/20200612-choe-farzan-coronavirus-spike-mutation.html>; see also Lizhou Zhang et al., *The D614G Mutation in the SARS-Cov-2 Spike Protein Reduces SI Shedding and Increases Infectivity*, BIORXIV 19 (June 12, 2020), <https://www.biorxiv.org/content/10.1101/2020.06.12.148726v1.full.pdf> (preprint).

140. Will Feuer, *Trump says everyone knew the coronavirus was airborne in February: It’s ‘no big thing’*, CNBC (Sept. 10, 2020, 5:43 PM), <https://www.cnbc.com/2020/09/10/trump-says-everyone-knew-the-coronavirus-was->

Several Covid-19 variants of concern “seem to spread more easily and quickly than other variants.”¹⁴¹ In November 2020, the United Kingdom (U.K.) reported finding a new variant of COVID-19, “SARS-CoV-2 VOC 202012/01” or “B.1.1.7.”¹⁴² Researchers from the London School of Hygiene and Tropical Medicine estimate “VOC 202012/01 is 56% more transmissible . . . than preexisting variants of SARS-CoV-2.”¹⁴³ “Educational settings are among the largest institutions linked to SARS-CoV-2 clusters that have remained open during November and December 2020” in the United Kingdom, leading these researchers to conclude that “school or university closures may be required to prevent a large epidemic in these affected regions in early 2021.”¹⁴⁴ They concluded that bringing transmission rates under control is unlikely “unless primary schools, secondary schools, and universities are also closed” and vaccine rollout is greatly accelerated to suppress “the resulting disease burden.”¹⁴⁵

Gathering unvaccinated people from different households may contribute to viral recombination, which “provides an opportunity for the virus to bring together, into a single recombinant virus, multiple mutations that independently confer distinct fitness advantages but that

airborne-in-february-its-no-big-thing.html (citing taped conversations between President Trump and journalist Bob Woodward where President Trump said on February 7, 2020 “China said it was airborne earlier than the statements I made. People knew it was airborne”); cf. Courtney Subramanian et al., *Trump says Coronavirus will be gone by April when the weather gets warmer, doesn’t offer scientific explanation*, USA TODAY (Feb. 10, 2020, 5:58 PM), <https://www.usatoday.com/story/news/politics/elections/2020/02/10/trump-rallies-new-hampshire-eve-democratic-primary/4716223002/> (“The president continued to suggest the Coronavirus outbreak, which has claimed 1,000 lives as of Monday, will be gone by April. He told the crowd that ‘in theory’ once the weather warms up Coronavirus, which he referred to as ‘the virus,’ will ‘miraculously’ go away.”).

141. *COVID-19 is an illness caused by SARS-CoV-2, a respiratory virus that spreads easily from person to person*, AMA, <https://www.ama-assn.org/system/files/2020-12/covid-19-transmission-info-for-patients.pdf> (last updated Dec. 21, 2020); see *How COVID-19 Spreads*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html> (last updated Oct. 28, 2020); *About the Variants of the Virus that Causes COVID-19*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant.html> (last updated Apr. 2, 2020).

142. See Lisa Stiffler, *What you need to know about the newly detected, more contagious COVID-19 variant*, GEEKWIRE (Jan. 5, 2021, 9:57 AM), <https://www.geekwire.com/2021/need-know-newly-detected-contagious-covid-19-variant/>.

143. Nicholas G. Davies et al., *Estimated Transmissibility and Severity of Novel SARS-CoV-2 Variant of Concern 202012/01 in England*, CTR. FOR MATHEMATICAL MODELLING INFECTIOUS DISEASES 2 (Dec. 23, 2020), https://cmmid.github.io/topics/covid19/reports/uk-novel-variant/2020_12_23_Transmissibility_and_severity_of_VOC_202012_01_in_England.pdf (preprint).

144. *Id.* at 13.

145. *Id.* at 2.

were carried separately in the two parental strains.”¹⁴⁶ “Recombination requires simultaneous infection of the same host with different viruses, and the two parental strains have to be distinctive enough to manifest in a detectable way in the recombined sequence.”¹⁴⁷ Viral recombination incubates viral mutations whose consequences are yet unknown.

Santa Clara County, California, where Santa Clara University is located, offers an example of how travel restrictions and lockdowns play a role in reducing virus mutation and spread. The Los Alamos National Laboratory found that the version of COVID-19 first detected in Wuhan, China in late 2019, continued to dominate the local epidemic in Santa Clara County, California through spring 2020.¹⁴⁸ Santa Clara County samples gathered in mid-March through early April—labeled “Stanford”—“have a mixture of both the G614 and D614 forms. These distinct patterns suggest relatively little mixing between the two local epidemics.”¹⁴⁹

Korber *et al.* theorize that Santa Clara County’s March 16, 2020 stay-at-home orders, initiated relatively early in the U.S. pandemic response, may be one reason the more infectious G614 variation was not predominant in that county.¹⁵⁰ Which variant circulates in a region is important because researchers, including Korber *et al.*, found that the “G614 variant is associated with greater infectivity, as well as clinical evidence that it is associated with higher viral loads.”¹⁵¹ In-person or hybrid classes encourage students, faculty, and staff to travel from their communities to a law school that may be in another region, state or country, creating COVID-19 risks.¹⁵² “[T]ravel increases your chance of getting and spreading COVID-19,” CDC advised.¹⁵³ As vaccinations became more widely available, CDC revised its guidance stating that “[f]ully vaccinated people can resume domestic travel and do not need to get tested before or after travel or self-quarantine after travel.”¹⁵⁴

146. Korber *et al.*, *Spike Mutation*, *supra* note 139, at 12. *Cf. When You’ve Been Fully Vaccinated*, CTRS. FOR DISEASE CONTROL & PREVENTION (Apr. 2, 2021), <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated.html> (last updated Apr. 2, 2021).

147. Korber *et al.*, *Spike Mutation*, *supra* note 139, at 8.

148. *See* Korber *et al.*, *Tracking Changes*, *supra* note 138, at 815-17.

149. *Id.* at fig. S4.

150. *Id.*

151. *Id.* at 813.

152. *See Travel During COVID-19*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/travelers/travel-in-the-us.html> (last updated Feb. 16, 2021).

153. *Id.*

154. *Interim Public Health Recommendations for Fully Vaccinated People*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html> (last updated Apr. 2, 2021).

While many remain unvaccinated, drawing students, faculty, and staff from all over the nation and the globe to study and work together in person increases the potential for viral spread that promotes viral recombination, variants, and mutation that may increase community infection risks.

Global spread of the U.K. variant and other more infectious COVID-19 variants require a review of mitigation measures planned for educational settings. CDC confirmed that the U.K. variant was reported in more than forty-five U.S. states or jurisdictions as of March 2, 2021, and also reported cases of infection with South African and Brazilian COVID-19 variants, while a novel COVID-19 strain was identified in Southern California that may have contributed to the viral spike in Los Angeles county in winter 2020-2021.¹⁵⁵ Law Schools and universities planning in-person or hybrid education should reassess whether distance, masking, and shields around class participants or instructors offer sufficient protection against more infectious COVID variants, and whether vaccinations should be required for those participating in person.

C. Loud Talking (Lecture-Level Speaking) as a Virus Spread Mechanism

Loud talking, consistent with lecture-level speaking, may transmit COVID-19.¹⁵⁶ Loud talking may also spread viruses, whether in a classroom, on campus, or in a restaurant. Face masks not designed to trap small particles (in contrast to a properly fitted N-95 mask) may be inadequate to mitigate viral spread in indoor environments such as a classroom. This is particularly so if an infected person carries a more infectious COVID-19 variant.

“[N]ormal speech generates airborne droplets that can remain suspended for tens of minutes or longer and are eminently capable of

155. Brian Price, *Cuomo Confirms 1st Case of New, More Contagious UK Strain of Virus in New York*, NBC NEWS (Jan. 4, 2021), <https://www.nbcnewyork.com/news/coronavirus/cuomo-confirms-case-of-new-more-contagious-u-k-strain-of-virus-in-new-york/2811244/>; *Variant Cases in the US*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant-cases.html> (last updated Mar. 23, 2021); *About the Variants*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant.html> (last updated Feb. 12, 2021); see generally Wenjuan Zhang et al., *Emergence of a novel SARS-CoV-2 strain in Southern California, USA*, MEDRXIV (Jan. 20, 2021), <https://www.medrxiv.org/content/10.1101/2021.01.18.21249786v1.full.pdf> (preprint).

156. See Valentyn Stadnytskyi et al., *The Airborne Lifetime of Small Speech Droplets and their Potential Importance in SARS-CoV-2 Transmission*, 117 PROC. NAT'L ACAD. SCI. U.S. 11875, 11875 (2020), <https://www.pnas.org/content/pnas/117/22/11875.full.pdf>.

transmitting disease in confined spaces.”¹⁵⁷ “The distance over which droplets travel laterally from the speaker’s mouth during their downward trajectory is dominated by the total volume and flow velocity of exhaled air.”¹⁵⁸ Stadnytskyi *et al.* found that the total volume of exhaled air and droplet count “increase with loudness” of the speaker.¹⁵⁹

Dr. Adriaan Bax, co-author of the Stadnytskyi *et al.* study, responded to Professor Catherine Sandoval’s request for clarification about the level of loudness that promotes COVID-19 nuclei transmission. Dr. Bax, from the National Institutes of Health (NIH), responded that a professor’s voice when lecturing, or a student speaking loudly in class in response to the professor’s request to speak up so others can hear, is consistent with the loudness levels their study identified as effective at COVID-19 and other respiratory virus spread.¹⁶⁰ NIH author Bax responded to Professor Sandoval:

The level of “loud speaking” used in our setup is comparable to a lecturing voice, or a professor asking a student to “speak up.” So, louder than a private dinner conversation, more like public lecturing.¹⁶¹

This study is consistent with previous studies that found speaking loudly effectively transmits airborne viruses.¹⁶²

According to a study by Asadi *et al.*, “[t]he particle emission rate [for respiratory pathogens] during speech is linearly correlated with the amplitude (loudness) of vocalization, for four different languages tested.”¹⁶³ “[S]imply talking in a loud voice would increase the rate at which an infected individual releases pathogen-laden particles into the air, which in turn would increase the probability of transmission to susceptible individuals nearby.”¹⁶⁴ “[A]n airborne infectious disease might spread more efficiently in a school cafeteria than a library, or in a

157. *Id.* at 11877; *see also* Hua Qian *et al.*, *Indoor Transmission of SARS-CoV-2*, INDOOR AIR 1, 1 (2020), <https://onlinelibrary.wiley.com/doi/pdf/10.1111/ina.12766> (“[S]haring indoor spaces with one or more infected persons is a major SARS-CoV-2 infection risk.”).

158. Stadnytskyi *et al.*, *supra* note 156, at 11875.

159. *Id.*

160. Email from Adriaan Bax, Ph.D., NIH Distinguished Investigator, Lab. of Chem. Physics, Nat’l Inst. of Diabetes & Digestive & Kidney Diseases, Nat’l Insts. of Health, to Catherine Sandoval, Assoc. Professor, Santa Clara Univ. Sch. of Law (May 17, 2020) (on file with author, Catherine Sandoval).

161. *Id.*

162. *See, e.g.*, Sima Asadi *et al.*, *Aerosol Emission and Superemission During Human Speech Increase With Voice Loudness*, 9 SCI. REPS., Feb. 2019, at 1, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6382806/pdf/41598_2019_Article_38808.pdf (“[R]ate of particle emission during normal human speech is positively correlated with the loudness (amplitude) of vocalization . . .”).

163. *Id.* at 2.

164. *Id.* at 7.

noisy hospital waiting room than a quiet ward.”¹⁶⁵ This study “suggest[s] a new hypothesis: that speech superemitters might contribute to the phenomenon of superspreading, in which a relative few contagious individuals infect a disproportionately large number of secondary cases during infectious disease outbreaks.”¹⁶⁶

Studies on loud talking as a virus transmission method indicate that speech by faculty members and students during in-person classes and meetings creates a high-risk of COVID-19 spread. Talking while wearing a face mask in a volume loud enough for everyone in class to hear may increase the potential for viral transmission during classes. Closed and indoor environments have also been found to promote COVID-19 spread.¹⁶⁷ Classes where people talk for an hour or more increase the risks of COVID-19 transmission and non-N95 masks may be insufficient to reduce transmission, particularly for COVID-19 variants.

D. Virus-Exposure Vectors: Time + Indoor Exposure + Other Factors

The length of viral exposure influences the potential for infection, although there is no established threshold for COVID-19 infection risk.¹⁶⁸ In October 2020, CDC redefined close contact that increases infection risk as spending “a cumulative 15 minutes or more within six feet of someone who was infectious over 24 hours, even if the time isn’t consecutive.”¹⁶⁹

Dr. Erin Bromage examined several COVID-19 transmission events among a choir, at a call center, restaurant, and meatpacking plant.¹⁷⁰ As Dr. Bromage highlights:

[i]n all these cases, people were exposed to the virus in the air for a prolonged period (hours). Even if they were fifty feet away (choir or call center), even a low dose of the virus in the air reaching them,

165. *Id.*

166. *Id.* at 2.

167. Hiroshi Nishiura et al., *Closed Environments Facilitate Secondary Transmission of Coronavirus Disease 2019 (COVID-19)*, MEDRXIV 2 (2020), <https://www.medrxiv.org/content/10.1101/2020.02.28.20029272v2.full.pdf> (preprint) (“The odds that a primary case transmitted COVID-19 in a closed environment was 18.7 times greater compared to an open-air environment . . .”); see generally Qian et al., *supra* note 157.

168. See Erin Bromage, *The Risks - Know Them - Avoid Them*, ERIN BROMAGE PHD DISEASE MUSINGS, <https://www.erinbromage.com/post/the-risks-know-them-avoid-them> (last updated May 20, 2020).

169. Andrew Joseph, *CDC expands definition of ‘close contacts,’ after study suggests Covid-19 can be passed in brief interactions*, STAT (Oct. 21, 2020), <https://www.statnews.com/2020/10/21/cumulative-time-covid-19-spread/>.

170. Bromage, *supra* note 168.

over a sustained period, was enough to cause infection and in some cases, death.¹⁷¹

Indoor spaces appear to be conducive to COVID spread. “Superspreading events” (SSEs) are “a phenomenon where certain individuals disproportionately infect a large number of secondary cases relative to an ‘average’ infectious individual.”¹⁷² Jonathan Kay studied SSEs and reported that with “few exceptions, almost all of the SSEs took place indoors, where people tend to pack closer together in social situations, and where ventilation is poorer.”¹⁷³

The shift of hundreds of law schools and universities to online education in March 2020 as a response to COVID-19 spread may be one reason universities were not superspreader hotbeds in spring 2020.¹⁷⁴ Following the rise in COVID-19 cases in summer 2020,¹⁷⁵ several college campuses convening in-person classes experienced a rise in COVID-19 infections, often associated with social activities and drinking off-campus.

Mitigation measures such as sitting six feet apart for more than fifteen minutes at a time in an indoor space may not be sufficient to deter indoor COVID-19 virus spread. “Social distancing guidelines don’t hold in indoor spaces where you spend a lot of time,” Dr. Bromage concluded.¹⁷⁶ A study of a COVID-19 outbreak in a South Korean office building found that “[d]espite considerable interaction between workers on different floors of building X in the elevators and lobby, spread of COVID-19 was limited almost exclusively to the 11th floor, which indicates that the duration of interaction (or contact) was likely the main facilitator for further spreading of SARS-CoV-2.”¹⁷⁷ Such “[i]ndoor spaces, with limited air exchange or recycled air and lots of people, are concerning from a transmission standpoint. We know that 60 people in

171. *Id.*

172. Max SY Lau et al., *Characterizing Super-Spreading Events and Age-Specific Infectiousness of SARS-CoV-2 Transmission in Georgia, USA*, MEDRXIV 3 (July 14, 2020), <https://www.medrxiv.org/content/10.1101/2020.06.20.20130476v3.full.pdf> (preprint).

173. Jonathan Kay, *COVID-19 Superspreader Events in 28 Countries: Critical Patterns and Lessons*, QUILLETTE (Apr. 23, 2020), <https://quillette.com/2020/04/23/covid-19-superspreader-events-in-28-countries-critical-patterns-and-lessons/>.

174. See, e.g., Karen Sloan, *Here Are the Law Schools Moving Classes Online Amid Coronavirus*, LAW.COM (Mar. 10, 2020, 2:05 PM), <https://www.law.com/2020/03/10/here-are-the-law-schools-moving-classes-online-amid-coronavirus/>.

175. Mark Katkov, *U.S. Sets Daily Record For New Coronavirus Cases*, NPR (June 26, 2020, 3:33 AM), <https://www.npr.org/sections/coronavirus-live-updates/2020/06/26/883799638/u-s-sets-daily-record-for-new-covid-19-cases>.

176. Bromage, *supra* note 168.

177. Shin Young Park et al., *Coronavirus Disease Outbreak in Call Center, South Korea*, 26 EMERGING INFECTIOUS DISEASES 1666, 1669 (2020), <https://wwwnc.cdc.gov/eid/article/26/8/20-1274-f1>.

a volleyball court-sized room (choir) results in massive infections. Same situation with the restaurant and the call center.”¹⁷⁸

The main infection facilitator “wasn’t common touch points, such as doors and elevator buttons, but rather common *airspace*. When people talk—or sneeze or cough—they produce respiratory droplets that can come to rest in other people’s mouths, noses, and lungs,” Derek Thompson observed.¹⁷⁹ Thompson highlights how “[t]alking for hours in close quarters, in an unventilated space, can create an ideal petri dish for COVID-19 transmission.”¹⁸⁰ John Brooks, MD, Chief Medical Officer of CDC’s COVID-19 response, observed that if someone “sneezes in close proximity to you during a brief interaction, ‘[t]hat may last only a few seconds, but that’s a high-risk circumstance.’”¹⁸¹

Sneezes, coughs, or droplets from loud talking, singing, or exhalations may travel much farther than six feet and contain large and small droplets of virus and “gas clouds” capable of transmitting COVID-19. The recommendation for six feet of distance to limit viral transmission traces to studies conducted in 1897 of the distance traveled by pathogens, and imaging studies focusing on large droplets conducted in the 1940s.¹⁸² Contemporary scientific methods confirm that virus droplets can travel much farther, particularly small droplets.

Lydia Bourouiba’s study of droplet exhalation from sneezes and coughs found “[p]eak exhalation speeds can reach up to 33 to 100 feet per second (10-30 m/s), creating a cloud that can span approximately 23 to 27 feet (7-8 m).”¹⁸³ Bourouiba observed “exhalations, sneezes, and coughs not only consist of mucosalivary droplets following short-range semiballistic emission trajectories but, importantly, are primarily made of a multiphase turbulent gas (a puff) cloud that entrains ambient air and traps and carries within it clusters of droplets with a continuum of droplet sizes.”¹⁸⁴ Morawska *et al.* stressed the “significant potential for inhalation exposure to viruses in microscopic respiratory droplets

178. Bromage, *supra* note 168.

179. Derek Thompson, *Social Distancing Is Not Enough*, ATLANTIC (May 22, 2020), <https://www.theatlantic.com/ideas/archive/2020/05/how-will-we-ever-be-safe-inside/611953/>.

180. *Id.*

181. Sarah Crow, *The CDC Just Changed This One Major Coronavirus Guideline*, BESTLIFE (July 27, 2020), <https://bestlifeonline.com/cdc-close-contact-guidelines/>.

182. Nicholas R. Jones et al., *Two Metres or One: What is the Evidence for Physical Distancing in Covid-19?*, BMJ, Aug. 2020, at 1, <https://www.bmj.com/content/370/bmj.m3223>.

183. Lydia Bourouiba, *Turbulent Gas Clouds and Respiratory Pathogen Emissions*, 323 JAMA 1837, 1838 (2020), <https://jamanetwork.com/journals/jama/fullarticle/2763852>.

184. *Id.* at 1837.

(microdroplets) at short to medium distances (up to several meters, or room scale).”¹⁸⁵

A study of virus transmission in a restaurant in Guangzhou, China found that “strong airflow from the air conditioner could have propagated droplets from table C to table A, then to table B, and then back to table C,” infecting diners in the air flow path.¹⁸⁶ Air conditioning, heating, and ventilation may play a role in COVID-19 transmission as these systems affect air circulation, including airborne particles.¹⁸⁷

WHO recognized that “reports related to indoor crowded spaces have suggested the possibility of aerosol transmission, combined with droplet transmission, for example, during choir practice, in restaurants or in fitness classes,” and called for more research on COVID-19 airborne transmission.¹⁸⁸ A commentary by Lidia Morawska and Donald K. Milton, along with 239 scientists, appealed to “the medical community and to the relevant national and international bodies to recognize the potential for airborne spread of COVID-19.”¹⁸⁹ Morawska and Milton emphasized the heightened importance of analyzing airborne transmission of COVID-19 “when countries are re-opening following lockdowns: bringing people back to workplaces and students back to schools, colleges, and universities.”¹⁹⁰ In late October 2020, CDC recognized that COVID-19 may be spread through airborne transmission, “linger in the air for minutes to hours” and “infect people who are further than 6 feet away from the person who is infected or after that person has left the space.”¹⁹¹

Dust and other airborne particles may also transmit viruses by carrying “fomites” across a room.¹⁹² Sima Asadi *et al.* studied

185. Lidia Morawska & Donald K. Milton, *It Is Time to Address Airborne Transmission of Coronavirus Disease 2019 (COVID-19)*, 71 *CLINICAL INFECTIOUS DISEASES* 2311, 2311 (2020), <https://doi.org/10.1093/cid/ciaa939>.

186. Jianyun Lu *et al.*, Research Letter, *COVID-19 Outbreak Associated with Air Conditioning in Restaurant, Guangzhou, China, 2020*, 26 *EMERGING INFECTIOUS DISEASES* 1628, 1629 (2020), <https://dx.doi.org/10.3201/eid2607.200764>.

187. Alvin Powell, *Is air conditioning helping spread COVID in the South?*, *HARV. GAZETTE* (June 29, 2020), <https://news.harvard.edu/gazette/story/2020/06/air-conditioning-may-be-factor-in-covid-19-spread-in-the-south/>.

188. WORLD HEALTH ORG., TRANSMISSION OF SARS-COV-2: IMPLICATIONS FOR INFECTION PREVENTION PRECAUTIONS (2020), <https://www.who.int/publications/i/item/modes-of-transmission-of-virus-causing-covid-19-implications-for-ipc-precaution-recommendations> (scientific brief).

189. Morawska & Milton, *supra* note 185, at 2311.

190. *Id.* at 2312.

191. *How COVID-19 Spreads*, *supra* note 141.

192. See generally Sima Asadi *et al.*, *Influenza A Virus is Transmissible Via Aerosolized Fomites*, 11 *NATURE COMM.* 4062 (2020), <https://www.nature.com/articles/s41467-020-17888-w.pdf>.

transmission of viruses between guinea pigs and found that “dried influenza virus remains viable in the environment, on materials like paper tissues and on the bodies of living animals, long enough to be aerosolized on non-respiratory dust particles that can transmit infection through the air to new mammalian hosts.”¹⁹³ Their experiment helped to explain previous findings of the “highest airborne genome counts of SARS-CoV-2 in [hospital] rooms where health care workers doffed their personal protective equipment (PPE), hinting that virus was possibly being aerosolized from contaminated clothing as it was removed.”¹⁹⁴ This research highlights the potential for non-exhalation virus transmission.

When people share a common airspace for an hour or more in an indoor class and other indoor environments, COVID-19 infection risks rise. Non-medical face masks, even if consistently worn, may be insufficient to contain viral particles contained by sneezes, coughs, or loud talking at lecture level.

E. Mask-Wearing Is Important, But May be Inadequate to Mitigate Virus Spread

Consistent and proper mask wearing may diminish virus spread. Kai *et al.* developed a model that predicts “universal masking at 80% adoption . . . flattens the curve significantly more than maintaining a strict lockdown [whereas] [m]asking at only 50% adoption . . . is not sufficient to prevent continued spread.”¹⁹⁵ That model was not based on the more infectious U.K. or South African COVID-19 variants whose infectiousness levels require reexamination of mitigation steps necessary to reduce the rate of viral transmission. The US Department of Labor (DOL) recommended under the Trump Administration that workplaces take steps to “limit spread of the respiratory secretions of a person who

193. *Id.* at 4-5.

194. *Id.* at 6 (citing Yuan Liu *et al.*, *Aerodynamic Analysis of SARS-Cov-2 in Two Wuhan Hospitals*, 582 NATURE 557 (2020), <https://www.nature.com/articles/s41586-020-2271-3.pdf>).

195. De Kai *et al.*, *Universal Masking is Urgent in the COVID-19 Pandemic: SEIR and Agent Based Models, Empirical Validation, Policy Recommendations*, CORNELL U., Apr. 2020, at 5, <https://arxiv.org/pdf/2004.13553v1.pdf> (e-print) (“[U]niversal masking at 80% adoption . . . flattens the curve significantly more than maintaining a strict lockdown . . . Masking at only 50% adoption . . . is not sufficient to prevent continued spread.”); Richard O. J. H. Stutt, *et al.*, *A Modelling Framework to Assess the Likely Effectiveness of Facemasks in Combination with ‘Lock-Down’ in Managing the COVID-19 Pandemic*, 476 PROC. ROYAL SOC’Y 1, 15 (2020), <https://royalsocietypublishing.org/doi/10.1098/rspa.2020.0376> (“[F]acemask use by the public could significantly reduce the rate of COVID-19 spread, prevent further disease waves and allow less stringent lock-down regimes The effect is greatest when 100% of the public wear facemasks.”).

may have COVID-19. Provide a face mask, if feasible and available, and ask the person to wear it, if tolerated.”¹⁹⁶ The Trump Administration DOL advised making mask wearing optional, subject to individual choice, a position that fueled culture wars about mask wearing and undermined public health.¹⁹⁷

The type of mask worn also influences the extent of virus spread and the amount of protection for the individual wearer: “[h]omemade face masks only offer a small degree of protection, but they may help prevent the transmission of SARS-CoV-2 from asymptomatic people.”¹⁹⁸ A “stitched mask made of quilting cotton was observed to be the most effective, followed by the commercial mask, the folded handkerchief, and, finally, the bandana.”¹⁹⁹ A mask’s “higher thread count by itself is not sufficient to guarantee better stopping capability; the bandana covering, which has the highest thread count among all the cloth masks tested, turned out to be the least effective.”²⁰⁰ As supplements to face masks, face shields may limit COVID-19 transmission through the eyes, a potential virus infection vector.²⁰¹ Dr. Solmaz Nabipour, Clinical Associate Professor of Anesthesiology, and Anesthesiology Medical Director, Stanford Cancer Center South Bay, reports that she and her colleagues “really have to yell when wearing a mask and face shield at work.”²⁰² Dr. Nabipour and her health care colleagues wear N95 masks and personal protective equipment (PPE) appropriate to the health profession, PPE levels not currently recommended for schools and universities. Face shields and non-

196. U.S. DEP’T OF LABOR, OSHA 3990-03 2020, GUIDANCE ON PREPARING WORKPLACES FOR COVID-19, at 10 (2020), https://www.osha.gov/sites/default/files/publications/OSHA3990.pdf?fbclid=IwAR2qTOXnhvrkIPtUXRz039D4IP44j2izQgPuC8ypo4FSL_U4R0jjKPC_hpg.

197. Savannah Smith, *Unmasked: How Trump’s mixed messaging on face-coverings hurt U.S. coronavirus response*, NBC NEWS (Aug. 9, 2020, 7:28 PM), <https://www.nbcnews.com/politics/donald-trump/calendar-confusion-february-august-trump-s-mixed-messages-masks-n1236088>.

198. Jill Seladi-Schulman medically reviewed by Deborah Weatherspoon, *Can Face Masks Protect You from the 2019 Coronavirus? What Types, When and How to Use*, HEALTHLINE (June 2, 2020), <https://www.healthline.com/health/coronavirus-mask>.

199. Siddhartha Verma et al., *Visualizing the Effectiveness of Face Masks in Obstructing Respiratory Jets*, 32 PHYSICS FLUIDS 1, 5 (2020), <https://aip.scitation.org/doi/10.1063/5.0016018>.

200. *Id.*

201. Korin Miller, *Face shields ineffective at blocking aerosols to prevent COVID-19 spread, says study*, MSN (Sept. 23, 2020), <https://www.msn.com/en-us/health/medical/face-shields-ineffective-at-blocking-aerosols-to-prevent-covid-19-spread-says-study/ar-BB19m8xh>.

202. Solmaz Nabipour, Written Comments to Catherine Sandoval on the Text of the Present Article (July 3, 2020) (on file with author, Catherine Sandoval).

medical grade masks could encourage loud talking that promotes virus transmission.

Compliance with mask wearing recommendations and mandates has not been universal. Concern about mask wearing compliance and enforcement motivated approximately twelve percent of the faculty at Pennsylvania State University to sign a petition “demanding the right to bar from their classrooms students who refuse to wear masks, and the autonomy to decide whether to teach in person or online. They have asked the university to outline clear procedures for handling violations of social distancing, mask wearing, and other safety protocols.”²⁰³

“Frontline workers face some of the most serious risks from this mask conflict, as they work directly with the public day in and day out,” a University of Massachusetts, Amherst, Labor Center study reported.²⁰⁴ During the Trump Administration, “although wearing a mask [was] recommended by nearly every public health official, the sometimes violent resistance by the public has led the CDC to actually recommend that workers not try to enforce mask mandates.”²⁰⁵ A popular taco restaurant in Los Angeles, Hugos Tacos, closed two locations after hourly conflicts with some customers who refused to wear masks, threw liquids at workers who asked them to wear masks, and told Latino workers to “go back to where you came from.”²⁰⁶ We would not expect any law student, faculty, or staff member to behave in this fashion or to engage in racist taunts or assaults. Sadly, the conflict about mask wearing is unlikely to be left outside the law school door.

In Georgia, the Governor issued an Executive Order suspending local mask mandates, and after suing the City of Atlanta to enforce that order, dropped the suit and revised the order to allow local mask mandates in counties with high levels of COVID-19 infections.²⁰⁷ State

203. Susan Snyder, *What if students won't wear masks in class? Professors want assurances that universities will enforce a mandate*, PHILA. INQUIRER (June 17, 2020), <https://www.inquirer.com/education/college-classes-fall-semester-face-masks-covid-19-20200617.html>.

204. Clare Hammonds & Jasmine Kerrissey, *At the Frontlines of the Debate on Masks: Worker Experiences Enforcing COVID-19 Safety Protocols* 12 (Nov. 23, 2020) (working paper), <https://www.umass.edu/lrrc/sites/default/files/At%20the%20Frontlines%20of%20the%20Debate%20on%20Masks%20.pdf>.

205. *Id.*

206. Kyung Lah, *Exhausted by conflicts over guests refusing to wear masks, a popular California taco spot temporarily closes*, MERCURY NEWS (June 30, 2020, 5:19 AM), <https://www.mercurynews.com/2020/06/30/exhausted-by-conflicts-over-guests-refusing-to-wear-masks-a-popular-california-taco-spot-temporarily-closes/>.

207. Associated Press, *Georgia governor allows local mask mandates, with limits*, CBS NEWS (Aug. 17, 2020, 7:58 AM), <https://www.cbsnews.com/news/georgia-face-mask-mandate-brian-kemp-allows/>.

preemption of mask mandates poses challenges for public universities whose law school is considered public property. As subdivisions of the state, public universities may be subject to Executive Orders suspending mask requirements on public property.

Even for those willing to wear masks, over the hours of class, transition between classes, meetings, and study, some will likely take off their mask to eat, drink, wipe their nose, cough, or sneeze. In-person classes during the COVID-19 pandemic can transmute common activities such as sneezing, coughing, drinking, eating, or touching your face from the mundane, to a cue that predicts harm and triggers fear.²⁰⁸

During a pandemic, once ordinary behaviors such as drinking a cup of coffee or sneezing can become distractions that limit cognitive abilities and interfere with learning and class participation.²⁰⁹ Danger signals promote fear that interferes with learning.²¹⁰ Some “[r]esponses to danger can include reflexes, such as freezing or fleeing an imminent threat, and active responses, such as learned avoidance responses.”²¹¹

Fear and anxiety may seed chronic stress. Chronic stress contributes to persistent inflammation, a condition that contributes to diabetes and heart disease, which may increase susceptibility to severe

208. Cf. Susan Sangha et al., *Know Safety, No Fear*, 108 NEUROSCIENCE & BIOBEHAVIORAL REVS. 218, 218 (2020), <https://www.sciencedirect.com/science/article/pii/S0149763419300491> (“[T]hreat expectations and the associated behavioral responses must be sensitive to changes in the predictive status of cues. Cues that once predicted harm may no longer do so”); Christian Sundquist, *The Future Of Law Schools: Covid-19, Technology, and Social Justice*, 53 CONN. L. REV. 1, 9 (2020) (preprint) (“[It is] highly questionable whether any school will be able to fully eliminate the health risks of in-person instruction.”).

209. See James M. Lang, *The Distracted Classroom*, CHRON. HIGHER EDUC. (Apr. 14, 2017), <https://community.chronicle.com/news/1767-the-distracted-classroom> (citing ADAM GAZZALEY & LARRY D. ROSEN, *THE DISTRACTED MIND: ANCIENT BRAINS IN A HIGH-TECH WORLD* (2016)) (“We have a restricted ability to distribute, divide, and sustain attention; actively hold detailed information in mind; and concurrently manage or even rapidly switch between competing goals.”).

210. See T. Scott Bledsoe & Janice J. Baskin, *Recognizing Student Fear: The Elephant in the Classroom*, 62 C. TEACHING 32, 39 (2014), <https://eric.ed.gov/?id=EJ1025024> (“[A]ctive learning takes place when students feel safe and supported by instructors and fellow classmates.”); *id.* at 33 (“[F]ear . . . impacts our cognitive processes—how we perceive our environment, how we remember things, whether we can focus and pay attention, how well we plan and then execute that plan, and how well we problem-solve.”).

211. Sangha et al., *supra* note 208, at 218; see, e.g., Rany Abend, et al., *Anticipatory Threat Responding: Associations with Anxiety, Development, and Brain Structure*, 87 BIOLOGICAL PSYCHIATRY 867, 916 (2020), <https://www.sciencedirect.com/journal/biological-psychiatry/vol/87/issue/10>; Adriano Schimmenti et al., *The Four Horsemen of Fear: An Integrated Model of Understanding Fear Experiences During the Covid-19 Pandemic*, 17 CLINICAL NEUROPSYCHIATRY 41, 41 (2020) (describing four interrelated domains of fear during the COVID-19 pandemic: (1) fear of the body/fear for the body, (2) fear of significant others/fear for significant others, (3) fear of not knowing/fear of knowing, and (4) fear of taking action/fear of inaction).

COVID-19 illness and even death.²¹² Chronic stress may inhibit learning by laying down in the brain “scaffolding linked to anxiety, depression, and post-traumatic stress disorder,” inhibiting connections to “the prefrontal cortex, which would improve learning and memory.”²¹³ Chronic stress “can adversely affect brain systems linked to motivation and mental agility,” and disturb sleep.²¹⁴ Depression can impair “cognition in both non-emotional domains, such as planning and problem-solving, and emotional and social areas, such as creating attentional bias to negative information.”²¹⁵

Pandemics cause stress. “Fear and anxiety about a new disease and what could happen can be overwhelming and cause strong emotions in adults and children.”²¹⁶ Teaching adults in person under such conditions may undermine high-quality teaching, learning, professional development, unduly risk health and safety, and compromise equity.

F. Antibodies and Short-term COVID-19 Reinfection Immunity

The field of COVID-19 antibody testing is evolving. CDC warns that antibody tests may lead to false positives (falsely indicating the presence of antibodies).²¹⁷ The extent and duration of antibody protective effects against COVID-19 remains unknown. Long *et al.* concluded that the short duration of the antibodies studied reveals the “risks of using COVID-19 ‘immunity passports’ and support the prolongation of public health interventions, including social distancing,

212. Barbara Jacquelyn Sahakian *et al.*, *How chronic stress changes the brain – and what you can do to reverse the damage*, CONVERSATION (Mar. 11, 2020, 11:13 AM), <https://theconversation.com/how-chronic-stress-changes-the-brain-and-what-you-can-do-to-reverse-the-damage-133194>; Yun-Zi Liu *et al.*, *Inflammation: The Common Pathway of Stress-Related Diseases*, 11 FRONTIERS HUM. NEUROSCIENCE, June 2017, at 2, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5476783/pdf/fnhum-11-00316.pdf> (“[S]tress can activate inflammatory response in brain as well as peripherally.”); Sonja Chiappetta *et al.*, *COVID-19 and the Role of Chronic Inflammation in Patients With Obesity*, 44 INT’L J. OBESITY 1790, 1790 (2020), <https://doi.org/10.1038/s41366-020-0597-4> (“The current pandemic of COVID-19 and the risk of SARS-CoV-2 poses a particular risk to people living with preexisting conditions that impair immune response or amplify pro-inflammatory response.”).

213. Christopher Bergland, *Chronic Stress Can Damage Brain Structure and Connectivity*, PSYCHOL. TODAY (Feb. 12, 2014), <https://www.psychologytoday.com/us/blog/the-athletes-way/201402/chronic-stress-can-damage-brain-structure-and-connectivity>.

214. Sahakian *et al.*, *supra* note 212.

215. *Id.*

216. *Pandemics can be stressful*, INT’L ASS’N SMART LOC. UNION 105, <https://local105.org/2020/06/16/pandemics-can-be-stressful/> (last visited Mar. 9, 2021).

217. *Antibody Testing Interim Guidelines*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/antibody-tests-guidelines.html> (last updated Mar. 17, 2021).

hygiene, isolation of high-risk groups and widespread testing.”²¹⁸ The extent of COVID-19 reinfection is yet unknown. Some cases of patients who tested positive, then negative, then positive again have raised the question about whether COVID-19 reinfected a patient or a continuous infection was present.”²¹⁹ Coronavirus protective immunity is short-lasting,” Edridge *et al.* concluded.²²⁰ COVID-19 antibody immunity length remains unknown in 2021.

V. LIMITS OF COVID TESTING, SCREENING, AND QUARANTINE POLICIES AS STRATEGIES TO MITIGATE CONTAGION

Symptom screening, COVID-19 testing, contact tracing, and quarantine strategies trail COVID-19 infection. Each of these strategies face implementation and effectiveness challenges that may not limit contagion.

Symptom screening prior to building entry or campus registration will not identify asymptomatic or presymptomatic COVID-infected people who, as Moghadas *et al.* found, are “responsible for more than 50% of the overall attack rate in COVID-19 outbreaks.”²²¹ Stanford researchers Alison Callahan *et al.* found that “symptom-based screening may not be an effective strategy to quantify an individual’s likelihood of having COVID-19” considering the “non-specific nature of the symptoms, and the fact that co-infections with other respiratory viruses are common,” limiting “the utility of symptom-based screening strategies to prioritize testing and the use of symptom surveys as a leading indicator of new COVID-19 cases in a region.”²²²

Temperature and symptom screenings may miss people with mild COVID-19 symptoms who have a high viral load capable of infecting others. Kimon Argyropoulos *et al.* found that COVID-19 positive patients in their study who had mild symptoms carried a higher viral load

218. Quan-Xin Long *et al.*, *Clinical and Immunological Assessment of Asymptomatic SARS-CoV-2 Infections*, 26 NATURE MED. 1200, 1204 (2020), <https://doi.org/10.1038/s41591-020-0965-6>.

219. Sehaam Khan & Saurabh Sinha, *COVID-19 Immunity and reinfection: Why it’s still essential to take precautions*, MEDICALXPRESS (Dec. 16, 2020), <https://medicalxpress.com/news/2020-12-covid-immunity-reinfection-essential-precautions.html>.

220. *See generally id*; *see generally* Arthur W.D. Edridge *et al.*, *Coronavirus Protective Immunity is Short-Lasting, Human Coronavirus Reinfection Dynamics: Lessons for SARS-CoV 2*, MEDRXIV (2020), <https://doi.org/10.1101/2020.05.11.20086439> (preprint).

221. Seyed M. Moghadas *et al.*, *The Implications of Silent Transmission for the Control of COVID-19 Outbreaks*, 117 PNAS 17513, 17513 (2020).

222. Alison Callahan *et al.*, *Estimating the Efficacy of Symptom-based Screening for COVID-19*, 95 NPJ DIGITAL MED., July 2020, at 1-2.

than those hospitalized with severe symptoms.²²³ A study by Lael Yonker *et al.* found that of the 192 children evaluated, forty-nine of whom were infected with SARS-CoV-2, the “viral load was highest in children in the first 2 days of symptoms, significantly higher than hospitalized adults with severe disease.”²²⁴

Temperature checks at building entry points have shown limited effectiveness as a COVID-19 screen. A British study of temperature checks at airports found that “46% . . . of infected travellers would not be detected, depending on incubation period, sensitivity of exit and entry screening, and proportion of asymptomatic cases.”²²⁵ COVID-19’s “incubation period (the time from exposure to development of symptoms)” ranges from two to fourteen days.²²⁶ Temperature checks may not identify those who are infected with COVID-19 but are presymptomatic, remain asymptomatic, or who may be ill but do not develop a fever.²²⁷ Temperature checks may yield a “false sense of security” that reduces vigilance once the building’s threshold is crossed, Dr. Nabipour observed.²²⁸

Several universities administered COVID-19 tests to campus community members to support in-person and hybrid classes as well as on-campus housing and study.²²⁹ Even with FDA approval of new tests, testing delays, supply shortages, and laboratory processing bottlenecks challenged many testing strategies. Stanford’s Clinical Virology Laboratory developed a rapid COVID-19 test following the Food and Drug Administration (FDA)’s February 29, 2020 ruling that allowed

223. Kimon V. Argyropoulos *et al.*, *Association of Initial Viral Load in Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Patients with Outcome and Symptoms*, 190 AM. J. PATHOLOGY 1881, 1884 (2020).

224. Lael M. Yonker *et al.*, *Pediatric Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2): Clinical Presentation, Infectivity, and Immune Responses*, 227 J. PEDIATRICS 45, 45 (2020).

225. Billy J. Quilty *et al.*, *Effectiveness of Airport Screening at Detecting Travellers Infected with Novel Coronavirus (2019-nCoV)*, 25 EUROSURVEILLANCE 4, 4 (2020).

226. *Clinical Questions about COVID-19: Questions and Answers: Transmission*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html#Transmission> (last updated Mar. 4, 2021).

227. Claire Gillespie, *Are Coronavirus Temperature Checks Really Effective? Here’s What Experts Say*, HEALTH, <https://www.health.com/condition/infectious-diseases/coronavirus/coronavirus-temperature-checks> (last updated Apr. 30, 2020).

228. Solmaz Nabipour, Written comments on the Text of this Article to Author Catherine Sandoval (July 3, 2020) (on file with author Catherine Sandoval).

229. *See, e.g.*, Doug Most, *BU to Set Up COVID-19 Testing for Students, Faculty, and Staff*, BU TODAY (May 21, 2020), <http://www.bu.edu/articles/2020/covid-19-testing-for-bu-students-faculty-and-staff/>.

laboratories to develop tests and apply for certification.²³⁰ In mid-August 2020, the FDA issued an emergency approval of the saliva-based test developed at Yale’s Department of Public Health, a test the National Basketball Association used during their season’s play in a “bubble.”²³¹ The saliva-based test mitigates supply chain constraints by using sterile tubes without buffers, and ongoing developments in saliva-based tests may improve test accuracy.²³²

Access to testing, testing frequency, test result processing speed, and communication influence the effectiveness of testing, contact tracing, isolation, and quarantine strategies. In summer 2020, people in many states faced testing delays and waited one to two weeks for results.²³³ By November 2020, testing wait times decreased to two days in many places, but shortages of swabs and other supplies persisted.²³⁴

Accurate and speedy testing is a prerequisite to contact tracing.²³⁵ Harvard epidemiologist Michael Mina observed, “if you don’t get results back in a day or so, outbreaks really can’t be stopped without isolating and quarantining all contacts preemptively.”²³⁶ The elongated testing process destabilizes the memory-based foundation for contact tracing.

230. Krista Conger, *Stanford Medicine COVID-19 test now in use*, STAN. MED. (Mar. 5, 2020), <https://med.stanford.edu/news/all-news/2020/03/stanford-medicine-COVID-19-test-now-in-use.html>.

231. Michael Greenwood, *Quick and affordable saliva-based COVID-19 test developed by Yale scientists receives FDA Emergency Use Authorization*, YALENEWS (Aug. 15, 2020), <https://news.yale.edu/2020/08/15/yales-rapid-covid-19-saliva-test-receives-fda-emergency-use-authorization>.

232. See generally Isabel M. Ott et al., *Simply Saliva: Stability of SARS-Cov-2 Detection Negates the Need for Expensive Collection Devices*, MEDRXIV (Aug. 4, 2020), <https://www.medrxiv.org/content/10.1101/2020.08.03.20165233v1.full.pdf> (preprint); Cara Murez, *Saliva Equals Nasal Swab for COVID Test Accuracy*, WEBMD (Dec. 11, 2020), <https://www.webmd.com/lung/news/20201211/saliva-equals-nasal-swab-for-covid-test-accuracy#1>.

233. Genoa Barrow, *Local COVID Testing Sites To Reopen*, SACRAMENTO OBSERVER (July 10, 2020), <https://sacobserver.com/2020/07/local-covid-testing-sites-to-reopen/>; *Americans face COVID-19 test delays as virus surges: “A hot mess”*, CBS NEWS (July 9, 2020, 12:27 PM), <https://www.cbsnews.com/news/coronavirus-testing-delays-results-surge/>.

234. Emma Court, *Testing Bottlenecks Again Grip U.S. With Coronavirus Surge*, MSN (Nov. 17, 2020), <https://www.msn.com/en-us/money/other/testing-bottlenecks-again-gripping-us-with-coronavirus-surgin/ar-BB1b49NO>.

235. Brianna Abbott & Sarah Krouse, *Growing Wait Times for Covid-19 Test Results Hinder Virus Response*, WALL ST. J. (July 16, 2020, 5:30 AM), <https://www.wsj.com/articles/growing-wait-times-for-covid-19-test-results-hinder-virus-response-11594891800>; see *Case Investigation and Contact Tracing: Part of a Multipronged Approach to Fight the COVID-19 Pandemic*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/php/principles-contact-tracing.html> (last updated Dec. 3, 2020).

236. See Morgan McFall-Johnsen, *The US is in the middle of another coronavirus testing crisis—on a far larger scale than before*, BUS. INSIDER (July 10, 2020, 4:26 AM), <https://www.businessinsider.com/another-coronavirus-testing-shortage-has-hit-us-2020-7>.

“With a testing delay of 3 days or longer, even the most efficient strategy cannot reach R_{CTs} [effective reproduction numbers of a contact tracing strategy] values below 1,” where the number of people infected with the disease is no longer continuing to expand.²³⁷ The CDC’s survey of 350 COVID-19 positive adult inpatients and outpatients found “only 46% reported recent contact with a COVID-19 patient.”²³⁸ The close contact “was most commonly a family member (45%, 69 of 153) or a work colleague (34%, 52 of 153).”²³⁹ Testing delays undermine the potential for contact tracing, including notification through mobile application “app” or by phone, to identify those at risk of infection.

Use of cell phone and app tracking to identify where people were before they received a positive COVID-19 diagnosis may not reveal who that person was with at those locations. Some apps depend on people downloading the app or allowing COVID-19 tracking technology.²⁴⁰ That process also presumes access to the type of cell phone that enables tracking. Testing shortages and delays highlight the danger of relying on testing and contact tracing as a cornerstone of in-person or hybrid teaching during this pandemic.

Several Ph.D. students developed a model for fall 2020 in-person classes at Cornell University that envisioned testing every five days, on-campus quarantine of up to 700 in the two weeks after campus move-in, and extensive contact tracing once COVID-19 infection is detected.²⁴¹ As UNC Chapel-Hill found within two weeks of campus move-in, COVID-19 outbreaks on campus may quickly challenge quarantine capacity and assumptions about the safety of in-person classes during a pandemic.²⁴² The swift and significant COVID-19 outbreak at UNC

237. Mirjam E Kretzschmar et al., *Impact of Delays on Effectiveness of Contact Tracing Strategies for COVID-19: A Modelling Study*, 5 LANCET PUB. HEALTH e452, e452 (2020), [https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(20\)30157-2/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30157-2/fulltext).

238. See Mark W. Tenforde et al., *Characteristics of Adult Outpatients and Inpatients with COVID-19—11 Academic Medical Centers, United States, March-May 2020*, 69 MORBIDITY & MORTALITY WKLY. REP. (2020), <https://www.cdc.gov/mmwr/volumes/69/wr/mm6926e3.htm>.

239. *Id.* at 842.

240. See David Nield, *How Covid-19 Contact Tracing Works on Your Phone*, WIRED (June 7, 2020, 7:00 AM), <https://www.wired.com/story/covid-19-contact-tracing-apple-google> (“[Y]our phone will be logging other phones it comes into contact with, assuming both your device and the others are running a Covid-19 tracking app that’s been fully enabled.”).

241. See generally J. Massey Cashore et al., *COVID-19 Mathematical Modeling for Cornell’s Fall Semester* (June 15, 2020) (unpublished manuscript) (on file with the Center for Data Science for Enterprise and Society, Cornell University), https://people.orie.cornell.edu/pfrazier/COVID_19_Modeling_Jun15.pdf.

242. See Guskiewicz & Blouin, *supra* note 89.

Chapel-Hill led that campus to switch to online learning and send most students home in fall 2020.²⁴³

A study by Yale researchers David Paltiel *et al.* recommends testing for COVID infection every other day on college campuses; their model assumed isolation would occur within eight hours of identifying those infected or displaying COVID-19 symptoms.²⁴⁴ The eight-hour isolation time limit may not be long enough to account for off-campus jobs, housing, and activities that may delay effective notice, isolation, and quarantine protocols. Paltiel *et al.* did not examine the “effect of screening on faculty and staff,” although they recognized that “these and other nonstudent members of the college community include a higher proportion of older, more medically vulnerable individuals.”²⁴⁵

The Cornell model assumed that following peak infection rates after move-in, “the greatest sustained source of infection will be interaction with the outside community, the quarantined population is likely to contain a larger fraction of faculty, staff, and students living off campus.”²⁴⁶ The Cornell model did not analyze the consequences of COVID-19 for campus and community members who are particularly vulnerable to the virus.

Models that accept infection and hospitalization rates resulting from bringing more than a thousand people together must analyze the equity issues raised by COVID-19 affliction. The consequence of infection can be severe for some, deadly for others, and long-lasting for many. Perrin *et al.* reported the increasing prevalence of “post-viral syndrome” for those infected by COVID, including “persistent fatigue, diffuse myalgia, depressive symptoms, and non-restorative sleep,” and a host of other symptoms.²⁴⁷

For fall 2021, Cornell shifted from a model that relied primarily on testing to requiring COVID-19 vaccinations for incoming students with exceptions for medical issues and religious beliefs.²⁴⁸ Cornell plans to return to in-person instruction in fall 2021 without routinely scheduled online options and commits to monitor vaccination progress and

243. *Id.*

244. See A. David Paltiel et al., *Assessment of SARS-CoV-2 Screening Strategies to Permit the Safe Reopening of College Campuses in the United States*, 3 JAMA NETWORK OPEN, July 2020, _____ at _____, 1, <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2768923?resultClick=3>.

245. *Id.* at 9.

246. Cashore et al., *supra* note 241 at 2.

247. Ray Perrin et al., *Into the Looking Glass: Post-viral Syndrome Post COVID-19*, 144 MED. HYPOTHESES, Nov. 2020, _____ at _____, 1, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7320866/>.

248. Pollack & Kotlikoff, *supra* note 21.

scientific developments.²⁴⁹ Cornell will require “mandatory high-quality mask wearing, special seating, additional ventilation, surveillance testing, etc.”²⁵⁰ Cornell plans to use “de-densified classrooms, with a mix of instruction modes similar to the current semester,” if less than fifty percent of the student population has been vaccinated by the beginning of the fall 2021 semester.²⁵¹

Campus COVID mitigation and testing regimes must also consider interaction with the communities in which universities are located, and the network with whom the campus community interacts. Yale University requires students to sign a community compact promising to participate in weekly testing and to travel outside of New Haven County only for essential reasons after prior notice to and approval by graduate or undergraduate advisors.²⁵²

This strategy must recognize “there is no ‘Yale-only’ bubble. An outbreak anywhere in the region could place the University at risk, forcing a school shutdown before the virus comes to campus.”²⁵³ Likewise, an outbreak at the university could result in community spread, even with campus testing and quarantine protocols that trail infection.

Like law schools, universities do not operate as islands; they form a hub with spokes that reach into the surrounding community, other states, and nations. Campus outbreaks can infect communities, and community outbreaks can reach campus. “Reopening college campuses imposes risks that extend beyond students to the faculty who teach them, the many university employees (administrative and facilities staff) who come into close daily contact with them, and the countless other members of the surrounding community with whom students come into contact.”²⁵⁴

Viral pandemics highlight the interrelationship between universities, the communities in which they are located, and the localities from which they draw students, faculty, and staff. On August 13, 2020, Stanford University reversed its plans to reopen its campus to undergraduates and graduate students for the 2020-2021 academic year,

249. *Id.*

250. *Id.*

251. *Id.*

252. Univ. Registrar’s Office, *Yale Community Compact*, YALE U., <https://registrar.yale.edu/compact> (last visited Apr. 4, 2021).

253. Rose Horowitz, *School of Public Health study says students may be able to safely return to campus*, YALE DAILY NEWS (Aug. 18, 2020, 7:58 AM), <https://yaledailynews.com/blog/2020/08/18/school-of-public-health-study-says-students-may-be-able-to-safely-return-to-campus/>.

254. Paltiel et al., *supra* note 244, at 9.

and shifted to online education.²⁵⁵ Stanford President Marc Tessier-Lavigne explained the shift to online education due to the state's worsening health status with "nearly 600,000 COVID-19 cases and more than 10,000 deaths in California," in mid-August 2020, leading much of the state, including all of the San Francisco Bay Area counties to be placed on the state's "watch list."²⁵⁶ For fall 2020, California state guidance did not "allow most indoor classes as long as the county in which a college or university is located on the state's watch list," and prohibited "communal dining, most gatherings and social events, the use of indoor common spaces such as lounges, visitors to campus, and other aspects of campus life," factors that contributed to the shift to online education.²⁵⁷ By December 2020, the death toll in California was dramatically higher, as it was in many American communities and regions throughout the globe.²⁵⁸

Even with frequent testing, contact tracing, mask-wearing and social distancing requirements, behavior can quickly thwart in-person teaching plans.²⁵⁹ "All members of the university community must understand the fragility of the situation and the ease with which inattention to behavior may propagate infections and precipitate the need once again to shut down campus," Paltiel *et al* cautioned.²⁶⁰ WHO reports people in the twenties to forties, many of whom do not realize they are infected, drove the COVID-19 pandemic in mid-2020.²⁶¹ Behavior appears to be a major factor in virus propagation.

UNC-Chapel Hill switched from in-person to online education less than two weeks after campus move-in, as the university had "just four

255. Marc Tessier-Lavigne, *President's update on autumn 2020 undergraduate education*, STAN. U. (Aug. 13, 2020), <https://healthalerts.stanford.edu/covid-19/2020/08/13/autumn-update/> [hereinafter Tessier-Lavigne, *Online Update*]; Marc Tessier-Lavigne, *A message from President Marc Tessier-Lavigne and Provost Persis Drell on academic planning for the fall quarter and 2020-21 academic year*, STAN. U. (June 3, 2020), <https://healthalerts.stanford.edu/covid-19/2020/06/03/a-message-from-president-marc-tessier-lavigne-and-provost-persis-drell-on-academic-planning-for-the-fall-quarter-and-2020-21-academic-year/> [hereinafter Tessier-Lavigne, *June Message*].

256. Tessier-Lavigne, *Online Update*, *supra* note 255.

257. *Id.*

258. Sam Levin, *California reaches 25,000 coronavirus deaths during deadliest month yet*, *GUARDIAN* (Dec. 30, 2020, 5:18 PM), <https://www.theguardian.com/world/2020/dec/30/california-coronavirus-record-deaths-los-angeles> (explaining that California saw 5,300 deaths in just December 2020).

259. See Paltiel *et al.*, *supra* note 244, at 1.

260. *Id.* at 8.

261. Reuters, *People in their 20-40s driving COVID-19 pandemic: WHO*, *BUS. TODAY* (Aug. 18, 2020, 12:34 PM), <https://www.businesstoday.in/current/world/people-in-their-20-40s-driving-covid-19-pandemic-who/story/413302.html>.

empty rooms left in quarantine” after COVID-19 outbreaks.²⁶² UNC Provost Bob Blouin reported that “most of the transmissions have been within the social sphere, campus life,” creating accountability challenges for mask-wearing, social distancing, and other policies to limit COVID-19 spread.²⁶³ Student gatherings off-campus without masks or physical distancing spread COVID-19 infection at Notre Dame University, leading 147 people to test COVID-positive after one week of in-person classes.²⁶⁴ Following the campus outbreak, Notre Dame held classes online for two weeks, then resumed in-person instruction, and found through testing that sixteen percent of its undergraduate students tested positive for COVID-19.²⁶⁵

The President of Michigan State University on August 18, 2020 announced a shift to online education instead of the planned in-person and hybrid education for undergraduates.²⁶⁶ Observing “the current status of the virus in our country—particularly what we are seeing at other institutions as they re-populate their campus communities[,]” Michigan State President Samuel L. Stanley, Jr. determined that “despite our best efforts and strong planning, it is unlikely we can prevent widespread transmission of COVID-19 between students if our undergraduates return to campus.”²⁶⁷ Michigan State delayed the start of its spring 2021 semester after COVID cases rose during the holiday period at the end of 2020.²⁶⁸

Cornell and Yale Universities required students to pledge adherence to behavior compacts, including promises to cooperate with frequent testing, wear masks, limit social interactions and abstain from

262. Colleen Flaherty, *Shutdown, Repeat*, INSIDE HIGHER ED (Aug. 18, 2020), <https://insidehighered.com/news/2020/08/18/unc-chapel-hill-sends-students-home-and-turns-remote-instruction>.

263. Will Feuer, *UNC abruptly halts in-person classes after coronavirus outbreak on campus*, CNBC (Aug. 17 2020, 4:21 PM), <https://www.cnn.com/2020/08/17/university-of-north-carolina-shifts-in-person-classes-to-remote-learning-after-coronavirus-outbreak-on-campus.html>.

264. *Notre Dame enacts two weeks of remote instruction*, NOTRE DAME NEWS (Aug. 18, 2020), <https://news.nd.edu/news/notre-dame-enacts-two-weeks-of-remote-instruction/>.

265. *Id.*; Marek Mazurek, *At Notre Dame, 16% of undergraduate students tested positive for COVID*, SOUTH BEND TRIB. (Dec. 24, 2020), https://www.southbendtribune.com/news/local/at-notre-dame-16-of-undergraduate-students-tested-positive-for-covid/article_000d9364-4497-11eb-8d65-873dc75a6858.html.

266. Samuel L. Stanley, Jr., *Aug. 18: Fall Semester Plans Change*, MICH. ST. U. (Aug. 18, 2020), https://president.msu.edu/communications/messages-statements/2020_community_letters/2020-08-18-plans-change.html.

267. *Id.*

268. Samuel L. Stanley, Jr., *Michigan colleges and university classes delayed for spring 2021 semester*, MSU President says, WLNS.COM (Dec. 21, 2020, 5:10 PM), <https://www.wlns.com/news/michigan/michigan-colleges-and-university-classes-delayed-for-spring-2021-semester-msu-president-says/>.

travel outside of the area where the university is located.²⁶⁹ Yet, more than one hundred fifty Yale students were brought before COVID disciplinary boards in 2020, and some students were asked to leave campus due to compact violations.²⁷⁰

Head of Silliman College at Yale and psychology professor Dr. Laurie Santos advised students that Yale's community compact was not to be taken lightly, and emphasized that their behavior could have "life-or-death consequences."²⁷¹ "[S]ome staff members are from sectors of society that are particularly vulnerable to COVID-19," and "they do not have the choice of whether to come to campus," Santos emphasized.²⁷² "We all should be emotionally prepared for widespread infections—and possibly deaths—in our community," Dr. Santos warned.²⁷³

The serious consequences of COVID-19 infection including virus spread, sickness, lingering symptoms, and deaths, on and off campus, raise questions about the safety of plans to hold classes in person or through a hybrid method while COVID-19 variants circulate, and gaps remain in vaccination and Covid's burdens. Behavior that drives infection spread, physical factors such as insufficient ventilation for indoor spaces, airborne transmission of COVID-19, and the proliferation of more infectious COVID variants call into question the prudence of in-person law school and higher education classes, campus activities, and socialization during this viral pandemic.

VI. PHYSICAL FACTORS AT UNIVERSITIES MAY CONTRIBUTE TO VIRUS SPREAD

A. Toilet Plumes, Ventilation, and the Physics of Fluids

Virus exposure risks may be compounded by other factors such as the indoor environment's physical features. Do the windows open? Does the building's ventilation system displace room air at the rate

269. *COVID-19 and Reactivation Planning: Travel*, CORNELL U., <https://covid.cornell.edu/travel/> (last visited Mar. 20, 2021); see CORNELL UNIV., CORNELL STUDENT BEHAVIORAL COMPACT (2020), https://covid.cornell.edu/_assets/files/behavioral-compact.pdf; see also *Yale Community Compact, Spring 2021*, YALE U., <https://registrar.yale.edu/compact> (last visited Aug. 19, 2020).

270. Julia Bialek & Emily Tian, *More than 150 students, majority first years, went before COVID disciplinary committee*, YALE DAILY NEWS (Dec. 3, 2020, 1:39 AM), <https://yaledailynews.com/blog/2020/12/03/more-than-150-students-majority-first-years-went-before-covid-disciplinary-committee/>.

271. Paulina Firozi, *A Yale professor's stark warning to returning students: Be prepared for deaths*, WASH. POST (Aug. 20, 2020, 4:00 AM), <https://www.washingtonpost.com/education/2020/08/20/yale-coronavirus-warning/>.

272. Horowitz, *supra* note 253.

273. *Id.*

required by the public health department? CDC recommended a range of steps to improve indoor ventilation to increase airflow in occupied space.²⁷⁴ Ventilation improvements can “reduce the concentration of viral particles in the indoor air.”²⁷⁵ “The lower the concentration, the less likely some of those viral particles can be inhaled into your lungs; contact your eyes, nose, and mouth; or fall out of the air to accumulate on surfaces,” CDC advises.²⁷⁶ Ventilation improvements can be challenging and more costly where building design does not allow windows to open, in older buildings, and where weather, pollen, or asthma triggers limit options to open windows to promote air flow. It should be emphasized that as of February 2021, no safe level of COVID-19 exposure has been established.

Other physical factors affect the potential for indoor transmission. Are there separate stairways for going in different directions (up vs. down)? Do restrooms have lids that close to reduce “toilet plumes” that may spread COVID-19? Are there sufficient facilities to support hand washing? Risk factors need to be layered to analyze workplace and study safety.

Many local health rules require handwashing stations or hand sanitizer availability to mitigate COVID-19 spread.²⁷⁷ In many universities, handwashing stations are typically only available in restrooms. Many campus buildings do not have restrooms on every floor or “don’t have women’s bathrooms on every floor, so the idea that everyone could just wash their hands between classes seems implausible.”²⁷⁸ CDC recommended that hand washing is more effective than hand sanitizers, although hand sanitizer may be a useful backup.²⁷⁹

Several studies indicate that toilets flushed without a lid, or with the lid up, spray a “toilet plume” into the air capable of transmitting viruses such as COVID-19.²⁸⁰ Li *et al.* reported that toilet flushing is “capable

274. *Ventilation in Buildings*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/community/ventilation.html> (last updated Feb. 9, 2021).

275. *Id.*

276. *Id.*

277. U.S. DEP’T OF LABOR, *supra* note 196, at 8.

278. Huang & Austin, *supra* note 48, at 42.

279. *Show Me the Science – When & How to Use Hand Sanitizer in Community Settings*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/handwashing/show-me-the-science-hand-sanitizer.html> (last visited Mar. 17, 2021).

280. Joshua Bote, *Can a toilet flush spread coronavirus? Here’s why you might want to put the lid down*, USA TODAY (May 15, 2020, 11:53 AM), <https://www.usatoday.com/story/news/health/2020/05/15/coronavirus-transmission-flush-lid-down-prevent-toilet-plumes/5198015002> (reporting that a “toilet plume” can blast “fecal matter, along with various pathogens and water particles,” “through the air and on surfaces after flushing the toilet without the lid on”); Brian Wong, *Coronavirus: pathogens linger in*

of expelling aerosol particles out of the toilet bowl,” and found that “40%–60% of the total number of particles can rise above the toilet seat to cause large-area spread, with the height of these particles reaching 106.5 cm [3.4 feet] from the ground.”²⁸¹ “Even in the post-flushing period (35 s–70 s after the last flushing), the upward velocity of the diffused particles can reach 0.27 cm/s–0.37 cm/s, and they continue to climb.”²⁸² Li *et al.* recommend putting the toilet lid down before flushing.²⁸³ Toilets do not have lids in many university buildings, making the lid closing method unavailable to reduce toilet plume spread. Wearing a mask while visiting a public or university restroom should be encouraged, particularly in restrooms lacking toilet lids. The potential for COVID transmission through the eyes,²⁸⁴ indicates that wearing a mask that covers the nose and mouth is insufficient to avoid a toilet plume after a recent flush.

Dean Erwin Chemerinsky’s memo about UC Berkeley Law School’s decision to hold all classes online in fall 2020 cited the UC Berkeley campus restrictions that limit restroom occupancy to “only one person in a restroom at a time, no matter how large the restroom” as a factor that restricted the classes the university could simultaneously convene.²⁸⁵ Neither the memo nor any publicly available documents explain the basis for UC Berkeley’s restroom occupancy restriction policy. The one person at a time limitation no matter the size of the restroom suggests this restriction is not driven by social distancing protocols. The University of Denver’s reopening protocol requires only one person at a time in the restroom if distancing of a “6-foot separation cannot be maintained.”²⁸⁶ Restroom occupancy restrictions make it difficult to schedule one class, let alone several.

toilet for hours if you flush without closing lid – and some may still sneak through even if it is down. Hong Kong study finds, SOUTH CHINA MORNING POST (Feb. 13, 2020, 5:52 PM), <https://www.scmp.com/news/hong-kong/health-environment/article/3050502/coronavirus-hong-kong-study-shows-pathogens-can> (“[A] toilet flush can release up to 80,000 polluted droplets and leave them suspended a metre in the air for hours if the lid is left up.”).

281. Yun-yun Li *et al.*, *Can a Toilet Promote Virus Transmission? From a Fluid Dynamics Perspective*, 32 PHYSICS FLUIDS 065107, 065107-12-13, (2020), <https://aip.scitation.org/doi/10.1063/5.0013318>.

282. *Id.* at 065107-13.

283. *Id.*

284. See generally Ping Wu *et al.*, *Characteristics of Ocular Findings of Patients With Coronavirus Disease 2019 (COVID-19) in Hubei Province, China*, 138 JAMA OPHTHALMOLOGY 575 (2020), <https://jamanetwork.com/journals/jamaophthalmology/fullarticle/2764083>.

285. Chemerinsky, *supra* note 84.

286. UNIV. OF DENVER, REOPENING PROTOCOL FOR SOCIAL DISTANCING & PPE ISSUED (2020), https://www.du.edu/sites/default/files/2020-05/DU%20COVID%20Protocol%20Social%20Distancing%20PPE_5.11.2020%20Final_0.pdf.

CDC recommended IHE add “physical barriers, such as plastic flexible screens, between bathroom sinks . . . especially when they cannot be at least 6 feet apart.”²⁸⁷ CDC recommended disinfection between uses for sink faucets that need to be touched.²⁸⁸ The imperative of handwashing, particularly after using the bathroom, indicates that people will remain in the restroom while the toilet plume lingers in the air. For campuses that provide housing, CDC advised placing plastic barriers between beds that are not at least six feet apart.²⁸⁹ Such barriers and shared bathrooms may be insufficient to prevent virus spread in dorms and other shared spaces.

B. Reducing Shared Use of Objects to Diminish Transmission

CDC recommended reducing shared item use.²⁹⁰ While COVID is primarily spread from person to person, it “may be possible that a person can get COVID-19 by touching a surface or object that has SARS-CoV-2 on it and then touching their own mouth, nose, or possibly their eyes.”²⁹¹ “Avoid sharing electronic devices, books, pens, and other learning aids,” CDC advises.²⁹²

This advice challenges the design of classrooms that feature an installed computer, keyboard, and mouse shared by each faculty member and lecturer who uses the room to deliver classes and display material from the computer including connections necessary for hybrid classes. In modern classrooms, students share plugs to charge computers and electronic equipment. Information Technology departments should be consulted about the appropriate types of cleaning supplies and disinfecting wipes for use on keyboards, control panels, computer display screens, plugs, and lighting controls.

In law school classrooms, chairs, desks, tables, markers, erasers, keyboards, and physical materials are often shared. “Use of shared objects (e.g., lab equipment, computer equipment, desks) should be limited when possible, or cleaned between use,” CDC advised.²⁹³ CDC suggested encouraging “students, faculty, and staff to use disinfectant wipes to wipe down shared desks, lab equipment, and other shared

287. *Considerations for Institutions of Higher Education*, *supra* note 63.

288. *Id.*

289. *Id.*

290. *Id.*; U.S. DEP’T OF LABOR, *supra* note 196, at 9 (“Discourage workers from using other workers’ phones, desks, offices, or other work tools and equipment, when possible.”).

291. U.S. DEP’T OF LABOR, *supra* note 196, at 5.

292. *Considerations for Institutions of Higher Education*, *supra* note 63.

293. *Id.*

objects and surfaces before use.”²⁹⁴ Faculty members would face challenges monitoring proper cleaning and disinfection while setting up for their lecture and focusing on educational content and delivery.

Shared spaces include library areas where students may study between in-person classes or appointments. Students will use tables, desks, chairs, computer plugs, and other equipment that will need cleaning and disinfecting between uses by different people. Law schools that encourage students to “leave the building asap after class—no socializing in the hallways or other public spaces,”²⁹⁵ may find students scheduled for multiple in-person classes on a particular day studying outside, on benches, or in their car if they have one, and do not have a campus dorm or nearby room. Campus benches and shady spots may attract gatherings that undermine social distancing directives.

CDC recommended closing “shared spaces such as dining halls, game rooms, exercise rooms, and lounges if possible; otherwise, stagger use and restrict the number of people allowed in at one time to ensure everyone can stay at least 6 feet apart, and clean and disinfect between use.”²⁹⁶ CDC advised closing student and faculty lounges with shared microwaves and coffee stations.²⁹⁷ Eliminating microwaves may increase food costs and limit options for some who rely on reheating food brought from home. Ensuring sufficient “grab-and-go options” for meals or individually plated meals may also increase food and staff costs.

Derek Thompson offered a helpful mnemonic phrase, SAFE, to encapsulate the lessons of the science relevant to COVID-19 mitigation: social distancing, airflow awareness, face masks, [and] expectionation.²⁹⁸ The physical features in many university buildings, potential for virus spread across the room through sneezing, coughing, or talking loudly, varying effectiveness of masks (even if worn consistently), and consequences of COVID-19 infection raise concerns about the safety of bringing faculty, staff, and students to campus to meet in person during this pandemic.

294. *Id.*; see CTRS. FOR DISEASE CONTROL & PREVENTION, GUIDANCE FOR CLEANING AND DISINFECTING: PUBLIC SPACES, WORKPLACES, BUSINESSES, SCHOOLS, AND HOMES (2020), https://www.cdc.gov/coronavirus/2019-ncov/community/pdf/reopening_america_guidance.pdf.

295. Dan Rodriguez, *Nonsense and sensibility: hybrid is not the answer*, PRAWFSBLAWG (June 30, 2020, 12:34 PM), <https://prawfsblawg.blogs.com/prawfsblawg/2020/06/nonsense-and-sensibility-hybrid-is-not-the-answer.html#comments> (citing Professor Merritt’s Facebook post).

296. *Considerations for Institutions of Higher Education*, *supra* note 63.

297. *Id.*

298. Thompson, *supra* note 179.

VII. INCREASED RISKS OF POOR COVID-19 OUTCOMES

A. Community Members at High Risk of COVID-19 Infection, Illness, Hospitalization, and Death

Law schools must recognize that the demographics, age, and health status of students, faculty, and staff may increase their risks following COVID-19 infection. Law schools must align their pedagogical policies with commitments to diversity and inclusion to promote safety and effective education.

African-Americans, Native Americans, and Latinx Americans experienced higher COVID-19 hospitalization rates.²⁹⁹ As of March 12, 2021, age-adjusted hospitalization rates were three point seven times higher for American Indians or Alaska Natives, two point nine times higher for Black or African Americans, and three point one times higher for Hispanic or Latino persons than the age-adjusted standardized U.S. rates.³⁰⁰ Infection rates were higher for people of color than for whites with the exception of Asian-Americans, and death rates were higher for Native Americans, African-Americans, and Latinx Americans than for Whites or Asian-Americans.³⁰¹

COVID-19 risks increase for people who: have one or more underlying health conditions, share a household with other highly vulnerable people; lack access to health care, or; whose immigration or other status increases concern about seeking health or government assistance.³⁰² CDC's survey of 350 COVID-19 inpatients and outpatients found that "inpatients were older (median age = 54 versus 42 years . . .) and differed by race/ethnicity . . . and annual household income . . . Inpatients were less likely to be white (19% versus 37%) and more likely to have annual household income <\$25,000 (28% versus

299. AAFA Community Services, *Coronavirus (COVID-19): What People With Asthma Need to Know*, ASTHMA & ALLERGY FOUND. AM. (Jan. 27, 2021, 11:15 AM), <https://community.aafa.org/blog/coronavirus-2019-ncov-flu-what-people-with-asthma-need-to-know>; CDC, *COVID-19 & Minority Groups*, *supra* note 40; James C. Ramos, *For California Native Americans, COVID-19 is yet another existential threat to survive*, SACRAMENTO BEE (May 7, 2020, 6:00 AM), <https://www.sacbee.com/opinion/article242555401.html>.

300. *Risk for COVID-19 Infection, Hospitalization and Death by Race/Ethnicity*, *supra* note 41.

301. *Id.*

302. *People with Certain Medical Conditions*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html> (last updated Mar. 15, 2021); *Mapping Immigrants At-Risk for COVID-19 and Access to Healthcare*, BIM I, <https://bimi.berkeley.edu/mapping-immigrants-risk-covid-19-and-access-healthcare> (last visited Mar. 21, 2020); David Blumenthal et al., *Covid-19 – Implications for the Health Care System*, NEW ENG. J. OF MED. (2020), <https://www.nejm.org/doi/full/10.1056/nejmsb2021088>.

13%).”³⁰³ Inpatients also had “more underlying chronic conditions (median = two) than did outpatients (median = one) . . . , including cardiovascular conditions, chronic respiratory disease, and diabetes.”³⁰⁴

Several communities of color are “at higher risk for exposure to the virus because many cannot work from home, cannot afford not to work, and often have jobs that require interacting with large numbers of other people.”³⁰⁵ Elise Gould and Heidi Shierholz reported that in March 2020, only “16.2% of Hispanic workers and 19.7% of black workers can telework” compared to twenty-nine point nine percent of White workers and thirty-seven percent of Asian workers.³⁰⁶ Dr. Mary Bassett, Director of the FXB Center for Health and Human Rights at Harvard University, “said a big determinant of who dies is who gets sick in the first place, and that infections have been far more prevalent among people who can’t work from home . . . Many of us also have problems with obesity and diabetes, but we’re not getting exposed, so we’re not getting sick.”³⁰⁷

Immigrant communities, particularly those who are undocumented or are in the naturalization process, face additional vulnerabilities during the pandemic. Several law schools have students or graduates who have Deferred Action for Childhood Arrivals (DACA) status, “which allows certain unauthorized aliens who arrived in the United States as children to apply for a two-year forbearance of removal.”³⁰⁸ The Supreme Court in June 2020 remanded the Department of Homeland Security (DHS) rescission of the DACA program on Administrative Procedure Act (APA) grounds, faulting DHS for failing to consider “hardship to DACA recipients.”³⁰⁹ In November 2020, the Eastern District of New York ordered DHS to “fully reinstate the DACA program” after it determined that Chad Wolf was not lawfully serving as Acting Secretary of Homeland Security when he issued the memorandum rescinding DACA.³¹⁰ President-elect Joseph R. Biden, noted his support for

303. Tenforde et al., *supra* note 238, at 842.

304. *Id.* (probability levels excluded from text are available in the article cited).

305. Usha Lee McFarling, *Fearing deportation, many immigrants at higher risk of Covid-19 are afraid to seek testing or care*, STAT (Apr. 15, 2020), <https://www.statnews.com/2020/04/15/fearing-deportation-many-immigrants-at-higher-risk-of-covid-19-are-afraid-to-see-testing-or-care/>.

306. Elise Gould & Heidi Shierholz, *Not everybody can work from home*, ECON. POL’Y INST. (Mar. 19, 2020, 1:15 PM), <https://www.epi.org/blog/black-and-hispanic-workers-are-much-less-likely-to-be-able-to-work-from-home/>.

307. Oppel et al., *supra* note 42.

308. *Dept. of Homeland Sec. v. Regents of the Univ. of Ca.*, 140 S. Ct. 1891, 1896 (2020).

309. *Id.* at 1916.

310. *Batalla Vidal v. Wolf*, No. 16-CV-4756 (NGG) (VMS), 2020 WL 6695076, at *4 (E.D.N.Y. Dec. 4, 2020).

reinstating DACA in a tweet: “Dreamers are Americans—and it’s time we make it official.”³¹¹

Uncertainties about DACA’s future and immigration policy add to the stress of the COVID-19 pandemic. “[C]oncerns about finances, COVID-19 infection, immigration, and unemployment (among other factors) were associated with greater anxiety, stress, and depression among the dreamers” with DACA status in a study of undocumented University of Delaware college students.³¹²

The Trump Administration’s more restrictive interpretation of the “public charge” rule led to fear that using public health and other government services “could lead to deportation” or prevent immigrants “from receiving permanent residency in the future.”³¹³ Under the public charge rule, the Trump Administration allowed consideration of an applicant’s use of government services including cash, health care or housing for more than twelve months over a three-year period, when deciding asylum cases, applications for residency or citizenship.³¹⁴

The Trump Administration’s public charge rule was the subject of a series of legal cases in 2020 heard by the U.S. Supreme Court and in two different circuits, resulting in an APA challenge to the rule and uncertainty over its application. On January 27, 2020, the Supreme Court in *Department of Homeland Security (DHS) v. New York* granted DHS a stay of a preliminary injunction issued by a district court pending resolution in the Second Circuit Court of Appeals; allowing the Trump Administration to enforce its interpretation of the public charge rule while litigation proceeded.³¹⁵ In September 2020, the Second Circuit granted DHS a stay of the preliminary injunction on the grounds that the district court likely exceeded its jurisdiction in granting the injunction.³¹⁶

311. Elizabeth Redden, *They Are Americans Now*, INSIDE HIGHER ED (Nov. 10, 2020), <https://www.insidehighered.com/news/2020/11/10/president-elect-biden-has-pledged-reinstate-daca>; see also Joe Biden (@JoeBiden), TWITTER (Nov. 2, 2020, 9:28 PM), <https://twitter.com/JoeBiden/status/1323497131517378560?s=20>.

312. Jarid Goodman et al., *Mental Health of Undocumented College Students During the COVID-19 Pandemic 2* (Sept. 30, 2020) (working paper), <https://doi.org/10.1101/2020.09.28.20203489>.

313. McFarling, *supra* note 305.

314. *Public Charge Fact Sheet*, U.S. CITIZENSHIP & IMMIGR. SERVS., <https://www.uscis.gov/news/public-charge-fact-sheet> (last updated Mar. 10, 2021).

315. *Dep’t of Homeland Sec. v. New York*, 140 S. Ct. 599 (2020) (granting stay of preliminary injunction pending disposition of the Government’s appeal in the United States Court of Appeals for the Second Circuit and disposition of the Government’s petition for a writ of certiorari).

316. *New York v. Dep’t of Homeland Sec.*, 974 F.3d 210 (2d Cir. 2020) (staying preliminary injunction based on DHS showing a likelihood of success on the merits based on district court’s lack of jurisdiction to issue the preliminary injunction, and a DHS showing of irreparable harm by inability to enforce the new rule).

The Ninth Circuit in *City & County of San Francisco v. USCIS*, vacated the nationwide injunction against the public charge rule, but largely affirmed the district court's ruling that found DHS engaged in arbitrary and capricious decision-making by failing to consider the rule's effect on immigrant and public health.³¹⁷

As the COVID-19 pandemic spread following the Supreme Court's stay of the injunction allowing DHS to enforce the stricter public charge rule, the U.S. Citizenship and Immigration Service (USCIS) announced that it would not consider COVID-19 "testing, treatment, nor preventative care (including vaccines, if a vaccine becomes available) related to COVID-19 as part of a public charge inadmissibility determination, nor as related to the public benefit condition applicable to certain nonimmigrants seeking an extension of stay or change of status."³¹⁸ The USCIS stated it would not apply the public charge rule to COVID-19 treatment even if it were paid for by one or more public benefits, such as federally funded Medicaid.³¹⁹ Still, fear of the public charge rule and exposure to deportation proceedings led many to disenroll from public programs, including health and nutrition services.³²⁰

President Biden reversed the Trump Administration's interpretation of the public charge rule and returned to the 1999 rule that required applicants for U.S. immigration to "show they weren't getting cash assistance from the federal government and weren't institutionalized and being financially maintained by the government."³²¹ Uncertainty about immigration policy has increased

317. *City & Cty. of S.F. v. USCIS*, 981 F.3d 742 (9th Cir. 2020) (affirming and vacating in part two district court injunctions based on plaintiffs demonstrating a high likelihood of success in showing government's new public charge rule interpretation as inconsistent with any reasonable interpretation of the statutory public charge bar, a violation of the APA, and contrary to law).

318. *Public Charge*, U.S. CITIZENSHIP & IMMIGR. SERVS., <https://www.uscis.gov/green-card/green-card-processes-and-procedures/public-charge> (last updated Mar. 19, 2021).

319. *Id.*

320. See McFarling, *supra* note 305 (reporting that Congresswoman Norma Torres who represents a district in California's Inland Empire that is seventy percent Latinx is increasingly seeing "constituents unenroll from public services like school lunch programs and Medicaid," and expressing concern that "the public charge rule could spark a health crisis"); Jeremy Raff, *How Fear Spreads the Coronavirus*, ATLANTIC (May 29, 2020), <https://www.theatlantic.com/politics/archive/2020/05/immigrants-sick-covid-19-are-scared-see-help/612142/>; Amy Howe, *Government gets green light to implement "public charge" rule pending appeals*, SCOTUS BLOG (Jan. 27, 2020, 2:59 PM), <https://www.scotusblog.com/2020/01/government-gets-green-light-to-implement-public-charge-rule-pending-appeals/>.

321. Jessica Perez, *President Biden withdraws litigation on Public Charge Rule*, NBC RIGHT NOW (Mar. 11, 2021), https://www.nbcrightnow.com/live/president-biden-withdraws-litigation-on-public-charge-rule/article_1f56f400-8208-11eb-8d25-d3e5f4d04c86.html.

fear among many immigrants about seeking government services including health services. Immigration policies must consider their public health implications.

Differing state and local requirements to present a form of identification to receive COVID-19 vaccination have created confusion and stress for many immigrants who may not have a state identification such as a driver's license.³²² More clarity about the vaccination process and outreach to immigrant communities is important to expand COVID-19 services and protect public health. Lack of health care and fear of going to the doctor increase susceptibility to poor COVID-19 outcomes and may increase community infection spread.

Concomitant with the heavy burden of poor COVID-19 health outcomes on communities of color, as of March 2021 more than three thousand hate incidents against Asian-Americans have been reported during the coronavirus pandemic.³²³ Hate instances included "reports of harassment, shunning, slur, and physical violence."³²⁴ The Asian American Bar Association of New York reported that from "January 1 to November 1, 2020, the New York Police Department saw an eight-fold increase in reported anti-Asian hate crimes compared to the same period in 2019."³²⁵

The COVID-19 pandemic has resulted in a higher health and morality toll for many communities of color, hate crimes, and vulnerability for immigrant families. As law schools plan for the fall 2021 semester and beyond, promoting respect, diversity, and inclusion is critical. Commitment to diversity and inclusion by law schools must include standing against hate and violence.

B. COVID-19, Age, Gender, and Health Status Issues

Law schools host a diverse student body with a broad age range. As a graduate school, most American law students have completed college. Many American law students are in their early twenties.³²⁶ Others range in age from mid-to-late twenties, to sixties or beyond, and

322. Akilah Johnson, *For immigrants, IDs prove to be a barrier to a dose of protection*, WASH. POST (Apr. 10, 2021, 2:15 PM), <https://www.washingtonpost.com/health/2021/04/10/covid-vaccine-immigrants-id/>.

323. Zoe Christen Jones, *Asian Americans reported nearly 3,800 hate incidents in the past year*, CBS NEWS (Mar. 17, 2021, 2:14 PM), <https://www.cbsnews.com/news/asian-american-hate-crimes-incidents-3800-last-year/>.

324. *Id.*

325. Harmeet Kaur, *As attacks against Asian Americans spike, advocates call for action to protect communities*, CNN (Feb. 13, 2021), <https://edition.cnn.com/2021/02/13/us/asian-american-attacks-covid-19-hate-trnd/index.html>.

326. Tomer, *supra* note 6 (reporting that students age twenty-two to twenty-four made up about fifty percent of all law school applicants between 2011 and 2015).

have extensive work histories, possess another advanced degree, have served in the military, or maintain other responsibilities (including supporting families). In comparison, most faculty and staff range in age from twenties through late seventies or eighties, with some older faculty and staff still actively participating in law school teaching or administration. In one example, the “median age of the faculty members of Harvard’s Faculty of Arts and Sciences is over 60 years old.”³²⁷

Older adults are at the highest risk for severe illness from COVID-19; they are more likely to “require hospitalization, intensive care, or a ventilator to help them breathe, or they may even die.”³²⁸ People of any age with “certain underlying medical conditions are at increased risk for severe illness from the virus that causes COVID-19,” CDC warns.³²⁹ “The more underlying medical conditions someone has, the greater their risk is for severe illness from COVID-19.”³³⁰

CDC identifies pregnancy as an “underlying condition” that increases COVID-19 risks.³³¹ Ellington *et al.* analyzed data reported to CDC between January-June 2020 on COVID-19 positive pregnant women in the United States, and found “pregnant women who are Hispanic and black might be disproportionately affected by SARS-CoV-2 infection during pregnancy.”³³² “After adjusting for age, presence of underlying conditions, and race/ethnicity, pregnant women were 5.4 times more likely to be hospitalized . . . 1.5 times more likely to be

327. Complaint for Declaratory and Injunctive Relief at 13, *President & Fellows of Harv. Coll. v. U.S. Dep’t of Homeland Sec.*, No. 1:20-cv-11283, 13 (Mass. Dist. Ct. 2020).

328. *Older Adults*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/older-adults.html> (last updated Mar. 17, 2021).

329. *People with Certain Medical Conditions*, *supra* note 302 (listing conditions that increase risk for COVID-19 for people of any age: Chronic kidney disease; COPD (chronic obstructive pulmonary disease); Immunocompromised state (weakened immune system) from solid organ transplant; Obesity (body mass index [BMI] of thirty or higher); Serious heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies; Sickle cell disease; Type 2 diabetes mellitus. Listing conditions that might increase COVID-19 risk: Asthma moderate-to-severe); Cerebrovascular disease (affects blood vessels and blood supply to the brain); Cystic fibrosis; Hypertension or high blood pressure; Immunocompromised state (weakened immune system) from blood or bone marrow transplant, immune deficiencies, HIV, use of corticosteroids, or use of other immune weakening medicines; Neurologic conditions, such as dementia; Liver disease; Pregnancy; Pulmonary fibrosis (having damaged or scarred lung tissues); Smoking; Thalassemia (a type of blood disorder); Type 1 diabetes mellitus).

330. *Id.*

331. *Id.*

332. Sascha Ellington *et al.*, *Characteristics of Women of Reproductive Age with Laboratory-Confirmed SARS-CoV-2 Infection by Pregnancy Status—United States, January 22–June 7, 2020*, 69 MORBIDITY & MORTALITY WKLY. REP. 769, 772 (2020), <https://www.cdc.gov/mmwr/volumes/69/wr/mm6925a1.htm>.

admitted to the ICU . . . , and 1.7 times more likely to receive mechanical ventilation.”³³³

Catherine D’Ignazio and Lauren Klein invite us to generate “counterdata” on under-analyzed issues by asking questions such as whether COVID-19 makes “pregnant people more at risk (as they were for SARS)?”³³⁴ They contend “[w]hile collecting [data] on its own does not dissipate all inequality, it can be an important part of a comprehensive strategy to hold powerful institutions accountable.”³³⁵ Enarson argues for a “gender aware and a gender fair approach to disaster as a matter of fundamental human rights and social justice.”³³⁶ “If we’re not meeting the needs of women, for example, in the tsunami, Hurricane Katrina, or Hurricane Andrew, we’re not meeting the needs of half of the people. It’s a question of equity as well as equality,” Enarson argued.³³⁷

Addressing gender equity in disaster preparation and response requires recognizing issues affecting women, hearing, and incorporating their perspectives, and understanding their needs. By December 2016, women became the majority of U.S. law students, reversing underrepresentation that persisted for nearly a century after many American law schools and bar associations began admitting women in the aftermath of World War I.³³⁸

To enhance safety and fulfill commitments to diversity and inclusion, law schools and universities should adopt an inclusive decision-making process that prioritizes safety and recognizes the vulnerability of pregnant students, faculty, staff, and community members, and others susceptible to severe COVID-19 illness. Men have higher COVID-19 death rates around the globe; for “those aged 45 and 54, there are five men dying for every two women.”³³⁹ But “more women over the age of 85 have died from the virus, despite having a

333. *Id.*

334. D’Ignazio & Klein, *supra* note 44, at 2.

335. *Id.*

336. Elaine Enarson, Keynote Address, *Toward A Feminist Perspective on Women and Disaster*, 28 WOMEN’S RTS. L. REP. 3, 4 (2007).

337. *Id.*

338. Cynthia Grant Bowman, *Women in the Legal Profession from the 1920s to the 1970s: What Can We Learn from Their Experience About Law and Social Change?*, 61 ME. L. REV. 1, 3 (2009).

339. Richard V. Reeves & Tiffany N. Ford, *COVID-19 much more fatal for men, especially taking age into account*, BROOKINGS (May 15, 2020), <https://www.brookings.edu/blog/up-front/2020/05/15/covid-19-much-more-fatal-for-men-especially-taking-age-into-account/>.

lower death rate—simply because women make up most of this age group (4.2 million compared to 2.3 million men).”³⁴⁰

Many law students, as well as law faculty and staff members, are parents of children in pre-K through K-12 education. Throughout much of 2020, U.S. Education Secretary DeVos pushed for opening schools through in-person classes, arguing K-12 schools “must fully open and they must be fully operational.”³⁴¹ By July 2020 as COVID-19 infection, hospitalization, and death rates surged, several local school boards and states delayed or declined in-person openings for K-12 schools.³⁴² As K-12 educational delivery strategies fluctuate during the COVID-19 pandemic, law schools must recognize the difficulties faced by students, faculty, and staff who supervise children attending school online, or whose schools suddenly shift back to online learning.

Law schools convene multiple generations, a diversity of races and ethnicities, and a mix of men and women in class and academic activities for hours at a time. The multi-generational mix among law schools and university students, faculty, staff, and community members, and the length of interactions in indoor classrooms place these educational institutions in a high-risk category for COVID-19 transmission.

C. COVID-19 Illness and Long-lasting Complications

While some infected people are asymptomatic, “some get mild symptoms and some get symptoms enough to put them at home for a few days. Some are in bed for weeks and have symptoms even after they recover, others go to the hospital, some require oxygen, some require

340. *Id.*

341. Laura Meckler, *Trump and DeVos want schools ‘fully’ open, but not many are listening*, WASH. POST (July 10, 2020, 3:31 PM), https://www.washingtonpost.com/education/trump-devos-schools-hybrid/2020/07/10/117b7ea2-c2d0-11ea-b4f6-cb39cd8940fb_story.html.

342. See, e.g., *Are schools in your California county required to teach students online this fall? Here’s the list*, MERCURY NEWS (July 17, 2020, 3:20 PM), <https://www.mercurynews.com/2020/07/17/are-schools-in-your-california-county-required-to-teach-students-online-this-fall-heres-the-list/> (declaring K-12 schools in California counties on the state’s watchlist for COVID-19 outbreaks should begin fall instruction online only and may convene in-person instruction after the county in which they are located is “off the watchlist for 14 days.”); Howard Blume & Sonali Kohli, *L.A. Unified will not reopen campuses for start of school year amid coronavirus spike*, L.A. TIMES (July 13, 2020, 7:31 PM), <https://www.latimes.com/california/story/2020-07-13/l-a-unified-will-not-reopen-campus-start-of-school-year>; Kristen Taketa, *San Diego Unified will start school this fall with online learning*, SAN DIEGO UNION-TRIB. (July 13, 2020, 11:07 AM), <https://www.sandiegouniontribune.com/news/education/story/2020-07-13/san-diego-unified-will-start-this-fall-with-online-learning>; Matt Barnum, *Pediatricians distance themselves from Trump’s school reopening push in new statement*, CHALKBEAT (July 10, 2020, 11:18 AM), <https://www.chalkbeat.org/2020/7/10/21320020/school-reopening-american-academy-pediatrics-trump-devos-statement>.

intensive care, some get intubated and some die.”³⁴³ Dr. Fauci testified to Congress in June 2020 that increasing numbers of young adults were experiencing serious COVID-19 illness.³⁴⁴ Approximately “80% of patients, especially children and young adults” with COVID-19 are asymptomatic or experience minor symptoms while “20% will develop COVID-19 with various degrees of severity.”³⁴⁵ Initial study of the U.K. variant found a higher number of people under age twenty infected by that variant, a fact that raises concern for in-person interaction as a range of potentially infected individuals mix.³⁴⁶

COVID-19 may trigger “formation of blood clots that can lead to strokes and other life-threatening complications, even in younger people.”³⁴⁷ Some infected by COVID-19 experience symptoms that affect multiple organs including the respiratory system, the “central nervous system central nervous system (CNS), and postinfectious immune mediated processes.”³⁴⁸ COVID-19 CNS diseases include “encephalopathy, encephalitis, acute disseminated encephalomyelitis, meningitis, ischemic and hemorrhagic stroke, venous sinus thrombosis, and endothelialitis. In the peripheral nervous system, COVID-19 is associated with dysfunction of smell and taste, muscle injury, the Guillain-Barre syndrome, and its variants.”³⁴⁹

A study of forty-three patients in the United Kingdom referred to the COVID-MDT [multidisciplinary team] neurology/encephalitis and neurovascular multi-disciplinary team observed neurological symptoms including strokes, acute disseminated encephalomyelitis (an inflammation affecting the brain and spinal cord)³⁵⁰ and

343. Lovelace, Jr., *supra* note 115.

344. *Id.*

345. Igor J. Koralnik & Kenneth L. Tyler, *COVID-19: A Global Threat to the Nervous System*, 88 ANNALS NEUROLOGY 1, 7 (2020), <https://onlinelibrary.wiley.com/doi/epdf/10.1002/ana.25807>.

346. ERIK VOLZ ET AL., REPORT 42 - TRANSMISSION OF SARS-CoV-2 LINEAGE B.1.1.7 IN ENGLAND: INSIGHTS FROM LINKING EPIDEMIOLOGICAL AND GENETIC DATA 13-14 (2020), <https://www.imperial.ac.uk/mrc-global-infectious-disease-analysis/covid-19/report-42-sars-cov-2-variant/> (preprint).

347. Francis Collins, *Searching for Ways to Prevent Life-Threatening Blood Clots in COVID-19*, NIH DIRECTOR'S BLOG (June 11, 2020), <https://directorsblog.nih.gov/2020/06/11/searching-for-ways-to-prevent-life-threatening-blood-clots-in-covid-19/>.

348. Koralnik & Tyler, *supra* note 345, at 1.

349. *Id.*; Mayo Clinic Staff, *Guillain-Barre Syndrome*, MAYO CLINIC, <https://www.mayoclinic.org/diseases-conditions/guillain-barre-syndrome/symptoms-causes/syc-20362793> (last visited Mar. 20, 2021) (defining Guillain-Barre syndrome as “a rare disorder in which your body’s immune system attacks your nerves . . . eventually paralyzing your whole body”).

350. *Acute Disseminated Encephalomyelitis (ADEM)*, WEBMD, <https://www.webmd.com/brain/acute-disseminated-encephalomyelitis-adem> (last updated

hallucinations.³⁵¹ “The high incidence of acute disseminated encephalomyelitis, particularly with haemorrhagic change, is striking,” the study’s authors added, noting “[t]his complication was not related to the severity of the respiratory COVID-19 disease.”³⁵² The “strokes we have encountered with COVID-19 have been severe,” the study reported.³⁵³

CDC’s survey found that COVID-19 undermined afflicted patient’s health for weeks after hospital discharge. “Fewer inpatients (39%, 20 of 51) reported a return to baseline level of health at 14–21 days than did outpatients (64%, 150 of 233) ($p = 0.001$).”³⁵⁴ Scientists do not yet know whether COVID-19’s effects will be long lasting, even for those who “recover.” A study conducted in Germany of 100 patients diagnosed with severe acute respiratory syndrome associated with COVID-19 found cardiac involvement in “78 patients (78%) and ongoing myocardial inflammation in 60 patients (60%) with recent COVID-19 illness, independent of preexisting conditions, severity and overall course of the acute illness, and the time from the original diagnosis.”³⁵⁵ Disproportionate risks and consequences of COVID for communities of color, those with underlying medical conditions including pregnant women, and older Americans underscore the imperative of prioritizing health, safety, and equity during this pandemic.

July 27, 2020) (“[Acute disseminated encephalomyelitis is a] rare kind of inflammation that affects the brain and spinal cord, usually in children. It damages the coating that protects nerve fibers, called myelin.”).

351. Ross W. Paterson et al., *The Emerging Spectrum of COVID-19 Neurology: Clinical, Radiological and Laboratory Findings*, 143 *BRAIN* 3104, 3106 (2020), <https://doi.org/10.1093/brain/awaa240> (“A 55-year-old female (Patient 7), with no previous psychiatric history, was admitted with a 14-day history of fever, cough, muscle aches, breathlessness, as well as anosmia and hypogeusia She reported visual hallucinations, seeing lions and monkeys in her house.”).

352. *Id.* at 3104-05.

353. *Id.* at 3117.

354. Tenforde et al., *supra* note 238, at 841.

355. Valentina O. Puntmann et al., *Outcomes of Cardiovascular Magnetic Resonance Imaging in Patients Recently Recovered From Coronavirus Disease 2019 (COVID-19)*, 5 *JAMA CARDIOLOGY* 1265, 1272 (2020), https://jamanetwork.com/journals/jamacardiology/fullarticle/2768916?utm_campaign=articlePDF&utm_medium=articlePDFlink&utm_source=articlePDF&utm_content=jamacardio.2020.3557.

VIII. ONLINE, HYBRID, OR IN-PERSON CLASS MODELS: HEALTH,
SAFETY, AND EQUITY VALUES

*A. Barriers to In-person and Hybrid Legal Education During the
Pandemic*

UC Berkeley School of Law (formerly Boalt Hall) had hoped to offer in-person classes in fall 2020, particularly for first-year law students.³⁵⁶ On June 26, 2020, UC Berkeley Law School Dean Chemerinsky announced that the school's "Fall 2020 classes will be conducted remotely."³⁵⁷ After developing and submitting contingency plans to reduce "building occupancy by 75-80% as required by campus, and taking all necessary health precautions" to support in-person classes, Dean Chemerinsky and the Contingency Planning Committee "concluded that the best course—for the health of those in our community and for our educational program—is to have the Fall semester's classes be online."³⁵⁸

UC Berkeley's "campus policy is no more than 25 students in a classroom at a time . . . seated at least six feet apart."³⁵⁹ Only the two largest classrooms could accommodate students in this fashion.³⁶⁰ The 25-student limit would not allow for a law school small section to meet in one room.³⁶¹ "We also have concerns about the ventilation system for these parts of the building and its ability to displace room air at the rate required by the Public Health Department," Dean Chemerinsky explained.³⁶²

For in-person classes, "[c]leaning and disinfecting between uses of classrooms would be essential, but likely would be available only once or at most twice a day."³⁶³ More time would have to be scheduled between classes to accommodate "the reduced bathroom capacity and need for classroom cleaning," while the law school's café would be closed, vending machines and water fountains would not be available, and department kitchenettes and break rooms would cease.³⁶⁴ The UC Berkeley campus informed the law school that it was "considering

356. *Fall 2020-21 Options: Frequently Asked Questions*, BERKELEY L., <https://www.law.berkeley.edu/academics/llm/traditional-llm/fall-2020-21-options-faqs/> (last visited Mar. 20, 2021).

357. Chemerinsky, *supra* note 84, at 1.

358. *Id.*

359. *Id.*

360. *Id.*

361. *Id.*

362. *Id.*

363. Chemerinsky, *supra* note 84, at 1.

364. *Id.*

requiring that all students arriving from out of the area be tested and not attend in-person for two weeks. This likely would mean that all classes would need to be online for the beginning of the semester.”³⁶⁵

After considering these obstacles, and taking into account the desire of many students and faculty members including Dean Chermerinsky to hold in-person classes in fall 2020, the Dean announced that he is “convinced we can provide an excellent education via remote learning this semester and frankly a better education than we can through a limited number of in-person classes taught in a hybrid fashion.”³⁶⁶ “I also believe it is the safest course for the health of our faculty, staff, and students,” Dean Chermerinsky added.³⁶⁷

Harvard Law School (HLS) went through a similar evolution in early June 2020, initially hoping the 2020-2021 academic year “could begin, at least in part, on campus.”³⁶⁸ Harvard Law School announced on June 3, 2020 that “in light of the daily news about the continuing health risks of the pandemic, advice from public health experts, and the very real concern that testing will not yet be available on the scale or frequency needed to adequately monitor COVID-19-related illness in the Harvard community,” it would convene the fall Term 2020 term online.³⁶⁹ “This is not the announcement we’d hoped to make. But our first priority is, and must continue to be, the health and safety of our community, and we cannot reliably conclude at this time that we can safely provide an effective on-campus program this fall,” HLS stated.³⁷⁰

B. Hybrid Hopes and Pandemic Realities

“Most [U.S.] law schools” as of July 1, 2020, were “pushing to offer at least some courses in person, even if the bulk of instruction takes place via the internet. Law deans are also warning that all courses could switch to a remote format if the pandemic worsens.”³⁷¹ Yale Law School operated under a hybrid-learning model in fall 2020-spring 2021.³⁷² Yale offered in-person Law School classes in fall 2020 with opportunities for students to participate online or faculty to teach

365. *Id.*

366. *Id.*

367. *Id.*

368. *HLS Fall Term 2020*, *supra* note 84.

369. *Id.*

370. *Id.*

371. Sloan, *Online or In person?*, *supra* note 84.

372. Heather K. Gerken, *Announcements*, YALE L. SCH. (Mar. 15, 2021), <https://law.yale.edu/yls-today/media-inquiries/office-public-affairs/yale-law-school-covid-19-information/announcements> (see the July 1, 2020 announcement).

online.³⁷³ Yale University pushed its spring 2021 semester's start to February 1, 2021, eliminated Spring Break, and planned to continue hybrid teaching along with frequent COVID testing.³⁷⁴ Stanford University reversed plans to reopen its campus to sections of undergraduates and graduate students for the 2020-2021 academic year, but left latitude for graduate schools to decide whether to proceed online or through hybrid classes.³⁷⁵

As COVID-19 infection cases rose, more law schools switched to remote teaching for fall semester 2020 and spring 2021. "The resurging pandemic was a factor in Vermont Law School's decision to remain remote, given that many students come from outside of the state," a reversal from Vermont's announced intention in early May 2020 to "return to campus with various health protocols in place."³⁷⁶ As law schools evaluate their options during the COVID-19 pandemic for fall 2021 and beyond, health, safety, and equity must remain at the forefront of legal education.

C. Equity Tempers Magical Thinking

Measures necessary to prevent COVID-19 spread will not allow for a return to "normal teaching" and activities "as usual," particularly as COVID-19 variants increase in infectiousness and virulence prior to widespread distribution and use of effective vaccines and mitigation measures. Huang and Austin observe that "status quo bias" may influence thinking about whether in-person or online classes are the best option as universities decide how to deliver higher education prior to an effective COVID-19 vaccine.³⁷⁷

Professor Josh Blackman anticipates that students wishing to avoid the restrictions of going into the building, those in vulnerable groups, and those who find it difficult to hear others speaking while wearing masks may switch to online classes (or listen to recordings instead of attending mandatory classes) as a more effective means of learning.³⁷⁸ Ohio State Professor Deborah Merritt argued "it's time to realize that

373. *Id.*

374. *Yale Law School COVID-19 Information*, *supra* note 95.

375. Tessier-Lavigne, *Online Update*, *supra* note 255; *cf.* Tessier-Lavigne, *June Message*, *supra* note 255.

376. *Id.*

377. Huang & Austin, *supra* note 48, at 32 (citing Kendra Cherry, *How the Status Quo Bias Affects Your Decisions*, VERYWELL MIND (May 11, 2020), <https://www.verywellmind.com/status-quo-bias-psychologicaldefinition-4065385>).

378. See Josh Blackman, *A Typical University Day in the COVID-19 Era*, REASON (May 22, 2020, 8:01 AM), <https://reason.com/2020/05/22/what-would-in-person-classes-look-like-in-the-fall/>.

on-campus classes will not be the center of our universe this fall. We need to embrace a model in which online classes are at the center, with careful prep by professors over the next two months.”³⁷⁹ Professor and former Dean Dan Rodriguez predicted “the hybrid/in-person plans will end up being scuttled in any event (maybe as early as July [2020]; maybe at the beginning of the term; maybe just as soon as there is an outbreak in a particular law school).”³⁸⁰

University of Miami Law School Professor William Widen recommends “[a]dministrators should strategically reduce overall campus population density by teaching law online because law adapts well to distance learning.”³⁸¹ “Lowering student density on campus reduces the risk to our overall academic communities. A maintenance crew cleaning a needed chemistry lab is not exposed to the risk of infection from law school students.”³⁸² Law school classes interpret words, not specimens, and analyze cases, not chemicals.

Professor Widen observed that financial concerns factor into the push for in-person or hybrid Law School education.³⁸³ “Pay cuts, salary freezes and furloughs are hitting law schools as university systems grapple with massive budget shortfalls caused by the coronavirus pandemic.”³⁸⁴ Many schools fear that “law students will only pay for the in-person Socratic experience. Economics drives the decision to take the risk to open with in-person classes.”³⁸⁵ We all hope that the day does not arrive when “the lethal effect of the decision [to hold in-person law school classes] becomes manifest. This is particularly so when the calculus of decision compared lives lost against the economic gain,” Professor Widen argued.³⁸⁶

“Law students learn about a disastrous choice made in the design of the Ford Pinto, which exposed consumers to an increased risk of death to save money.”³⁸⁷ “In this crisis, the legal academy has a choice to operate in a safer manner and we should seize that opportunity—to avoid

379. Rodriguez, *supra* note 295 (citing Professor Merritt’s Facebook post).

380. *Id.*; Daniel B. Rodriguez, NW. PRITZKER SCH. L., <https://www.law.northwestern.edu/faculty/profiles/DanielRodriguez/> (last visited Mar. 21, 2021).

381. William H. Widen, *The Only Question for Law School Re-Openings*, JURIST (June 29, 2020, 4:56 PM), <https://www.jurist.org/commentary/2020/06/william-widen-law-schools-reopening/>.

382. *Id.*

383. *Id.*

384. Karen Sloan, *Law Schools Hit by Financial Fallout From COVID-19*, LAW.COM (Apr. 23, 2020, 1:54 PM), <https://www.law.com/2020/04/23/law-schools-hit-by-financial-fallout-from-covid-19/>.

385. Widen, *supra* note 381.

386. *Id.*

387. *Id.*

the need to even engage in the types of calculations for a law school that landed Ford Motor Company in such trouble,” Professor Widen advised.³⁸⁸

Harvard University announced that it would continue instruction online in spring 2021, rejecting the hybrid model as pedagogically unsound and posing ethical and fairness challenges. John Manning, Dean of Harvard Law School, expressed concern that mask wearing required of those attending a hybrid classroom in person makes it more difficult for all participants, particularly for those participating online, to hear each other and see facial expressions.³⁸⁹ After some experience with online teaching in fall 2020, the Harvard law faculty determined that “considerations of equity strongly favor continuing with online instruction.”³⁹⁰

Hybrid “classes are not equally accessible to students who come from countries subject to a travel ban, who face other difficulties securing visas,” as well as those “who have family or personal obligations or challenges that compel them to remain where they are now, or who suffer from underlying conditions that place them at high risk of serious illness should they contract COVID-19.”³⁹¹ The Harvard faculty concluded “[e]specially given the nature of our pedagogy, it seemed to us problematic to create a tiered experience in which only some of our community could engage in the forms of classroom instruction being offered.”³⁹²

The factors that pushed Harvard’s faculty to hold classes online in spring 2021 may persist into fall 2021 and beyond concurrent with vaccination gaps, COVID health disparities, and more infectious COVID variants. Harvard upgraded its heating, ventilation, and air conditioning systems across campus to meet CDC recommendations for air filtration and exchange.³⁹³ These are prudent educational infrastructure expenditures, and more institutions would be wise to make such investments but may face financial challenges in doing so. Even with upgraded ventilation, the question is whether public health conditions will change sufficiently by fall 2021 and beyond to *safely* reconvene in-person classes or in a hybrid fashion.

388. *Id.*

389. Manning, *HLS Winter and Spring Terms 2021*, *supra* note 50.

390. *Id.*

391. *Id.*

392. *Id.*

393. Manning & Whitley, *supra* note 49.

Consistent with the lesson of cases that found legal liability for failing to put safety first,³⁹⁴ law schools should adopt pedagogical methods that prioritize safety of life, campus and community health, and equity during this pandemic. The utilitarian calculus that weighs money and comfort with in-person classes against lives and safety is a balancing exercise law schools should reject.

IX. ETHICAL FRAMEWORK TO PUT HEALTH AND SAFETY FIRST:
RESPECT THE INHERENT DIGNITY AND WORTH OF EACH PERSON, AND
ALIGN COMMITMENTS TO DIVERSITY AND INCLUSION WITH
EDUCATIONAL EXCELLENCE

A. Ethical Planning for Legal Education During the COVID-19 Pandemic

Evaluation of the ethics of legal education models during the COVID-19 pandemic should begin with an inquiry into legal education's mission. The 2007 Carnegie Report observed:

The calling of legal educators is a high one—to prepare future professionals with enough understanding, skill and judgment to support the vast and complicated system of the law needed to sustain the United States as a free society worthy of its citizens' loyalty. That is, to uphold the vital values of freedom with equity and extend these values into situations as yet unknown but continuous with the best aspirations of our past.³⁹⁵

The decision about how to execute that responsibility—to prepare law students to develop the skill and judgment to ethically apply their knowledge of the law to legal, business, non-profit, public policy, and other fields and to serve their clients and community—calls us to focus on the substance and goals of legal education, not on its traditional methods of delivery.

ABA Standard 302 requires law schools to establish learning outcomes that shall, at a minimum, include competency in the following:

- (a) Knowledge and understanding of substantive and procedural law;
- (b) Legal analysis and reasoning, legal research, problem-solving, and written and oral communication in the legal context;
- (c) Exercise of proper professional and ethical responsibilities to clients and the legal system; and

394. *See, e.g., Grimshaw v. Ford Motor Co.*, 119 Cal. App. 3d 757, 776 (Ct. App. 1981) (“The Pinto crash tests results had been forwarded up the chain of command to the ultimate decision-makers and were known to the Ford officials who decided to go forward with production.”).

395. CARNEGIE REPORT, *supra* note 3, at 11.

(d) Other professional skills needed for competent and ethical participation as a member of the legal profession.³⁹⁶

Notably missing from these and other ABA standards is a requirement to train law students to make ethical decisions regarding public health and safety. Most legal training on law student and lawyer “well-being” focuses on substance use, mental health disorders, and work-life balance, but ignores public health.³⁹⁷

Law schools have largely focused on training students to “think like a lawyer.”³⁹⁸ The case method is the primary tool to develop patterns of legal thinking that trains students to identify relevant facts, glean legal rules, choose among competing rules, and “analyze situations by looking for points of dispute or conflict.”³⁹⁹ The Carnegie Report observed that connecting case study and analysis “with the rich complexity of actual situations that involve full-dimensional people, let alone the job of thinking through the social consequences or ethical aspects of the conclusions, remains outside the case-dialogue method.”⁴⁰⁰

American law schools prize in-class dialogue among students and faculty, as well as interactions that result from bumping elbows in the hallway. In 1950, the Supreme Court in *Sweatt v. Painter* recognized that “[f]ew students and no one who has practiced law would choose to study in an academic vacuum, removed from the interplay of ideas and the exchange of views with which the law is concerned.”⁴⁰¹

Contemporary online education allows for synchronous classes conducted over the Internet to facilitate dialogue, class, and group discussion, a method unimaginable at the twentieth century’s mid-point when the Supreme Court decided *Sweatt v. Painter*. In 2003, when the Supreme Court in *Grutter v. Bollinger* upheld the University of Michigan’s admission program designed to create a diverse student body to promote a “robust exchange of ideas,”⁴⁰² synchronous, interactive video conferencing technology that allowed access to vocal and digital chat, sharing documents and screens, was barely a gleam in the Internet’s eye. We confront the COVID-19 pandemic with online platforms that promote collaboration between law students, faculty, and clients, tools increasingly essential to legal practice and civic engagement. These

396. ABA STANDARDS, *supra* note 28, at standard 302.

397. *See, e.g.*, NAT’L TASK FORCE ON LAWYER WELL-BEING., THE PATH TO LAWYER WELL-BEING: PRACTICAL RECOMMENDATIONS FOR POSITIVE CHANGE (2017), <https://lawyerwellbeing.net/wp-content/uploads/2017/11/Lawyer-Wellbeing-Report.pdf>.

398. CARNEGIE REPORT, *supra* note 3, at 6.

399. *Id.*

400. *Id.*

401. *Sweatt v. Painter*, 339 U.S. 629, 634 (1950).

402. *Grutter v. Bollinger*, 539 U.S. 306, 329 (2003).

platforms enable effective legal education and train students in online legal practice tools.

Assessment of legal education methods during this pandemic must be grounded in ethics that reflect the democratic values legal education serves. This article uses Santa Clara University's Markkula Ethics Center's ethical decision-making app, which draws from several major ethical values: Utility, Rights, Justice, Common Good, and Virtue, to pose questions that guide ethical decision-making.⁴⁰³ Ethical decision-making is not a process of checking off a list of ethical or philosophical approaches. Rather, it calls for centering ethics as legal education's lodestar.

Respect for the inherent worth and dignity of every human life, prioritizing safety, and a commitment to diversity and inclusion as essential to legal education, set the *North Star* of the ethical compass we suggest legal education should adopt. As Justice Stewart argued: the "basic concept of the essential dignity and worth of every human being—a concept at the root of any decent system of ordered liberty" underlies First Amendment values.⁴⁰⁴ The First Amendment likewise recognizes the democratic values education promotes. This value-oriented foundation supports our conclusion that online education is the best approach to legal education during the COVID-19 pandemic.

B. Ethical Frameworks to Guide Legal Education Decision-making

1. Know the Facts and Identify Stakeholders

The Markkula Ethics App begins by asking about the relevant facts and factual gaps facing a decision-maker: "What are the relevant facts of the case? What facts are not known? Do I know enough to make a decision?"⁴⁰⁵

Sections IV-VIII of this article analyzed the emerging science about the "novel" coronavirus. As discussed *supra* in section IV, masks, social

403. *Ethical Decision Making*, MARKKULA CTR. FOR APPLIED ETHICS SANTA CLARA U., <https://www.scu.edu/ethics/ethics-resources/ethical-decision-making/> (last visited Mar. 11, 2021).

404. *Rosenblatt v. Baer*, 383 U.S. 75, 92 (1966) (Stewart, J., concurring); *Hardin v. Obstetrical & Gynecological Assocs. P.A.*, 527 S.W.3d 424, 439 n.21 (Tex. App. 2017) (citing Justice William J. Brennan, Jr., Address at the Georgetown University Text and Teaching Symposium (Oct. 12, 1985) ("[T]he Constitution embodies the aspiration of . . . human dignity that brought this nation into being. . . . For the Constitution is a sublime oration on the dignity of man [It] is a sparkling vision of the supremacy of the human dignity of every individual.")).

405. *Get the Facts*, MARKKULA CTR. FOR APPLIED ETHICS SANTA CLARA UNIV., <https://www.scu.edu/ethics-app/#getTheFacts> (last visited Aug. 23, 2020) [hereinafter *Markkula Ethics App*].

distancing, frequent handwashing, surface cleaning, and COVID-19 vaccination—particularly where some remain unvaccinated—may be inadequate to prevent COVID-19 spread in environments where people spend an hour or more at a time together in classes indoors. Examination of educational models during this pandemic must first acknowledge that in-person, indoor classes raise infection risks.

The evolving scientific understanding of COVID-19 and potential mitigation measures, changing levels of COVID infection, viral mutations that increase infection rates, delays in testing and contact tracing, uncertainties about the effect of COVID-19 vaccines on variants, and vaccination adoption gaps leave decision-makers to act with incomplete information during this pandemic. Safety-based decision-making requires clear-eyed judgment that rejects “magical thinking,”⁴⁰⁶ the belief that circumstances will conform to our wishes or differ from reality. Leadership requires courage to act based on available information and clearly articulated principles.

Caldwell observes that the “best safety processes and systems could be undermined by organizational behaviors that suppress or dismiss information.”⁴⁰⁷ Data on the availability of hospital beds and intensive care units across the country, information critical to assessing health care system capacity during the COVID-19 pandemic, “disappeared from the Centers for Disease Control and Prevention’s website after the Trump administration quietly shifted control of the information to the Department of Health and Human Services.”⁴⁰⁸ A CDC analysis of the data reported by HHS found it had major flaws, including response bias and underreporting.⁴⁰⁹ “Mixed definitions lead to a definite undercount of hospital cases!” a CDC report contended, while arguing that “a coordinated, transparent, public reporting Federal system is needed.”⁴¹⁰

Law schools act within the larger framework of government and communities, creating complex interacting networks that affect

406. Bridget J. Crawford, *Magical Thinking and Trusts*, 50 SETON HALL L. REV. 289, 294 n.22 (2019) (“‘Magical thinking’ is a phrase from anthropology literature that describes non-rational, non-fact-based thought.”); John Warner, *Lurching Toward Fall, Disaster on the Horizon*, INSIDE HIGHER ED. (June 28, 2020), <https://www.insidehighered.com/blogs/just-visiting/lurching-toward-fall-disaster-horizon?ga=2.209963605.1743382391.1595026193-731120218.1583560623>.

407. CALDWELL, *supra* note 33, at 16.

408. Will Feuer, *Coronavirus data has already disappeared after Trump administration shifted control from CDC*, CNBC (July 16, 2020, 9:31 AM), <https://www.cnbc.com/2020/07/16/us-coronavirus-data-has-already-disappeared-after-trump-administration-shifted-control-from-cdc-to-hhs.html>.

409. Mathew Sapiano, *Evaluation of HHS Protect data*, CTRS. FOR DISEASE CONTROL & PREVENTION (Nov. 2020), <https://www.sciencemag.org/sites/default/files/HHS%20Protect%20Evaluation%20Nov%202020.pdf>.

410. *Id.*

information availability and complicate decision-making. Law schools, like other Critical Infrastructure providers, must make ethical decisions about how to act in the absence of important information (and decide what to do about the conduct that shielded that information from public view). Universities can practice ethical decision-making by publishing information about COVID-19 issues on campus and in the community, and by practicing inclusive, safety and equity-based decision-making.

The Markkula Ethics App next asks the user to consider “individuals and groups [who] have an important stake in the outcome?”⁴¹¹ This article analyzes the risks of in-person classes and the hybrid model those classes support, to the Extended Campus Network (ECN) of law students, faculty, staff, their families and households, the communities in which they live, work, shop, and visit, and the people with whom each will come into contact. COVID-19 risk extends through the ECN’s tentacles and may affect people and communities differently. As infection is introduced or spread in the ECN, hubs where people connect can facilitate transmission and support virus clusters.⁴¹² Prior to wide-scale distribution and adoption of an effective COVID-19 vaccine among the law school cohort, and more analysis of vaccination as a mitigation measure against COVID-19 variants, in-person law school classes, office hours, meetings, and work, and the campus and community interactions they foster, increase the prospect of severe or persistent illness or death in the ECN and connected networks. With vaccination administration and acceptance increasing in older age cohorts, younger cohorts may be most at risk of contracting and spreading the virus.⁴¹³

Examination of in-person teaching during this pandemic from a variety of ethical frameworks counsels extreme caution about in-person or hybrid pedagogical models during this pandemic. Online instruction offers an ethical alternative consistent with the values underlying law, education, and democracy. Embracing online education protects people, institutions, and safety during this pandemic as it prepares us for future pandemics, emergencies, and disasters.

411. *Markkula Ethics App*, *supra* note 405.

412. Skums et al., *supra* note 46, at 2.

413. See Stephanie Ebbs & John Brownstein, *With older Americans largely vaccinated, more new COVID-19 cases among younger adults*, ABC NEWS (Mar. 31, 2021, 9:37 AM), <https://abcnews.go.com/Politics/older-americans-largely-vaccinated-covid-19-cases-younger/story?id=76777363>.

2. Utility

The SCU Markkula Center App asks: “Does this action produce the most good and do the least harm for all who are affected? What good and what harm will or may result?”⁴¹⁴ These questions reflect the utilitarian philosophy Jeremy Bentham articulated.⁴¹⁵ Utilitarianism is a teleological theory (from Greek *telos*, “end”; *logos*, “science”) “that derives duty or moral obligation from what is good or desirable as an end to be achieved.”⁴¹⁶ Utilitarianism holds that the “moral correctness of an action is directly correlated to the good produced by its goal or purpose.”⁴¹⁷

John Stuart Mill led the form of utilitarianism known as consequentialism, “where consequences are all that matter in making a moral decision.”⁴¹⁸ Like utilitarianism, consequentialism focuses on the end-result, assigning little or no weight to other factors. Utilitarian decision-making “produces winners and losers among the options, and there is no guarantee that anything whatsoever is owed to the losers.”⁴¹⁹ Santa Clara University Philosophy Professor Brian Buckley observes that utilitarianism fails to recognize the inherent worth of each person, relationships, or promises.⁴²⁰

Amartya Sen criticized the utilitarian focus on consequences to the exclusion of rights or distribution issues.⁴²¹ Consequentialism, he wrote, depends in part on “what is or is not included in the list of consequences.”⁴²² Lynn Huntsinger and Lucy Diekmann observed that the history of Native American tribes such as the Yurok in Northern California, “amply demonstrates a shortcoming of the utilitarian approach, wherein a minority group disproportionately bears the burdens

414. *Markkula Ethics App*, *supra* note 405.

415. See generally JEREMY BENTHAM, AN INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION (Clarendon Press 1907) (1789).

416. *Teleological Ethics*, ENCYCLOPEDIA BRITANNICA, <https://www.britannica.com/topic/teleological-ethics> (last visited July 19, 2020).

417. Corey A. Ciocchetti, *Tricky Business: A Decision-Making Framework for Legally Sound, Ethically Suspect Business Tactics*, 12 CARDOZO PUB. L. POL'Y & ETHICS J. 1, 9 (2013).

418. *Id.* at 9, 11.

419. Brian Buckley, Distinguishing the Common Good from the Greater Good in an Applied Ethics Case, Paper presented at Thomas Aquinas: Teacher of Humanity Conference, University of St. Thomas, Houston, 4 (Oct. 2013) (on file with author, Catherine Sandoval).

420. *Id.*

421. AMARTYA SEN, DEVELOPMENT AS FREEDOM 59 (1999).

422. *Id.*

of a policy designed to produce the greatest good for the greatest number.”⁴²³

Utilitarianism and consequentialism have been used to justify decisions that fail to consider or value the interests of all those affected by the decision. Professor Catherine Sandoval observed that “bureaucratic erasure,” failure to consider or mention tribes or tribal members, was used to support proposals to appropriate “tribal lands without consideration of rights of or risks to tribal members and the tribes.”⁴²⁴ Utilitarianism risks sacrificing the values and interests of some for the benefit of others—a calculus that often falls hardest on minority, vulnerable, and disadvantaged groups.

Ethical Guidelines In Pandemic Influenza, a report prepared for the CDC in 2007, recognizes the shortcomings of utilitarianism as a pandemic preparation or decision-making guide. As the authors explain, “[w]e have concluded that a classic utilitarian approach to defining priorities, ‘the greatest good for the greatest number,’ is not a morally adequate platform for pandemic influenza planning.”⁴²⁵ Instead, those guidelines recommend a consequentialist approach with guardrails that consider equity. The guidelines support “an approach to ethical justification, that, like utilitarianism, evaluates the rightness or wrongness of actions or policies primarily by their consequences, but, we further recommend that planning should take into account other checks (‘side constraints’) grounded in the ethical principles of respect for persons, non-maleficence, and justice.”⁴²⁶

Ethical Guidelines In Pandemic Influenza recommends principles to temper a “classic utilitarian approach, which might accept imposing suffering on the few for the greater benefit of all,” advocating as ethical guardrails:

- Refrain from harming or injuring individuals and communities;
- Equal opportunity to access resources should be assured to those within agreed upon priority groups;

423. Lynn Huntsinger & Lucy Diekmann, *The Virtual Reservation: Land Distribution, Natural Resource Access, and Equity on the Yurok Forest*, 50 NAT. RESOURCES J. 341, 343 (2010).

424. Catherine J.K. Sandoval, *Energy Access is Energy Justice: The Yurok Tribe’s Trailblazing Work to Close the Native American Reservation Electricity Gap*, in ENERGY JUSTICE, INTERNATIONAL AND U.S. PERSPECTIVES 166, 181 (Raya Salter et al. eds., 2018).

425. ETHICS SUBCOMM. OF THE ADVISORY COMM. TO THE DIR., CTRS. FOR DISEASE CONTROL & PREVENTION, *ETHICAL GUIDELINES IN PANDEMIC INFLUENZA* 6 (2007), https://www.cdc.gov/os/integrity/phethics/docs/panFlu_Ethic_Guidelines.pdf.

426. *Id.*

Respect for individual autonomy by, for example, employment of the least restrictive interventions that are likely to be effective.⁴²⁷

Likewise, the report, *Ethical Guidance For Public Health Emergency Preparedness And Response: Highlighting Ethics And Values In A Vital Public Health Service*, counsels that when allocating health resources, “traditional utilitarian goals of public health, e.g., maximizing the number of lives saved or the number of quality-adjusted life years,” must also consider equity, fairness, and vulnerable populations.⁴²⁸ It recommends “public health should seek to achieve fairness or equity by focusing efforts on the most vulnerable sectors of the population, e.g., the poor, racial minorities, and people living with disabilities.”⁴²⁹

For law schools, analysis of the benefits or harm resulting from convening classes through an in-person, hybrid, or fully online model must consider the decision’s effects on vulnerable members of the law school and surrounding community—including communities of color, people over 65, those with underlying health conditions—as well as those with child-care and other family responsibilities. This decision-making process must consider law school students, staff, and faculty, the campus community, everyone in their households, and the communities with which they interact. Like other higher education institutions and schools, a law school forms part of a community ecosystem.

Law students hail from many areas of the United States and from other countries. These facts influence the risk level of gathering people in person. “In general, the more people from different households a person interacts with at a gathering, the closer the physical interaction is, and the longer the interaction lasts, the higher the risk that a person with a COVID-19 infection, symptomatic or asymptomatic, may spread it to others,” the California Department of Public Health advised in November 2020.⁴³⁰

Most full-time law students meet in class for twelve to fifteen hours a week and spend three times as many hours studying and preparing for class. They devote additional hours to legal and campus activities and projects. The length of time spent in class, the potential for airborne virus transmission, circulation of more contagious viral variants, the limits of virus screening, testing, contact tracing, mask compliance and fit issues, all raise the risks of convening law school in-person or through

427. *Id.*

428. Jennings & Arras, *supra* note 58, at 56.

429. *Id.*

430. *Updated Guidance for Gatherings*, CAL. DEP’T. OF PUBLIC HEALTH (Apr. 15, 2021), <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Guidance-for-the-Prevention-of-COVID-19-Transmission-for-Gatherings-November-2020.aspx>.

hybrid classes. The risks for different age groups have shifted during the course of the COVID-19 pandemic. As COVID-19 variants gain hold around the world, more young adults and children are suffering serious health consequences from COVID-19 infection including hospitalization. As the U.K. variant became dominant in many parts of the United States, in “March [2021], New Jersey suffered a 31% jump in Covid-19 hospitalizations among young adults ages 20 to 29, the state health commissioner said. And the 40-49 age group saw a 48% increase in Covid-19 hospitalizations.”⁴³¹ Older adults, who were more likely to have been vaccinated, saw single-digit percentage increases in hospitalization.⁴³²

Many young adults were indifferent to getting vaccinated in March 2021, “unconvinced the vaccines are necessary. They dismiss the urgency of getting vaccinated, rely heavily on peers and social media for vaccination advice—and seem unaware their rejection of the vaccine could lengthen the course of the pandemic,” the Florida Sentinel reported after interviewing young people on spring break.⁴³³ “Public health experts say immunizing young adults—the largest spreaders of the virus—will be critical to emerging from the pandemic, especially as the highly contagious UK variant becomes the more dominant strain in the U.S.”⁴³⁴

The perception that COVID afflicts fewer young people and is more dangerous for older people or those with certain health conditions may fuel a demographic and health dichotomy between those attending class in person, and those studying or teaching online. As vaccination increases among people over fifty, increasing vaccination among law students, faculty, staff, and communities will be critical to a healthy educational environment and to enabling in-person or hybrid classes.

Insufficient research is available to determine whether mixing vaccinated and unvaccinated people in classes, office hours, and activities is safe, particularly as more infectious and lethal COVID-19 variants circulate.⁴³⁵ Hybrid and in-person classes may split by

431. Christina Maxouris & Holly Yan, *More than 11,000 cases of a troubling variant reported in the US. These states have the highest numbers*, CNN (Apr. 2, 2021, 2:21 AM), <https://www.cnn.com/2021/04/01/health/us-coronavirus-thursday/index.html>.

432. *Id.*; Cindy Krischer Goodman, *Young adults about COVID vaccines: We don't want them, we don't need them. Yet they make up majority of virus cases*, S. FLA. SUN SENTINEL (Mar. 25, 2021), <https://news.yahoo.com/young-adults-covid-vaccines-don-211000841.html> (“Young adults 25-34 make up the largest percentage of COVID cases in Florida.”).

433. Krischer Goodman, *supra* note 432.

434. *Id.*

435. *Cf.* CDC, *When You've Been Fully Vaccinated*, *supra* note 146 (“You can gather indoors with unvaccinated people of any age from one other household (for example, visiting

demography, with younger people more willing to meet in person, even as vaccination becomes more common among older adults. Demographic splits between those participating in person and those online undercut diversity, inclusion, equity, and dialogue among diverse participants that enriches legal education.

Utilitarian philosophy, even with ethical guardrails, weighs benefits and burdens in a manner that does not respect other principles and values. Sacrificing the health, well-being, and the lives of some for questionable educational gains or to promote the university's financial stability engages in a utilitarian calculus that fails to fully respect every human being's worth and dignity. The utilitarian ethical approach does not adequately value diversity and inclusion as central to ethical and effective legal education. As a result, Utilitarianism is an insufficient framework to address pandemics and advance the goals of effective, diverse, ethical, and inclusive legal education.

3. *Rights and Dignity*

The Markkula Center Ethical decision-making App offers questions based on an ethical framework focused on rights and dignity: "Does my action best respect the rights of all who have a stake? Does this action respect the dignity of others? If I take this action, am I treating others simply as a means to an end?"⁴³⁶

"All human beings are born free and equal in dignity and rights," the United Nations Universal Declaration of Human Rights Article 1 declares as the foundation for its work.⁴³⁷ "Human rights determine a sphere of individual liberty against other subjects (governments or individuals); action constraints place limits on exercise of rights which are justified by prevention of harms to the agent in question or by protection of an impersonal value."⁴³⁸

Recognition of each person's rights and dignity rejects strategies that treat people as a means to an end, rather than an end in themselves. Infection, hospitalization, and death rates among communities of color, other vulnerable groups, and many afflicted by COVID-19, call us to ask whether convening classes in-person or through a hybrid model is consistent with respect for the worth and dignity of every person, the

with relatives who all live together) without masks or staying 6 feet apart, unless any of those people or anyone they live with has an increased risk for severe illness from COVID-19.").

436. *Markkula Ethics App*, *supra* note 405.

437. G.A. Res. 217 A, Universal Declaration of Human Rights, art. 5 (Dec. 10, 1948), <https://www.un.org/en/universal-declaration-human-rights/index.html>.

438. Łuków, *supra* note 32, at 324.

values of diversity and inclusion, safety, effective education, and the respect for the rights of each person.

Constructing a scenario where students and teachers can choose to teach or learn through a hybrid format makes personal safety contingent on individual choices. Organizations are responsible for their safety plans, including plans that leave safety to individual choice.⁴³⁹ Relinquishing safety to individual choice fails to recognize organizational responsibility for safety.

Hybrid classes face pedagogical challenges that can result in the worst of both worlds for educational outcomes. Writing on a blackboard, for example, is difficult to decipher through an online screen. In contrast, video conferencing technologies make a virtual whiteboard visible to all participants. Split attention between monitoring questions inside the classroom and through the online chatroom add to the challenges of managing a hybrid class.

Demographic differences between in-person and online classes undermine robust educational dialogue. Putting microphones at the seats of in-person students and appointing a student to monitor the online chat function does not overcome equity problems posed by hybrid classes. Classes split by health, age, demography, and risk result in uneven access to content and hinder dialogue. Law schools must ask whether the hybrid or in-person model is compatible with respect for persons and their potential, commitments to diversity and inclusion, health, safety, and effective education.⁴⁴⁰ Ethical action constraints put the brakes on educational options that undermine values and compromise educational excellence.

4. Justice

As Dean William Prosser observed in his treaty on Torts, “[j]ustice, as every law student soon discovers, is an abstract, undefinable thing, about which men disagree.”⁴⁴¹ The Markkula Center’s Ethical decision-making App asks about the justice of a proposed action: does it “treat people equally or proportionally? Does it give each person affected his

439. See X. Zou, et al., *Risk Preference: How Decision Maker’s Goal, Current Value State, and Choice Set Work Together*, 127 *PSYCHOL. REV.* 74, 74 (2020), <http://dx.doi.org/10.1037/rev0000162> (“[T]he *choice set* (i.e., perceived available options) can affect whether people choose a more or a less risky option.”).

440. Cf. R. George Wright, *Treating Persons As Ends in Themselves: The Legal Implications of A Kantian Principle*, 36 *U. RICH. L. REV.* 271, 319-20 (2002) (arguing that poor, unhealthy, and dangerous conditions in some public schools undermines education, the opportunity to transform potential into competencies, and respect for persons).

441. Thomas C. Grey, *The First Virtue*, 25 *STAN. L. REV.* 286, 286 (1973) (citing W. PROSSER, *LAW OF TORTS* 249 (4th ed. 1971)).

or her due?”⁴⁴² Aquinas observed that “ ‘ Right’ (Ius) may be understood as ‘what is due,’ so justice is the ingrained habit that ensures others get their due.”⁴⁴³ John Rawls in his *THEORY OF JUSTICE* seeks to maximize the minimum level of welfare when making a choice that affects people differently.⁴⁴⁴ Applying this theory leads to the question “What are people due?”⁴⁴⁵

ABA standards help to define what is due. ABA Standard 301 requires that law schools maintain a “rigorous program of legal education that prepares its students, upon graduation, for admission to the bar and for effective, ethical, and responsible participation as members of the legal profession.”⁴⁴⁶ ABA Standard 302 requires law schools to establish learning outcomes to develop: legal knowledge and understanding; legal analysis and reasoning, legal research, problem-solving, written and oral communication, train students to exercise proper professional and ethical responsibilities to clients and the legal system; and skills for competent and ethical participation as a member of the legal profession.⁴⁴⁷ These guidelines leave law schools with latitude to achieve the ABA’s learning objectives, but do not articulate standards for ethical conduct when faced with health and safety risks. To fill this critical gap, this article defines what is due as a high-quality, ethical, and inclusive legal education, consistent with health, safety, and equity values.

The Markkula Center Ethics App invites users to consider whether they have “some prejudice or interest that might make [them] favor one person over another?”⁴⁴⁸ If treating people differently, it asks whether there “is there a valid reason to treat someone differently?”⁴⁴⁹ Aristotle in the *Nicomachean Ethics* described “the just . . . [as] a species of the proportionate,” recognizing that justice supports treating people differently in proportion to their difference.⁴⁵⁰ This proportionate philosophy manifests in legal and political debates “over rights and the legal status of different social groups.”⁴⁵¹

442. *Markkula Ethics App*, *supra* note 405.

443. Buckley, *supra* note 419, at 11 n.20.

444. JOHN RAWLS, *A THEORY OF JUSTICE* 152-54 (1971).

445. See Norman Bowie, *The Law: From A Profession to A Business*, 41 *VAND. L. REV.* 741, 754 (1988).

446. ABA STANDARDS, *supra* note 28, at standard 301.

447. *Id.* at standard 302.

448. *Markkula Ethics App*, *supra* note 405.

449. *Id.*

450. Aristotle, *Nicomachean Ethics*, in *THE BASIC WORKS OF ARISTOTLE* Book V, 3 (W.D. Ross trans., 350 B.C.), <http://classics.mit.edu/Aristotle/nicomachaen.5.v.html>.

451. Patricia Mann, *Dimensions of Justice in 21st Century Legal Practice and Law School Pedagogies*, 9 *CHARLESTON L. REV.* 251, 253 (2015).

Law schools, like other IHE, schools, and workplaces have long recognized the duty to accommodate students, faculty, and staff with medical needs, consistent with the Americans with Disabilities Act (ADA) and concepts of equity and justice.⁴⁵² COVID-19 may afflict healthy people, those with underlying medical conditions the ADA does not classify as disabled, and put those over sixty-five, as well as those in particular demographic groups at higher risk.⁴⁵³ ADA accommodation needs must be respected in the educational models we choose. Yet, the ADA is insufficient to protect all law school, campus, household, and community participants during the COVID-19 pandemic.

CDC recommended IHE offer “distance learning in addition to in-person classes to help reduce the number of in-person” attendees and provide “options for faculty and staff at higher risk for severe illness (including older adults and people of all ages with certain underlying medical conditions).”⁴⁵⁴ These guidelines reflect Aristotle’s principle of treating people differently to achieve a just result.

The hybrid approach needs to examine that modality’s pedagogical effectiveness. Transmission risks for those who attend classes in person and may expose law school community members, their families, the community, and their networks to COVID-19 must be considered. Law schools should examine demographic divisions for hybrid classes and make adjustments to improve equity, as well as pedagogy, as the pandemic continues. While striving to achieve a just educational model, to give each person what is due, law schools must focus on the goals of legal education. Ethical approaches to analysis of the common good help guide legal education during this pandemic.

5. *Common Good*

The Markkula Center’s Ethics App asks: “Does this action best serve the community as a whole, not just some members? Will this option be equally to everyone’s advantage?”⁴⁵⁵ These questions reflect philosophical traditions that inquire into which actions promote the “common good.” John Locke characterized the common good, as the

452. See, e.g., Office of Accessible Educ., *Guidelines for Disability Documentation*, SANTA CLARA U., <https://www.scu.edu/oae/guidelines-for-disability-documentation/> (last visited July 1, 2020) (“[The office] recommends students who are seeking accommodation on the basis of disability to provide documentation from a qualified medical professional that describes the disability/health condition and the functional impacts of the disability/health condition.”); Americans with Disabilities Act, 42 U.S.C. § 12101 (2009).

453. Fraser et al., *supra* note 6; Tenforde et al., *supra* note 238, at 2.

454. *Considerations for Institutions of Higher Education*, *supra* note 63.

455. *Markkula Ethics App*, *supra* note 405.

good of each and every person, not maximal aggregate utility.⁴⁵⁶ Rawls envisioned the common good as general conditions that are in an appropriate sense equally to everyone's advantage.⁴⁵⁷

Pope Paul IV in *Guadium et Spes* "defines the common good as 'the sum total of social conditions which allow people, either as groups or as individuals, to reach their fulfillment more fully and more easily.'" ⁴⁵⁸ "A society that wishes and intends to remain at the services of the human being at every level is a society that has the common good—the good of all people and of the whole person—as its primary goal," the Pontifical Council For Justice & Peace declared.⁴⁵⁹

Professor Brian Buckley observed that the common good "does not concentrate on winners and losers and total aggregate good," but, instead asks which option best promotes each person's thriving, a query that "can sound close to greater good that is the object of the utilitarian calculus, but the difference is the attention paid to each individual."⁴⁶⁰ The common good does not pit individual members of the community against each other; it creates opportunities for individual and collective fulfillment. In *Summa Theologiae*, Aquinas speaks to this: "He that seeks the good of the many, seeks in consequence his own good."⁴⁶¹

"Does this action contribute to the conditions of social life that give everyone an opportunity to thrive? How will my action affect the resources everyone must share, such as the environment?" the Markkula App asks.⁴⁶²

Asking which legal education method creates opportunities to thrive is an ambitious and important question during a pandemic. Health and safety are predicates to thriving. Safety is a paramount value that reflects respect for the worth and dignity of each person. Consistent with our educational goals and values, law schools should ask which is the safest teaching option, online, hybrid, or fully in-person classes? Centering the common good on safety reflects a culture that recognizes safety as a core value.

456. See JOHN LOCKE, SECOND TREATISE OF GOVERNMENT, chs. IX, XI (1688).

457. See RAWLS, *supra* note 444, at 246.

458. Susan J. Stabile, *A Catholic Vision of the Corporation*, 4 SEATTLE J. FOR SOC. JUST. 181, 184 (2005) (citing POPE PAUL VI, *GAUDIUM ET SPES* ¶ 26 (1965) (Pastoral Constitution on the Church in the Modern World)).

459. PONTIFICAL COUNCIL FOR JUSTICE & PEACE, COMPENDIUM OF THE SOCIAL DOCTRINE OF THE CHURCH ¶ 165 (2004).

460. Email from Brian Buckley, Senior Lecturer, Santa Clara University, to author Catherine Sandoval (July 11, 2020) (on file with author, Catherine Sandoval).

461. *Id.* at 8 (citing AQUINAS, *SUMMA THEOLOGIAE*, II-II, 47, 10, ad 2 (Timothy McDermott ed., Christian Classics 1991)).

462. *Markkula Ethics App*, *supra* note 405.

Defining safety and safety culture are starting points for institutionalizing safety as an organizational value. The U.S. Nuclear Regulatory Commission “defines nuclear safety culture as the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment.”⁴⁶³ On a similar vein, the National Aeronautical and Space Administration (NASA) defines safety as “freedom from those conditions that can cause death, injury, occupational illness, damage to or loss of equipment or property, or damage to the environment.”⁴⁶⁴ For NASA, its “safety priority is to protect: (1) the public, (2) astronauts and pilots, (3) the NASA workforce (including contractor employees working on NASA contracts), and (4) high-value equipment and property.”⁴⁶⁵

Safety is also an educational value and responsibility for academic institutions. Academic institutions articulate safety culture through their practices, values, and the habits they teach. Academic laboratories have shifted from “rule-and-reminder-based programs” to “a culture where our scientists don’t think about safety as a compliance issue or a set of guidelines distinct from their research activities, but as a fundamental value embedded in everything they do.”⁴⁶⁶ Academic institutions also reflect safety culture through research guardrails on human subjects.⁴⁶⁷

To date, law schools have not thought of their field as a safety related discipline or articulated their safety culture, in contrast to other organizations operating in high-risk environments.⁴⁶⁸ Nor have most law schools developed safety plans beyond building evacuation, self-locking doors, and ad hoc responses to natural disasters. Yet, a COVID-19 outbreak in a law school could quickly become a high consequence, superspreader event. One COVID-19 positive person could infect multiple classes, faculty, staff, community, and household members. COVID dramatically shifted the risk profile of holding classes where

463. *Safety Culture*, U.S. NUCLEAR REG. COMMISSION, <https://www.nrc.gov/about-nrc/safety-culture.html#:~:text=The%20U.S.%20Nuclear%20Regulatory%20Commission%20%28NR%29%20defines%20nuclear,culture%20commensurate%20with%20the%20safety%20and%20security%20> (last updated June 8, 2020).

464. 48 CFR § 1852.223-70 (2015) (Safety and Health Measures and Mishap Reporting).

465. *Id.*

466. Kenneth C. Hover & Michael J. Schneider, *Constructing an Affirmative Safety Culture in Educational and Research Laboratories*, 42 CONCRETE INT’L 37, 37 (2020) (citing STAN. UNIV., ADVANCING SAFETY CULTURE IN THE UNIVERSITY LABORATORY (2014)).

467. See, e.g., *Definition of a Human Subject Research*, U. FLA. INSTITUTIONAL REV. BD. <http://irb.ufl.edu/index/humanrsch.html> (last visited Mar. 20, 2021).

468. Cf. CALDWELL, *supra* note 33, at 5, 7.

people gather to study and discuss reading material and apply that knowledge to legal problems.

Organizations socially construct risk and the choices available to increase or mitigate risk.⁴⁶⁹ Sociologist Charles Perrow rejected safety and accident theories that focused on actions of individuals and emphasized the relations between errors and the system in which people work, as opposed to the errors and the operators.⁴⁷⁰ Perrow's observations draw us to look at the construction of safety systems, not just individual choices that affect safety. Safety risk reduction should not be relinquished to individual choice. Law schools must develop a safety culture and plan that respects the worth and dignity of each person and promotes excellence through diversity and inclusion. Online education best achieves these objectives and supports safety.

6. *Virtue*

This value asks whether selecting an option will lead the decision-maker "to act as the sort of person I want to be?"⁴⁷¹ Aristotle's philosophy examines the virtues we must adopt and habits we must develop to be a good person and live a good life.⁴⁷² The Markkula Ethics Center invites the App user to consider the character traits they would exhibit if they select a particular action, and which habits of character the action would develop.⁴⁷³

Ciocchetti observed "the task of considering ethical implications" of a problem and "acting accordingly is morally required of legislators (and the citizens who elect them), lawyers, and, most importantly, business professionals who confront the business ethics dilemmas on a regular basis."⁴⁷⁴ Law schools find themselves at the fulcrum of a decision-making process that requires considering the institution's core values as society confronts a pandemic, the scale of which has not been seen in a century since the Spanish flu.

469. *Id.* at 4 ("The organization socially constructs a view that the essence of safety is to prevent individuals from committing errors.").

470. See CHARLES PERROW, *NORMAL ACCIDENTS: LIVING WITH HIGH-RISK TECHNOLOGY* 372 (1984) (observing that system characteristics affect safety inducing factors).

471. *Markkula Ethics App*, *supra* note 405.

472. Ciocchetti, *supra* note 417, at 18-20; see ARISTOTLE, *POLITICS*, BOOK VII, Pt. XIII (Benjamin Jowett trans., 250 B.C.E.), <http://classics.mit.edu/Aristotle/politics.7.seven.html> ("There are three things which make men good and virtuous; these are nature, habit, and rational principle.").

473. *Markkula Ethics App*, *supra* note 405.

474. Ciocchetti, *supra* note 417, at 116.

ABA Standard 302 requires law schools to produce ethical professionals.⁴⁷⁵ Law schools should ask whether in-person or hybrid teaching models are consistent with ethical behavior. Gathering in person increases infection risks and can lead to illness, serious complications, or death. Social distancing, mask wearing mandates, testing and contact tracing, and other precautions may be insufficient to protect everyone in a class, building, campus, and community while vaccination, COVID health and equity gaps, and COVID-19 variants persist. Despite knowledge of the higher risk of infection, hospitalization, and death for many communities of color, older Americans, people with certain medical conditions, unvaccinated people, and the growing infection rate among young people, would teaching in person or through a hybrid model be consistent with ethical professional conduct? Would such a choice communicate respect for our diverse community and the dignity and worth of every human being?

In the face of growing COVID-19 infection rates, online legal education presents an opportunity to put safety first, minimize disruption, and ensure continuity of excellent and inclusive education. Electricity was not widely available during the Spanish flu of 1918, telephone services were in their infancy, and the Internet would not be available to the public for more than fifty years.⁴⁷⁶ While the Internet does not replicate the law school classroom experience as if it were a virtual reality game, video conferencing presents opportunities for students and faculty to meet in live synchronous classes.

The Internet facilitates posting of reading, video materials, and discussion boards that feature “many to many” communication exceeding the reach of emails or one-on-one talks. Ruben Puentedura’s online education model—substitute, modify, augment, and redesign—highlights online education’s transformational potential.⁴⁷⁷ Online education can redefine educational methods and deepen understanding

475. ABA STANDARDS, *supra* note 28, at standard 302.

476. Only about half of all US homes had electricity in 1925. *The Electric Light System*, NAT’L PARK SERV., <https://www.nps.gov/edis/learn/kidsyouth/the-electric-light-system-phonograph-motion-pictures.htm#:~:text=In%201882%20Edison%20helped%20form,the%20U.S.%20have%20electric%20power> (last updated Feb. 26, 2015). It wasn’t until 1950 when more than half of American households had telephones. Statista Research Dep’t, *Percentage of housing units with telephones in the United States from 1920 to 2008*, STATISTA (Sept. 30, 2010), <https://www.statista.com/statistics/189959/housing-units-with-telephones-in-the-united-states-since-1920/>. The internet wasn’t widely available until 1993. History.com Editors, *World Wide Web (WWW) launches in the public domain*, HISTORY (Mar. 30, 2020), <https://www.history.com/this-day-in-history/world-wide-web-launches-in-public-domain>.

477. Will Fastigi, *The SAMR Model*, TECH. FOR LEARNERS, <https://technologyforlearners.com/the-samr-model/> (last visited July 21, 2020).

such as by enabling video creation.⁴⁷⁸ Online education allows law schools to model the virtue of valuing the worth and dignity of every human being, put health and safety first, honor commitments to diversity and inclusion, while training law students to use Internet-based tools and platforms legal practice has embraced.

X. COMMITMENT TO DIVERSITY AND INCLUSION SUPPORTS ONLINE EDUCATION

Following decades of legal challenges and efforts to open American law schools to racial and ethnic minorities and women,⁴⁷⁹ many law schools and educational institutions have adopted commitments to diversity and inclusion.⁴⁸⁰ University of Houston Law School Dean Leonard Baynes notes that “just about every law school’s website describes its commitment to diversity. Most, if not all, law schools admit diverse students or hire diverse faculty candidates who are well credentialed and at the top of their classes.”⁴⁸¹

These commitments call IHE to embed diversity and inclusion throughout the institution’s work including its instructional design. COVID-19’s disparate effect on many communities of color links commitments to diversity and inclusion to decision-making about legal education during this pandemic.

Dean Baynes observed that commitments to diversity and inclusion embrace diversity as a “bedrock principle, grounded in the equality provisions of the Fourteenth Amendment.”⁴⁸² “Our justice system depends on people from all backgrounds to preserve democracy and further the rule of law. Absence of diverse representation calls into question the objectivity and credibility of legal decisions by courts, juries, prosecutors, and others.”⁴⁸³ Dean Baynes points to studies that show “more diverse and inclusive groups make better decisions.”⁴⁸⁴

In 1978, the U.S. Supreme Court in *Regents of the Univ. of California v. Baake* espoused the benefits of diversity in education, a

478. *Id.*

479. *See, e.g.,* Sweatt v. Painter, 339 U.S. 629, 633 (1950); Regents of the Univ. of Cal. v. Baake, 438 U.S. 265 (1978); Gratz v. Bollinger, 539 U.S. 244 (2003); Grutter v. Bollinger, 539 U.S. 306, 330 (2003); Fisher v. Univ. of Tex., 136 S. Ct. 2198, 2214 (2016).

480. Leonard M. Baynes, *A Dean’s Roadmap to Diversity and Inclusion: The University of Houston Law Center As A Template for Success*, 50 U. TOL. L. REV. 221, 221 (2019).

481. *Id.* at 224.

482. *Id.* at 221.

483. *Id.*

484. *Id.* (citing Erik Larson, *New Research: Diversity + Inclusion = Better Decision Making at Work*, FORBES (Sept. 21, 2017, 2:18 PM), <https://www.forbes.com/sites/eriklarson/2017/09/21/new-research-diversity-inclusion-better-decision-making-at-work/#95431264cbfa>).

value the Court previously recognized in *Sweatt v. Painter*. In its evaluation of petitioner’s argument that “universities must be accorded the right to select those students who will contribute the most to the ‘robust exchange of ideas,’” *Baake* recognized that “even at the graduate level, our tradition and experience lend support to the view that the contribution of diversity is substantial.”⁴⁸⁵ *Baake* cited *Sweatt v. Painter*, which decided in 1950 that segregated law schools, separate law schools in Texas for African-American students and white students, did not provide equal education:

The law school, the proving ground for legal learning and practice, cannot be effective in isolation from the individuals and institutions with which the law interacts. Few students and no one who has practiced law would choose to study in an academic vacuum, removed from the interplay of ideas and the exchange of views with which the law is concerned.⁴⁸⁶

The Amicus brief written by the daughter and nephews of Heman Marion Sweatt for the 2013 *Fisher v. University of Texas* case regarding U.T. Austin’s admissions policies highlights *Sweatt v. Painter*’s foundational role in educational and desegregation jurisprudence.⁴⁸⁷ “In 1950—four years before *Brown v. Board of Education*—this Court held that Sweatt must be admitted to UT, because the separate law school created to accommodate him was not equal in—among other things—intangibles such as reputation.”⁴⁸⁸ Consigning African-Americans such as Sweatt to a separate law school would leave him “removed from the interplay of ideas and the exchange of views” with “members of the racial groups which number 85% of the population of the State” at the time of the lawsuit.⁴⁸⁹

In *Grutter v. Bollinger*, the Supreme Court endorsed Justice Powell’s view in *Baake* “that student body diversity is a compelling state interest that can justify using race in university admissions. The Court defers to the Law School’s educational judgment that diversity is essential to its educational mission.”⁴⁹⁰ *Grutter*’s analysis rests on *Sweatt v. Painter*’s insights about the educational value of dialogue among diverse participants. Each student contributes to his or her

485. *Regents of Univ. of Cal. v. Baake*, 438 U.S. 265, 313 (1978).

486. *Id.* at 314 (citing *Sweatt v. Painter*, 339 U.S. 629, 634 (1950)).

487. Allan Van Fleet & Nicholas Grimmer, *Amicus Curiae Brief of the Family of Heman Sweatt in Support of Appellees in Fisher v. University of Texas*, 39 T. MARSHALL L. REV. 119, 129 (2013).

488. *Id.*

489. *Id.*

490. *Grutter v. Bollinger*, 539 U.S. 306, 308 (2003).

learning and to that of others through this diverse dialogue that promotes the common good.⁴⁹¹

Grutter upheld the University of Michigan Law School's commitment to admitting a "critical mass" of diverse students "by reference to the substantial, important, and laudable educational benefits that diversity is designed to produce, including cross-racial understanding and the breaking down of racial stereotypes."⁴⁹² The Supreme Court found that the "Law School's claim is further bolstered by numerous expert studies and reports showing that such diversity promotes learning outcomes and better prepares students for an increasingly diverse workforce, for society, and for the legal profession."⁴⁹³ *Grutter* cited comments submitted by businesses asserting that "the skills needed in today's increasingly global marketplace can only be developed through exposure to widely diverse people, cultures, ideas, and viewpoints."⁴⁹⁴ "High-ranking retired officers and civilian military leaders assert[ed] that a highly qualified, racially diverse officer corps is essential to national security."⁴⁹⁵ *Grutter* recognized that "because universities, and in particular, law schools, represent the training ground for a large number of the Nation's leaders, *Sweatt v. Painter*, 339 U.S. 629, 634, the path to leadership must be visibly open to talented and qualified individuals of every race and ethnicity."⁴⁹⁶

COVID-19's disparate impact on African-Americans, Native Americans, and Latinx Americans, as well as those with certain underlying medical conditions including pregnancy, and older Americans, and the risks associated with those who are unvaccinated would foreseeably lead to a divided classroom that evokes concerns underlying *Sweatt v. Painter*. Many diverse students, older students, and those with certain underlying medical conditions may watch classes via remote during the COVID-19 pandemic while those inside a hybrid classroom may be younger and less diverse.

A Strada Education Network survey published in July 2020 found that with COVID-19 as a factor in educational decision-making, "[m]en's choices changed slightly, with 33 percent reporting they would

491. See Buckley, *supra* note 419, at 8-9.

492. *Grutter v. Bollinger*, 539 U.S. at 308.

493. *Id.*

494. *Id.*

495. *Id.*

496. *Id.*

choose fully online, 36 percent hybrid and 31 percent in person.”⁴⁹⁷ In contrast, “women said they were much more likely to pursue a fully online option, with 48 percent choosing online, 30 percent hybrid and 22 percent in person.”⁴⁹⁸ Demographic divisions between online and in-person participants, whether intentional or not, undercut “the interplay of ideas and exchange of views among students” and “interaction among members of different racial groups[,]” ideals recognized in *Sweatt v. Painter* as educational values that support first amendment goals.⁴⁹⁹

Managing the split classroom of raised hands for those physically present and virtual hands and chat threads for those participating online makes it challenging to create the interplay of ideas and exchange of views *Sweatt v. Painter* understood as central to legal education. The split classroom confounds pedagogical strategies such as breaking students into small groups to promote discussion and deeper understanding. With a few clicks, video conferencing technology platforms such as Zoom separate students into breakout rooms to promote small group discussion and analysis. Students seated three-to-six feet from each other in person during the COVID-19 pandemic would have to turn to each other and speak loud enough for other discussion group members to hear. In a room with several discussion groups, each talking loudly, the discussion will transform from a murmur to a roar.

Integrating online students into the physical classroom’s discussion groups poses challenges for students and the instructor. Imagine discussion groups of four with students seated at directional coordinates, north, south, east, and west. Add one online student accessing the in-person discussion group through laptop computers. While the students in the room strain to hear their socially distanced discussion group, the student participating online must attempt to filter out their discussion group from the rising cacophony in the room. Students attending in person may look at each other to signal talking and listening, while checking their laptop or assigning a monitor to hear or speak to the online participant.

If the faculty member cleaves discussion groups by those in the room and those participating online, the split discussion groups will replicate demographic differences between online and in-person students. Creating separate discussion groups for those participating

497. Lindsay McKenzie, *COVID-19 and Online Education Decisions*, INSIDE HIGHER ED (July 30, 2020), <https://www.insidehighered.com/news/2020/07/30/survey-data-reveal-impact-covid-19-perceptions-online-education>.

498. *Public Viewpoint: Work and Education Research*, STRADA, <https://www.stradaeducation.org/publicviewpoint/> (last visited Apr. 19, 2021).

499. Fleet & Grimmer, *supra* note 487, at 131.

online (including many older students and faculty, those from vulnerable communities, and those with certain underlying health conditions, and more women) and those participating in person (who may be younger and less diverse), undermines pedagogical aims of diversity recognized from *Sweatt* to *Baake* to *Grutter*.

Ongoing protests about police brutality and the killing of African-Americans and other people of color by police, as well as the need to combat hate against Asian-Americans, cry for justice and equity.⁵⁰⁰ Concurrent with data showing African-Americans, Native Americans, and Latinx Americans suffering disproportionately from COVID-19 illness, hospitalization, and death, convening law school classes in-person or in a hybrid format replicates racial, ethnic, gender, age, and other divisions which law schools and our country have sought to eradicate.

Failure to consider diversity and inclusion in the law school's COVID-19 decision-making matrix deploys "bureaucratic erasure"⁵⁰¹ to obscure the loss of diverse dialogue, educational interaction, and equity endemic to hybrid and in-person classrooms during this pandemic. Commitment to equity, justice, diversity, inclusion, safety, recognition of the dignity and worth of each person, and educational excellence supports putting all law students on the same platform, united in virtual classrooms during the COVID-19 pandemic.

XI. ONLINE EDUCATION FOSTERS EDUCATIONAL EXCELLENCE, INCLUSION, AND PREPARATION FOR THE CONTEMPORARY LEGAL PROFESSION

A. Online Excellence in Pedagogy

Most ABA-approved law schools moved their remaining coursework online in March 2020 as COVID-19 spread in many American communities during the spring 2020 academic term.⁵⁰² Although online education is still new for many law schools, decision-making during this pandemic should question the premise that in-person classes or hybrid classes are the best method to achieve a law school's core educational mission and responsibilities.

500. Meg Wagner et al., *June 11 Black Lives Matter protests*, CNN (June 12, 2020, 12:41 AM), <https://www.cnn.com/us/live-news/george-floyd-protests-06-11-20/index.html>; Jones, *supra* note 323.

501. Sandoval, *Energy Access is Energy Justice*, *supra* note 424, at 181.

502. *Council moves to expand flexibility for fall academic year*, AM. BAR ASS'N (June 1, 2020), <https://www.americanbar.org/news/abanews/aba-news-archives/2020/06/council-moves-to-expand-flexibility/>.

Yale Law School announced on July 1, 2020 that it would use a hybrid-learning model in fall 2020.⁵⁰³ Yale Law School's Dean Heather Gerken announced that to "hew to our core educational mission, we will do all we can to create opportunities for in-person learning while ensuring that everyone has access to engaging online courses when in-person classes are not possible."⁵⁰⁴ The Dean's letter did not explain in more detail why Yale determined that holding in-person classes under a hybrid model was the best way to hew to their educational mission.

Each of the law professor authors of this article attended law school when online legal education was unimaginable, and each have taught law school classes in person for more than a decade. While we look forward to the day when we can work with our students and colleagues in person, we have developed online resources to enhance student understanding of legal materials, promote engagement, and provide meaningful feedback. In summer 2020, several of the authors took the Creating Optimal Online Learning course at Santa Clara University to learn more online educational techniques.⁵⁰⁵

Professor Sandoval was the first among this article's authors to use video to record online classes and hold online review sessions in 2018. At that time, the Camp Fire caused Santa Clara University to close due to poor air quality as a massive wildfire destroyed the town of Paradise, California, and killed 86 of its residents.⁵⁰⁶ Her videos recorded on YouTube provided in-depth lectures on several contract law topics. These videos provided learning resources for all of her students, including those who had asthma or were sensitive to poor air quality. She also engaged live with her students in a Zoom review session in November 2018 as poor air persisted and people with asthma were advised to stay indoors.

Professor Love engaged in Socratic dialogue in her Torts class in spring and fall 2020, going up and down the virtual rows. Socratic interaction between students and their teacher "train[s] students in

503. *Yale Law School COVID-19 Information*, *supra* note 95.

504. *Id.*

505. *Creating Optimal Online Learning (COOL)*, SANTA CLARA U., <https://www.scu.edu/provost/teaching-and-learning/faculty-collaborative-for-teaching-innovation/summer-programming/> (last visited Mar. 12, 2021) ("The COOL program addresses the what and the how of online teaching. Participants will learn what evidence-based practices for online teaching exist and how to implement these practices using SCU's suite of technology tools.").

506. See Broadband Institute of California @ Santa Clara University School of Law, Reply Comments on the Matter of Internet Freedom (WC Docket Nos. 17-108, 17-287, 11-42) (May 20, 2020), <https://ecfsapi.fcc.gov/file/1052104890909/BBIC%20Mozilla%20Remand%20Reply%20Comments%20Final.pdf> (discussing poor air quality during the Camp Fire).

spontaneous oral analysis and argument,” deepens understanding, and improves students’ ability to apply the material.⁵⁰⁷ In fall 2020, Professor Love assigned students to “law firms” and called on two firms each day to make arguments for the plaintiff or defendant. She then opened the virtual floor to questions from students on call and from all students in the class.

In her Zoom online classroom, Professor Love asks a student to take questions from the class via chat and relay the questions to her when they pause for discussion. In person, the faculty member can see raised hands and sense questions based on student faces, often before they articulate them. Online education forces more channeling of questions and development of strategies to handle the multitasking of taking questions while advancing understanding of legal cases, concepts, and materials.

Online education offers the opportunity to “flip the classroom,” spending class time analyzing problems and legal hypotheticals rather than reviewing reading assignments. In comparison, “[i]n the traditional classroom, professors spend the majority of their time dispensing information. The students spend the majority of their class time taking notes. Professors have little time to help them connect the analytical dots.”⁵⁰⁸

In a Socratic method classroom, the dominant mode of legal education first introduced by Christopher Langdell of Harvard University in 1870, the faculty member’s questions interrupt note taking with dialogue about the cases and material studied.⁵⁰⁹ In the flipped model, new content may be presented online through videos viewed prior to class to highlight key points in or approaches to assigned material. Class time may then focus on activities that enhance and deepen understanding and help students analyze and apply the material to legal hypotheticals.⁵¹⁰ Each of the law professor authors of this article use a partially flipped model for online education, combining Socratic dialogue in class with videos and written materials students review before class.

Professor Love gives her Torts Law class multiple-choice questions at the end of topical unit in their virtual class to check their understanding

507. Helen Leskovic, *Distance Learning in Legal Education: Implications of Frame Relay Videoconferencing*, 8 ALB. L.J. SCI. & TECH. 305, 310 (1998).

508. William R. Slomanson, *Blended Learning: A Flipped Classroom Experiment*, 64 J. LEGAL EDUC. 93, 95 (2014).

509. Jamie R. Abrams, *Reframing the Socratic Method*, 64 J. LEGAL EDUC. 562, 565 (2015) (citing Christopher M. Ford, *The Socratic Method in the 21st Century* (2008) (unpublished manuscript), http://www.usma.edu/cfe/literature/ford_08.pdf) (noting Langdell’s contributions: “the introduction of the case method and the Socratic method”).

510. See Slomanson, *supra* note 508, at 95.

and provide feedback before the final exam. Each of the law professor authors of this article attended law school when Legal Research and Writing was the only class in which students received written feedback during the first year of law school before final exams. ABA standard 306(d)(2) requires that online classes offer a “regular monitoring of student effort by the faculty member and opportunity for communication about that effort.”⁵¹¹ Online learning requires and facilitates faculty-student interaction that promotes accountability and fosters learning and support.

B. Training Students to Practice Online Teaches Valuable Professional Skills

Conducting courses electronically trains students to practice law online as Internet use increases throughout society. COVID-19 produced a sea change that shifted legal practice to online forums. In response to the COVID-19 pandemic, the Supreme Court heard oral argument by telephone for the first time.⁵¹² Legal practice, including courtroom trials, arguments, and motions largely moved online to mitigate risks during the COVID-19 pandemic.⁵¹³ Several California county and appellate courts shifted to online motion and limited trial calendars.⁵¹⁴ Law firms harnessed video conferencing to conduct interviews, onboard attorneys, provide training, and practice law.⁵¹⁵

Teaching law students to communicate in writing and orally through online mechanisms prepares them for modern legal practice. Online training enables law schools to achieve and monitor the objectives of ABA Standard 302.⁵¹⁶

As we collaborate to promote online education, academics, policy makers, businesses, regulators, and researchers must also address the role of Internet Service Providers (ISPs) in deepening the digital divide.

511. ABA STANDARDS, *supra* note 28, at standard 306(d)(2).

512. Press Release, Supreme Court of the U.S. (Apr. 13, 2020), https://www.supremecourt.gov/publicinfo/press/pressreleases/pr_04-13-20 (listing Supreme Court oral arguments to be heard by telephone).

513. *See, e.g.*, Chacour Koop, *The first Zoom jury trial: Texas jurors use phones, iPads from sofas and a backyard*, FORT WORTH STAR-TELEGRAM (May 19, 2020, 4:47 PM), <https://www.star-telegram.com/news/coronavirus/article242846441.html>.

514. *See, e.g.*, Cheryl Miller, *How COVID-19 Is Impacting California Courts: Roundup of Services*, LAW.COM THE RECORDER (Dec. 15, 2020, 2:30 PM), <https://www.law.com/therecorder/2020/05/06/how-covid-19-is-impacting-california-courts-roundup-of-services/>.

515. Victoria Hudgins, *COVID-19 Shifts Law Firms' Hiring, Onboarding Process Online—To a Limit*, LAW.COM, LEGAL TECH NEWS (Mar. 31, 2020, 10:00 AM), <https://www.law.com/legaltechnews/2020/03/31/covid-19-shifts-law-firms-hiring-onboarding-process-online-to-a-limit/>.

516. *See* ABA STANDARD, *supra* note 28, at standard 301.

ISP policies that, for example, slow subscribers to speeds too slow to support classroom participation through video conferencing if the subscriber used levels of Internet data commensurate with online education undercut educational opportunity and equity.⁵¹⁷ Students and faculty using mobile devices to access classes and conduct their research or study for one to two weeks may hit ISP-induced slowdown caps that will reset the subscriber's speeds to early 1990 levels. Late twentieth-century Internet speeds will not just make video conferencing appear slow, it will make it difficult for the student or faculty member to connect to or participate in twenty-first century online classes.⁵¹⁸

Not all students live in households that have or can secure wired Internet access. Many places in America still lack Internet access at speeds sufficient to support video education. Students who live in crowded dwellings with multiple family members or several households may not be able to install or access wired Internet facilities and services. Increasing numbers of students are homeless and have no option to secure wired Internet.⁵¹⁹ Homeless students, like many low-income students, and students living in crowded residences, rely heavily on wireless methods for Internet access. Georgetown University is addressing Internet access and study space issues by examining options for reservations for study space on campus and at office workspaces around the globe such as WeWork.⁵²⁰

As we invest in online education, law schools must address digital divide issues, ISP policies, access, and affordability gaps to ensure equitable access to high-quality online education. Internet access will promote educational access and form a gateway to health and other services, increasingly offered online during the COVID-19 pandemic.

517. Broadband Institute of California @ Santa Clara University School of Law, Comments, *supra* note 55, at 14 (“BBIC is concerned that current ISP practices including throttling those who use more than certain quantities of data to 2G speeds will interfere with education, public health access, and undercut public safety”); *id.* at 19-20, 44-50.

518. *Id.* at 37-39.

519. See Charisse Jones, *Homeless in College: Students sleep in cars, on couches when they have nowhere else to go*, USA TODAY (Dec. 30, 2019, 3:23 PM), <https://www.usatoday.com/story/money/2019/06/10/homelessness-among-college-students-growing-crisis/3747117002/>.

520. William Treanor, *Message from Dean Treanor: Spring 2021 Semester Plan*, GEO. L. SCH., <https://www.law.georgetown.edu/covid-19-updates/message-from-the-dean-spring-2021-semester-plan/> (last visited Dec. 30, 2020).

XII. CONCLUSION: ONLINE LEGAL EDUCATION DURING THE COVID-19 PANDEMIC PROMOTES HEALTH, SAFETY, EQUITY, AND EDUCATIONAL EXCELLENCE

As we walk the long and uncertain road to what we hope will be this pandemic's end, we recommend that law schools develop a safety culture that puts health, safety, and equity first. Law schools must pay attention to the science and evolving conditions. Pedagogical plans should adopt a people, safety and equity-centric viewpoint.

Risks of serious and persistent illness or death from COVID-19, the variety of conditions that increase risks of COVID-19 illness, and the disproportionate effects of COVID-19 on many communities of color and demographic groups call for searching scrutiny of the in-person or hybrid legal education model during this pandemic. This article goes to print as COVID-19 vaccines are becoming available to all people over 16 in the United States. Acceptance of the COVID-19 vaccine by the cohorts that make up the bulk of law school students, faculty, and staff, and by the communities in which law schools are located and connected must be closely monitored.

Without widespread vaccination including by the young adult cohort that makes up the bulk of law school and college students, COVID-19's infectiousness and the increased spread attributed to COVID-19 variants makes convening classes in-person or through a hybrid model a high-risk activity. Even for the universities that adopt COVID-19 vaccination mandates, exemptions for religious or health reasons will increase risks for classroom and campus participants, and the communities in which universities are located, particularly if scientists confirm that COVID-19 vaccination reduces transmission risks.

Law schools considering convening in-person or hybrid classes during the WHO-declared pandemic, should give considerable weight to a local public health emergency where their campus is located and in the places from which their students, faculty, and staff may travel. COVID-19 public health emergencies may require or counsel online classes or at least online options. Educational methods selected must recognize the impacts and costs to students of encouraging people to move for in-person classes, when in-person classes may need to be suspended or terminated due to campus or community outbreaks.

Law schools should consider requiring the COVID-19 vaccine for in-person classes and campus activities, just as many other vaccinations are required. At the same time, law schools must recognize that exemptions for health or religious reasons may lead to unvaccinated

persons attending class in person, raising risks, particularly if scientists confirm that COVID-19 vaccinations reduce transmission.

During the national and local public health emergency, law schools should continue masking and other prevention requirements in classrooms and on campus, even if they require COVID vaccinations. Law schools must remain vigilant about the growth of COVID variants and may need to switch to online education. As more infectious COVID-19 variants spread, assumptions rooted in 1940s science must be reexamined such as the six-foot metric for social distancing.

Law schools should take steps to ensure equity including monitoring whether hybrid classes split students or faculty by demographics (race, ethnicity, tribe, gender, age, disability, health status). Law schools should adopt technology, training, and support to promote diversity, equity, and educational dialogue in classes and legal educational activities. We recommend that law schools focus on training faculty and students to increase the effectiveness of online teaching and learning, and address Internet and computer access issues and ISP policies that undercut educational equity. Training, assessment, and support are also essential if hybrid classes are used to ensure that pedagogical, diversity, inclusion, and equity objectives are met.

The “well-being of students, staff, and faculty is irreplaceable. Death is irreversible. During COVID-19, online higher education is socially responsible higher education,” Huang and Austin emphasized.⁵²¹ The safest course for legal education during the COVID-19 pandemic and health emergency is online education. Online legal education will save lives, protect health, and train law students to use online tools that are reshaping legal practice and society.

Accessible, diverse, and effective legal education requires planning for resiliency, inclusive technology, and pedagogy to meet twenty-first century challenges. This article urges law schools to develop a safety culture that prioritizes health, safety, equity, and well-being, respects the dignity and worth of every person, and values diversity and inclusion to support robust education.

521. Huang & Austin, *supra* note 48, at 43.