Nos. 21A244 & 21A247

In the Supreme Court of the United States

IN RE MCP NO. 165, OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION, INTERIM FINAL RULE: COVID-19 VACCINATION & TESTING, 86 FED. REG. 61402

(*Caption continued on inside cover*)

On Applications for Stay Pending Certiorari

MOTION OF AMERICAN PUBLIC HEALTH ASSOCIATION, ASSOCIATION OF SCHOOLS AND PROGRAMS OF PUBLIC HEALTH, 12 LEADING PUBLIC HEALTH AND HEALTH CARE ORGANIZATIONS, 30 DEANS OF LEADING ACADEMIC PROGRAMS, AND 109 LEADING PUBLIC HEALTH AND HEALTH POLICY SCHOLARS FOR LEAVE TO FILE ATTACHED BRIEF AS *AMICI CURIAE* IN SUPPORT OF RESPONDENTS

NEIL K. SAWHNEY
GUPTA WESSLER PLLC
100 Pine Street, Suite 1250
San Francisco, CA 94111
(415) 573-0336

DEEPAK GUPTA
Counsel of Record
GUPTA WESSLER PLLC
2001 K Street, NW
Suite 850 North
Washington, DC 20006
(202) 888-1741
deepak@guptawessler.com

Counsel for Amici Curiae

December 30, 2021

NATIONAL FEDERATION OF INDEPENDENT BUSINESS, *et al.*,
Applicants,

v.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, *et al.*,
Respondents.

OHIO, *et al.*,
Applicants,

v.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, *et al.*,
Respondents.

American Public Health Association, Association of Schools and Programs of Public Health, Academy of Managed Care Pharmacy, Alliance of Community Health Plans, American College of Osteopathic Emergency Physicians, American College of Preventative Medicine, Association of American Medical Colleges, College of American Pathologists, Council of State and Territorial Epidemiologists, National Hispanic Medical Association, National Medical Association, National Safety Council, Association of periOperative Registered Nurses, and National League for Nursing, 30 deans of leading academic programs, and 109 leading public health and health policy scholars respectfully move for leave to file the attached brief as *amici curiae* in support of the federal respondents and affirmance.

The proposed *amici* seek to file this brief to demonstrate to the Court that the overwhelming public-health and scientific consensus supports the Occupational Health and Safety Administration's rule requiring employers to ensure that employees are either vaccinated against COVID-19, or wear masks and undergo regular testing. Through this brief, the proposed *amici* also seek to explain that well-established evidence, buttressed by more recent, cutting-edge empirical studies during the pandemic, shows that vaccination can effectively reduce SARS-CoV-2 exposure and transmission in workplace settings. The proposed *amici* are concerned that staying entry of OSHA's vaccinate-or-test standard will delay measures needed to control the spread of COVID-19 and will further endanger American workers.

Given the Court's expedited consideration of this matter of significant national interest, the proposed *amici* provided notice to all parties of their intent to file by email

on December 28, 2021. Counsel for the applicants in No. 21A244 stated that they do not oppose this motion, and counsel for the applicants in No. 21A247 consent to it. The federal respondents take no position on this motion.

CONCLUSION

For the foregoing reasons, the proposed *amici* respectfully request that the Court grant leave to file the attached *amicus* brief at the time submitted.

Respectfully submitted,

DEEPAK GUPTA
Counsel of Record
Gupta Wessler PLLC
2001 K Street, NW
Suite 850 North
Washington, DC 20006
(202) 888-1741
deepak@guptawessler.com

NEIL K. SAWHNEY
Gupta Wessler PLLC
100 Pine Street, Suite 1250
San Francisco, CA 94111
(415) 573-0336

December 30, 2021 *Counsel for Amici Curiae*

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NEIL K. SAWHNEY
GUPTA WESSLER PLLC
100 Pine Street, Suite 1250
San Francisco, CA 94111
(415) 573-0336

DEEPAK GUPTA
Counsel of Record
GUPTA WESSLER PLLC
2001 K Street, NW
Suite 850 North
Washington, DC 20006
(202) 888-1741
deepak@guptawessler.com

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INTEREST OF *AMICI CURIAE* AND SUMMARY OF ARGUMENT[1]

Even before the Delta and Omicron variants, COVID-19 had profoundly transformed American working life. The virus has shut down workplaces, triggered significant workplace restrictions, infected millions of employees, and sent hundreds of thousands to the hospital or the morgue. And particular workplaces, such as meatpacking plants, have repeatedly emerged as our nation's worst hotspots, bringing illness and death to those who toil in them.

Recent weeks have made clear that the pandemic is far from over. As the Sixth Circuit observed below, "the virus rages on, mutating into different variants, and posing new risks" to employers and employees alike. Ohio App. for Stay, App.A-4. Still, in the past two years, we have developed two critical tools—vaccination and testing—to effectively prevent the virus's spread. In light of these developments, and exercising its responsibility to protect the health of America's workers and the safety of its workplaces, OSHA issued an emergency temporary standard requiring covered employers to ensure that employees are either vaccinated against COVID-19, or wear masks and undergo regular testing. *See COVID-19 Vaccination and Testing; Emergency Temporary Standard*, 86 Fed. Reg. 61402 (Nov. 5, 2021).

The Sixth Circuit correctly held that OSHA acted well within its statutory authority in issuing its vaccinate-or-test standard. *See* App.A-9–17. This brief, on behalf of

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[1] All parties have consented to the filing of this brief. No counsel for a party authored this brief in whole or in part and no person other than *amici* and their counsel made a monetary contribution to its preparation or submission.

many of the nation's leading public-health and healthcare scholars and professional organizations, explains how that rule also reflects the most recent scientific evidence and research. And it also directly responds to the petitioners' repeated assertions that COVID-19 is "not an occupational danger"—that, in other words, "the COVID-19-related risk presented by work is the same risk that arises from human interaction more broadly." Ohio App. for Stay, 12; *see, e.g.*, *id.* at 9 (arguing that COVID-19 is a danger "presented by human life generally," not by work).

Nothing could be further from the truth. The evidence is clear: The nature of both the virus and in-person work makes the workplace particularly at risk for COVID-19 transmission and infection. Because it is an airborne pathogen primarily transmitted through the inhalation of small respiratory particles, SARS-CoV-2 spreads especially well between people who must spend hours together in close quarters indoors.[2] That accurately describes the wide range of America's workplaces—from food-processing plants and car factories to retail stores and offices.

The science is also clear about the best way to combat COVID-19's spread—vaccines. All the evidence shows that vaccination significantly reduces the likelihood that workers will transmit COVID-19 and infect other workers, especially when combined with regular testing and other mitigation measures. And vaccination *drastically* reduces the chance of hospitalization and death. For these reasons, numerous employers have already imposed

[2] "SARS-CoV-2" refers to the virus and "COVID-19" refers to the disease it causes. For the reader's convenience, however, this brief (like much of the scientific literature) will often refer to "COVID-19" to mean both the virus and the disease.

vaccine requirements, which have engendered widespread vaccination uptake and have consistently proven effective.

Amici curiae file this brief to explain that OSHA's vaccinate-or-test standard reflects this overwhelming scientific and public-health consensus. *Amici* are a diverse group of scholars and professional organizations of public health and healthcare practitioners who share a deep commitment to the health and safety of America's workers. They include more than one hundred of the country's leading educators, scholars, and public health and healthcare professionals, as well as 30 deans and associate deans of leading academic programs across the United States. The individual *amici* are joined by 14 of the country's leading public health and healthcare organizations, which collectively represent tens of thousands of public health and healthcare practitioners.

ARGUMENT

I. COVID-19 is a particularly severe danger in the workplace, and it poses special risks for workers.

Workers, and the workplaces in which they work, are particularly at risk of COVID-19 infection. The mechanics of how the virus is transmitted should make this proposition self-evident. SARS-CoV-2 is an airborne virus that spreads through an infected person's respiratory particles. *See* 86 Fed. Reg. at 61409.[3] As OSHA explains in its rule, airborne transmission may occur "when people are in close contact with one another in indoor spaces," particularly "in indoor spaces without adequate ventilation where small respiratory particles are able to remain suspended in the air and accumulate." *Id.* High risk exposure and

[3] All subsequent citations to the OSHA rule's preamble are labeled "Pmbl."

infection can occur with relatively brief exposure (less than 15 minutes), and "employees can be exposed to the virus in almost any work setting." *Id.* at 61409, 61411–12.[4] Whether working in cubicles clustered in an office building or shoulder-to-shoulder in a food-processing plant, employees "share common areas like hallways, restrooms, lunch rooms[,] and meeting rooms." *Id.* It is little surprise, then, that indoor workplace environments—where individuals work in close contact with other employees for many hours each day—are particularly susceptible to the risk of a COVID-19 outbreak as compared to other settings.

That is precisely what the public-health evidence has shown. OSHA's vaccinate-or-test standard relies on numerous empirical studies that have found that workers in various occupational sectors have had COVID-19 at substantially higher rates than their surrounding communities. *See, e.g.*, Pmbl.61412–14 (citing studies). State-level data confirm that the workplace environment often facilitates and accelerates the spread of the disease—in North Carolina, for example, nearly 80% of COVID-19 "clusters" in the state, and nearly 40% of deaths, have been workplace-related.[5] Workers in a wide range of workplaces—like grocery stores, fitness facilities, schools, corrections and detention facilities, and others—experienced up to

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[4] *See also, e.g.*, Centers for Disease Control and Prevention, *Scientific Brief: SARS-CoV-2 Transmission* (May 7, 2021), https://perma.cc/RY72-9YAJ; Kevin P. Fennelly, *Particle sizes of infectious aerosols: Implications for infection control*, 8 Lancet Respiratory Med. 914, 914–24 (2020), https://perma.cc/9XHX-FNFW.

[5] *See* N.C. Dep't of Health and Human Servs., *COVID-19 Clusters in North Carolina* (last updated Nov. 22, 2021), https://perma.cc/SGW8-USTM; *see* Pmbl.6412.

five times greater rates of infection than the general public. *Id.* at 61414 (citing studies).

Moreover, "larger employers are more likely to have many employees gathered in the same location" and therefore more likely to have "larger," "longer" outbreaks.[6] For this reason, OSHA's decision to focus on employers with more than 100 employees is not just reasonable—it is empirically supported. *See* App.A-29–30.

The increased risk of viral transmission in workplaces has had a devastating effect on workers. That workers who are required to work in person experience disproportionate COVID-19 mortality rates is empirically well-established.[7] Indeed, substantial evidence confirms links between in-person occupational sectors and "high excess mortality during the pandemic."[8] Evidence from California, for instance, shows that "excess mortality rose sharply in several essential sectors" where "[i]n-person essential workers" were "not protected by shelter-in-place policies," suggesting that the rise in mortality is associated with in-person work.[9] Data from other states

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[6] *Id.* at 61512; *see, e.g.*, Zuelma Contreras et al., *Industry Sectors Highly Affected by Worksite Outbreaks of Coronavirus Disease, Los Angeles County, California, USA, March 19–September 30, 2020*, 27 Emerging Infectious Diseases 1769 (2021), https://perma.cc/7RTS-KDRU ("[F]acilities employing more on-site staff had larger and longer outbreaks.").

[7] *See, e.g.*, Kristin J. Cummings et al., *Disparities in COVID-19 Fatalities among Working Californians*, medRxiv (*preprint*, posted Nov. 11, 2021), https://perma.cc/9V7C-WALA.

[8] Yea-Hung Chen et al., *Excess mortality associated with the COVID-19 pandemic among Californians 18-65 years of age, by occupational sector and occupation: March through November 2020*, 16 PLOS ONE at 2 (2021), https://perma.cc/AZK2-QZZG.

[9] *Id.* at 8.

similarly finds a statistically significant higher excess mortality rate for workers who predominately work in person.[10]

These empirical findings are consistent with a "growing body of literature demonstrating occupational risks for SARS-CoV-2 infection."[11] And they dovetail with OSHA's determination that workers who have no choice but to work in person—and who have "little ability to limit contact with . . . coworkers, clients, members of the public, patients, and others"—face increased risk of illness, hospitalization, and death as a result of COVID-19. Pmbl.614,08. In fact, public-health scholars have concluded that "there would have been 57% fewer COVID-19 deaths" if, among other factors, "all individuals had the COVID-19 mortality associated with the safest … occupational position"—"non-essential, telework."[12] The evidence thus supports OSHA's decision to focus its vaccinate-or-test standard on in-person workers, and to exempt employees who work alone, remotely, or exclusively outdoors. *See* Pmbl.61419.

The meatpacking industry's experience with COVID-19 is a particularly instructive—and well-studied—

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[10] *See* Oregon Health Auth., *COVID-19 Weekly Report* at 79–85 (Nov. 17, 2021), https://perma.cc/4VFR-V2BR; Devan Hawkins, Letitia Davis & David Kriebel, *COVID-19 deaths by occupation, Massachusetts, March 1–July 31, 2020*, 64 Am. J. of Indust. Med. 238 (2021), https://perma.cc/E3L7-R6DN; Washington State Dep't of Health, *Statewide COVID-19 Outbreak Report* (2021), https://perma.cc/S5KQ-CU7N.

[11] Chen, *supra* n.8, at 7.

[12] Ellicott C. Matthay et al., *Contributions of occupation characteristics and educational attainment to racial/ethnic inequities in COVID-19 mortality*, medRxiv at 3 (*preprint*, posted Oct. 30, 2021), https://perma.cc/476F-Q39C.

example of how the virus can sweep through workplaces. Disease spread in meatpacking plants has been so severe that, following "multiple reports of widescale coronavirus outbreaks within and around meatpacking facilities, the [Congressional] Select Subcommittee initiated an investigation into coronavirus infections and deaths in meatpacking plants."[13] Data from "five of the largest meatpacking conglomerates, which represent over 80 percent of the market for beef and over 60 percent of the market for pork in the United States," indicated that certain plants had nearly *half* of their workforce contract COVID-19 in the first year of the pandemic—multiples higher than the percentage of the U.S. population that had contracted the disease at that time.[14]

That food processing workers are particularly at risk of transmission might not come as a surprise. They endure "long shifts in enclosed facilities" shared "with hundreds, if not thousands, of other workers," with "collective[]" breaks in the "same" "common areas," in "close quarters" on the "facility floor," "unable to socially distance by virtue of the production line layout[]." *Id.* at 4. But while the "high-density, fast-paced environments of food production facilities pose a barrier to proper adherence to COVID-19 prevention measures, such as social distancing . . . and cleaning of shared spaces," "these challenges are not unique to food production facilities."[15]

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[13] Staff of H. Select Subcomm. on the Coronavirus Crisis, 117th Cong., *Memorandum re: Coronavirus Infections and Deaths Among Meatpacking Workers at Top Five Companies Were Nearly Three Times Higher Than Previous Estimates* at 1 (Comm. Print 2021), https://perma.cc/ZAC7-264F.

[14] *Id.* at 1–2.

[15] Contreras, *supra* n.6, at 1769.

Like those in food production and meatpacking, workers in "other sectors" encounter "distinctive" factors related to in-person work, such as "increased contact with the public" or "shared equipment[] and common spaces," that "similarly increase the risk of COVID-19 worksite exposure."[16] High COVID-19 case incidence rates have occurred in the workforces of many important economic sectors—in manufacturing, transportation and warehousing, and wholesale trade. "High-density environments," "close contact in production lines, long shifts, shared equipment[] and common spaces," "shared transportation," "poor ventilation and sanitation," and "increased contact with the public" all contribute to "particular[] risk for COVID-19 exposure."[17]

The COVID-19 pandemic has also pulled back the curtain on the way that workplace conditions and risks can exacerbate the existing health disparities between white workers and workers of color. The early months of the pandemic sickened and killed people of color in the United States at higher rates than non-Hispanic white people.[18] This is not only a result of underlying economic and health disparities but is also because people of color occupy a disproportionately high number of jobs that qualify as

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[16] *Id.* at 1769, 1772.

[17] *Id.* at 1770, 1772–73.

[18] *See* Tiana N. Rogers et al., *Racial Disparities in COVID-19 Mortality Among Essential Workers in the United States*, 12 World Med. & Health Pol'y (Special Issue: Symposium on Coronavirus 2019: Social Determinants, Disparities, and Impacts) 1 (2020), https://perma.cc/AJW8-C8AV; Chen, *supra* n.8, at 7 ("Excess mortality in high-risk occupational sectors was evident across all race and ethnic groups in stratified analyses, with notably high relative and per-capita excess in Latino and Black Californians.").

"essential work" or otherwise require them to work in person.[19]

Regardless of race or socioeconomic status, the evidence is clear: In-person workers "are at greater risk of SARS-CoV-2 infection" because their "working conditions bring[] them into closer contact with those already infected," and are "at greater risk of more severe infections when exposed to SARS-CoV-2."[20] The workplace, in other words, presents particularized and special dangers of COVID-19 transmission and infection. OSHA was therefore right to determine that the virus poses an especially grave danger to America's in-person workers and to act quickly and decisively to address that grave danger.

II. Vaccines are the most effective tools for reducing COVID-19 transmission and infection in the workplace.

There is no better way to prevent the transmission, morbidity, and mortality of COVID-19 than vaccination. The scientific evidence supporting this conclusion, too, is clear. As OSHA explained, numerous large-scale studies have confirmed the "power of vaccines to safely protect individuals" from transmission and infection of COVID-19, including from the Delta variant. Pmbl.614117–19, 61431.[21]

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[19] *See also, e.g.*, Contreras, *supra* n.6, at 1773; 117th Cong., *Memorandum re: Coronavirus*, *supra* n.13, at 8; Hans R. House et al., *Agricultural workers in meatpacking plants presenting to an emergency department with suspected COVID-19 infection are disproportionately Black and Hispanic*, 28 Acad. Emergency Med. [Special Issue: (In)Equity in EM] 1012 (2021), https://perma.cc/8CNQ-T6QV.

[20] Pouran D. Faghri et al., *COVID-19 Pandemic: What has work got to do with it?*, 63 J. of Occupational & Envtl. Med. e245, e247 (2021), https://bit.ly/3Eu2q1f.

[21] *See, e.g.*, Seyed M. Moghadas et al., *The impact of vaccination on COVID-19 outbreaks in the United States*, Nat'l Inst. of Health at

Unvaccinated adults of prime working age (18 to 49 years) are 15.2 times more likely to be hospitalized and 17.2 times more likely to die of COVID-19 than fully vaccinated people in the same age range.[22] And so-called "natural immunity" is no substitute: Vaccines are five times more effective in preventing serious illness and hospitalization than a previous COVID-19 infection.[23]

Although vaccines are generally effective at preventing infection, hospitalization, and death, they are

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2 (*preprint*, revised Jan. 2, 2021), https://perma.cc/9MRU-PKBB (finding that widespread COVID-19 vaccination has made a "substantial impact on mitigating COVID-19 outbreaks"); Lok Wong Samson, et al., *Associations Between County-level Vaccination Rates and COVID-19 Outcomes Among Medicare Beneficiaries,* Rep. No. HP-2021-23, Office of the Assistant Secretary for Planning and Evaluation, U.S. Dep't of Health and Hum. Servs., at 1 (Oct. 2021), https://perma.cc/PN3Y-8J32 (estimating reduction of approximately 265,000 COVID-19 infections and 39,000 deaths among Medicare beneficiaries); *see also* Sumehda Gupta, et al., *Vaccinations Against COVID-19 May Have Averted Up to 140,000 Deaths in the United States*, 40 Health Affs. 1465 (2021), https://perma.cc/ZA2E-T3C8; Mark W. Tenforde et al., *Association Between mRNA Vaccination and COVID-19 Hospitalization and Disease Severity*, 326 JAMA 2043, 2048 (2021) https://perma.cc/B3R7-X7F6.

[22] Heather M. Scobie et al., CDC, *Monitoring Incidence of COVID–19 Cases, Hospitalizations, and Deaths, by Vaccination Status—13 U.S. Jurisdictions, April 4–July 17, 2021*, 70 Morbidity & Mortality Weekly Rpt. 1284 (Sept. 10, 2021), https://perma.cc/QD6J-P24N; *see* Pmbl.61418.

[23] Catherine H. Bozio et al., CDC, *Laboratory-Confirmed COVID-19 Among Adults Hospitalized with COVID-19–Like Illness with Infection-Induced or mRNA Vaccine-Induced SARS-CoV-2 Immunity—Nine States, January–September 2021*, 70 Morbidity & Mortality Weekly Rpt. 1539 (Oct. 29, 2021), https://perma.cc/RS9F-FPXJ.

particularly so in the workplace context. Extensive evidence has shown that vaccination "reduce[s] the presence and severity of COVID-19 cases in the workplace," and effectively "ensur[es]" that workers are protected from being infected and infecting others. Pmbl.61434, 61520, 61528–29 (citing studies). This is true for two straightforward reasons. *First*, vaccinated employees are in the aggregate significantly less likely to bring the virus into the workplace. Pmbl.61418–19; *see also, e.g.*, Pmbl.61403, 61418–19, 61435, 61438, 61528–29. *Second*, even those vaccinated workers who get infected are far less likely to spread the virus. *See id.* Although it is true that COVID-19 vaccines, like other vaccines, do not *completely* prevent transmission of COVID-19 to others, growing evidence shows that they significantly decrease it.[24]

A recent study of COVID-19 transmission and infection among law enforcement officers, firefighters, and other first responders highlights the vital need for vaccination of workers. The study found that the incidence of COVID-19 in unvaccinated firefighters was five times higher than in vaccinated firefighters—and *twenty times* higher for unvaccinated law enforcement officers.[25] On

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[24] *See, e.g.*, Anika Singanayagam et al., *Community transmission and viral load kinetics of SARS-CoV-2 Delta (B.1.617.2) variant in vaccinated and unvaccinated individuals*, Lancet Infectious Diseases (2021), https://perma.cc/A7K9-WUP2 (vaccinated individuals spread Delta to the unvaccinated at twice the rate as to the vaccinated); Po Ying Chia et al., *Virological and serological kinetics of SARS-CoV-2 Delta variant vaccine-breakthrough infections: a multi-center cohort study*, medRxiv (*preprint*, posted July 31, 2021), https://perma.cc/JQ3E-YS2V (shorter infectious period for vaccinated individuals); Ross J. Harris et al., *Effect of Vaccination on Household Transmission of SARS-CoV-2 in England*, New Eng. J. of Med. (Aug. 19, 2021), https://perma.cc/MP8W-DSPM.

[25] Alberto J. Caban-Martinez et al., *High Burden of COVID-19*

average, according to the study, first responders were sick with COVID-19 for over two weeks and missed close to 40 hours of work due to their illness. These findings, the authors wrote, "suggest that state and local governments with large numbers of unvaccinated first responders may face major disruptions in their workforce due to COVID-19 illness" absent meaningful vaccination-and-testing requirements.[26]

Other research during the COVID-19 pandemic has confirmed the efficacy of vaccination against workplace transmission and infection. A study of frontline workers from December 2020 through August 2021 concluded that "full vaccination with COVID-19 vaccines was 80% effective in preventing" COVID-19 infection, "further affirming the highly protective benefit of full vaccination up to and through the most recent summer U.S. COVID-19 pandemic waves."[27] And studies of vaccination in health-care workers have shown that vaccinated employees are not just less likely to be infected—on average, they miss fewer days of work and experience milder symptoms if they are infected.[28]

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among Unvaccinated Law Enforcement Officers and Firefighters, medRxiv at 6 (*preprint*, posted Nov. 26, 2021), https://perma.cc/SW9H-864Z.

[26] *Id.* at 4.

[27] Ashley Fowlkes et al., CDC, *Effectiveness of COVID-19 Vaccines in Preventing SARS-CoV-2 Infection Among Frontline Workers Before and During B.1.617.2 (Delta) Variant Predominance*, 70 Morbidity & Mortality Weekly Rpt. 1167 (Aug. 27, 2021), https://perma.cc/Q3EW-4GYM.

[28] *See* Earl Strum et al., *Healthcare workers benefit from second dose of COVID-19 mRNA vaccine: Effects of partial and full vaccination on sick leave duration and symptoms* (*preprint*, posted Nov. 21, 2021), https://perma.cc/4ZL6-G6HV; *see also, e.g.*, Tamara Pilishvili

Given the compelling data, it is not surprising that many employers with experience dealing with widespread COVID-19 outbreaks have recognized the need to require vaccination. To return to the meatpacking industry, as noted above, meatpacking facilities suffered particularly extensive and severe COVID-19 outbreaks in the early days of the pandemic. Several major employers responded with vaccine requirements covering their entire workforce, which have proved highly effective at achieving adherence. Less than three months after Tyson Foods mandated coronavirus vaccines for all its 120,000 U.S. workers, for example, more than 96 percent are vaccinated.[29] This is true across industries. As OSHA explained in its rule, "[e]vidence shows that mandating vaccination has proven to be an effective method for increasing vaccination rates" and that "[s]ignificant numbers of workers would get vaccinated if their employers required it." Pmbl.61435 (citing Kaiser Family Found., *Does The Public Want To Get A COVID-19 Vaccine* (Sept. 2021)). Indeed, "many workers who were vaccinated over the last four months were motivated by their employer requiring vaccination." *Id.*; *see, e.g.*, Shawn Hubler, *'Mandates Are Working': Employer Ultimatums Lift Vaccination Rates, So Far*, N.Y. Times (Sept. 30, 2021),

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et al., *Effectiveness of mRNA Covid-19 Vaccine among U.S. Health Care Personnel*, N. Eng. J. Med. (Sept. 22, 2021), https://perma.cc/W7ZS-DE23; Annalee Yassi et al., *Infection control, occupational and public health measures including mRNA-based vaccination against SARS-CoV-2 infections to protect healthcare workers from variants of concern: a 14-month observational study using surveillance data*, 16 PLOS ONE (2021), https://perma.cc/NJF9-QS3R.

[29] Lauren Hirsch, *Days away from its deadline, Tyson Foods reaches a 96 percent vaccination rate*, N.Y. Times (Oct. 26, 2021), https://perma.cc/B2EU-RSU6.

https://perma.cc/JE86-3T69 (observing that when employers require workers to get vaccinated, vaccination rates increase to over 90 percent).

Finally, it should not be overlooked that vaccination in the workplace reduces the opportunities for the virus to continue to mutate by reducing transmission and length of infection—meaning that vaccination could prevent future, more deadly, variants of COVID-19.[30] The escalating global concerns about the recently discovered Omicron variant serve as a timely reminder that vaccination is an indispensable tool that not only protects worker health and safety, but can prevent widescale social and economic disruption.

III. OSHA properly determined that its vaccinate-or-test standard is essential to protect workers.

The Occupational Safety and Health Act of 1970 allows OSHA to issue emergency temporary standards when the agency "determines (A) that employees are exposed to grave danger from exposure to substances or agents determined to be toxic or physically harmful or from new hazards, and (B) that such emergency standard is necessary to protect employees from such danger." 29 U.S.C. § 655(c)(1). As explained above, the public-health evidence makes abundantly clear that both criteria are satisfied here. Because they work in person, employees covered by the standard are subject to severe and particularized risk of illness, hospitalization, and death as a result of COVID-

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[30] *See* Ting-Yu Yeh & Gregory P. Contreras, *Full vaccination against COVID-19 suppresses SARS-CoV-2 delta variant and spike gene mutation frequencies and generates purifying selection pressure*, medRxiv at 2 (*preprint*, posted Aug. 10, 2021), https://perma.cc/JMB2-VUMF (study of 16 countries finding that "the vaccination coverage rate is inversely correlated to the mutation frequency of the . . . SARS-CoV-2 delta variants").

19. And the empirical data collected since the release of COVID-19 vaccines indicates that vaccination is by far the most effective tool to prevent further transmission and infection.

Given the evidence, OSHA reasonably decided that its vaccinate-or-test standard was necessary to address the grave danger that COVID-19 poses to American workers. This decision is not unprecedented: The agency "has long recognized the importance of vaccinating workers against preventable illnesses to which they may be exposed on the job." Pmbl.61433–34. In 1991, under President George H.W. Bush, OSHA adopted what is known as the "bloodborne pathogens standard" to prevent the transmission of hepatitis B, hepatitis C, and HIV. *See* 29 C.F.R. § 1910.1030. As part of that standard, the agency required employers to make the hepatitis B vaccine available to employees in any workplace with potential exposure to bloodborne pathogens. *See id.* § 1910.1030(b); *see generally Am. Dental Ass'n v. Martin*, 984 F.2d 823, 824 (7th Cir. 1993). That standard resulted in a significant increase in the number of employees accepting hepatitis B vaccination, and "a dramatic decline in the incidence of HBV infections" among covered workers.[31] The bloodborne pathogens standard addressed viruses whose potential transmission "between workers is minimal in comparison to the SARS-CoV-2 virus; Hepatitis B and HIV are transmitted through blood and certain body fluids, whereas the SARS-CoV-2 virus spreads through respiratory droplets that can travel through the air from worker-to-worker." Pmbl.61436. Therefore, OSHA determined that, in the

[31] *See* Francis J. Mahoney et al., *Progress Toward the Elimination of Hepatitis B Virus Transmission Among Health Care Workers in the United States*, 157 Archives of Internal Med. 2601, 2604 (1997), https://perma.cc/E289-HKD9.

case of COVID-19, merely offering vaccination to workers would be insufficient. To protect against workplace spread of this rapidly transmitted, airborne virus, it was necessary to require vaccination or regular testing and masking. *See id.*

That determination warrants deference. As Chief Justice Roberts has recognized, the "precise question" of what restrictions should be imposed during "the pandemic is a dynamic and fact-intensive matter subject to reasonable disagreement." *S. Bay United Pentecostal Church v. Newsom*, 140 S. Ct. 1613, 1613 (2020) (Roberts, C.J., concurring in denial of certiorari). Congress has entrusted OSHA with the responsibility to protect workplace safety and health, particularly when workers are faced with a grave danger—which the COVID-19 pandemic indisputably is. Based on an extensive administrative record replete with public-health and scientific evidence showing that vaccination is the most effective tool to prevent COVID-19 transmission and infection in the workplace, the agency issued its vaccinate-or-test standard. Given this careful and deliberative process, OSHA's rule "should not be subject to second-guessing by an 'unelected federal judiciary,' which lacks the background, competence, and expertise to assess public health." *Id.* at 1614. Even more so when, as here, the agency adopted its rule to deal with "changing facts on the ground." *See id.*

And the facts on the ground continue to change. In the last month, countries around the world have once again closed their borders and instituted lockdowns in response to the threat of the new, more transmissible Omicron variant. Cases are once again rising, and increased hospitalizations and deaths are likely to follow. The public-health evidence has uniformly concluded that vaccines are the primary way to prevent the rise and spread of such

variants, thereby protecting our nation's workplaces and workers. Because OSHA's vaccinate-or-test standard appropriately reflects this overwhelming scientific consensus, this Court should uphold it.

CONCLUSION

The decision below should be affirmed.

Respectfully submitted,

DEEPAK GUPTA
Counsel of Record
Gupta Wessler PLLC
2001 K Street, NW
Suite 850 North
Washington, DC 20006
(202) 888-1741
deepak@guptawessler.com

NEIL K. SAWHNEY
Gupta Wessler PLLC
100 Pine Street, Suite 1250
San Francisco, CA 94111
(415) 573-0336

December 30, 2021 *Counsel for Amici Curiae*

APPENDIX

Institutional *Amici Curiae*

American Public Health Association. APHA champions the health of all people and all communities; strengthens the profession of public health; shares the latest research and information; promotes best practices; and advocates for public health issues and policies grounded in scientific research. APHA represents more than 22,000 individual members and is the only organization that combines a nearly 150-year perspective, a broad-based member community, and the ability to influence federal policy to improve the public's health.

Association of Schools and Programs of Public Health. ASPPH is the voice of accredited academic public health, representing more than 135 schools and programs accredited by the Council on Education for Public Health. The Association seeks improved health for everyone, everywhere by strengthening the capacity of its members.

Academy of Managed Care Pharmacy. AMCP is the professional association leading the way to help patients get the medications they need at a cost they can afford. AMCP's diverse membership of pharmacists, physicians, nurses, biopharmaceutical professionals, and other health care specialists leverage their expertise in clinical evidence and economics to optimize medication benefit design and population health management. AMCP helps patients access cost-effective and safe medications, including vaccines using evidence-based medication use strategies while promoting affordable health care solutions.

Alliance of Community Health Plans. ACHP is a national leadership organization of top-performing health

plans and provider organizations. ACHP's members are not-for-profit, community-based and regional health plans that provide high-quality health coverage and care to more than 24 million Americans, in 36 states and the District of Columbia. We are leading the industry in practical, proven reforms around primary care delivery, value-based payment and data-driven systems improvement.

American College of Osteopathic Emergency Physicians. ACOEP provides invaluable personal and professional support to the emergency medicine community, empowering members to provide outstanding care for themselves and their patients while successfully navigating the evolving practice of medicine.

The American College of Preventive Medicine. ACPM is a professional, medical society of more than 2,000 physicians dedicated to improving the health and quality of life of individuals, families, communities and populations. Preventive medicine physicians bridge the divide between public health and clinical practice applying their knowledge and skills in medicine, social, economic, and behavioral sciences to improve health through disease prevention and health promotion. ACPM advocates for policy and practice that bolsters disease prevention efforts and creates healthier communities.

Association of American Medical Colleges. AAMC is a nonprofit association dedicated to transforming health through medical education, health care, medical research, and community collaborations. Its members are all 155 accredited U.S. and 17 accredited Canadian medical schools; more than 400 teaching hospitals and health systems; and more than 70 academic societies.

College of American Pathologists. As the world's largest organization of board-certified pathologists and

leading provider of laboratory accreditation and proficiency testing programs, CAP provides services to patients, pathologists, and the public by fostering and advocating excellence in the practice of pathology and laboratory medicine worldwide. Pathologists are physicians whose diagnoses drive care decisions made by patients, primary care and specialist physicians, and surgeons.

Council of State and Territorial Epidemiologists. CSTE works to advance public health policy and epidemiologic capacity. We support effective public health surveillance and epidemiologic practice through training, capacity development, and peer consultation; develop standards for practice; promote effective use of epidemiologic data to guide public health practice and improve health; and advocate for scientifically based policy. CSTE has 2200+ members working in applied epidemiology across all domains including occupational health, acute and chronic diseases and conditions.

National Hispanic Medical Association. Established in 1994, NHMA is a non-profit association representing the interests of 50,000 licensed Hispanic physicians in the United States. The mission of the organization is to empower Hispanic physicians to lead efforts to improve the health of Hispanic and other underserved populations in collaboration with Hispanic state medical societies, residents, medical students, and other public and private sector partners.

National Medical Association. Established in 1895, NMA is the nation's oldest and largest professional and scientific organization representing more than 50,000 African American physicians and their patients, and advocating for parity and justice in medicine, the elimination of health disparities and promotion of health equity.

National Safety Council. NSC has been America's leading safety advocate for over 100 years. As a mission-based nonprofit organization, NSC works to eliminate the leading causes of preventable death and injury, focusing our efforts on the workplace, roadways, and impairment. We create a culture of safety to keep people safer in the workplace and beyond so they can live their fullest lives. Our more than 15,500 member companies represent 7 million employees at nearly 50,000 U.S. worksites.

The Association of periOperative Registered Nurses. AORN was founded in 1949 to establish a national community for operating room nurses who sought to share best practices for patients undergoing surgery. The organization represents 43,000 professionals who share a passion for advancing perioperative nursing and ensuring patient safety and optimal outcomes.

The National League for Nursing. NLN is the oldest nursing organization in the United States, representing more than 1,200 nursing schools, 40,000 members, and 25 regional constituent leagues. The NLN provides teaching resources and faculty development opportunities to assist them to educate and clinically prepare our nation's nurses. The League promotes excellence in nursing education to build a strong, diverse nursing workforce to advance the health of our nation and the global community.

Individual *Amici Curiae*[*]

Deans and Associate Deans

1. Amy Lauren Fairchild, PhD, MPH, Dean and Professor of Health Services Policy and Management, College of Public Health, The Ohio State University
2. Ana V. Diez Roux, MD, PhD, MPH, Dana and David Dornsife Dean, Dornsife School of Public Health, Drexel University
3. Ashish K. Jha, MD, MPH, Dean, Professor of Health Services, Policy and Practice, Brown University School of Public Health
4. Ayman El-Mohandes, MBBCh, MD, MPH, Dean, CUNY Graduate School of Public Health & Health Policy
5. Barbara K. Rimer, DrPH, Dean, Alumni Distinguished Professor, UNC Gillings School of Global Public Health
6. Bernadette Boden-Albala, MPH, DrPH, Director and Founding Dean, Program in Public Health, Professor, Department of Health, Society and Behavior, Program in Public Health, Department of Neurology, School of Medicine, Susan and Henry Samueli College of Health Sciences, University of California, Irvine
7. Boris D. Lushniak, MD, MPH, Dean, University of Maryland School of Public Health

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[*] *Amici* listed here have joined this brief in their individual capacity only, and do not represent the interests of any institution with which they may be affiliated.

8. Cheryl Healton, DrPH, MPH, Dean and Professor of Public Health Policy and Management, NYU School of Global Public Health
9. Edith A Parker, DrPH, MPH, Dean, University of Iowa College of Public Health
10. Elaine H. Morrato, DrPH, MPH, CPH, Founding Dean and Professor, Parkinson School of Health Sciences and Public Health, Loyola University Chicago
11. Eyal Oren, PhD, MS, Interim Director, Professor, Division of Epidemiology & Biostatistics, Core Investigator, Institute for Behavioral and Community Health, School of Public Health, San Diego State University
12. James W. Curran, MD, MPH, Dean and Professor, Emory University Rollins School of Public Health
13. John R. Finnegan, PhD, Professor and Dean, School of Public Health, University of Minnesota-Twin Cities
14. Jonathan M. Samet, MD, MS, Dean and Professor, Colorado School of Public Health
15. John T. Monahan, JD, Interim Dean, School of Nursing and Health Studies, Professor, Department of Medicine, Senior Lecturer, Law Center, Georgetown University
16. Linda Forst, MD, MPH, Senior Associate Dean, School of Public Health, Professor, Environmental and Occupational Health Sciences, Attending Physician, Occupational Medicine, UlHealth, University of Illinois at Chicago
17. Lynn R. Goldman, MD, MPH, MS, Michael and Lori Milken Dean of Public Health, Professor, Environmental and Occupational Health, Milken Institute

School of Public Health, The George Washington University

18. M. Daniel Givens, DVM, PhD, DACT, DACVM–Virology, Professor and Dean, Virginia-Maryland College of Veterinary Medicine
19. Mark L. Williams, PhD, M. Joycelyn Elders Professor and Dean, Fay W. Boozman College of Public Health, University of Arkansas for Medical Sciences
20. Michael G. Perri, PhD, Dean, College of Public Health and Health Professions, University of Florida
21. Megan L. Ranney, MD, MPH, FACEP, Professor of Emergency Medicine, Alpert Medical School, Associate Dean of Strategy and Innovation, School of Public Health, Brown University
22. Michele Barry, MD, FACP, FASTMH, Drs. Ben and A. Jess Shenson Professor of Medicine and Tropical Diseases, Director of the Center for Innovation in Global Health, Senior Associate Dean for Global Health, Stanford University
23. Muge Akpinar, MD, MPH, Professor and Dean, School of Public Health, University of Nevada, Reno
24. Perry N. Halkitis, PhD, MS, MPH, Dean, Professor of Biostatistics and Urban-Global Public Health, Director, Center for Health, Identity, Behavior & Prevention, Rutgers School of Public Health
25. Robert M. Weiler PhD, MPH, Senior Associate Dean for Academic Affairs and Professor, George Mason University Graduate Programs in Public Health
26. Sherry Glied, PhD, Dean, Robert F. Wagner Graduate School of Public Service, New York University

27. Sten H. Vermund, MD, PhD, Anna M.R. Lauder Professor of Public Health and Dean, Yale School of Public Health
28. Susan Klitzman, DrPH, MPH, CPH, Senior Associate Dean for Administration and Professor, CUNY Graduate School of Public Health and Health Policy
29. Tetine Sentell, PhD, Interim Dean, Professor of Public Health, Thompson School of Social Work & Public Health, University of Hawai'i at Mānoa
30. Wayne H Giles, MD, MS, Dean and Professor, School of Public Health, University of Illinois at Chicago

Academic Chairs

1. Alexander J. Travis VMD, PhD, Director, Cornell University Master of Public Health Program, Chair, Department of Public & Ecosystem Health
2. Andrea Baccarelli, Chair and Professor of Environmental Health Sciences, Columbia University Mailman School of Public Health
3. Anthony L. Schlaff, MD, MPH, Director, Public Health Program, Professor, Department of Public Health and Community Medicine, Tufts University School of Medicine
4. Carrie A. Redlich, MD, MPH, Professor of Medicine, Occupational and Environmental Medicine and Pulmonary, Director, Yale Occupational and Environmental Medicine Program, Yale School of Medicine
5. George Friedman-Jimenez, MD, DrPH, Director, Occupational Physician and Epidemiologist, Bellevue/NYU Occupational Environmental Medicine Clinic, Bellevue Hospital and NYU Grossman School of Medicine

6. Laura L. Hungerford, DVM, MPH, PhD, CPH, FNAP, Professor and Head, Department of Population Health Sciences and Virginia Tech Public Health Program, Virginia-Maryland College of Veterinary Medicine
7. Manya Magnus, PhD, MPH, Professor & Interim Chair, Department of Epidemiology, The George Washington Univeristy Milken Institute School of Public Health
8. Mary-Katherine McNatt, DrPH, MPH, MCHES, CPH, COI, Chair and Associate Professor, Department of Public Health, A.T. Still University College of Graduate Health Studies
9. Melissa Perry, ScD, MHS, Professor and Chair of Environmental and Occupational Health, The George Washington University
10. Michael E. Martell, PhD, Associate Professor and Chair, Economics, Bard College
11. Nils Hennig, MD, PhD, MPH, Director, Graduate Program in Public Health, Associate Professor, Pediatric Infectious Diseases, Environmental Medicine and Public Health, Health System Design and Global Health, Icahn School of Medicine at Mount Sinai
12. Peter Orris, MD, MPH, Professor and Chief, Occupational and Environmental Medicine, University of Illinois Hospital and Health Sciences System
13. Robert M. Wachter, MD, Professor and Chair, Dept of Medicine, University of California, San Francisco
14. Jonathan Levy, ScD, Professor and Chair, Department of Environmental Health, Boston University School of Public Health

15. Jonathan Patz, MD, MPH, Tony J McMichael Professor and John P Holton Chair of Health and the Environment, Director, Global Health Institute, Nelson Institute, Center for Sustainability and the Global Environment (SAGE) and Department of Population Health Sciences, School of Medicine & Public Health, University of Wisconsin

Scholars

1. Adam M. Finkel, ScD, CIH, Clinical Professor of Environmental Health Sciences, University of Michigan School of Public Health, Former Director of Health Standards, OSHA, Former Regional Administrator (VIII)
2. Andy Slavitt, Former Senior Advisor to the Biden Administration COVID Response
3. Barry S. Levy, MD, MPH, Adjunct Professor of Public Health, Tufts University School of Medicine, Past President, APHA
4. Beate Ritz, MD, PhD, Professor of Epidemiology, Environmental Health, and Neurology, Fielding School of Public Health and Geffen School of Medicine, UCLA
5. Bernard D. Goldstein, MD, Professor Emeritus and Dean Emeritus, University of Pittsburgh Graduate School of Public Health
6. Beth Rosenberg, ScD, MPH, Associate Professor, Department of Public Health and Community Medicine, Tufts University School of Medicine
7. Brian S. Schwartz, MD, MS, Professor of Environmental Health and Engineering, Epidemiology, and

Medicine, Johns Hopkins Bloomberg School of Public Health

8. C. William Keck, Past President, APHA, Professor Emeritus, Department of Family and Community Medicine, Northeast Ohio Medical University
9. Celeste Monforton, DrPH, MPH, Public Health Lecturer, Texas State University
10. Craig Slatin, ScD, MPH, Professor Emeritus, Zuckerberg College of Health Sciences, University of Massachusetts Lowell, Editor, New Solutions: A Journal of Environmental and Occupational Health Policy
11. David M. Cutler, PhD, Otto Eckstein Professor of Applied Economics, Faculty of Arts and Sciences, Harvard University
12. David Kriebel, ScD, Professor Emeritus, University of Massachusetts Lowell
13. David Ozonoff, MD, MPH, Professor Emeritus of Environmental Health, Boston University School of Public Health
14. David Rosner, PhD, MPH, Lauterstein Professor and Co-Director, Center for the History and Ethics of Public Health, Mailman School of Public Health and Department of History, Columbia University
15. David Vlahov, PhD, RN, Professor of Nursing, Yale School of Nursing
16. David H. Wegman, MD, MSc, Professor Emeritus, Department of Work Environment, UMass Lowell, Adjunct Professor, Harvard School of Public Health
17. Debbie Berkowitz, Former Chief of Staff and Senior Policy Advisor, OSHA, US Department of Labor

18. Donald K. Milton, MD, DrPH, MPower Professor, Professor, Environmental and Occupational Health, School of Public Health, University of Maryland
19. Edward L. Baker MD, MPH, MSc, Former Assistant Surgeon General, RADM (ret), USPHS, Adjunct Professor, Harvard Chan School of Public Health, Adjunct Professor, UNC Gillings School of Global Public Health
20. Emily A. Spieler, JD, Edwin W. Hadley Professor of Law, Northeastern University
21. Eric A. Feldman, JD., Ph.D., Deputy Dean for International Programs, Heimbold Professor of International Law, Professor of Medical Ethics & Health Policy, University of Pennsylvania Carey Law School
22. Eric Topol, MD, EVP and Professor, Molecular Medicine, Scripps Research, Founder and Director, Scripps Research Translational Institute
23. Ezekiel J. Emanuel, MD, PhD, Vice Provost for Global Initiative, Co-Director, Healthcare Transformation Institute, Levy University Professor, Perelman School of Medicine and The Wharton School, University of Pennsylvania
24. Gerald Markowitz, PhD, MA, Distinguished Professor of History, John Jay College of Criminal Justice and The Graduate Center, CUNY
25. Gregory R. Wagner, M.D., Department of Environmental Health, Harvard T.H. Chan School of Public Health
26. Helene D. Gayle, MD, MPH, President and Chief Executive Officer, The Chicago Community Trust

27. Henry Aaron, PhD, Bruce and Virginia MacLaury Chair, Senior Fellow, Economic Studies Program, Brookings Institution
28. Hillary Nelson, PhD, MPH, Director, MPH Program, University of Pennsylvania
29. Jack Caravanos, DrPH, CIH, Clinical Professor, Global and Environmental Public Health, New York University, School of Global Public Health
30. Jack Dennerlein, PhD, MS, Professor, Bouvé College of Health Sciences, Northeastern University, Adjunct Professor of Ergonomics and Safety, Harvard T.H. Chan School of Public Health
31. James A. Merchant, MD, DrPH, Emeritus Professor of Medicine and Public Health, Emeritus Founding Dean, College of Public Health, University of Iowa
32. Jay H. Glasser, PhD, MS, FFPH, Hon FRSPH, Hon FCPMA, President, Medicine and Public Health Initiative, Past President, APHA
33. Jay Himmelstein, MD, MPH, Professor Emeritus, Population and Quantitative Health Sciences, UMass Chan Medical School
34. Joel Kaufman, MD, MPH, Professor, Environmental & Occupational Health Sciences, Medicine, and Epidemiology, University of Washington
35. John R. Balmes, MD, Professor of Medicine, University of California, San Francisco, Professor of Environmental Health Sciences, School of Public Health, University of California, Berkeley
36. John P. Moore, PhD, Professor of Microbiology and Immunology, Weill Cornell Medical College, New York

37. Jordan Barab, Former Deputy Assistant Secretary, OSHA, US Department of Labor
38. Jose L. Jimenez, PhD, Distinguished Professor of Chemistry, Fellow of CIRES, University of Colorado-Boulder
39. Joseph Telfair, DrPH, MSW, MPH, FRSPH, Past President, APHA
40. Joshua M. Sharfstein, MD, Professor of the Practice in Health Policy and Management, Johns Hopkins Bloomberg School of Public Health
41. Julia Raifman, ScD, Assistant Professor, Health Law, Policy, and Management, Boston University School of Public Health
42. Katherine Swartz, PhD, Professor of Health Economics and Policy, Harvard School of Public Health
43. Karen B. Mulloy, DO, MSCH, Associate Professor, Case Western Reserve University School of Medicine
44. Kari Hartwig, DrPH, MPH Program Director, Associate Professor, St. Catherine University
45. Kenneth Olden, PhD, Former Director, National Institute of Environmental Health Sciences and National Toxicology Program, Founding Dean, City University of New York School of Public Health
46. Kenneth Rosenman, MD, FACE, FACOEM, FACPM, Professor of Medicine, Chief of the Division of Occupational and Environmental Medicine, Michigan State University
47. Kyle Steenland, PhD, PhD, MS, Professor, Department of Environmental Health, Rollins School of Public Health, Emory University

48. Laura Punnett, ScD, Professor, Department of Biomedical Engineering, Co-Director, Center for the Promotion of Health in the New England Workplace, Senior Associate, Center for Women and Work, University of Massachusetts Lowell
49. Lee S. Newman, MD, MA, FACOEM, FCCP, F. Colleg. Ramazzini, Distinguished University Professor and Center Director, Center for Health, Work and Environment, Department of Environmental and Occupational Health, Department of Epidemiology, Colorado School of Public Health, Department of Medicine, University of Colorado School of Medicine
50. Leslie I. Boden, PhD, Professor, Boston University School of Public Health
51. Linda S. Birnbaum, PhD, DABT, ATA, Scientist Emeritus and Former Director, National Institute of Environmental Health Sciences and National Toxicology Program, Scholar in Residence, Nicholas School of the Environment, Duke University
52. Linda C. Degutis, DrPH, MSN, Lecturer, Yale School of Public Health, Past President, APHA, Former Director, National Center for Injury Prevention and Control, CDC
53. Linda Rae Murray, MD, MPH, Adjunct Assistant Professor, University of Illinois School of Public Health, Past President, APHA
54. Linda Rosenstock, MD, MPH, UCLA Professor of Medicine and Public Health, Former NIOSH Director

55. Lisa M. Carlson, MPH, MCHES, Past President, APHA, Executive Administrator, Research Administration, Emory School of Medicine
56. Magda Schaler-Haynes, JD, MPH, Adjunct Professor of Health Policy and Management, Mailman School of Public Health, Columbia University
57. Mark R. Cullen MD, Professor of Medicine and Biomedical Data Science, Stanford University (retired)
58. Melissa A. McDiarmid, MD, MPH, DABT, Professor of Medicine and Epidemiology and Public Health, Director, Division of Occupational and Environmental Health, University of Maryland School of Medicine
59. Melvin D. Shipp, OD, MPH, DrPH, Past President, APHA, Former Dean and Professor Emeritus, The Ohio State University College of Optometry
60. Michael E. Bird, MSW, MPH, Past President, APHA, National Public Health Consultant, Native Public Health Consultant
61. Michael Felsen, Former Regional Solicitor, US Department of Labor, Boston
62. Michael Silverstein, MD, MPH, Former Director of Policy, OSHA, US Department of Labor, Former Director, Washington State OSHA
63. Michael S. Sinha, M.D., J.D., M.P.H., Harvard Medical School Center for Bioethics
64. Michael T. Osterholm, PhD, MPH, Director, Center for Infectious Disease, Research and Policy, University of Minnesota
65. Myron Allukian Jr., DDS, MPH, Past President, APHA

66. Nancy Krieger, PhD, Professor of Social Epidemiology, Harvard T.H. Chan School of Public Health
67. Nicholas A. Ashford, PhD, JD, Professor of Technology and Policy, Massachusetts Institute of Technology
68. Noah S. Seixas, PhD, MS, Professor Emeritus, Department of Environmental and Occupational Health Sciences, University of Washington, School of Public Health
69. Oliver Fein, MD, Professor of Clinical Medicine Emeritus, Weill Cornell Medical College
70. Oni Blackstock, MD, MHS, Founder and Executive Director, Health Justice
71. Pamela M. Aaltonen, PhD, RN, Professor Emerita, Purdue University, Past President, APHA
72. Patricia D. Mail, PhD, MPH, MS, Past President APHA, Secretary, Board of Directors for Franke Tobey Jones
73. Phillip J. Landrigan, MD, MSc, FAAP, Director, Program for Global Public Health and the Common Good, Director, Global Observatory on Pollution and Health, Professor of Biology, Schiller Institute for Integrated Science and Society
74. Richard Fairfax, Former Deputy Assistant Secretary, OSHA, US Department of Labor
75. Richard J. Jackson, MD, MPH, FAAP, HonAIA, HonASLA, Professor Emeritus, UCLA Fielding School of Public Health
76. Rob McConnell, MD, Professor of Population and Public Health Science, Director, Southern California

Environmental Health Science Center, University of Southern California

77. Robyn R.M. Gershon, MHS, DrPH, Clinical Professor, Department of Epidemiology, Program Director, Early Career Research Development, New York University School of Global Public Health
78. Rosemary K. Sokas, MD, MOH, Professor of Human Science and of Family Medicine, Georgetown University School of Nursing and Health Studies
79. Saad B. Omer, MBBS, MPH, PhD, FIDSA, Director, Yale Institute for Global Health, Professor of Medicine (Infectious Diseases), Yale School of Medicine, Susan Dwight Bliss Professor of Epidemiology of Microbial Diseases, Yale School of Public Health
80. Sara Rosenbaum, JD, Harold and Jane Hirsh Professor, Health Law and Policy, Department of Health Policy and Management, Milken Institute School of Public Health, The George Washington University
81. Scott L. Zeger, PhD, John C. Malone Professor of Biostatistics, Epidemiology and Medicine, Bloomberg School of Public Health, Johns Hopkins University
82. Seth Trueger, MD, MPH, FACEP, Associate Professor of Emergency Medicine, Northwestern University, Feinberg School of Medicine, Emergency Physician, Northwestern Memorial Hospital, Digital Media Editor, JAMA Network Open
83. Sheldon Krimsky, PhD, MS, Lenore Stern Professor of Humanities and Social Sciences, Adjunct Professor, Public Health and Community Medicine, Tufts University

84. Sherry Baron, MD, MPH, Professor, Barry Commoner Center for Health and the Environment, Queens College, Affiliate Professor, Graduate School of Public Health and Health Policy, City University of New York
85. Sonia M. Suter, JD, MS, The Kahan Family Research Professor of Law, Founding Director, Health Law Initiative, The George Washington University Law School
86. Stephen Zoloth, PhD, MPH, Professor, Department of Health Sciences, Northeastern University
87. Steven Markowitz, MD, DrPH, Director and Professor, Barry Commoner Center for Health and the Environment, Queens College, City University of New York
88. Susan S. Addiss, MPH, MUrS, Past President, APHA, Vice-Chair, Board of the East Shore Health District, Branford, CT
89. Timothy Stoltzfus Jost, JD, Emeritus Professor, Washington and Lee University
90. Tom Frieden, President and CEO of Resolve to Save Lives, NAM Member, Former Director, Centers for Disease Control
91. W. Ian Lipkin, MD, John Snow Professor of Epidemiology and Director, Center for Infection and Immunity, Mailman School of Public Health, and Professor of Neurology, Cell Biology and Pathology, Vagelos College of Physicians and Surgeons, Columbia University
92. William Foege, MD, MPH, retired, Professor Emeritus, Emory University, Past President, APHA

93. William M. Sage, MD, JD, James R. Dougherty Chair for Faculty Excellence, School of Law, Professor of Surgery and Perioperative Care, Dell Medical School, The University of Texas at Austin
94. William N. Rom M.D., MPH, Sol and Judith Bergstein Professor of Medicine, Emeritus Research Professor, NYU School of Medicine, Research Scientist, NYU School of Global Public Health