

No. 23-411

**I n the
Supreme Court of the United States**

VIVEK H. MURTHY, SURGEON GENERAL, ET AL.,

Petitioners,

v.

M

**On Writ of Certiorari to the United States
Court of Appeals for the Fifth Circuit**

**BRIEF OF AMERICAN ACADEMY OF
PEDIATRICS, AMERICAN MEDICAL
ASSOCIATION, AMERICAN ACADEMY OF
FAMILY PHYSICIANS, AMERICAN COLLEGE
OF PHYSICIANS, AND AMERICAN
GERIATRICS SOCIETY AS *AMICI CURIAE*
IN SUPPORT OF PETITIONERS**

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<i>Texas v. Johnson</i> , 491 U.S. 397 (1989)	4
Other Authorities	
Jennifer Abbasi, <i>Widespread Misinformation About Infertility Continues to Create COVID-19 Vaccine Hesitancy</i> , 327 JAMA 1013 (2022), https://bit.ly/3QIhFeX	19
Am. Acad. of Pediatrics, <i>Going PLACES</i> (Sept. 2023), https://bit.ly/3uv1dHm	26, 29, 30
Am. Med. Ass’n, <i>Physician Leaders Discuss COVID-19 Vaccine Misinformation</i> (May 26, 2021), https://bit.ly/3R3n41B	25
Annenberg Pub. Pol. Ctr., <i>Vaccine Confidence Falls as Belief in Health Misinformation Grows</i> (Nov. 1, 2023), https://bit.ly/3ur14om	20
Timothy B. Baker et al., <i>The Relationship of COVID-19 Vaccination with Mortality Among 86,732 Hospitalized Patients: Subpopulations, Patient Factors, and Changes over Time</i> , 38 J. Gen. Internal Med. 1248 (2023), https://bit.ly/3MQBv6u	7
John Robert Bautista et al., <i>US Physicians’ and Nurses’ Motivations, Barriers, and</i>	

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Healthcare Rsch. & Quality (May 2021),
<https://bit.ly/410E9gd> 17

Kristin Goddard et al., *Safety of COVID-19 mRNA Vaccination Among Young Children in the Vaccine Safety Datalink*, 152 Pediatrics, no. 1, e2023061894 (June 2023), <https://bit.ly/40SI26s> 16

Liz Hamel et al., *KFF COVID-19 Vaccine Monitor: Media and Misinformation*, KFF (Nov. 8, 2021), <https://bit.ly/47Brja3>..... 20

Anne M. Hause et al., *Safety Monitoring of an Additional Dose of COVID-19 Vaccine – United States, August 12-September 19, 2021*, 70 Morbidity & Mortality Wkly. Rep. 1379 (2021), <https://bit.ly/3R7RJUR> 16

Anne M. Hause et al., *Safety Monitoring of COVID-19 mRNA Vaccine Second Booster Doses Among Adults Aged 50 Years – United States, March 29, 2022-July 10, 2022*, 71 Morbidity & Mortality Wkly. Rep. 971 (2022), <https://bit.ly/49IfoJh>..... 16

Fiona P. Havers et al., *COVID-19-Associated Hospitalizations Among Vaccinated and Unvaccinated Adults 18 Years or Older in 13 US States, January 2021 to April 2022*, 182 JAMA Internal Med. 1071 (2022), <https://bit.ly/49LryRJ> 7

Beth L. Hoffman et al., *It’s Not All About Autism: The Emerging Landscape of Anti-Vaccination Sentiment on Facebook*, 37 Vaccine 2216 (2019)..... 19

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Heather Hollingsworth, *Doctors Grow Frustrated Over COVID-19 Denial, Misinformation*, AP News (Oct. 4, 2021, 4:05 PM), <https://bit.ly/47CoRjB>24, 25

Jacqueline Howard, *Minnesota Measles Outbreak Exceeds Last Year's Nationwide Numbers*, CNN (June 2, 2017, 3:52 PM), <https://cnn.it/3MJxzEI>.....23

Inst. of Med., *The Childhood Immunization Schedule and Safety: Stakeholder Concerns, Scientific Evidence, and Future Studies*, Nat'l Acads. Press (2013), <https://bit.ly/3Gc1hhU>5

Nicola P. Klein et al., *Surveillance for Adverse Events After COVID-19 mRNA Vaccination*, 326 JAMA 1390 (2021), <https://doi.org/10.1001/jama.2021.13248> (Oct 8, 2021), <https://pubmed.ncbi.nlm.nih.gov/34900419/> (Oct 4, 2021), *Cummiou-19 m-19 mciion Cnm ane-2 (er)-1 (S)-7 (af)-1(ak)-8 (i)1-1 e (S)-7 (ciD)TJeptom*

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VIII

Mayo Clinic Health Sys., *Debunking COVID-19 Myths*, <https://mayocl.in/3MSnhCl> (last updated Aug. 2, 2023).....20

David M. Morens et al., *The Concept of Classical Herd Immunity May Not Apply to COVID-19*, 226 *J. Infectious Diseases* 195 (2022), <https://bit.ly/3RjzAtZ>..... 10, 11

Claire Morley et al., *Emergency Department Crowding: A Systematic Review of Causes, Consequences and Solutions*, 13 *PLOS One*, Aug. 30, 2018, <https://bit.ly/3SI9mCA> 14

Brendan Nyhan & Jason Reifler, *Does Correcting Myths About the Flu Vaccine Work? An Experimental Evaluation of the Effects of Corrective Information*, 33 *Vaccine* 459 (Jan. 2015), <https://bit.ly/3QFovC1>27

Brendan Nyhan et al., *Effective Messages in Vaccine Promotion: A Randomized Trial*, 133 *Pediatrics* e835 (2014)27

Joel Oliphint, *Top Doctors: Anatomy of the Central Ohio Measles Outbreak and Why It Might Not Be the Last*, *Columbus Monthly* (Aug. 15, 2023, 6:17 PM), <https://bit.ly/46rjNOg>.....24

S.J. Olshanksy & L. Hayflick, *The Role of MPM8-0.004 in the 2020-21 Flu Season* (2021)

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Manisha Patel et al., *National Update on Measles Cases and Outbreaks—United States, January 1–October 1, 2019*, 68 *Morbidity & Mortality Wkly. Rep.* 893 (Oct. 11, 2019), <https://bit.ly/3Tcgo2P>.....23

Varun K. Phadke et al., *Association Between Vaccine Refusal and Vaccine-Preventable Diseases in the United States: A Review of Measles and Pertussis*, 315 *JAMA* 1149 (2016), <https://bit.ly/3SSeK6m>24

Francesco Pierri et al., *Online Misinformation Is Linked to Early COVID-19 Vaccination Hesitancy and Refusal*, 12 *Sci. Reps.*, no. 1, 5966 (2022), <https://bit.ly/46ZHVaz>.....22

Kazem Rahmani et al., *The Effectiveness of COVID-19 Vaccines in Reducing the Incidence, Hospitalization, and Mortality From COVID-19: A Systematic Review and Meta-Analysis*, 10 *Frontiers Pub. Health* 873596 (Aug. 26, 2022), <https://bit.ly/47lnLcb>.....10

Mohana Ravindranath, *Doctors Bring the Fight to Anti-Vaxxers Online*, *Politico* (Feb. 15, 2021, 4:31 AM), <https://bit.ly/3v7FNRe>30

Dorit Rubinstein Reiss & Lois A. Weithorn, *Responding to the Childhood Vaccination Crisis: Legal Frameworks and Tools in the Context of Parental Vaccine Refusal*, 63 *Buff. L. Rev.* 881 (2015), <https://bit.ly/3uD8wgx>15

- Reuters Fact Check, *No Evidence COVID-19 Vaccines Have Caused Increase In Cancers, Contrary To Claims Made On Social Media*, Reuters (Feb. 11, 2022, 3:02 PM), <https://reut.rs/46oD1nt>20
- Reuters, *Fact Check: RFID Microchips Will Not Be Injected with the COVID-19 Vaccine, Altered Video Features Bill and Melinda Gates and Jack Ma* (Dec. 4, 2020, 3:52 PM), <https://reut.rs/40GO9e8> 19, 21
- Andis Robeznieks, *Doctor Shortages Are Here—And They'll Get Worse If We Don't Act Fast*, Am. Med. Ass'n (Apr. 13, 2022), <https://bit.ly/4aq4bNV>31
- Charlene M.C. Rodrigues & Stanley A. Plotkin, *Impact of Vaccines; Health, Economic and Social Perspectives*, 11 *Frontiers in Microbiology*, July 2020, <https://bit.ly/3QMFB0D>8, 9
- Lisa S. Rotenstein et al., *The Association of Work Overload with Burnout and Intent to Leave the Job Across the Healthcare Workforce During COVID-19*, 38 *J. Gen. Internal Med.* 1920 (2023), <https://bit.ly/48maBfp>31
- Royal Soc'y for Pub. Health, *Moving the Needle: Promoting Vaccination Uptake Across the Life Course* (Jan. 2019), <https://bit.ly/3R3e4JQ>21
- Regina Royan et al., *Physician and Biomedical Scientist Harassment on Social Media During the COVID-19*

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Pandemic, 6 JAMA Network Open, no. 6,
e2318315 (June 14, 2023),
<https://bit.ly/41lsKHT>30

Andrea Salcedo, *A Doctor Falsely Told*
Lawmakers Vaccines Magnetize People:
'They Can Put a Key on Their Forehead. It
Sticks.”, Wash. Post (June 9, 2021),
<https://wapo.st/47ixxMh>19, 21

.. 30

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Sophia T. Tan et al., *Infectiousness of SARS-CoV-2 Breakthrough Infections and Reinfections During the Omicron Wave*, 29 Nature Med. 358 (2023), <https://bit.ly/3tfZUfy> 11, 12

XIV

- Wanqian Xu et al., *Real-World Safety of COVID-19 mRNA Vaccines: A Systematic Review and Meta-Analysis*, 11 Vaccines, no. 6, 1118 (2023), <https://bit.ly/3utr172> 15
- Jennifer Zipprich et al., *Measles Outbreak — California, December 2014–February 2015*, 64 Morbidity & Mortality Wkly. Rep. 153 (2015), <https://bit.ly/41m0ogs> 23

INTEREST OF *AMICI CURIAE*

organizations, representing 129,600 family physicians and medical students nationwide. AAFP seeks to improve the health of patients, families, and communities by advocating for the health of the public and by supporting its members in providing continuous comprehensive health care to all.

The American College of Physicians is the largest medical specialty organization in the United States. Its membership includes 161,000 internal medicine physicians, related subspecialists, and medical students. Internists apply scientific knowledge and clinical expertise to the diagnosis, treatment, and compassionate care of adults across the spectrum from health to complex illness. ACP and its physician members lead the profession in education, standard-setting, and the sharing of knowledge to advance the science and practice of internal medicine.

The American Geriatrics Society is a nationwide, not-for-profit society of geriatrics healthcare professionals founded in 1942 and dedicated to improving the health, independence, and quality of life of older people. AGS's more than 6,000 members include geriatricians, geriatrics nurse practitioners, social workers, family practi-

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means. *Amici* have long

effective at preventing influenza-associated hospitalizations and 89% effective at preventing severe influenza.⁶ A literature review similarly

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patients who develop COVID-

outbreak has occurred domestically since 1949.¹⁹ Ap-

compared to an unvaccinated individual without a prior SARS-CoV-2 infection, an individual who had received even a single dose of a COVID-19 vaccine and had not previously been infected had a 22% lower risk of transmitting COVID-19, an unvaccinated individual with a prior infection had a 23% lower risk of transmitting COVID-19, and an individual who had both been vaccinated and previously been infected had a 40% lower risk of transmitting COVID-19.³⁵ The risk of transmission by vaccinated individuals decreased even further with additional doses of the vaccine.³⁶

C. Widespread vaccination reduces the burden on the medical system.

In addition to protecting vaccinated individuals from severe health outcomes and reducing the infection risk for both vaccinated and non-vaccinated individuals, by reducing the load on the healthcare system, vaccinations indirectly produce better health outcomes for patients with ailments unrelated to the relevant disease.

It is axiomatic that, if any given communicable disease infects fewer individuals and causes less severe symptoms among some members of the infected population, treatment of that disease will become less resource-intensive. Researchers have estimated that the first twenty years of the Vaccines for Children Program, from 1994 through 2013, will prevent approximately 322 million illnesses and 21 million hospitalizations.³⁷ Within the COVID-19 context, one

³⁵ *Ibid.*

³⁶ *Ibid.*

³⁷ Cynthia G. Whitney et al., *Benefits from Immunization During the Vaccines for Children Program Era – United States, 1994–*

study estimated the original mRNA vaccine course was 85% effective at preventing COVID-19 hospitalizations between mid-March and mid-August 2021.³⁸ Another model estimated that COVID-19 vaccinations prevented 1.6 million hospitalizations among vaccinated adults in the United States between December 1, 2020 and September 30, 2021 alone.³⁹ A third model estimated that between December 2020 and November 2022, COVID-19 vaccination in the U.S. prevented more than 18.5 million additional hospitalizations.⁴⁰ The reduction in hospitalizations resulting from vaccinations is significant not only as a proxy for health outcomes for those individuals, but also for the increased strain on hospitals and healthcare professionals that was avoided. Further research has determined that individuals who are infected with COVID-19 make greater use of the healthcare system during the six months following acute illness as well.⁴¹

Research confirms that greater strain on medical resources leads to worse health outcomes. Pre-COVID-19 research had already identified that crowding in emergency departments leads to clinician

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adverse events from vaccines are extremely rare today

studies concluded that serious side effects were also extremely rare following a first or second COVID-19 booster shot.⁵¹ A review of 247,011 doses of mRNA vaccines administered to children between the ages of

systematic reviews of vaccine safety.”

misinformation about VAERS entries, results in claims that are unsupported by evidence.

II. Misinformation about vaccines meaningfully interferes with their lifesaving role in a well-functioning public health system.

Despite the foregoing, vaccines themselves do not save lives—only people being vaccinated save lives

some misinformants claim that people who have received COVID-19 vaccinations have become magnetized (such that metal utensils will stick to their foreheads), or that vaccines are somehow tethered to 5G cellular towers.⁶⁰ Others have claimed that the COVID-19 vaccine will implant recipients with a tracking microchip controlled by Bill Gates.⁶¹ Others claim that vaccines from COVID-19 to the flu will render recipients infertile.⁶² Others claim that diseases targeted by vaccination (such as polio) never existed at all.⁶³ And still others claim that routine vaccines for children cause autism⁶⁴ or cancer.⁶⁵ Several of

⁶⁰ Andrea Salcedo, *A Doctor Falsely Told Lawmakers Vaccines Magnetize People: 'They Can Put a Key on Their Forehead. It Sticks.'*, Wash. Post (June 9, 2021), I-0.004

these inaccurate claims were the subject of the communications at issue in this case.⁶⁶

None of these assertions are supported by credib in

increasing the efficacy of vaccine misinformation. One German study, for example, found that “viewing typical vaccine-critical websites for only five to 10 minutes increases the perception of risk” regarding the most common vaccinations for young children and “acquiring information about vaccinations on a vaccine-critical website significantly decreased the intentions to vaccinate.”⁷⁴ And more recently, a study in the U.S. found that the number of participants who expressed definite intentions to obtain the COVID-19 vaccine dropped by more than 6% (relative to control groups that had been exposed to factual information) after reviewing only five pieces of vaccine misinformation.⁷⁵ Another study found that online misinformation helps forecast vaccine hesitancy strongly at a county level, indicating that “there is a lag of around 2–

Declining vaccination uptake has resulted in a resurgence of diseases that previously verged on eradication. For example, measles was declared eliminated from the United States in 2000.⁷⁷ But in December 2014, an outbreak began at Disneyland—ultimately resulting in 110 cases in California residents, 96 of which occurred in individuals who were unvaccinated or whose vaccination status was unknown.⁷⁸ And in 2017, more than 70 Minnesotans were diagnosed with measles, resulting in 21 hospitalizations.⁷⁹ All but four of those afflicted were unvaccinated: the outbreak hit hardest in a community that had successfully been targeted by misinformation linking the measles, mumps, and rubella vaccine to autism.⁸⁰ Similarly, across a series of measles cases and outbreaks that spanned 31 states in 2019, 1,249 cases of measles were reported, with 1,107 of those occurring in people who were unvaccinated or whose vaccination status was unknown.⁸¹ And in 2022, Columbus, Ohio suffered an outbreak of 85 confirmed measles cases in children—none of whom were fully vaccinated against

⁷⁷ CDC, *Measles (Rubeola)*, <https://bit.ly/3SMLQo8> (last reviewed Nov. 5, 2020).

⁷⁸ Jennifer Zipprich et al., *Measles Outbreak — California, December 2014–February 2015*, 64 *Morbidity & Mortality Wkly. Rep.* 153, 153 (2015), <https://bit.ly/41m0ogs>.

⁷⁹ Jacqueline Howard, *Minnesota Measles Outbreak Exceeds Last Year's Nationwide Numbers*, CNN (June 2, 2017, 3:52 PM), <https://cnn.it/3MJxzEI>.

⁸⁰ *Id.*

⁸¹ Manisha Patel et al., *National Update on Measles Cases and Outbreaks—United States, January 1–October 1, 2019*, 68 *Morbidity & Mortality Wkly. Rep.* 893, 893 (Oct. 11, 2019), <https://bit.ly/3Tcgo2P>.

the virus.⁸² During the outbreak, 36 children—42% of those infected—were hospitalized.⁸³ Pertussis, too, has become more widespread, reaching levels “that have not been observed in more than 5 decades.”⁸⁴

This consequence of misinformation is illustrated not only by data, but by individual human cost. One doctor, for example, has described a patient who refused COVID-19 vaccination, against the advice of her pediatrician and obstetrician, because she was breast-feeding.⁸⁵ She was later hospitalized.⁸⁶ Another primary care physician, working out of a large health system in Atlanta, described “the scenario [he] see[s] the most where during the height of the pandemic younger adults and individuals were jeopardizing the lives and health of older family members and patients driven by what they shared and believe[d], spreading misinformation.”⁸⁷ A geriatrics health care professional similarly described a “frail 92 year old patient” who “has refused all Covid vaccines to date” as “[h]er son told her it was dangerous based on reports he read

⁸² Joel Oliphint, *Top Doctors: Anatomy of the Central Ohio Measles Outbreak and Why It Might Not Be the Last*, Columbus Monthly (Aug. 15, 2023, 6:17 PM), <https://bit.ly/46rjNOg>

online.”⁸⁸ Although the doctor “[t]ook a long time to discuss” vaccination with the patient, “[t]here was no convincing her.”⁸⁹

B. Combatting vaccine misinformation after its acceptance is not reliably effective and diverts resources from clinical care.

The detrimental effects of vaccine misinformation are particularly visible in clinical settings, where doctors and other healthcare professionals are on the front lines against misinformation that has not been stopped at its source. The experiences of *amici* and their members show that post hoc efforts to mitigate the harm from vaccine misinformation are less effective at preserving public health than reducing the spread of misinformation in the first place, because

magnetized.⁹⁷ Another pediatrics infectious diseases physician with thirty-six years of experience has heard parents raise the concern that the COVID-19 vaccine was “developed to kill people of color.”⁹⁸ Pediatricians report that these concerns about vaccination have moved beyond the COVID-19 vaccine, and are also causing families that had “never worried about

their concerns, exploring the patients' medical sources, explaining additional evidence the clinician can offer, identifying common ground, and planning to continue the conversation in the future.¹⁰¹ These conversations already require a meaningful investment of time, and require even more when clinicians follow these suggestions. One internist reports that “[i]t takes up a lot of * * * clinic time,” and that he “[o]ften * * * end[s] up going beyond 20 minutes of an office visit to counsel.”¹⁰² A pediatrician in Lexington, Kentucky with twenty-three years of experience reports spending approximately double the time counseling parents on vaccination than she did before COVID-19.¹⁰³ And a neonatologist practicing in Westchester County with twenty-three years of experience estimates that he spends one third of each prenatal consultation—or about two hours on an average work day—dedicated only to discussing COVID-19 immunization with reluctant families.¹⁰⁴

The internal medicine specialist who has been practicing in rural Alaska for twenty-five years reports that she has “spent time during every visit of [her] clinic day, totaling many hours each week, assessing vaccination status, counseling patients, discussing vaccine options, addressing vaccine questions, risks, benefits, state of the science, and countering misinformation.”¹⁰⁵ Despite some “limited success” in patient vaccination through these efforts, she has

¹⁰¹ Asha Shajahan & Irene V. Pasquetto, *Countering Medical Misinformation Online and in the Clinic*, 106 *Am. Fam. Physician* 124 (2022), <https://bit.ly/49EDMeZ>.

¹⁰² Statement received from ACP Nov. 17, 2023.

¹⁰³ Statement received from AAP Nov. 17, 2023.

¹⁰⁴ Statement received from AAP Nov. 17, 2023.

¹⁰⁵ Statement received from ACP Nov. 17, 2023.

“noticed a new distressing trend”: that “patients who previously agreed to be vaccinated are declining recommended boosters or updated vaccine doses,” be-

coming years¹¹⁶ and reports that, due at least in part to “elevated levels of burnout * * * during COVID-19,” more than a quarter of healthcare professionals (and 24.3% of physicians) who responded to one survey stated an intent to leave their practice.¹¹⁷

The heartbreak doctors face in seeing misinformation claim the lives of their patients poses, in one North Texas pediatrician’s words, its own wa

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CONCLUSION

For the reasons explained above, should this Court address the question of whether petitioners' actions furthered a compelling interest, it should answer that question in the affirmative.

Respectfully submitted,

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