

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Who Calls the Shots? A Legal and Historical Perspective on Vaccine Mandates



Eric M. Fraser, JD, MBA Phoenix, AZ Michael J. Neuss, MD, PhD Philadelphia, PA

Vaccine mandates in the United States are often controversial, with some people opposed to mandates on the grounds they threaten personal liberty. The public's contentious debates about vaccines, however, bear little resemblance to current legal battles. In court, some mandates survive whereas others have failed. Neither extreme (either those calling for universal mandates or those calling for no mandates) has received much traction in court.

Instead, cases turn on legal nuances and technical aspects of the law such as the precise contours of legislative authorization. As we argue in this article, the history of vaccine mandates can be a guide to our current moment. Vaccine mandates can be contentious, but they also have important (if complex) legal and historical precedent. We argue that even the most notable disease eradication campaigns involved a patchwork of efforts, rather than a single comprehensive mandate. Smallpox eradication has become an important touchstone in our current debates about vaccine policy, but is often misrepresented as a monolithic process or a unified response. Smoking also serves as an important example, showing how meaningful action in public health requires a broad array of efforts and interventions. As our article argues, many observers of the current debate around vaccine

AFFILIATIONS: Osborn Maledon, P.A. (E. M. F.); and the University of Pennsylvania (M. J. N.).

CORRESPONDENCE TO: Michael J. Neuss, MD, PhD; email: michael. neuss@pennmedicine.upenn.edu

Copyright © 2022 American College of Chest Physicians. Published by Elsevier Inc. All rights reserved.

DOI: https://doi.org/10.1016/j.chest.2022.04.142

mandates oversimplify the complexity of mitigating disease, which depends on efforts across states and municipalities, as well as public and private groups.

Introduction

By early 2022, government entities at virtually every level in the United States had enacted COVID-19 vaccination requirements. At the federal level, officials in the executive branch imposed vaccination requirements on large employers, health care facilities participating in Medicare and Medicaid, federal contractors, federal employees, and military personnel. State and local governments imposed a diverse array of vaccination mandates, covering groups such as government employees, public-facing employees of private businesses, and health care workers in some states and cities.¹

Vaccination mandates have proved to be controversial, with dozens of lawsuits challenging the mandates across the country. Despite widespread public debate about whether vaccination mandates are permissible at all, US courts have decisively rejected the notion that vaccination mandates are not permissible. In court, the question is not whether the government may impose vaccination mandates, but rather which government actors have the power to enact which mandates.

In the United States, therefore, a single, uniform vaccination requirement covering everyone is unlikely. Instead, vaccination requirements will likely continue as a patchwork of separate requirements enacted by different government and private actors, covering different sets of the population.

This pattern is not new. The histories of smallpox eradication and anti-tobacco campaigns share important similarities with the current moment. In this article, we share a brief history of the public health response to smallpox and smoking to show that the legal technicalities around vaccine mandates are sometimes complex, and historically the pathway to widespread vaccination involves not a single lever that is pulled early, but a variety of public and private mechanisms that develop into a patchwork of vaccine mandates.

Smallpox Inoculation in Historical Context

More than a century ago, many debates about mandatory vaccination centered around smallpox. The

chestjournal.org 659

historian James Colgrove² has described the challenge public health officials faced as one of negotiating the balance between persuasion and compulsion, against the backdrop of changing perspectives on the degree to which mandatory vaccination might be acceptable. Colgrove describes a basic challenge of "civic complacency" among the public in times of relatively low threat of infectious diseases, which was weighed against the probability of outbreaks and the need to have prevented some degree of community spread.

Campaigns to eradicate smallpox remain a remarkable fixture in the public's imagination, due primarily to the success of those campaigns. This success led, in turn, to a generally favorable view of vaccines as a technological intervention that could easily be made to improve public health. The apparent success of vaccines against diseases like smallpox has obscured much of the complexity around the public's acceptance of vaccines. Although some might portray smallpox vaccination requirements as relatively universal or uncontroversial, the historical evidence shows that, like today, the vaccination mandates were sometimes controversial, sometimes challenged, and consisted of a patchwork of separate mandates imposed by various public and private actors.

In the closing decades of the nineteenth century, public health officials in cities like New York and Boston often found themselves struggling to ensure widespread vaccination against smallpox. Colgrove² explains that "many health officials were frustrated that they had no legal authority to compel the vaccination of reluctant citizens." This began to change by the turn of the century, when many state and local governments imposed some form of smallpox vaccine mandate.³ Around 1900, many more state and local governments began mandating and enforcing vaccination, often by fining those who refused vaccination.

These mandates were not uncontroversial, and important questions about the vaccines motivated opposition to mandates. Groups such as the Anti-Vaccination League formed in the United States to oppose the mandates.³ The historian Karen Walloch⁴ has described debates over smallpox in this era as less to do with "irrational and antigovernment" viewpoints than with concerns about the safety and efficacy of vaccines, or of personal liberty and "bodily integrity." Practical concerns about specifically which vaccination techniques were safe and effective were prominent, and as Walloch has demonstrated, compulsory vaccination

was more likely imposed on immigrants than on established and affluent citizens of cities like Boston.

Even a century ago, opponents of vaccine mandates challenged the mandates in court. In one case decided in 1900, an objector "strenuously insist[ed] that vaccination is in no manner a preventive of smallpox, and that its failure in this respect is, as he contends, now conceded by many eminent medical authorities." He argued that complying with the mandate would "have his system so poisoned by the vaccine virus as to result in his permanent injury." The courts, however, did not view their job as deciding whether vaccine mandates were a good policy for public health: "it is for the legislature, and not for the courts, to determine in the first instance whether vaccination is or is not the best mode for the prevention of smallpox and the protection of the public health." The efficacy and safety of vaccines, and the wisdom of mandating them, fell outside the courts' analysis, "as the law affords no means for the question to be subjected to a judicial inquiry or determination."5 The courts recognized that they should answer legal questions, not medical questions.

Instead, the courts principally addressed the question of whether a particular mandate was authorized. Most notably, in the 1905 case *Jacobson v Massachusetts*, the US Supreme Court upheld a Massachusetts law under which municipalities could require people to get vaccinated or pay a fine. The Supreme Court held that "[i]t is within the police power of a State to enact a compulsory vaccination law." Consequently, courts generally upheld mandates authorized by a state legislature, such as in *Jacobson*.

In contrast, administrative agency mandates without legislative authorization often failed. In 1902, the Supreme Court of Kansas explicitly assumed that "the legislature has authority to enact such laws as are requisite for the preservation of health, and to prevent infection from contagious diseases," but struck down a regulation from the state board of health.8 Although the Kansas legislature authorized the board of health to "supervise the health interests of the people of the state," that was not specific enough to authorize a vaccination mandate. In 1897, the Supreme Court of Wisconsin likewise held that "[t]he state board of health is a creation of the statute, and has only such power as the statute confers," meaning that the court would uphold a vaccination requirement only if the legislature had authorized it.9

Eradicating smallpox did not happen immediately; it instead unfolded over decades, due to efforts from a variety of actors. The federal government never required everyone to get vaccinated via a single legislative act, in a single moment. Instead, efforts involved state and local governments throughout the country, as well as private actors. Many employers required that their employees be vaccinated even without government mandates. In the 1920s, for example, a clothing manufacturer in Texas required smallpox vaccinations for its 500 employees (at the employees' expense), unless they presented a physician's note. Noncompliance would result in being laid off until after "the smallpox epidemic or scare had passed." 10

The risk of spreading communicable disease through travel meant that health officials worked closely with operators of trains to inoculate anyone exposed to smallpox. In one illustrative example, 171 tourists bound for California in 1947 delayed their arrival in San Bernardino by 2 hours so that they could receive inoculations, rather than being forced to quarantine for 14 days. Similarly, following an outbreak at a wedding, thousands in Pennsylvania were inoculated against smallpox. There was a coordinated effort: "The schools, the post office, the Pennsylvania Railroad, and numerous factories joined the city [of Philadelphia] in the concerted effort to avert any outbreak here." In this case, environments where contagion could spread easily made partnerships around inoculation important.

Indoor Smoking Bans in Historical Context

Campaigns to curtail smoking have enjoyed broad support in recent years, but the challenge of intervening successfully to limit tobacco use speaks to the importance of elaborating who authorizes mandates against individual behavior. As with smallpox, efforts in the United States to curtail smoking rely on a patchwork of efforts involving the federal government, state and local governments, and private entities.

The federal government has banned smoking in narrow circumstances under the government's control, such as on aircraft and in federal buildings. Over the course of several decades, states and local governments enacted smoking bans, such as Minnesota's Freedom to Breathe Act, which covers most indoor public places. Many private entities also enacted their own smoking bans. Many readers of *CHEST* may recall times when smoking was permitted on the campuses of their college or medical school, or perhaps even around the hospitals

where they worked. For example, Duke University's health system became smoke free in 2007, but the University did not extend the smoke-free policy to all buildings until 2020. Similarly, many cities allowed restaurants to maintain smoking sections, a practice that has largely faded as awareness of the risk of second-hand smoke has increased.

To many involved in efforts to curtail smoking, progress felt slow and plodding, with efforts finding broader success only by the early twenty-first century. The tobacco industry has worked hard to resist efforts to curtail smoking, but many Americans have long been receptive to efforts to restrict the use of tobacco products. 16 Early (if limited) successes, such as Arizona's 1973 law restricting smoking in public places and government buildings, ¹⁷ demonstrated that there was support for new and robust interventions. These kinds of legislative interventions were usually sustainable, too. In contrast, efforts including the Food and Drug Administration's proposal in the mid-1990s that tobacco be regulated like a drug failed, only to find acceptance later when authorized through an act of Congress.¹⁸ Tobacco use remains prevalent in the United States, but began to fall before the close of the twentieth century, its decline "spurred by powerful shifts in the social meaning of cigarette use." ¹⁹ Increasing awareness of the risks tobacco posed and increasing acceptance of bans on smoking in public places helped to support these important interventions in public health.

COVID-19 Vaccination Mandates

On January 13, 2022, the US Supreme Court issued two opinions about vaccination mandates. Together, they illustrate the patchwork framework of mandates in the United States. In one case, the Supreme Court essentially upheld a federal administrative rule requiring vaccines for staff at medical facilities that participate in Medicare and Medicaid.²⁰ In the second case, the Supreme Court essentially ruled invalid an administrative rule from the Occupational Safety and Health Administration (OSHA), which required vaccinations for employees of most large businesses.²¹

The principal difference between the two cases was the scope of authority provided by Congress. The Supreme Court explained that "[a]dministrative agencies are creatures of statute. They accordingly possess only the authority that Congress has provided."²¹ For the Medicare/Medicaid mandate, the Supreme Court ruled that the vaccination mandate "falls within the authorities

chestjournal.org 661

that Congress has conferred upon" the agency and therefore was permissible.²⁰ For the OSHA rule, the Supreme Court ruled that the rule falls outside the power Congress had given to the agency.

No one on the Supreme Court questioned the principle that some vaccination requirements, by some government actors, are permissible. Even the justices who voted to invalidate the OSHA rule acknowledged that it would be "plainly permissible" for OSHA to issue "targeted regulations" within the scope of the agency's statutory authority.²¹ Justice Neil Gorsuch, who voted against the OSHA mandate, wrote, "The central question we face today is: Who decides?" He questioned whether decisions on vaccination requirements should be left to federal administrative agencies or whether "that work belongs to state and local governments across the country and the people's elected representatives in Congress."22

From more than a century of litigation and judicial decisions, a few principles emerge. First, federal and state agencies may impose vaccine mandates, but only if they have legislative authorization. Second, mandates typically have a limited scope, such as a federal health agency imposing mandates on health care facilities, or a state education board imposing mandates on school employees and students. Third, vaccine mandates will likely continue to consist of a patchwork of separate mandates at all levels of government, plus private actors. Federal agencies can act within the scope of their legislative authority, such as the Medicare/Medicaid mandate. State and local governments have other sources of authority, ranging from authority over their own employees or schools to a general police power. Some private employers have enacted their own requirements.²³ These mandates do not cover everyone in the United States, but neither did anti-tobacco interventions or smallpox vaccine mandates.

The challenges of our current system have been frustrating to many who wish for a faster resolution to the pandemic, and see the lack of national coordination as fundamentally limiting. The "end" of the pandemic and a return to more consistent normalcy would rely in part on compulsory vaccination. In light of the structural and legal frameworks of American government, including federalism and separation of powers, the pathway toward broader vaccination necessarily will rely on a variety of decentralized actors. In the long term, there may be a need to reassess our systems of public health to consider a more nationalized response to pandemics. For the time being, the country's current patchwork approach to mandates reflects a reality of governance and legal precedent in the United States that makes a nationwide response difficult. Perhaps support for better-organized and morecentralized responses to pandemics will develop in time. But in our current moment, we can sew together a broader patchwork of mandates, supported by efforts to educate on the safety and efficacy of vaccines, while encouraging easier access to vaccines.

Acknowledgments

Financial/nonfinancial disclosures: None declared.

Other contributions: The authors thank Dr Andrew Wehrman, who pointed us toward the topic of vaccine trains. His forthcoming book, The Contagion of Liberty, examines the history of smallpox vaccination closely, although in an earlier period than is considered in this article.

References

- 1. California State Public Health Officer Order of July 26, 2021; New York City Order of the Commissioner of Health & Mental Hygiene to Require Covid-19 Vaccination in the Workplace; December 13, 2021; California State Public Health Officer Order of February 22,
- 2. Colgrove J. State of Immunity: The Politics of Vaccination in Twentieth-Century America. 1st ed. Berkeley, CA: University of California Press; 2006:17-18.
- 3. Compulsory Vaccination. Yale Law Journal. 1903;12(8):504-506.
- 4. Walloch KL. The Antivaccine Heresy: Jacobson v. Massachusetts and the Troubled History of Compulsory Vaccination in the United States, 216. Rochester, NY: University of Rochester Press; 2015:170.
- 5. Blue v Beach, 56 N.E. 89, 91 (Ind. 1900).
- 6. Jacobson v Massachusetts, 197 U.S. 11 (1905).
- 7. Jacobson v Massachusetts, 197 U.S. 11 (1905). For a deeper discussion of this case, see Blackman J. The Irrepressible Myth of Jacobson v. Massachusetts. Buffalo Law Review. 2022;70(1):131.
- 8. Osborn v Russell, 68 P. 60 (Kan. 1902).
- 9. State ex rel. Adams v Burdge, 70 N.W. 347 (Wis. 1897).
- 10. Texas Emp. Ins. Ass'n v Mitchell, 27 S.W.2d 600, 603 (Tex. Civ. App.
- 11. 171 on Train Get Smallpox Vaccine. New York Herald Tribune. July 26, 1947:13.
- 12. Thousands More Are Vaccinated. Philadelphia Inquirer. January 6, 1943:1; They All Want Vaccinations. Philadelphia Inquirer. January
- 13. 14 CFR § 252.4 (aircraft); Executive Order No. 13058, Fed. Reg. 1997;62(156):43451 (August 9, 1997) (Protecting Federal Employees and the Public From Exposure to Tobacco Smoke in the Federal Workplace).
- 14. Freedom to Breathe Act, Session Laws Minn. ch. 2007;82.
- 15. Duke Human Resources. Tobacco Free Policy. Accessed April 15, 2022. https://hr.duke.edu/wellness/tobacco-cessation/tobacco-free-
- 16. Brandt AM. The Cigarette Century: The Rise, Fall, and Deadly Persistence of the Product That Defined America. New York: Basic Books: 2009.
- 17. Arizona Session Laws Ch. 122, § 1 (1973).

- 18. Brandt AM. FDA regulation of tobacco—pitfalls and possibilities. $N\ Engl\ J\ Med.\ 2008;359(5):445-448.$
- 19. Brandt AM. The Cigarette Century: The Rise, Fall, and Deadly Persistence of the Product That Defined America. New York: Basic Books; 2009:6.
- 20. Biden v Missouri, 595 U.S. ____, 142 S. Ct. 647 (2022).
- 21. Nat'l Fed'n of Indep. Bus. v Dep't of Labor, 595 U.S. ____, 142 S. Ct. 661 (2022).
- 22. *Nat'l Fed'n of Indep. Bus. v Dep't of Labor*, 595 U.S. ____, 142 S. Ct. 661 (2022) (Gorsuch, J., concurring).
- 23. Cutter C, Nassauer S, Tita B. U. S. Companies Split on Vaccine Mandates. Wall Street Journal. August 5, 2021:A1.

chestjournal.org 663