FROM INFLUENZA TO EBOLA: LEGAL AND BUSINESS IMPLICATIONS OF EMPLOYER-MANDATED VACCINATION POLICIES

Teri Dobbins Baxter[*]

Abstract

The overwhelming weight of authority confirms that vaccines save lives. But vaccine opponents have been vocal and influential, and even some who work in healthcare facilities distrust vaccines. The tension between employees who distrust vaccines and employers who want to encourage or require vaccination has led many healthcare policy and legal scholars to explore the legal and ethical implications of compulsory vaccine policies. While many scholars have made important contributions to this discussion, most of the legal scholarship has focused on a single vaccine for a limited class of employees: the influenza (flu) vaccine for healthcare workers. Moreover, the focus of the literature is on healthcare employers' potential liability if they require employees to get the flu vaccine. However, new diseases threaten our communities constantly, and as new vaccines are developed (such as the Zika and Ebola vaccines currently being developed and tested) healthcare and non-healthcare employers must reconsider imposing mandatory vaccination policies. This Article considers the factors those employers should consider when deciding whether to require employees to be vaccinated against diseases other than the flu.

Similarly, most arguments in support of or in opposition to flu vaccination policies do not address whether healthcare or other employers may face liability if they fail to require employees to be vaccinated. The question is critically important because mandating vaccines is almost unheard-of outside of the healthcare context. Many lawyers and government agencies advise employers to encourage but not mandate employee vaccination, and the only risks identified are the risks of being sued for imposing a mandate in violation of anti-discrimination statutes. The unstated premise is that there is no liability if the employer chooses not to require vaccination. This Article considers the accuracy of that premise and concludes that employers whose employees are likely to transmit diseases to other employees, vulnerable clients, or patients may face liability if they do not to require their employees to be vaccinated.

---

[*]Associate Dean for Faculty Development and Professor of Law, University of Tennessee College of Law. The author thanks Christopher John and Alex Thomason for their valuable research assistance and the University of Tennessee College of Law for its generous research support.

Introduction

Despite the increased scrutiny and distrust of vaccines over the past two decades, the overwhelming weight of authority confirms that vaccines save lives.[1] The strength of the medical evidence helps to explain why vaccines are mandatory for schoolchildren in every state.[2] It also supports efforts by states and employers to mandate influenza vaccinations for healthcare personnel. But vaccine opponents have been vocal and influential, and even some who work in healthcare facilities oppose vaccine mandates. The tension between employees who distrust vaccines and employers who want to encourage or require vaccination has led many healthcare policy and legal scholars to explore the legal and ethical implications of compulsory vaccine policies.[3]

While many scholars have made important contributions to this discussion, most of the legal scholarship has focused on a single vaccine for a limited class of employees: the influenza (flu) vaccine for healthcare workers. Moreover, the focus of the literature is on healthcare employers' potential liability if they require employees to get the flu vaccine. However, almost none consider the legal implications of a non-healthcare employer mandating flu vaccinations or requiring vaccination against other diseases. Furthermore, no one has seriously considered whether an employer might face liability for *failing* to require its employees to be vaccinated. This Article explores this uncharted territory.

Certainly it is understandable that scholars would focus on the flu vaccine and healthcare personnel to analyze legal issues raised by mandatory vaccination policies. Influenza is a serious, highly contagious disease that affects thousands of people each year and exacts a heavy price in terms of economic losses for employers, strain on the healthcare system, and thousands of deaths. Moreover, because the risks and benefits have been closely studied over a long period of time, it is relatively easy for scholars (and courts) to perform a cost-benefit analysis and apply the results to constitutional, discrimination, and disability law arguments. But the conclusions reached for compulsory flu vaccine policies for healthcare

---

[1] http://www.cdc.gov/vaccines/vac-gen/vaxwithme.html

[2] While every state requires vaccinations for children attending school, states are not uniform with respect to which exemptions, if any, are available or the consequences of failure to comply with the vaccination requirements. *See* discussion *infra* Part ____.

[3] *See*, *e.g.*, Rene F. Najera & Dorit R. Reiss, *First Do No Harm: Protecting Patients Through Immunizing Health Care Workers*, 26 HEALTH MATRIX 363 (2016); Alexandra M. Stewart, Arthur Caplan, Marisa A. Cox, Kristen H.M. Chang & Jacqueline E. Miller, *Mandatory Vaccination of Health-Care Personnel: Good Policy, Law, and Outcomes*, 53 JURIMETRICS J. 341 (2013).

workers cannot be applied to questions about other employers or other vaccines without critical thought. New diseases threaten our communities constantly, and as new vaccines are developed (such as the Zika and Ebola vaccines currently being developed and tested) employers must reconsider whether to implement mandatory vaccination policies. This Article considers the factors those employers should consider when making their decisions.

Similarly, most arguments in support of or in opposition to flu vaccination policies do not address whether healthcare or other employers may face liability if they *fail* to require employees to be vaccinated. The question is critically important because mandating vaccines is almost unheard-of outside of the healthcare context. In addition, when employers are advised by their lawyers and by government agencies to encourage but not mandate employee vaccination, the only risks identified are the risks of being sued for imposing a mandate in violation of anti-discrimination statutes. The unstated premise is that there is no liability if the employer chooses not to require vaccination. This Article considers the accuracy of that premise and concludes that employers whose employees are likely to transmit diseases to other employees, vulnerable clients, or patients may face liability if they fail to require their employees to be vaccinated.

In Part I of this Article I will briefly outline the laws that apply and that an employer must consider before adopting a mandatory vaccination policy. Part II will address current state laws mandating or encouraging vaccination and describe the categories of people, places, and vaccines covered by those laws. Part III discusses the history of vaccine mandates in healthcare settings, some of the legal challenges to such mandates, and why relatively few healthcare facilities have adopted mandates. In Part IV, I identify other employment settings that may benefit from mandatory vaccine policies and analyses the risks and benefits of such policies. Part V identifies other vaccines—including the Zika and Ebola vaccines that are currently under development—and questions whether healthcare or other employers might want to require employees to get vaccinated against those diseases. Finally, the wisdom and legality of such mandates is considered.

I. Laws Relevant to Employer-Mandated Vaccination Policies

The laws that apply to vaccine mandates vary depending upon whether the employer is a private entity or branch or agency of the government. The United States Constitution and other federal and state laws restrict government action in ways that do not apply to private employers. However, several federal and state laws may impact whether and how a private employer may impose a vaccination requirement. This section

identifies relevant laws and how they apply to public and private employers.

A. Free Exercise Clause of the First Amendment to the United States Constitution

The Free Exercise Clause of the First Amendment is a limit on the federal government and states that "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof . . . ."[4] The Supreme Court has recognized that the Fourteenth Amendment incorporates First Amendment rights and protects against state action.[5] Consequently, no state or federal employer can enact any policy that infringes on the employee's free exercise of religion. However, "the right of free exercise does not relieve an individual of the obligation to comply with a 'valid and neutral law of general applicability on the ground that the law proscribes (or prescribes) conduct that his religion prescribes (or proscribes).'"[6] Therefore, so long as a vaccine mandate is a neutral law that applies equally to all employees without regard to religion, the policy will not violate the Free Exercise Clause.

B. Religious Freedom Restoration Acts

In response to the Supreme Court's holding that strict scrutiny should not apply to generally applicable rules that have the incidental effect of infringing on a person's exercise pf their religious beliefs, Congress enacted the Religious Freedom Restoration Act (RFRA), which revives the strict scrutiny standard, at least as applied to federal government action.[7] Similar state statutes also require strict scrutiny of state regulations that affect a person's free exercise of religion.[8] If a state government employer

---

[4] U.S. CONST. amend. I.

[5] "The fundamental concept of liberty embodied in that Amendment embraces the liberties guaranteed by the First Amendment." Cantwell v. State of Connecticut, 310 U.S. 296, 303 (1940).

[6] Employment Div., Dep't of Human Res. of Oregon v. Smith, 494 U.S. 872, 879 (1990).

[7] "Following our decision in *Smith,* Congress enacted RFRA in order to provide greater protection for religious exercise than is available under the First Amendment." Holt v. Hobbs, 135 S. Ct. 853, 859–60 (2015). 42 U.S.C.A. § 2000bb-1(2016) ("Government shall not substantially burden a person's exercise of religion even if the burden results from a rule of general applicability . . . ."). The Supreme Court struck down RFRA to the extent that it applied to state and local governments, City of Boerne v. Flores, 521 U.S. 507, 536, 117 S. Ct. 2157, 2172, 138 L. Ed. 2d 624 (1997) ("RFRA contradicts vital principles necessary to maintain separation of powers and the federal balance").

[8] *See* CONN. GEN. STAT. ANN. § 52-571b; FLA. STAT. ANN. §§ 761.01 *et seq.*; IDAHO STAT. §§ 73-401 *et seq.*; 775 ILL. COMP. STAT. ANN. § 35/1 et seq.; N.M. STAT. ANN. §§

in a state with an RFRA or similar law imposes a vaccine mandate with no exemption for employees whose religious beliefs oppose vaccination, the employer will have to prove that a compelling government interest justifies the mandate and that the mandate is the least restrictive means of furthering that interest. Government-run healthcare facilities may be able to meet this burden if they can prove that vaccination is necessary to protect vulnerable patients, but they will likely have to exempt employees with religious objections if those employees do not have patient contact or if the employer can accommodate their religious beliefs in other ways. For non-healthcare employers, it may be very difficult (or impossible) to identify a compelling interest that can only be further by mandatory vaccination. However, this does not mean that all vaccine mandates are unlawful; instead, it merely requires government employers to consider exemptions or other accommodations for employees with religious objections.

C. Title VII of the Civil Rights Act

While private employers are not bound by federal or state RFRAs, Title VII of the Civil Rights Act of 1964 (Title VII) applies to private employers[9] and prohibits religious discrimination. Under Title VII it is unlawful for an employer "to fail or refuse to hire or to discharge any individual, or otherwise to discriminate against any individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's . . . religion . . . ."[10] In order to prevail on a Title VII religious discrimination claim, the employee must first show that "a bona fide religious practice conflicts with an employment requirement and was the reason for [an] adverse employment action."[11] If the employee makes this *prima facie* case, then the burden shifts to the employer to show that: (1) it reasonably accommodated the employee, or (2) that offering a reasonable accommodation would cause it to suffer an undue hardship.[12]

28-22-1 *et seq.*; S.C. CODE ANN. §§ 1-32-10 *et seq.*; TEX. CIV. PRAC. & REM. §§ 110.001 *et seq*.; R.I. GEN. LAWS §§ 42-80.1-1 *et seq.* Some state constitutions provide similar protection. *See* AL. CONST. , § 3.01 ("The purpose of the Alabama Religious Freedom Amendment is to guarantee that the freedom of religion is not burdened by state and local law; and to provide a claim or defense to persons whose religious freedom is burdened by government.").

[9] "The term 'employer' means a person engaged in an industry affecting commerce who has fifteen or more employees for each working day in each of twenty or more calendar weeks in the current or preceding calendar year, and any agent of such a person . . . ." 42 U.S.C.A. § 2000e (West)

[10] 42 U.S.C.A. § 2000e-2 (West)

[11] *See , e.g.*, Cloutier v. Costco Wholesale Corp., 390 F.3d 126, 133 (1st Cir. 2004).

[12] *Id.*

"An accommodation constitutes an 'undue hardship' if it would impose more than a *de minimis* cost on the employer."[13] Accordingly, an employer must consider whether to exempt employees with religious objections or whether an accommodation (such as an exemption) will impose a significant cost.[14]

D. The Americans with Disabilities Act

The Americans with Disabilities Act (ADA) makes it unlawful for a covered employer to "discriminate against a qualified individual on the basis of disability in regard to job application procedures, the hiring, advancement, or discharge of employees, employee compensation, job training, and other terms, conditions, and privileges of employment."[15] Discrimination is not limited to termination or refusal to hire; an employer also violates the ADA by "not making reasonable accommodations to the known physical or mental limitations of an otherwise qualified individual with a disability who is an applicant or employee" unless the accommodation would "impose an undue hardship" on the employer.[16] "Undue hardship means, with respect to the provision of an accommodation, significant difficulty or expense incurred by a covered entity . . . . ."[17]

---

[13] *Id.* at 134.

[14] *Id*; *See also* Rachel K. Baden, *Can Health Care Facilities Require Their Employees to Receive the Influenza Vaccine?*, 40 Ohio N.U. L. Rev. 277, 285 (2013); *See* also Robinson v. Children's Hospital Boston, No. 14-10263-DJC, 2016 WL 1337255 at *9 (D. Mass. April 5, 2016) discussed *infra* at ___.

[15] 42 U.S.C.A. § 12112(a) (West). The ADA applies to private employers with "15 or more employees for each working day in each of 20 or more calendar weeks in the current or preceding calendar year . . . ." 42 U.S.C.A. § 12111(5)(A).

[16] 42 U.S.C.A. § 12112(b)(5)(A). Some have posited that merely asking whether an employee has been vaccinated might run afoul of the ADA. http://www.bloomberg.com/news/articles/2015-01-22/can-employers-mandate-vaccinations-for-employees- ("Even asking about workers' vaccination status can be thorny. Employers are barred from discriminating on the basis of medical status (under the Americans with Disabilities Act) or religion (under the Civil Rights Act), and questions about immunizations could reveal both."); 21 No. 11 W. Va. Emp. L. Letter 7 ("merely inquiring about an employee's vaccine history . . . as part of a vaccine policy may constitute an illegal disability inquiry.")

[17] 29 C.F.R. § 1630.2(p)(1). The regulations set out the factors that courts should consider when assessing whether an undue hardship exists:

> (i) The nature and net cost of the accommodation needed under this part, taking into consideration the availability of tax credits and deductions, and/or outside funding;
>
> (ii) The overall financial resources of the facility or facilities involved in the provision of the reasonable accommodation, the number of persons

In the context of a vaccine mandate, the ADA may require an accommodation for an employee if vaccination poses a medical threat (such as an allergy to a component of the vaccine). Exempting employees with medical objections is unlikely to create an undue hardship (a higher standard under the ADA than under Title VII) for most employers unless a significant number of employees can successfully prove the need for the exemption, which is highly unlikely. Healthcare employers may choose not to provide medical exemptions for employees who interact with vulnerable patient populations if no reasonable accommodation will adequately protect patients.[18]

It is possible that some courts will find that an employer is barred by the ADA from inquiring about whether an employee is vaccinated. The ADA states that "[a] covered entity shall not require a medical examination and shall not make inquiries of an employee as to whether such employee is an individual with a disability . . . unless such examination or inquiry is shown to be job-related and consistent with business necessity."[19] The purpose of this prohibition is to prevent employers from asking questions that are "likely to elicit information about a disability."[20]

In *Conroy v. New York State Dep't of Corr. Servs.*,[21] the Second Circuit Court of Appeals held that an employer's policy requiring employees to submit a "general diagnosis as part of a medical certification procedure following certain absences" from work constituted a disability-related inquiry.[22] Other circuits have construed the ADA more narrowly.[23]

> employed at such facility, and the effect on expenses and resources;
>
> (iii) The overall financial resources of the covered entity, the overall size of the business of the covered entity with respect to the number of its employees, and the number, type and location of its facilities;
>
> (iv) The type of operation or operations of the covered entity, including the composition, structure and functions of the workforce of such entity, and the geographic separateness and administrative or fiscal relationship of the facility or facilities in question to the covered entity; and
>
> (v) The impact of the accommodation upon the operation of the facility, including the impact on the ability of other employees to perform their duties and the impact on the facility's ability to conduct business.

Id. at § 1630.2(p)(2).

[18] *See* discussion *infra* at ___.

[19] 42 U.S.C.A. § 12112(d)(4)(A).

[20] U.S. EQUAL EMP. OPPORTUNITY COMM'N, ENFORCEMENT GUIDANCE: DISABILITY-RELATED INQUIRIES AND MEDICAL EXAMINATIONS OF EMPLOYEES UNDER THE AMERICANS WITH DISABILITIES ACT (2000), *available at https://www.eeoc.gov/policy/docs/guidance-inquiries.html#N_39_* [hereinafter Inquiries & Examinations].

[21] 333 F.3d 88, 96 (2d Cir. 2003)

[22] *Conroy*, 333 F.3d at 91-92.

[23] *See* Lee v. City of Columbus, 636 F.3d 245 (6th Cir. 2011).

In a case with similar facts—an employer whose policy required employees to submit a physician's note indicating "the nature of" the employee's illness upon returning to work—the Sixth Circuit held that it was not a disability-related inquiry.[24] The court noted that no other court had followed *Conroy* and it declined to do so, stating that "the *Conroy* court . . . unnecessarily swept within the statute's prohibition numerous legitimate and innocuous inquires that are not aimed at identifying a disability."[25] If the court believes that asking about vaccination status is likely to elicit information about a disability, then the employer would have to prove that the inquiry is job-related and consistent with business necessity.

E. Occupational Safety and Health Administration

The Occupational Safety and Health Administration (OSHA) imposes an obligation on employers to ensure that the workplace is "free from recognized hazards that are causing or are likely to cause death or serious physical harm to [their] employees . . . ."[26] Thus, in some situations the employer may have a duty to take steps, including encouraging or mandating vaccination, to prevent employees from contracting or spreading serious diseases in the workplace.[27]

For example, OSHA's published guidance informs employers that "[w]orkers who perform certain types of healthcare tasks for patients who may have the flu are at a higher risk of exposure to the seasonal flu virus and need additional precautions to protect them from workplace infection."[28] The first recommendation is that employers promote vaccination and make vaccines readily accessible to employees.[29] "Vaccination is the most important way to prevent the spread of the flu. Healthcare and emergency medical services personnel are a priority group for receiving the flu vaccine."[30] This advice strongly indicates that an employer that fails to at least encourage and enable at-risk employees to be

---

[24] *Id.* at 254. "[W]e do not find the requirement that an employee provide a general diagnosis . . . to be tantamount to an inquiry 'as to whether such employee is an individual with a disability or as to the nature or severity of a disability' under § 12112(d)(4)(A)." *Id.*

[25] *Id.*

[26] 29 U.S.C.A. § 654 (West).

[27] *See*, e.g., OSHA Employer Guidance Reducing Health Care Workers' Exposures to Seasonal Flu Virus, https://www.osha.gov/dts/guidance/flu/healthcare.html (advising healthcare employers to promote, administer, and make the flu vaccine readily available).

See also OSHA Interim Guidance for Protecting Workers from Occupational Exposure to Zika Virus, https://osha.gov/Publications/OSHA3855.pdf

[28] https://www.osha.gov/dts/guidance/flu/healthcare.html

[29] *Id.*

[30] *Id.*

vaccinated may violate OSHA.

F. State Laws

Many states have anti-discrimination laws that may require an employer to accommodate employees with religious objections to vaccination.[31] Worker's compensation laws may require the employer to pay for vaccine-related injuries if the employee is vaccinated at the employer's request.[32] Finally, state tort law may provide the basis for liability if an employer's failure to encourage or require its employees to be vaccinated against particular diseases violates a duty of care owed to employees, vendors or clients.

II. State Mandated Vaccinations

Many states have enacted laws requiring some employers—typically hospitals and long-term care facilities—to provide or require employees to receive specified vaccinations. The advantage of state law mandates is that employers do not have to worry about Title VII or ADA liability. So long as the state laws hold up against any legal challenges, the employer cannot be liable for complying with the law. However, not all states have such laws, the laws are not uniform in scope or effect, and many do not provide any penalties for non-compliance. Thus, they are often of limited value and employers must still consider whether to enact their own compulsory vaccination policies.

A. State police powers are broad enough to cover mandatory vaccination laws

State police powers undoubtedly include the right to pass laws to protect the health and safety of state inhabitants.[33] The seminal case

[31] Iowa Civil Rights Act (ICR) and the Nebraska Fair Employment Practice Act (NFEPA) prohibit private employers from discrimination on the basis of religion. *See also* FL. STAT. ANN. § 761.03 ("The government shall not substantially burden a person's exercise of religion, even if the burden results from a rule of general applicability . . . ."); Ariz. Rev. Stat. Ann. § 41-1493.01 ("[G]overnment shall not substantially burden a person's exercise of religion even if the burden results from a rule of general applicability."

[32] Edward P. Richards, Katherine C. Rathbun, Jay Gold, *The Smallpox Vaccination Campaign of 2003: Why Did it Fail and What are the Lessons for Bioterrorism Preparedness?* 64 LA. L. REV. 851, 870 (2004) ("Worker's compensation claims could be significant if a person with contraindications to vaccination is inadvertently immunized.")

[33] "According to settled principles, the police power of a state must be held to embrace, at least, such reasonable regulations established directly by legislative enactment

upholding state mandatory vaccination laws is *Jacobson v. Massachusetts*, which the Supreme Court decided in 1905.[34] The case was brought by a resident of Cambridge, Massachusetts who was prosecuted and found guilty of violating a regulation that required all inhabitants of the city to be vaccinated against smallpox.[35] Mr. Jacobsen argued that the vaccine mandate violated his liberty interests under the Fourteenth Amendment to the United States Constitution. [36] He claimed that "a compulsory vaccination law is unreasonable, arbitrary, and oppressive, and, therefore, hostile to the inherent right of every freeman to care for his own body and health in such way as to him seems best; and . . . is nothing short of an assault upon his person."[37]

The Supreme Court disagreed and held that the regulation did not violate the Constitution.[38] In so holding, the court noted that the liberty interests protected by the Fourteenth Amendment are not absolute.[39]

> There is, of course, a sphere within which the individual may assert the supremacy of his own will, and rightfully dispute the authority of any human government,—especially of any free government existing under a written constitution, to interfere with the exercise of that will. But it is equally true that in every well-ordered society charged with the duty of conserving the safety of its members the rights of the individual in respect of his liberty may at times, under the

---

as will protect the public health and the public safety." Jacobson v. Commonwealth of Massachusetts, 25 S. Ct. 358, 361 (1905).

[34] *Id.* More recently, the Supreme Court of Appeals of West Virginia and the United States Court of Appeals for the Second Circuit Court have decided cases challenging the mandatory vaccination laws in West Virginia and New York. Phillips v. City of New York, 775 F.3d 538 (2d Cir. 2015) *cert. denied sub nom.* Phillips v. City of New York, N.Y., 136 S. Ct. 104, 193 L. Ed. 2d 37 (2015); *D.J. v. Mercer Cty. Bd. of Educ.*, No. 13-0237, 2013 WL 6152363, at *1 (W. Va. Nov. 22, 2013).

[35] *Id.* at 359. The regulation was passed by the board of health, pursuant to a state law giving it authority to require vaccinations if, in the opinion of the board, it was necessary for the public health or safety. *Id.* at 358-59.

[36] *Id.* Specifically, he argued:

> That the regulation "was in derogation of the rights secured to the defendant by the 14th Amendment of the Constitution of the United States, and especially of the clauses of that amendment providing that no state shall make or enforce any law abridging the privileges or immunities of citizens of the United States, nor deprive any person of life, liberty, or property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws[.]

Id.

[37] *Id.* at 361.

[38] *Id.* at 367.

[39] *Id.* at 362.

> pressure of great dangers, be subjected to such restraint, to be enforced by reasonable regulations, as the safety of the general public may demand.[40]

Thus, the mere fact that a state law infringes on an individual's liberty in some manner does not lead to the inevitable conclusion that the law is unconstitutional.

In addressing the smallpox regulation, the Court noted that the state legislature only mandated vaccination when it was necessary for public health or safety.[41] It was neither arbitrary nor unreasonable for the legislature to entrust that authority to the board of health, which it presumed was composed of members of the community qualified to make that determination.[42] Moreover, the regulation was implemented at a time when it was undisputed that smallpox "was prevalent to some extent in the city of Cambridge, and the disease was increasing."[43] Under those circumstances, the Court was unwilling to find that the regulation was arbitrary.[44] Nevertheless, the Court cautioned that compulsory vaccination laws could be unconstitutional if they were not justified by the "necessities of the case."[45] If the acknowledged authority of a state or municipality to pass laws to protect health and safety was exercised in an "an arbitrary, unreasonable manner" or went "so far beyond what was reasonably required for the safety of the public" the courts would be obligated to declare them in violation of the Constitution.[46]

Finally, the Court addressed Mr. Jacobson's attacks on the efficacy and safety of vaccines.[47] While acknowledging the existence of laymen and medical professionals who did not believe that vaccines prevented disease and could cause disease, the court took judicial notice of contrary views held by "high medical authority."[48] The Court held that the legislature was free to choose between the competing views and was not required to submit its decision to review by a judge or jury.[49]

> If there is any such power in the judiciary to review

---

[40] *Id.* at 361.
[41] *Id.* at 361-62.
[42] *Id.*
[43] *Id.* at 362.
[44] *Id.*
[45] *Id.*
[46] *Id.* (citing Hannibal & St. J.R. Co. v. Husen, 95 U.S. 465, 473, 24 L. Ed. 527 (1877) in which the Court struck down a Missouri law prohibiting certain cattle from coming into the state; the Court held that the law was not a valid exercise of the state's police power since it did not protect against disease and invaded Congress' exclusive authority to regulate interstate commerce).
[47] *Id.* at 363.
[48] *Id.*
[49] *Id.*

> legislative action in respect of a matter affecting the general welfare, it can only be when that which the legislature has done comes within the rule that, if a statute purporting to have been enacted to protect the public health, the public morals, or the public safety, has no real or substantial relation to those objects, or is, beyond all question, a plain, palpable invasion of rights secured by the fundamental law, it is the duty of the courts to so adjudge, and thereby give effect to the Constitution.[50]

Not only did the Court refuse to usurp the legislature's role in deciding disputed issues related to public health and safety, it also refused to recognize an individual right to refuse vaccination based on his own belief that the smallpox vaccination would not be beneficial to him and might cause him serious injury or death.[51]

While courts have relied upon *Jacobson* for more than one hundred years to uphold compulsory vaccination laws, one portion of the opinion suggests at least one limit on the state's authority. The Massachusetts law sanctioning compulsory vaccination exempted children who were deemed "unfit subjects for vaccination" by a physician, but no such exemption was provided for adults.[52] The court stressed that it was "not to be understood as holding" that the statute was intended to apply to an adult who could establish with reasonable certainty that he or she is not a fit subject for vaccination, or that vaccination would cause serious injury or "probably cause his death."[53] The Court implied that under such circumstances, application of the statute might be so arbitrary or oppressive "as to justify the interference of the courts to prevent wrong and oppression"[54] and require a finding that the regulation violates the Fourteenth Amendment to the Constitution.[55]

B. Current state vaccination statutes

---

[50] *Id.*

[51] *Id.* at 366 (refusing to allow individuals "residing or remaining in any city or town where smallpox is prevalent, and enjoying the general protection afforded by an organized local government, may thus defy the will of its constituted authorities, acting in good faith for all, under the legislative sanction of the state.").

It is worth noting that Jacobson's concerns about the smallpox vaccine were not unfounded. There were serious side effects and dangers associated with smallpox vaccination. *See* discussion *infra* Part __.

[52] *Id.* at 363.

[53] *Id.* at 366-67.

[54] *Id.* at 366.

[55] *See id.* at 362.

All states have statutes requiring vaccination in specific settings.[56] The most common compulsory vaccination statutes apply to children who attend public and private schools and day cares, and people who work in nursing homes and healthcare facilities.[57] Most states allow exemptions from the vaccine requirements for those with religious or medical objections and some allow exemptions based on "personal beliefs."[58] Many of the vaccination statutes have been challenged in the courts, but no statute has been struck down.[59]

1. Mandatory vaccinations for schoolchildren and day care attendees

School vaccination statutes vary by state, with the most important variation being the types of exemptions available. Most states allow an exemption on the ground that it violates the family's religious beliefs, and many allow an exemption based on "personal beliefs,"[60] which essentially allows parents to refuse to vaccinate their children for any reason at all. In light of recent outbreaks of diseases that had previously been mostly or completely eradicated (such as measles), states are reconsidering their exemptions and, in some cases, getting rid of personal belief and religious exemptions. California is one such state. Senate Bill 277, which eliminated personal belief and religious exemptions to the vaccination requirements, was signed into law by the governor on June 30, 2015.[61] The law faced strong opposition but its passage was likely due in part to the measles outbreak in December 2014—February 2015. That outbreak was traced back to Disneyland in California. Numerous Disneyland visitors were exposed to the virus and spread it across the nation when they returned to their homes.[62]

---

[56] http://www.cdc.gov/phlp/publications/topic/vaccinationlaws.html "All states require children to be vaccinated against certain communicable diseases as a condition for school attendance." *Id.* In addition, many states require or encourage health care workers to be vaccinated against influenza, varicella (chicken pox), pneumococcal disease (pneumonia), and/or pertussis. *Id.*

[57] *Id.*

[58] *Id.*

[59] Najera & Reiss, *supra* note 3, 377-78.

[60] http://www.cdc.gov/phlp/publications/topic/vaccinations.html

[61] http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_*Id*=201520160SB277

[62] http://www.cdc.gov/measles/cases-outbreaks.html

> On January 5, 2015, the California Department of Public Health (CDPH) was notified about a suspected measles case. The patient was a hospitalized, unvaccinated child, aged 11 years with rash onset on December 28. The only notable travel history during the exposure period was a visit to one of two adjacent Disney theme parks located in Orange

Other states have faced legal challenges when they excluded unvaccinated children from school and the courts have consistently upheld the compulsory vaccination laws, even without religious or personal belief exemptions.[63] In New York, vaccination is mandatory for public school attendance, but the state provides medical and religious exemptions. However, even students that are granted exemptions on those grounds may be excluded from school attendance during an outbreak of a vaccine-preventable disease. In one case, several children were excluded from attending school during a chicken pox outbreak because they had not been vaccinated.[64] Some of the plaintiffs had been granted a religious exemption while another sought but was denied the religious exemption.[65] The court quickly dismissed the plaintiffs' substantive due process argument, citing *Jacobson v. Commonwealth of Massachusetts* and reaffirming that questions regarding the safety and efficacy of vaccines must be decided by the legislature, not the courts or individual citizens.[66] "Plaintiffs' substantive due process challenge to the mandatory vaccination regime is

---

> County, California. On the same day, CDPH received reports of four additional suspected measles cases in California residents and two in Utah residents, all of whom reported visiting one or both Disney theme parks during December 17–20. By January 7, seven California measles cases had been confirmed, and CDPH issued a press release and an Epidemic Information Exchange (Epi-X) notification to other states regarding this outbreak. Measles transmission is ongoing.
>
> As of February 11, a total of 125 measles cases with rash occurring during December 28, 2014–February 8, 2015, had been confirmed in U.S. residents connected with this outbreak. . . . Among the 110 California patients, 49 (45%) were unvaccinated; five (5%) had 1 dose of measles-containing vaccine, seven (6%) had 2 doses, one (1%) had 3 doses, 47 (43%) had unknown or undocumented vaccination status, and one (1%) had immunoglobulin G seropositivity documented, which indicates prior vaccination or measles infection at an undetermined time. Twelve of the unvaccinated patients were infants too young to be vaccinated. Among the 37 remaining vaccine-eligible patients, 28 (67%) were intentionally unvaccinated because of personal beliefs, and one was on an alternative plan for vaccination.

http://www.cdc.gov/MMWR/preview/mmwrhtml/mm6406a5.htm

[63] *See, e.g*., Phillips v. City of New York, 775 F.3d 538 (2d Cir. 2015) *cert. denied sub nom.* Phillips v. City of New York, N.Y., 136 S. Ct. 104, 193 L. Ed. 2d 37 (2015); Martha McCarthy, Ph.D., *Student Vaccination Requirements: Can Nonmedical Exemptions Be Justified?*, 320 ED. LAW REP. 591, 600 (2015) ("Courts in the initial challenges uniformly upheld state and municipal vaccination requirements and endorsed the conviction of parents for violating compulsory attendance laws because their unvaccinated children were not allowed to enroll in school.").

[64] Phillips, 775 F.3d at 542.

[65] *Id.*

[66] *Id.*

therefore no more compelling than Jacobson's was more than a century ago."[67]

The plaintiffs further argued that their exclusion from school during the chicken pox outbreak violated their rights under the Free Exercise Clause of the First Amendment.[68] At the time *Jacobson* was decided, the First Amendment had not yet been held to apply to the states. Consequently, the Supreme Court did not address the issue in that case. The Second Circuit noted that the Court has addressed the issue in other cases.

> The Supreme Court has stated in persuasive dictum . . . that a parent cannot claim freedom from compulsory vaccination for the child more than for himself on religious grounds. The right to practice religion freely does not include liberty to expose the community or the child to communicable disease or the latter to ill health or death.[69]

The Second Circuit also relied on a more recent Supreme Court case in which the Court held that "a law that is neutral and of general applicability need not be justified by a compelling governmental interest even if the law has the incidental effect of burdening a particular religious practice."[70] Accordingly, the Second Circuit agreed with a previous Fourth Circuit decision that mandatory vaccination requirements for school attendance do not violate the Free Exercise Clause.[71]

The court further noted that it would not violate the Constitution if New York chose to prohibit the children from attending school for failure to meet the mandatory vaccination requirements, without providing any exemptions.[72] Instead, the state provided an exemption for students based

---

[67] *Id.* (internal citations omitted).

[68] *Id.* at 543.

[69] *Id.* (quoting Prince v. Massachusetts*,* 321 U.S. 158, 166–67 (1944)).

[70] *Id.* (quoting Church of the Lukumi Babalu Aye, Inc. v. City of Hialeah*,* 508 U.S. 520, 531 (1993)).

[71] *Id.*

[72] *Id.* Mississippi's compulsory vaccination previously included an exemption based on religious beliefs. However, in *Brown v. Stone*, 378 So.2d 218 (1979) the Mississippi Supreme Court struck down the exemption.

> The exception, which would provide for the exemption of children of parents whose religious beliefs conflict with the immunization requirements, would discriminate against the great majority of children whose parents have no such religious convictions. To give it effect would result in a violation of the Fourteenth Amendment to the United States Constitution which provides that no state shall make any law denying to any person within its jurisdiction the equal protection of the laws, in that it would require the great body of school children to be vaccinated and at the same time expose them to the hazard of associating in school with children exempted under the religious exemption who had not been immunized as required by the statute.

on religious beliefs and only excluded them during an outbreak of a vaccine-preventable disease.[73] The court concluded that the more limited exclusion was certainly constitutional.[74] In light of recent outbreaks, several states are now considering eliminating personal belief and religious exemptions for children attending school as a means of providing greater protection of children and the *Phillips* opinion provides support for those changes.

2. State-mandated vaccination in healthcare settings

While laws mandating vaccines for schoolchildren are intended to protect the children themselves, laws mandating vaccination of healthcare workers are typically intended to protect of patients who may be uniquely vulnerable to vaccine-preventable diseases.[75] The laws are far from uniform and states vary with respect to which vaccines are required, which healthcare personnel must be vaccinated, and what exemptions, if any, are available.[76] Various regulations have faced legal challenges, but no statue has ever been struck down.[77]

Some state laws are limited to particular categories of employees and some only require healthcare facilities to implement a vaccination policy (which may include education and opportunities for employees to receive the vaccine but not mandate vaccination).[78] For example, seventeen

---

Id. at 223. The current statute contains no religious or personal belief exemptions, although it does allow an exemption based on medical reasons. MISS. CODE. ANN. § 41-23-37 (West 2016).

[73] *Id.*

[74] *Id.*

[75] http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5502a1.htm ("Because HCP [healthcare personnel] provide care to patients at high risk for complications of influenza, HCP should be considered a high priority for expanding influenza vaccine use.").

[76] http://www.cdc.gov/phlp/publications/topic/vaccinationlaws.html (linking to documents outlining the healthcare worker vaccination laws in every state).

[77] *See* Najera & Reiss, *supra* note 3, 377-378 (citing Alexandra M. Stewart & Sara Rosenbaum, *Vaccinating the Health-Care Workforce: State Law vs. Institutional Requirements*, 125 PUB. HEALTH REP. 615, 616-17 (2010); Wendy J. Parmet, *Pandemic Vaccines—The Legal Landscape*, 362 New Eng. J. Med. 1949, 1951 (2010)).

[78] Maryland's law is fairly comprehensive for certain diseases. MD. CODE REGS. § 10.07.02.01, 10.07.02.21-1 requires comprehensive care facilities and extended care facilities to "request that the employee receive immunization for varicella" and MD. CODE REGS. 10.07.02.21-1(B)(5); 10.07.02.21-1(B)(8) (requiring facilities to "screen all new employees for immunity to common childhood infections such as mumps, rubella, measles, and chicken pox (varicella), through the use of pre-employment questionnaires and, if appropriate, serologic testing for presence of antibodies of these diseases." Maryland law further requires these facilities to "inquire about a history of varicella for each new employee. If the employee's history is unclear, then the facility shall request a serology for

states require healthcare workers to receive influenza vaccinations, with or without exemptions.[79] California, Maine, Oklahoma, and Rhode Island require varicella (chickenpox) vaccinations for all hospital healthcare workers.[80] Only Maine grants exemptions for non-medical reasons.[81] California, Nebraska, and Rhode Island require all healthcare workers to be vaccinated against pertussis, while Louisiana requires parents of newborns in hospitals to receive the pertussis vaccination but not the healthcare workers.[82] New York requires parents of newborns in the neonatal, nursery and obstetrics facilities to be vaccinated.[83] California, Nebraska, Louisiana, and New York allow exemptions based on personal beliefs.[84] Even states with mandatory vaccination laws may not have strong (or any) enforcement mechanisms.[85] Some scholars have argued that state laws are the best mechanism for ensuring high vaccination rates in healthcare facilities,[86] but if the state laws only encourage vaccination, or allow non-medical exemptions, they may not be as effective as employer mandates.[87]

C. Mandatory vaccination for larger populations

Vaccination laws that apply to larger segments of the population are rare. In *Jacobsen*, the compulsory smallpox vaccination law applied to all

---

varicella." By comparison, Maine's law is not especially rigorous. 10-144 ME. CODE R. CH. 264, § 2(C) requires that hospitals "adopt and implement a policy that recommends and offers annual immunization against seasonal influenza to all personnel who provide direct care to residents of the facility." *See* also 31 R.I. ADMIN. CODE 1-22:3.5.4. "[a]nnual influenza vaccination is required for all health care workers" and requires hospitals to track the "number of health care workers who decline annual influenza vaccination for medical or personal reasons."

[79] http://www.cdc.gov/phlp/docs/menu-shfluvacclaws.pdf Some states allow philosophical (California, Illinois, Maine, Maryland, Massachusetts, Nebraska, Oklahoma, Oregon, Rhode Island, and Tennessee) or religious (Illinois, Maine, Massachusetts, New Hampshire, exemptions. *Id.* Others only allow medical exemptions (Colorado). *Id.*

[80] http://www.cdc.gov/phlp/docs/menu-varicella.pdf (Appendix 1).

[81] *Id.*

[82] http://www.cdc.gov/phlp/docs/menu-pertussis.pdf

[83] *Id.*

[84] *Id.*

[85] Najera & Reiss, *supra* note 3, 375.

[86] *See* Alexandra M. Stewart & Marisa A. Cox, State Law and Influenza Vaccination of Health Care Personnel, 31 VACCINE 827, 830 (2013) ("State-based vaccination requirements are the more efficient method to increase uptake among all HCP when compared to employer-based requirements."); Najera & Reiss, *supra* note 3, 401 ("We agree with Cox and Stewart that the most cost-effective way to impose mandatory immunization policies is via state statutes.").

[87] Najera & Reiss, *supra* note 3, 401 (noting that a mandate must address implementation and enforcement in order to be effective).

inhabitants in the city of Cambridge.[88] More recently, states have not considered such broad requirements to be necessary. This may be due in large part to high vaccination rates courtesy of childhood vaccination recommendations and requirements. Moreover, imposing such a requirement would be viewed as extreme and heavy-handed in the absence of a compelling need, such as an outbreak of a serious and highly contagious disease.

Legislators would need to identify a specific and severe public health threat that could be substantially reduced by immunization before it would be politically feasible, much less legally defensible. While courts have relied on *Jacobson* to uphold vaccination requirements for schools and hospitals, the Supreme Court in that case cautioned that regulations that are arbitrary, unreasonable, or "so far beyond what was reasonably required for the safety of the public" could violate the Constitution.[89] Yet, in light of declining childhood vaccination rates and a rise in homeschooling (which may allow parents to avoid the obligation to immunize their children before attending school), outbreaks of vaccine-preventable diseases are more likely and are already occurring. Accordingly, in the future states may have to seriously consider mandatory vaccination of adults during outbreaks or threats of outbreaks of vaccine-preventable diseases.

III. Healthcare Employer Vaccine Mandates

A. The Uneasy History of Mandatory Hospital Vaccination Policies

The Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC) creates the national standard of care for immunizations.[90] In 1981 the ACIP first recommended that all healthcare personnel receive the annual influenza vaccine.[91] Although the goal was for 90% of healthcare personnel to have received the flu vaccine, they never achieved that goal.[92] More than 30 years later, the vaccination rate among healthcare personnel was only approximately 40%.[93] By the 2011-2012 influenza season rates had increased to

[88] Jacobson, 25 S. Ct. at 359.

[89] *Id.* at 362.

[90] Stewart & Cox, *supra* note 86, 827 (2013).

[91] *Id.* Currently, many other healthcare organizations recommend vaccination for healthcare workers. A list of such organizations has been compiled by the Association of American Family Physicians (AAFP). http://www.aafp.org/news/health-of-the-public/20110613mandatoryfluvacc.html

[92] *Id.*

[93] *Id.*

approximately 66.9%, with physicians and nurses having the highest vaccination rates (77.9%) and staff at long-term care facilities had much lower rates (52%).[94]

While the rates have increased, they are not high enough to protect patients. Unvaccinated workers contribute to outbreaks, illness, and death in healthcare facilities.[95] "While research indicates that outbreaks are under-detected and under-reported, they have been documented across the United States and abroad."[96] At least one outbreak in a neonatal intensive care unit was attributed to unvaccinated hospital staff.[97] Eight of the thirty-three nurses and three patients became ill.[98] Transmission from staff to patients is partially attributed to the fact that many people who are exposed to diseases and become ill continue to work.[99]

Not all states have passed laws requiring healthcare workers to be vaccinated. However, the same concerns about protecting patients from contracting vaccine-preventable illnesses that motivate states to impose mandates have motivated healthcare facilities to impose vaccine mandates even when not required to do so by law.[100] The first hospitals adopted mandatory policies in 2005[101] and hundreds more followed in the subsequent decade.

Johns Hopkins Medicine recently mandated flu vaccines for its employees.[102] On its website, it explains why it adopted the policy:

> Vaccination for health care personnel has been recommended for years, yet vaccination rates remain at 45 percent nationally. At Johns Hopkins Medicine member organizations, rates increased over the years, but they did not

---

[94] *Id.*

[95] *Id.*

[96] *Id.* (internal citations omitted).

[97] *Id.* at 828. Only 63% of medical staff, 50% of auxiliary staff, and a shockingly low 15% of nurses had been vaccinated. *Id.*

[98] *Id.*

[99] *Id.* "Eleven to 59% of exposed workers can be affected, but continue to work, transmitting infection to 3-50% of exposed patients." *Id.* (internal citations omitted).

[100] Najera & Reiss, *supra* note 3, 382-83; Robinson v. Children's Hospital Boston, 2016 WL 1337255 (U.S.D.C. Mass. April 5, 2016), appeal filed in 1st Circuit on May 5, 2016.

[101] Najera & Reiss, *supra* note 3, 372.

[102] http://www.hopkinsmedicine.org/mandatory_flu_vaccination/faq.html The policy was implemented beginning with the 2012-2013 flu season and applies to all Johns Hopkins Medicine entities. *Id.* Employees can request accommodation for sincerely held religious beliefs and can request an exception for medical reasons. *Id.* "Those who cannot receive the flu vaccine, whether for religious or medical reasons, will be required to properly wear a protective surgical mask over their mouth and nose when within 6 feet of any patient and when entering a patient room during the influenza season." *Id.*

> achieve 100 percent despite significant efforts. Overall, voluntary programs have not been effective at markedly increasing vaccination rates.[103]

While many high profile hospitals have chosen to mandate vaccines, they represent only a fraction of American healthcare facilities.[104] And, some of those facilities faced opposition and litigation from individual employees and unions.[105]

In *Virginia Mason Hospital v. Washington State Nurses Association*,[106] the hospital initially attempted to protect patients by implementing a voluntary vaccination program through which the hospital offered employees free flu vaccines.[107] The program was implemented in 1998, but by 2004 the hospital had only achieved a 55% vaccination rate among the staff.[108] Only after the voluntary vaccination program failed to achieve a sufficiently high vaccination rate did the hospital choose to implement a mandatory vaccination requirement.[109]

The nurses' union filed a grievance against the hospital stating its opposition to the new policy.[110] The grievance was submitted to arbitration to determine whether the compulsory vaccination policy could be implemented by the hospital "without bargaining over it with representatives of the union."[111] The undisputed evidence established that "the elderly and immunocompromised patient population that Virginia Mason serves is at high risk for contracting the flu if exposed to it and for suffering severe and even fatal consequences if infected."[112] Moreover, unvaccinated employees posed a direct threat to vulnerable patients.[113]

> Studies have shown that staff-to-patient flu transmittal is prevalent in hospitals and other healthcare facilities because about half of those infected with influenza are asymptomatic and because as many as 70% of healthcare workers continue to go to work even when experiencing flu symptoms.[114]

---

[103] *Id.*
[104] *Id.*
[105] *Id.*
[106] 511 F.3d 908 (9th Cir. 2007).
[107] Virginia Mason, 511 F.3d at 912.
[108] *Id.*
[109] *Id.*
[110] *Id.* at 912. Only those with religious objections or a documented vaccine allergy were exempt. *Id.*
[111] *Id.*
[112] Virginia Mason, 511 F.3d at 911.
[113] *Id.*
[114] *Id.* Unvaccinated employees pose a risk to patients even if they do not feel ill because "[m]ost healthy adults may be able to infect others beginning 1 day **before** symptoms develop and up to 5 to 7 days **after** becoming sick. Some people,

Those risks had led states and other healthcare facilities to mandate flu vaccinations.[115]

Notwithstanding this evidence, the arbitrator sustained the union's grievance and ordered the hospital to rescind the policy.[116] The hospital filed an application in federal district court to have the arbitration award vacated. The hospital argued that "the award was irrational and contrary to public policy because it prevented the hospital from protecting patient health and thus performing its core mission."[117] The district court granted summary judgment to the union, holding in relevant part that "Virginia Mason did not show any explicit, well-defined, and dominant public policy that was contravened by the arbitrator's decision."[118] The Ninth Circuit Court of Appeals affirmed.[119] While the district court and Ninth Circuit decisions can be explained by the considerable deference given to arbitrator's conclusions with respect to the collective bargaining agreement, the conclusion that no "explicit, well-defined, and dominant public policy" was contravened by the decision is troubling from a public health and public policy perspective.[120]

In essence, the *Virginia Mason* rationale allows unions to block measures deemed necessary by trained public health and medical professionals to protect sick and vulnerable patients. The *Virginia Mason* arbitrator and affirming courts failed to acknowledge that a future plaintiff would have abundant evidence of the well-known risks posed by unvaccinated healthcare workers and the benefits of compulsory vaccination. Moreover, merely encouraging or recommending vaccination—as advocated by the nurses' union[121]—results in far lower vaccination rates than a requirement.

Recently, a federal district court sided with a hospital that terminated an employee who refused to comply with the hospital's mandatory flu vaccination policy.[122] In *Robinson v. Children's Hospital*

---

especially young children and people with weakened immune systems, might be able to infect others for an even longer time." http://www.cdc.gov/flu/keyfacts.htm

[115] *See* Robinson, 2016 WL at *2.

[116] *Id.*

[117] *Id.* at 913.

[118] *Id.*

[119] *Id.* Further litigation followed after Virginia Mason adopted a policy requiring unvaccinated employees to use facemasks. Najera & Reiss, *supra* note 3, 382. That policy was appealed to the National Labor Relations Board. *Id.* An administrative law judge ultimately decided that the union waived its collective bargaining right in that case. *Id.*

[120] *See* Stewart et al, *supra* note 3, 358-59 (2013).

[121] The union state that "although 'receiving influenza vaccine is a good choice for most nurses, it is just that—a choice' and that 'receipt of any medical treatment is up to the individual.'" Virginia Mason, 511 F.3d at 912 (quoting the union's grievance).

[122] Robinson, No. 14-10263-DJC, 2016 WL 1337255 at *9 (D. Mass. April 5, 2016).

Boston, the plaintiff was an administrator who had significant contact with patients.[123] In 2011 the hospital implemented a mandatory flu vaccination policy that applied to all employees and others (including contractors and volunteers) who worked or accessed patient-care areas.[124] The plaintiff, Leontine Robinson, refused to be vaccinated on the ground that taking the vaccine violated her religious beliefs.[125] Although the hospital assisted her in her attempts to find another position at the hospital that would not require vaccination, she was unable to find such a position and was eventually terminated.[126]

Robinson sued the hospital, claiming that her termination violated Title VII of the Civil Rights Act of 1964.[127] The district court analyzed the Title VII claim under the First Circuit's two-part framework: first, the plaintiff must make a *prima facie* case that an adverse employment action was taken because an employment requirement conflicted with the employee's bona fide religious practice.[128] If the employee establishes the *prima facie* case, the employer then has the burden of proving that it offered a reasonable accommodation, or that a reasonable accommodation would create an undue hardship.[129] The hospital claimed that it reasonably accommodated Robinson; alternatively, "any accommodation would have been an undue hardship."[130]

The court agreed that the hospital had reasonably accommodated Robinson by: (1) granting her a temporary exemption and while it reviewed her medical records to determine whether she was entitled to a permanent medical exemption;[131] (2) assisting her in her efforts to find a new position at the hospital; (3) allowing her to use two months of accrued earned time to find a position outside of the hospital plus another two weeks when she had

---

[123] *Id.* at *2.

[124] *Id.*

[125] *Id.* 3-4. Initially, Robinson objected because the vaccine contained pork byproduct. The hospital offered to give her a pork-free vaccine but she refused, apparently because her religion prohibited taking any vaccines. *Id.* at *3.

[126] *Id.* at *4 She applied and interviewed for one such position, but she was not offered the job. *Id.* The hospital treated her termination as a voluntary resignation, which enabled her to reapply for other positions at the hospital in the future. *Id.*

[127] *Id.* Robinson also brought a claim under a similar state civil rights statute. *Id.* at *4. The court ruled that the state statute was substantially similar to the federal claim and it failed for the same reasons. *Id.* at *10 note 7.

[128] *Id.* at *5.

[129] *Id.*

[130] *Id.* at *6. The hospital also argued that "no jury could reasonably find that Robinson had a bona fide religious belief that precluded vaccination," but the court declined to address that claim since it found in the hospital's favor on the other two grounds. *Id.*

[131] *Id.* at *8. The hospital ultimately determined that she did not qualify for a medical exemption. *Id.* at *4.

not found a job at the end of the two months; and (4) treating her termination as a voluntary resignation so that she would be eligible to apply for positions at the hospital in the future.[132]

Rejecting Robinson's argument that the hospital should have made a greater effort to help her find a new position within the hospital, the court noted that Title VII does not obligate employers to create positions to accommodate an employee's religious beliefs.[133] Moreover, employers are only required to provide a *reasonable* accommodation, not the employee's preferred or requested accommodation.[134] "[O]nce the employer has reasonably accommodated the employee's religious needs, the inquiry is over. An employer 'need not further show that each of the employee's alternative accommodations would result in undue hardship.'"[135]

Finally, the district court held that granting Robinson's request to allow her to keep her job and allowing her to continue to have patient access would create an undue hardship for the hospital.[136] An accommodation creates an undue hardship if it results in a "more than *de minimis* cost" to the employer.[137] Costs can be economic or non-economic, and can include increased safety risks or increased risk of legal liability.[138] The hospital argued that granting Robinson's requested accommodation would have increased the risk that influenza would be transmitted to vulnerable patients.[139] Concluding that "accommodating Robinson's desire to be vaccine-free in her role would have been an undue hardship because it would have imposed more than a *de minimis* cost," the court granted summary judgment in favor of the hospital.[140] Clearly, the *Robinson* court recognized the potential legal liability if the hospital did not take steps to protect against foreseeable injury to patients.

B. Why mandates are not ubiquitous

---

[132] *Id.* at *8. Ms. Robinson had an adverse reaction to a prior vaccination and the hospital encouraged her to get medical documentation of that event to submit in support of her request for a medical exemption. *Id.* at *4.

[133] *Id.* at *8.

[134] *Id.* *6.

[135] *Id.* (internal citations omitted) (quoting Ansonia Bd. of Educ. v. Philbrook, 479 U.S. 60, 68 (1986)).

[136] *Id.* at * 8.

[137] *Id.* (quoting Cloutier v. Costco Wholesale Corp., 390 F.3d 126, 134 (2004)).

[138] *Id.*

[139] *Id.* at *9. According to the hospital's statement of undisputed facts, "[t]he Hospital's patient population includes some of the most critically ill infants, children and adolescents in the world. Even in healthy infants and children, the influenza virus can be fatal and the risk of infection and fatality is higher within the Hospital's patient population." *Id.* at *2 (internal citation omitted).

[140] *Id.* at *10.

It is worth considering why more hospitals have not imposed vaccine mandates. First, the *Virginia Mason* experience demonstrates that even some healthcare workers resist vaccination. If unions can successfully challenge mandatory vaccination policies, then hospitals with unionized employees may not be able implement the policies. Second, the risk of liability if hospitals do not mandate vaccinations currently seems very low. There are no published cases of patients successfully suing a hospital because the patient contracted influenza from an unvaccinated healthcare worker.[141] In fact, the absence of such cases was noted in *Virginia Mason*:

> Hospitals theoretically could be liable under respondeat superior or other theories of corporate negligence for the unprofessional conduct of their nurse employees,[142] but neither Virginia Mason nor [the Washington State Health Association] has cited a single example of a hospital facing legal action because a patient contracted the flu from a health care worker.[143]

Without proof of a legal and regulatory consensus in support of mandatory vaccinations, the court would not overturn the arbitrator's decision on public policy grounds.[144]

In addition, a hospital will not be liable unless the patient can show that the hospital failed to exercise reasonable care.[145] Given that most hospitals do not have vaccine mandates, and the EEOC recommends encouraging but not requiring employee vaccination, hospitals have strong evidence that their policies are reasonable without a mandate. However, as more hospitals and states impose vaccine mandates, those that do not will find it more difficult to prove that their actions are reasonable. Additionally, if the judgment in *Robinson* is upheld on appeal and other courts follow and uphold mandatory vaccination policies, the risk of liability will increase. Finally, even a single case of a patient successfully suing a hospital after contracting a vaccine-preventable illness from a healthcare worker may be sufficient to convince more healthcare facilities to implement compulsory vaccination policies.

---

[141] *See* Virginia Mason, 511 F.3d at 916.

[142] The Washington State Health Association (WSHA) was an amicus in the case. Virginia Mason, 511 F.3d at 916. The WSHA noted that Washington's Uniform Disciplinary Act, WASH. REV.CODE § 18.130.180(15), made it a violation of professional standards for a nurse to "[e]ngag[e] in a profession involving contact with the public while suffering from a contagious or infectious disease involving serious risk to public health." *Id.*

[143] *Id.*

[144] *Id.* at 917.

[145] Keller v. Roca, 111 P.3d 445, 447 (Colo. 2005).

IV. Other Employers

It is understandable that most vaccination statutes and policies target healthcare facilities and children in schools and day care settings. Requiring vaccinations before they enter school or day care protects children who may be more likely to transmit and catch vaccine-preventable illnesses, and who may suffer more severe symptoms than adults will. To the extent that childhood vaccinations lead to immunity that persists into adulthood, such policies also ensure high vaccination rates for the general public. Vaccinating healthcare workers also protects uniquely vulnerable patients.

Aside from these two groups, mandatory vaccination policies are discouraged because of concerns about liability for religious or disability discrimination and a general sense that employees will oppose such policies as an intrusion on their personal liberties. This section identifies additional categories of employers who might consider imposing a mandatory vaccination requirement. It then compares the risk of imposing the requirement to the risks and costs associated with vaccine-preventable diseases and discusses how employers might draft a policy in order to minimize the litigation risk.

A. School Employees

All states require schoolchildren to be vaccinated before attending school, but no states require teachers, other school employees, or volunteers to be vaccinated.[146] Vaccinating adults may not be necessary to protect the children if the vaccination rate of the student body is sufficient for herd immunity,[147] but if student vaccination rates are lower than that threshold, unvaccinated faculty and staff could pose dangers to students as well as other faculty, staff, and parents. Unvaccinated teachers could pose a threat to children who are unable to be vaccinated due to medical conditions, children whose religious beliefs prohibit vaccination, or children who were vaccinated but did not develop immunity to the disease. Unvaccinated adults might also transmit a vaccine-preventable disease to a child who may

---

[146] *See* http://www.cdc.gov/phlp/publications/topic/vaccinationlaws.html

[147] Herd immunity (or also known as community immunity) is defined as:

> A situation in which a sufficient proportion of a population is immune to an infectious disease (through vaccination and/or prior illness) to make its spread from person to person unlikely. Even individuals not vaccinated (such as newborns and those with chronic illnesses) are offered some protection because the disease has little opportunity to spread within the community."

http://www.cdc.gov/vaccines/terms/glossary.html

not get seriously ill, but might infect a family member with a compromised immune system or who is too young to be vaccinated.

Yet this risk may not justify a vaccine mandate. While unvaccinated adults may pose a risk to others in the school, it does not automatically follow that they pose a litigation risk. Assuming that there is no evidence of an intent to harm students, a plaintiff who contracted a vaccine-preventable illness from a school employee would have to prove: (1) the school owed a duty to the plaintiff; (2) the school breached that duty; and (3) the school's breach of its duty caused the plaintiff's injury.[148] Specifically, in order to hold the school liable on a negligent supervision theory, the plaintiff would need to prove that the school had "a duty to prevent an unreasonable risk of harm to third persons to whom the employer knows or should have known that the employee would cause harm."[149]

A plaintiff may have difficulty establishing the existence of a duty and proving that there is an unreasonable risk of harm. Whether a duty exists is a question of law to be decided by the court.[150] The court should consider "the risk involved, the foreseeability of the injury weighed against the social utility of the actor's conduct, the magnitude of the burden of guarding against injury or harm, and the consequences of placing the burden on the actor. [151] While schools certainly have a duty to protect students from unreasonable risks of harm, if the vaccination rate in the community is high, it will be difficult to establish that the school should have known that that failing to mandate vaccines for employees would result in harm. Likewise, while the social utility of vaccinating school employees may be high, if all or nearly all of the children are vaccinated it is probably unforeseeable that a school or district's choice not to require vaccination of all adults would result in transmission of a vaccine-preventable illness.[152] Even if a plaintiff can make out a *prima facie* case of negligence, public schools may have immunity to suit that bars recovery.[153]

---

[148] *See* Keller, 111 P.3d at 447.

[149] *Id.* at 448.

[150] *Id.*

[151] *Id.*

[152] But in an elementary school, many students are likely to have younger siblings who are too young to be fully vaccinated against diseases such as pertussis or influenza. Arguably, a teacher or staff member should have known that any disease that they carry into the school could be transmitted by a student or fellow teacher or staff member to a vulnerable young child in their household.

[153] *Compare* Crisp Cty. Sch. Sys. v. Brown, 226 Ga. App. 800, 800, 487 S.E.2d 512, 514 (1997) (holding that the county school system was a political subdivision of the state and, as such, was vested with sovereign immunity except where expressly authorized by state law) *with* Dermott Special Sch. Dist. v. Johnson, 343 Ark. 90, 96, 32 S.W.3d 477, 481 (2000) (holding that "school districts, as political subdivisions, are not entitled to the State's constitutional sovereign-immunity protection" but are entitled statutory immunity which

However, during an outbreak or in a community with lower vaccination rates, schools who do not have the shield of immunity may be at greater risk for liability. During an outbreak, the risk to students and their families is more obvious and courts may find that schools have a duty to consider and assess ways to minimize the risk of transmission in the school. That evaluation should include assessment of the risk posed by unvaccinated employees as well as unvaccinated children. Some school districts have required unvaccinated children to remain home during an outbreak;[154] prudence might warrant requiring unvaccinated teachers and other employees to be absent as well. Similarly, if vaccination rates in the community or the school fall below the level necessary for herd immunity, then a court could find that unvaccinated employees in close contact with students pose an unreasonable risk of harm. Courts are most likely to find a duty with respect to diseases that are highly contagious, and for which there exists a vaccine that is effective with a low likelihood of serious side effects.

One example is the measles virus. A person with measles will generally first develop a fever, runny nose, cough, red eyes, and sore throat—all symptoms can easily be mistaken for a common cold. [155] Two or three days after symptoms begin, a rash develops.[156] The measles virus is very contagious and can spread through coughing and sneezing.[157]

> Also, measles virus can live for up to two hours in an airspace where the infected person coughed or sneezed. If other people breathe the contaminated air or touch the infected surface, then touch their eyes, noses, or mouths, they can become infected. Measles is so contagious that if one person has it, 90% of the people close to that person who are not immune will also become infected.[158]

A person infected with the measles virus is contagious for up to four days before the telltale rash appears.[159] Given the ease of transmission, the virus can spread quickly through a school with low vaccination rates. But

---

limits liability to the extent of liability insurance).

[154] Phillips v. City of New York, 775 F.3d 538 (2d Cir. 2015) *cert. denied sub nom.* Phillips v. City of New York, N.Y., 136 S. Ct. 104, 193 L. Ed. 2d 37 (2015) (holding that school's decision to exclude children who were exempt from vaccination requirements due to religious objections during a chicken pox outbreak did not violate the student's rights under the Due Process Clause of the Fourteenth Amendment or the Free Exercise Clause of the First Amendment).

[155] http://www.cdc.gov/measles/about/signs-symptoms.html

[156] *Id.*

[157] http://www.cdc.gov/measles/vaccination.html

[158] http://www.cdc.gov/measles/about/transmission.html

[159] *Id.*

vaccinating every adult can help. "One dose of MMR vaccine is about 93% effective at preventing measles if exposed to the virus, and two doses are about 97% effective."[160] Even if an unvaccinated person has already been exposed to the virus, the measles vaccine can provide some protection to the disease, if taken within 72 hours of initial exposure.[161]

Requiring all teachers and school employees to be vaccinated will not prevent transmission if a large number of students remain unvaccinated. Consequently, a plaintiff who alleges that failure to vaccinate employees created an unreasonable risk of harm may have difficulty proving causation. However, if vaccinating school personnel would have been sufficient to create herd immunity, or if the plaintiff can prove that the school knew that unvaccinated personnel created a risk for identifiable students[162] then the school might have a duty to ensure that the teachers and other adults who are in contact with those students do not increase the risk of transmission.

Schools may need to exempt or accommodate employees who have religious or medical objections, particularly if vaccination rates are sufficiently high with those exemptions and, therefore, they do not impose an undue burden. But, since school attendance is mandatory and many parents do not have the option of homeschooling or sending their children to private schools, public school districts could be found to have a heightened duty to ensure that teachers and other school employees do not present an unnecessary health risk. For private schools, parents have the option of sending their children to a different school so the defense of assumption of the risk might apply and preclude liability.

B. Private Non-Healthcare Employers

Private employers may consider mandating vaccination for the benefit of the business, other employees, or customers. The extent to which the employer may have a *duty* to require vaccinations depends upon a multitude of factors, including the workplace environment, the degree and context in which employees interact with one another or with customers, and any unusual vulnerability of employees or customers.

---

[160] http://www.cdc.gov/measles/vaccination.html

[161] http://www.cdc.gov/measles/hcp/index.html#immunity "MMR vaccine, if administered within 72 hours of initial measles exposure, or immunoglobulin (IG), if administered within six days of exposure, may provide some protection or modify the clinical course of disease." *Id.*

[162] For example, an immunocompromised student who is at greater risk of catching the virus.

1. Vaccines for the benefit of the employer and other employees

Studies have concluded that employers lose an estimated $7-10 billion dollars annually in lost productivity due to the flu.[163] During the 2010-2011 flu season, the flu was blamed for 100 million lost workdays, and two-thirds of the missed days were employer-paid sick time.[164] Given the tremendous economic cost to the employer, mandating vaccination against the flu seems like a prudent and obvious solution. Private employers do not face the same constitutional concerns as government employers[165] and the vast majority of states have a presumption of at-will employment.[166] Consequently, there are few legal barriers to vaccine mandates by private employers.[167] Yet few employers outside of the healthcare industry have imposed such mandates. In fact, many law firms have published newsletters or blog posts discouraging their clients from implementing mandatory vaccination policies and instead suggesting that employers educate their employees and encourage vaccination.[168]

Concerns about union opposition and potential liability under Title VII and the ADA may explain why mandates are so rare. Under Title VII, an employer must accommodate an employee's religious objections unless

---

[163] "The Economic Effect of Influenza on Businesses," 12/13/12 https://www.shrm.org/ResourcesAndTools/hr-topics/risk-management/Pages/Economic-Effect-Influenza-Businesses.aspx (last visited 7/11/16) (citing a 2011 Walgreens study from September 2011). In a 2007 study, the CDC calculated approximately $7 billion annual cost in sick days and lost productivity; the total economic burden of annual influenza epidemics exceeded $87 billion. Molinari NA, Ortega-Sanchez IR, Messonnier ML, Thompson WW, Wortley PM, Wentraub E, Bridges CB, The annual impact of seasonal influenza in the US: measuring disease burden and costs. Vaccine, 6/28/07 http://www.ncbi.nlm.nih.gov/pubmed/17544181 (last visited 7/11/16)

[164] *Id.*

[165] The constitution generally only regulates government action, not action by private parties. However, Title VII and the Americans with Disabilities Act apply to many private employers. *See* discussion *infra* Part I.C. D.

[166] Najera & Reiss, *supra* note 3, 380.

[167] *See id*.

[168] *See, e.g.*, Baker Hostetler Employment Law Spotlight, "Mandatory Flu Vaccination Policies: Tips for the Upcoming Flu Season," 9/5/13 http://wwwww.employmentlawspotlight.com/2013/09/mandatory-flu-vaccination-policies-tips-for-the-upcoming-flu-season/ (cautioning employers about potential discrimination or civil rights violation claims arising from mandatory vaccination policies) (last visited 7/11/16); Leech Tishman Client Alerts, "Employers: Be Wary of Vaccine Mandates," http://leechtishman.com/publications/employer-be-wary-of-vaccine-mandates/ (warning clients that "while the prospect of costs savings may be attractive, employers should be wary when considering whether to require employees to be vaccinates. The potential legal ramifications and costs could be colossal.) (last visited 7/11/16).

accommodation imposes would impose an undue hardship.[169] An accommodation imposes an undue hardship if it will result in "more than a *de minimis* cost" to the employer.[170] The ADA defines undue hardship differently and sets a higher standard for employers.[171] "Undue hardship means, with respect to the provision of an accommodation, *significant* difficulty or expense incurred by a covered entity . . . . ."[172]

The EEOC has also issued guidance to employers in the context of pandemic[173] influenza and noted that the reasonable accommodations requirements under Title VII and the ADA might necessitate exemptions for employees if the employer imposed an influenza vaccine requirement. The EEOC concluded that even during a pandemic "[g]enerally, ADA-covered employers should consider simply encouraging employees to get the influenza vaccine rather than requiring them to take it."[174] Notwithstanding the EEOC's advice, it may be worthwhile for some employers to mandate at least some vaccinations, even if they allow exemptions for employees with religious objections or medical disabilities.

Consider companies with a large number of employees whose business demands peak during flu season.[175] The company can suffer significant losses in productivity, healthcare costs, and lost profits if a large number of key employees are out with the flu at any given time. Making flu shots available may be sufficient to get a substantial number of employees to voluntarily get vaccinated, but if vaccine fears drive down vaccination rates, the employer may consider imposing a mandate. If the jobs are in high demand and there is a large pool of willing applicants, the mandate is likely to be successful. In a tight job market, or if opposed by the relevant unions, the mandate may not be feasible even if it is legal.[176]

Compulsory vaccination policies may also be prudent during an outbreak of a disease other than influenza. In the event of an outbreak of a vaccine-preventable disease such as measles, an employer may have an incentive to ensure that their workforce is not vulnerable. If the employer can demonstrate that its workforce is susceptible to an outbreak, that an outbreak among its employees would create a serious economic hardship,

---

[169] Cloutier v. Costco Wholesale Corp., 390 F.3d 126, 133 (1st Cir. 2004).

[170] Trans World Airlines, Inc. v. Hardison, 432 U.S. 63, 65 (1977).

[171] *See* discussion *supra* Part I.D.

[172] 29 C.F.R. § 1630.2(p)(1) (emphasis added). *See* discussion *supra* Part I.D.

[173] "A pandemic is a global disease outbreak. It is determined by how the disease spreads, not how many deaths it causes." http://www.flu.gov/pandemic/about/index.html

[174] U.S. Equal Employment Opportunity Commission "Pandemic Preparedness in the Workplace and the Americans with Disabilities Act," (EEOC Pandemic Preparedness) 10/9/09 https://www.eeoc.gov/facts/pandemic_flu.html (last visited 7/11/16)

[175] Examples might include UPS or Amazon during the Christmas holiday season.

[176] *See* Virginia Mason, 511 F.3d at 912.

and that the required vaccine is safe,[177] the employer will have a strong case for requiring employees to be vaccinated. Depending upon the factors outlined by the EEOC, the employer may need to accommodate religious or disability-based exemption requests, and if the employees belong to a union, there may be collective bargaining requirements. However, if the employer makes the decision carefully and thoughtfully, the risk that an employee will successfully sue the employer should be low.[178]

Neither the EEOC nor the employment law letters, law firm blogs, or newsletters discuss potential liability for *failing* to mandate vaccination. The fact that there have not been any high profile lawsuits alleging negligence by employers (much less a finding of liability) likely reinforces the notion that the risks associated with a mandate are higher than the risk of not imposing a mandate. In fact, an employee trying to establish liability faces several obstacles to proving that the employer's lack of a vaccine mandate resulted in a compensable loss to the employee. The first and biggest challenge for the employee is establishing that the employer owed a duty to the employee to prevent transmission of vaccine-preventable diseases.[179]

OSHA may establish such a duty if the employee can prove that a low vaccination rate in the workplace created an unsafe or unhealthy environment.[180] During a pandemic or even a local outbreak, the employee may be able to meet this burden if the conditions at the workplace make transmission between employees or between customers and employees likely.[181] However, if the employee brings a common law negligence claim, the employee might have their recovery limited or barred under the doctrine of avoidable consequences or comparative fault.[182] The most obvious argument would be that the employee could have protected himself by

---

[177] The medical and scientific communities should assess vaccine safety, not the employee or the employer.

[178] *See* discussion of other vaccines *infra* at ___.

[179] Keller, 111 P.3d at 448 ("To establish liability [for negligence], the plaintiff must prove that the employer has a duty to prevent an unreasonable risk of harm to third persons to whom the employer knows or should have known that the employee would cause harm.") (citing Restatement (Second) of Agency § 213 (1958) and Restatement (Second) of Torts § 317 (1965)).

[180] *See*, *e.g.*, https://www.osha.gov/zika/index.html

[181] *See*, *e.g.*, https://www.osha.gov/zika/index.html#!tab4

[182] *See*, *e.g.,* IOWA CODE § 668.3:

> Contributory fault shall not bar recovery in an action by a claimant to recover damages for fault resulting in death or in injury to person or property unless the claimant bears a greater percentage of fault than the combined percentage of faulty attributed to the defendants, third-party defendants and persons who have been released, but any damages allowed shall be diminished in proportion to the amount of fault attributable to the claimant).

getting vaccinated. Unless the employee has a medical condition that makes vaccination unadvisable, it will be difficult to prove that the employer's decision not to mandate vaccination for all employees was the proximate cause of the employee's illness. Even an employee who has a compromised immune system or who is unable to be vaccinated for medical or religious reasons can seek an accommodation from the employer (such as being allowed to work from home or take paid sick leave during the outbreak). Courts are unlikely to find that the only reasonable accommodation is compulsory vaccination of all other employees.

2. For the benefit of customers or vendors

Businesses that cater to or have high numbers of customers who are pregnant, parents or caregivers, or children (ex. Motherhood Maternity, Disneyland, Babies R Us, or a medical supply store) may consider mandatory vaccination of employees for the benefit of their customers. While all employees may not pose a risk or may not need to be vaccinated against all diseases, those who are in sufficiently close contact that a serious, vaccine-preventable disease can be transmitted, may pose a risk to customers and, consequently, may pose a business or litigation risk to their employers. The risk of legal liability is probably small for most businesses. While a business has a duty to its customers, in most cases courts are unlikely to hold that the duty encompasses protecting customers from vaccine-preventable diseases. Unless the employees pose a greater risk than the general public, there is no reason to believe that a business must protect its customers from risks that the customer is likely to encounter anywhere else. Courts would also need to consider the extent to which customers are responsible for protecting themselves by getting vaccinated. Finally, proving that the customer contracted a vaccine-preventable disease from the employee of a particular business may be difficult.

However, the threat of liability may be greater for businesses that target customers who are unlikely or unable to be vaccinated. For example, a store that specializes in clothes and furnishings for infants can expect customers to bring their infants into the store with them and those infants may be too young to be vaccinated against many diseases. A judge or jury could find that it is foreseeable that unvaccinated and vulnerable infants would come in contact with employees of the store and that the business's duty of reasonable care includes an obligation to ensure that the employees do not pose an unreasonable risk of harm to customers or their infants. Other facts that may affect liability include whether an employer allowed or

encouraged employees to stay at work when they are sick,[183] whether the employer encouraged vaccination and how successful any voluntary program has been, and whether the workplace is cleaned adequately and frequently.

Even if a customer cannot successfully sue a business, a business may suffer economic losses if customers even suspect that an employee transmitted a serious illness to a customer. The infant clothing store may lose customers if it becomes known (or believed) that another customer's infant contracted the flu or pertussis from an employee of the store. Conversely, customers may be more likely to patronize a business that publicizes its efforts to protect vulnerable customers against vaccine-preventable diseases or during an outbreak. Thus, a store that targets parents of young babies may benefit from assuring customers that all of its employees have been vaccinated.

Yet even recent high profile outbreaks do not appear to have motivated employers to considered mandatory vaccinations. When a measles outbreak in California was linked to the Disneyland Park and Resort, the Los Angeles Times reported that five Disney Resort employees had been diagnosed with measles.[184] Disney reportedly placed those employees and all other employees who had contact with those employees on paid leave and asked them to stay home until they could confirm that they were vaccinated or had developed an immunity to the disease.[185] Disney also offered vaccinations to employees.[186] Yet despite the outbreak and resulting public relations challenges, there is no indication that Disney considered requiring all employees to be vaccinated, perhaps since other children are the greatest risk factor and the park is unlikely to require all guests to be vaccinated. The same is probably true for most businesses that cater to children or families with young children. For example, a parent shopping in Babies 'R Us is likely to encounter at least as many children as

[183] Studies have shown that the majority of American workers go to work even when they are sick. *See* http://staples.newshq.businesswire.com/press-release/products-services/fourth-annual-staples-survey-shows-alarming-increase-sick-people-com#axzz2iZ3JPWcY (discussing annual survey conducted by office supply company Staples). Workers refuse to stay home for many reasons, including fear of losing their jobs, the need for a paycheck and no paid sick leave, fear of getting behind on their work, and employer insistence. *See* http://www.npr.org/sections/thesalt/2012/06/06/154442191/many-food-workers-keep-working-while-sick-survey-finds (discussing food borne illnesses transmitted by people who pick, process, prepare, and sell food).

[184] http://www.latimes.com/local/lanow/la-me-ln-disneyland-measles-outbreak-20150121-story.html (reported on 1/21/15) (last visited 7/20/16). Two of the employees had been vaccinated; the vaccination status of the other three was unknown). *Id.*

[185] Employees could provide medical records to prove they had been vaccinated. Immunity could be established by a blood test. *Id.*

[186] *Id.*

employees. An employer is unlikely to be found negligent for failing to reduce the risk to customers if a significant risk still exists due to other customers.

V. Other Vaccinations

1. Influenza and pertussis

The vaccine that is required more than any other is the influenza (flu) vaccine. In some respects, it may seem surprising that medical professionals advocate so strongly in favor of the flu vaccine.[187] The flu vaccine is must be administered every year, which makes it more difficult to achieve desired levels of vaccination in the population during any particular flu season.[188] Its effectiveness also varies from year to year because the flu virus is constantly changing and researchers must make educated guesses about which viruses to target in the vaccine before the start of each flu season. When researchers guess incorrectly, the vaccine may not provide protection against the viruses that actually circulate that season.[189] But in spite of the vaccine's limitations, it is the best method available for reducing the number of flu-related illnesses and deaths each year. Although influenza is not the most deadly disease for which a vaccine is available, hundreds of thousands of Americans become ill from the flu virus each year and the CDC estimates that over fifty-five thousand people died from complications related to the flu and pneumonia (one of the potential complications of the flu) in 2014 alone.[190]

Even healthy adults can become ill from the flu, but certain populations are at far greater risk. Specifically, very young children (especially those younger than two years of age), people over 65 years of age,[191] pregnant women, people with certain medical conditions such as asthma, and people with compromised immune systems are more likely to develop flu-related complications.[192] Since many patients in healthcare and

---

[187] CDC's Advisory Committee on Immunization Practices (ACIP) recommends annual flu vaccination, with either the inactivated influenza vaccine (IIV) or recombinant influenza vaccine (RIV), for everyone 6 months and older. http://www.cdc.gov/flu/protect/whoshouldvax.htm

[188] http://www.cdc.gov/flu/protect/keyfacts.htm

[189] http://www.cdc.gov/flu/about/season/vaccine-selection.htm

[190] http://www.cdc.gov/nchs/fastats/deaths.htm

[191] "In recent years, for example, it's estimated that between 80 percent and 90 percent of seasonal flu-related deaths have occurred in people 65 years and older and between 50 percent and 70 percent of seasonal flu-related hospitalizations have occurred among people in that age group." http://www.cdc.gov/flu/about/disease/65over.htm

[192] http://www.cdc.gov/flu/about/disease/high_risk.htm There is also some evidence

long-term care facilities will be in one or more high-risk groups, and in light of the high risk that employees will transmit the influenza virus to patients,[193] mandating flu vaccination for employees is a reasonable and prudent means of protecting vulnerable patients.

Similarly, requiring personnel who come in contact with newborns and infants to receive the pertussis vaccine is a targeted and reasonable response to a significant and demonstrable risk. While pertussis had been almost completely eliminated in the United States, the number of cases has increased dramatically in recent years, peaking in 2012 with 48,277 cases nationwide, including 20 deaths.[194] Over half of babies less than a year old who are diagnosed with pertussis need to be hospitalized and the disease can be deadly for infants.[195] Until recently, only children received the pertussis vaccine; currently a pertussis vaccine is available in combination with the tetanus and diphtheria booster shot that is given to adolescents (Tdap).[196] In addition, pregnant women, healthcare workers, and adults who did not get the Tdap vaccine as adolescents are encouraged to get the booster.[197] In light of the rise in the number of pertussis cases and the serious risk posed to infants who are too young to be fully vaccinated, compulsory vaccination of healthcare workers and others—such as day care workers—who regularly come in contact with young infants is reasonable.

Influenza and pertussis vaccines have been available and studied for many years. The risk of serious complications from for either vaccine is far lower than the risk of serious illness or death from the diseases.[198] Mandating these vaccines for healthcare workers or those who come in contact with people who are especially vulnerable to contracting the diseases and developing serious or life threatening complications is fairly uncontroversial. But the experience with these vaccines does not provide much guidance for states or employers when faced with an outbreak of a disease for which there is a new vaccine or a vaccine with higher incidences of more serious complications.

2. New vaccines

---

that American Indians and Alaskan Natives have a higher risk of flu complications. *Id.*

[193] "Studies have shown that staff-to-patient flu transmittal is prevalent in hospitals and other health facilities because about half of those infected with influenza are asymptomatic and because as many as 70% of healthcare workers continue to go to work even when experiencing flu symptoms." Virginia Mason, 511 F.3d at 911.

[194] http://www.cdc.gov/pertussis/outbreaks/trends.html

[195] http://www.cdc.gov/pertussis/fast-facts.html

[196] *Id.*

[197] *Id.*

[198] http://www.cdc.gov/flu/protect/keyfacts.htm#side-effects

Scientists are constantly working to develop new vaccines. If there is an outbreak of a serious disease for which a new vaccine has been developed, states and employers—healthcare employers in particular—will need to have a framework for determining: who should receive the vaccine, whether those persons should be encouraged or required receive the vaccine, and what exemptions, if any, should be allowed. Public policy officials and private employers will have to balance the risk to the employees from the vaccine against the risk that the disease poses to employees, patients or customers, and the economic health of the business.

The constitutional concerns for government employees remain the same as with current state influenza mandates and the smallpox vaccine policy approved by the Court in *Jacobson*, but the states will have to prove that any new vaccine requirements are not arbitrary, unreasonable, or oppressive. [199] This is a higher hurdle when the safety and efficacy of the vaccine is not clearly established or when the disease at issue is not catastrophic (like smallpox) or highly contagious (like influenza). While private employers retain the relative freedom to impose vaccination requirements on their employees (subject to Title VII, the ADA, and union collective bargaining requirements), pragmatic economic concerns are still relevant and may lead to different conclusions depending the seriousness and contagiousness of the disease for which the vaccine was developed and on the data available regarding the vaccine's safety.

Zika and Ebola are two examples of highly contagious diseases which can have debilitating or deadly complications. Governments and private companies in many countries are working on vaccines for both viruses and some Zika and Ebola vaccines are currently being tested on humans in clinical trials.[200] Employers' response to these vaccines will likely differ based not only on the perceived safety of the vaccine, but also the risk to employees and patients or customers if employees are not vaccinated.

a. The Zika Virus

The Zika virus is spread primarily through mosquito bites, but authorities have confirmed that it can be transmitted from mother to child,

[199] Jacobson, 25 S.Ct. at 362

[200] *See* NIH publication on Ebola Vaccine Trials, https://www.nih.gov/news-events/news-releases/experimental-ebola-vaccine-safe-prompts-immune-response (April 1, 2015);
http://www.nia*Id*.nih.gov/topics/ebolaMarburg/research/Pages/default.aspx (last updated February 26, 2016); http://www.canadianmanufacturing.com/research-and-development/quebec-team-begin-zika-vaccine-tests-humans-172549/

through sexual contact from a man to his partner, and through blood transfusions.[201] There has been one confirmed case of transmission through sexual contact from a woman to a man,[202] and at least one case in which officials cannot determine the method of transmission.[203] Most people infected with the Zika virus suffer only mild symptoms with no long-term complications.[204] However, Zika infection during pregnancy can cause birth defects, including hearing loss, eye defects, impaired growth, severe brain defects, and microencephaly.[205] With so many known methods of transmission and the possibility of unknown methods of transmission, and with such severe consequences for pregnant women and their babies, Zika presents potential public health disaster.[206]

If a Zika vaccine is finally approved for use and is proven safe and effective, then compulsory vaccination of all U.S. residents and visitors would undoubtedly be an effective means of preventing the spread of the disease and reducing or eliminating the risk to pregnant women and their babies. However, it is highly unlikely that any state or the federal government would take such an aggressive—and unprecedented—approach. While the states might have authority to implement such a policy, it is not a certainty. [207] States have rarely imposed such widespread mandates and would be justifiably reluctant to impose the mandate for a Zika vaccine because the state would need to prove that the mandate was reasonable and not arbitrary or oppressive. [208]

Unlike influenza or pertussis—which can be transmitted through casual contact—the only known methods for human-to-human transmission of Zika require intimate contact. While there is one case of Zika

---

[201] http://www.cdc.gov/zika/transmission/index.html

[202] http://www.cdc.gov/mmwr/volumes/65/wr/mm6528e2.htm?s_cid=mm6528e2_

[203] http://www.newsmax.com/TheWire/zika-utah-mystery/2016/07/19/*Id*/739321/ County health officials were investigating the case of a Utah man was the caregiver for a man with Zika who died. The caregiver was later diagnosed with Zika, but he had not had sexual contact with anyone who had Zika, had not traveled to a Zika-infected area, and there were no known Zika-carrying mosquitos in Utah. *Id.*

[204] http://www.cdc.gov/zika/symptoms/index.html

[205] http://www.hhs.gov/asl/testify/2016/02/t20160224c.html (statement by Anne Schuchat, M.D., Acting Director of the Dept. of Health and Human Services at a Hearing on Zika before the Committee on Oversight and Government, Subcommittee of Transportation and Public Assets, U.S. House of Representatives, 2/24/16; http://www.cdc.gov/zika/pregnancy/question-answers.html.

[206] http://www.hhs.gov/asl/testify/2016/02/t20160224c.html; The governor of Florida signed an executive order declaring a public health emergency in counties where Zika had been diagnosed. http://www.flgov.com/2016/02/03/gov-rick-scott-directs-public-health-emergency-in-four-counties-for-zika-virus/

[207] *See* Jacobsen, 25 S.Ct. at 360-361 (recognizing the state's authority under its police powers to enact a compulsory smallpox vaccination law).

[208] *Id.* at 362

transmission without any intimate contact, that is probably not sufficient to justify mandatory vaccination of every employee who might come in casual contact with someone infected with the Zika virus. If public health authorities confirm that Zika can be transmitted through casual contact, a stronger case could be made for state mandated vaccination.[209] Otherwise, requiring every inhabitant of the state to be vaccinated against a disease that produces only mild, temporary symptoms in the vast majority of the population could easily be labeled unreasonable or oppressive. The more likely response is that states with diagnosed cases of Zika or where mosquitos known to carry the virus live, will strongly encourage pregnant women, women who may become pregnant, and their partners to be vaccinated. States may also require healthcare workers to be vaccinated, but only if they can prove that the targeted employees pose an identifiable risk to patients (which is unlikely).

In the absence of a state imposed requirement, healthcare facilities and other employers will have to decide whether to impose a vaccine mandate on all or some employees. In an at-will employment context, an employer can require vaccination as a condition of continued employment.[210] However, employees with religious or medical objections have a strong case for an exemption.[211] As noted above, the Zika virus is not known to be transmitted through casual contact. Since the risk of the employee either contracting the virus from or transmitting the virus to another employee is small, there is little risk that the employer will suffer an economic loss due to the employee's illness. Likewise, there is little chance that the employee will infect another employee, customer, or patient. Consequently, for most employers there is little risk of legal liability if employees are not vaccinated against Zika and it will be difficult for an employer to prove that religious or medical exemptions impose an undue burden (under the strict ADA standard or more lenient Title VII standard) on the employer.

The case for compulsory vaccination further weakens if the vaccine is effective for most people who receive it. In that circumstance, women who are or who may get pregnant can protect themselves most effectively

[209] The federal government could rely on its authority under the Commerce Clause if the spread of Zika has a substantial affect on interstate commerce, but it is not clear that sufficient evidence exists to support that claim.

[210] *See, e.g.*, 18 No. 9 N.D. Emp. L. Letter 3 ("As a general rule, most North Dakota employers may institute a mandatory vaccine policy and fire workers for not complying with the policy. That's because in North Dakota, most employment is 'at will' meaning most employees can be fired for any lawful reason at any time. "); 20 No. 8 Miss. Emp. L. Letter 3 ("All Mississippi employers can technically require at-will employees to get flu shots regardless of their industry.")

[211] *See* 18 No. 9 N.D. Emp. L. Letter 3; 20 No. 8 Miss. Emp. L. Letter 3.

by getting vaccinated and ensuring that their sexual partners are vaccinated. While that might not be sufficient to establish herd immunity, the fact that intimate contact is necessary to transmit the virus means that herd immunity is not necessary to prevent the spread of the disease among humans. Even herd immunity will not protect against transmission from mosquitos to humans. Thus, vaccination of individuals and eliminating the mosquito populations would be the most effective controls.[212]

While the Zika virus will not affect most employers (making mandatory vaccination unnecessary), there are some employers who may have a strong incentive to require vaccination if and when it becomes available.[213] The CDC and OSHA have issued guidance for employees who are likely to come in contact with Zika-carrying mosquitos (for example, landscapers and others who work outdoors). [214] If a Zika vaccine becomes available, an employer might have an obligation to give employees access to the vaccine.[215] While pregnant women are at greatest risk, an employee who may transmit the virus to a woman who is pregnant or who may become pregnant should also be protected.[216] Consequently, OSHA recommends reassigning any women who are pregnant or who may become pregnant, and any man who has a sexual partner who may become pregnant to indoor work assignments.[217] Obviously, for an employer whose primary

[212] The HPV vaccine presents a similar situation. HPV itself is relatively harmless, but increases the risk of some cancers, including cervical cancer. Thus, unlike other vaccine-preventable diseases, vaccination is intended to prevent secondary effects and not the disease vaccinated against. Moreover, HPV is only effective before infection, which occurs through sexual contact. For these reasons, vaccination is most effective before a person becomes sexually active. Thus, the target group for vaccination is adolescents and the desired result is a longer term reduction in cancer rates. Mandating vaccination for adult healthcare workers, school employees, or any other employee would not serve any significant public health purpose.

[213] The CDC reports that mosquitos have begun transmitting the Zika virus in the United States. http://www.cdc.gov/zika/intheus/florida-update.html On August 1, 2016 the Florida Department of Health reported that mosquitos are transmitting the virus in a Miami neighborhood. *Id.* The CDC advised pregnant women to travel to the area. *Id.* This is the first time the CDC has ever issued a travel advisory for a place within the continental United States. http://www.cnn.com/2016/08/01/health/cdc-miami-florida-zika-travel-warning/index.html; *See* also http://www.flgov.com/2016/08/01/gov-scott-florida-calls-on-cdc-to-activate-emergency-response-team-following-confirmed-mosquito-borne-transmissions/

[214] https://www.osha.gov/zika/index.html "Workers who are exposed on the job to mosquitoes or the blood or other body fluids of infected individuals may be at risk for occupationally acquired Zika virus infection." *Id.*

[215] OSHA requires employers to provide a workplace "free from recognized hazards that are causing or are likely to cause death or serious physical harm to [their] employees . . . ". 29 U.S.C.A. § 654 (West).

[216] https://www.osha.gov/zika/index.html#!tab4

[217] *Id.*

business requires employees to work outside (i.e., construction, landscaping, road maintenance, park ranger, lifeguard) that advice might require reassignment of a large number of workers. In those circumstances, requiring employees to get the Zika vaccine may be a business necessity.

b. The Ebola Virus

Unlike the Zika virus, the Ebola virus is deadly[218] and can be transmitted through contact with the bodily fluids of an infected person, including sweat, blood, vomit, feces, and semen.[219] While this does not pose a high risk to the general public when there are isolated cases of Ebola, there is a serious risk in healthcare settings because healthcare workers are likely to come in contact with the infected bodily fluids of Ebola patients.[220] When a patient with Ebola was admitted to a hospital in Dallas in the fall of 2014, two nurses who cared for him became infected.[221] In light of that experience, it seems likely that healthcare facilities would strongly consider requiring employees to take the vaccine if it becomes available.

There is also a risk to family members and others who care for Ebola patients, since the symptoms are nonspecific and the patient may be initially misdiagnosed with another non-fatal illness such as pneumonia, or general gastrointestinal distress.[222] Those family members may then become infected and risk infecting others. This widens the circle of potential victims, but not dramatically. If there are only a few isolated cases the disease can be contained fairly quickly without the need for large-scale vaccination programs. However, the seriousness of the disease and the visceral reaction many people have to descriptions of the effects of the virus on those infected may lead to high demand for the vaccine.

In 2014, when the Ebola outbreaks in Guinea, Sierra Leone, and Liberia were at their peak, a single medical aid worker who worked with

---

[218] Ebola has a death rate of up to 90% http://www.who.int/csr/disease/ebola/faq-ebola/en/

[219] http://www.cdc.gov/vhf/ebola/pdf/mutations.pdf?pdf=image "Ebola virus is spread through direct contact with the blood or body fluids (including but not limited to feces, saliva, sweat, urine, vomit, and semen) of a person who is sick with or has died from Ebola. The virus in blood and body fluids can enter another person's body through broken skin or unprotected mucous membranes in, for example, the eyes, nose, or mouth." *Id.* It may be possible for the virus to be transmitted through the semen of men who have recovered from Ebola. *Id*: *See* also http://www.cdc.gov/vhf/ebola/about.html It is not known whether the virus can be transmitted through the vaginal fluid from a woman with Ebola. http://www.cdc.gov/vhf/ebola/transmission/index.html

[220] *Id.*

[221] *Id* http://www.nytimes.com/2014/10/13/us/texas-health-worker-tests-positive-for-ebola.html?_r=0

[222] *Id.*

Doctors Without Borders in Guinea developed Ebola after returning to New York.[223] Meanwhile, two healthcare workers in Dallas tested positive for Ebola after treating Thomas Eric Duncan, a Liberian man who developed Ebola symptoms after arriving in Dallas.[224] The nurses recovered but the Mr. Duncan died eight days after the CDC confirmed his Ebola diagnosis.[225] All of the people who came in contact with the Ebola patients were monitored for 21 days and the only transmission of the virus on United States soil was from Mr. Duncan to the two Dallas healthcare workers. Mr. Duncan's was the only death from Ebola.[226]

Nevertheless, in response to public fears and outcry, the governors of New York, New Jersey, and Illinois instituted a 21-day quarantine for all healthcare workers returning from West Africa who had contact with Ebola patients.[227] A nurse who was placed in quarantine in New Jersey—even though she had tested negative for Ebola and did not have any symptoms—argued that the quarantine violated her rights and experts debated the legality of the quarantines.[228] Public health officials criticized the quarantines as unnecessary in light of the strong medical consensus that people are not contagious until they develop symptoms of Ebola.[229] As months passed without any new infections, the tidal wave of fear receded and the legal issues were left largely unresolved.[230] However, the extent of the fear and the nearly unprecedented—and medically unnecessary—quarantines imposed in response to those fears make mandatory vaccination mandates a real possibility.

The considerations for Ebola differ markedly from those raised by a Zika vaccine. While the Zika virus can only be transmitted by humans through intimate contact and only has serious consequences for a small percentage of the population, the Ebola virus has potentially fatal consequences for anyone who is infected.[231] Moreover, while transmission requires contact with bodily fluids, healthcare workers are at high risk for

---

[223] http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/united-states-imported-case.html

[224] *Id.*

[225] *Id.*

[226] *Id.*

[227] http://time.com/3537755/ebola-new-york-new-jersey/

[228] http://blogs.wsj.com/law/2014/10/27/experts-debate-the-legality-of-new-jerseys-ebola-quarantine-policy/

[229] http://www.who.int/csr/disease/ebola/faq-ebola/en/ "People are not contagious until they develop symptoms." *Id.*

[230] Kaci Hicox, the nurse who was quarantined in New Jersey, filed suit in federal district court in New Jersey; that case is still pending although the State of New Jersey has filed a motion to dismiss. Case 2:15-cv-07647-KM-JBC, Hicox v. Christie, 2016 WL 211611 (May 2, 2016).

[231] http://www.who.int/csr/disease/ebola/faq-ebola/en/

such contact and even people outside of the healthcare setting may be at risk if an outbreak occurs and people are not quickly diagnosed and isolated. Under these circumstances, healthcare facilities would have good reason to require vaccination for all who may come in contact with patients during an outbreak. Whether states should impose a mandate for all inhabitants or even all healthcare workers in the absence of an outbreak or during an outbreak requires more careful consideration.[232]

States must still satisfy the courts that any mandatory vaccination policy is reasonable and not arbitrary or oppressive. In the absence of an outbreak or more than a few isolated cases of Ebola, a mandatory vaccine policy is suspect. However, recent history has shown that the Ebola virus inspires fear and it may be easier to persuade courts that a vaccine mandate is reasonable, even if public health and policy officials deem it unnecessary. A new vaccine also raises concerns about safety and effectiveness. Without significant testing and a proven safety record, states are less likely to impose such a mandate and courts are more likely to strike them down if the state chooses to do so. If there is an outbreak, a mandate may be perceived as more reasonable and necessary to protect public health and safety. However, the state will likely have to convince opponents and the courts that any risks posed by the vaccine are justified by the greater risks of widespread Ebola outbreaks.

Employers must consider different factors. Healthcare workers are most likely to come in contact with bodily fluids of patients infected with the Ebola virus and become infected themselves. In light of this reality, hospitals have an obvious duty to their employees and other patients to minimize the risk that the employees will contract the virus or transmit it to others.[233] Providing protective gear and instruction on proper use of the gear is imperative,[234] but may not be sufficient. Other nurses who worked at the

[232] For example, at the end of 2014 thirty-five hospitals in the United States had been designated as Ebola treatment centers. http://www.hhs.gov/about/news/2014/12/02/35-us-hospitals-designated-as-ebola-treatment-centers.html The administrators at those hospitals have a stronger incentive to require all employees to be vaccinated. However, in the beginning of an outbreak a person who has symptoms (and is therefore contagious) but not been diagnosed with Ebola may go into a hospital that is not one of those designated treatment centers and expose healthcare workers. Similarly, a person may be exposed to Ebola in another country and not even suspect that they are infected with Ebola. That single case may not lead to an outbreak, but healthcare workers could still be exposed. That is precisely what happened in Dallas in 2014.

[233] Employer have a duty under OSHA to ensure that the workplace is safe, and OSHA has published "recommendations for protecting workers whose work activities are conducted in an environment that is known or reasonably suspected to be contaminated with Ebola virus (e.g., due to contamination with blood or other potentially infectious material)." https://www.osha.gov/SLTC/ebola/control_prevention.html

[234] *Id.*

hospital where Mr. Duncan, the Dallas Ebola patient, was treated told reporters that the protective gear that they were given to use when treating Ebola patients was inadequate, as was the training on how and when to use the equipment.[235] They also claimed to have encountered resistance when trying to follow isolation procedures.[236] Staff allegedly did not follow protocols for processing specimens, leading to potential contamination of hospital systems.[237] The hospital disputed those reports and it may be that the nurses who were infected while treating Mr. Duncan failed to follow the procedures put in place by the hospital. Moreover, the CDC provided more guidance to hospitals after the Dallas cases were diagnosed,[238] and state and federal authorities have changed their approach for treating Ebola patients.[239] However, any system that requires perfect compliance 100% of the time is bound to have failures.

In light of the difficulty inherent in treating Ebola patients and the difficulty in diagnosing early cases, hospitals must seriously consider whether to require employees to be vaccinated if or when a vaccine becomes available. The obvious and clearest benefit to mandatory vaccination is that it protects employees who come in contact with infected patients before they are diagnosed with Ebola—in other words, before the employees are aware that they need to don protective gear and implement the procedures necessary to prevent transmission of the virus. While there have not been any new Ebola cases since October 2014, new cases of Ebola have been diagnosed in West Africa as late as April 2016.[240] As long as the

---

[235] http://abcnews.go.com/Health/dallas-nurses-hospital-sloppy-ebola-protocols-union/story?*Id*=26205956

[236] *Id.*

[237] *Id.*

[238] https://www.osha.gov/SLTC/ebola/control_prevention.html

[239] http://www.usatoday.com/story/news/nation/2014/12/02/35-ebola-hospitals/19780679/ The CDC describes a tiered approach, with healthcare facilities falling into one of three categories: (1) frontline healthcare facilities, (2) Ebola assessment hospitals, or (3) Ebola treatment centers. http://www.cdc.gov/vhf/ebola/healthcare-us/preparing/hospitals.html Most acute care facilities will be frontline healthcare facilities which should be able to identify and isolate patients who have been exposed to Ebola and have signs or symptoms of the virus, but will likely transfer the patients to Ebola assessment or treatment centers. *Id.* "Ebola assessment hospitals are facilities prepared to receive and isolate PUIs and care for the patient until a diagnosis of EVD can be confirmed or ruled out and until discharge or transfer is completed." *Id.* "Ebola treatment centers are facilities that plan to care for and manage a patient with confirmed EVD for the duration of the patient's illness." *Id.* As of February 18, 2015, the CDC identified were fifty-five hospitals with Ebola treatment centers in eighteen states and the District of Columbia. http://www.cdc.gov/vhf/ebola/healthcare-us/preparing/current-treatment-centers.html

[240] http://abcnews.go.com/International/world-health-organization-declares-end-ebola-virus-guinea/story?*Id*=39520887 The World Health Organization declared that the Republic of Guinea was Ebola-free on June 1, 2016 but it had been declared Ebola-free in

disease exists anywhere in the world from which people can travel to the United States, it is possible for new cases to be diagnosed here. But until that happens, healthcare workers are not likely to consider that a patient presenting with a fever, chills and malaise may be infected with the Ebola virus.[241] An Ebola vaccine would protect against infection and prevent transmission when healthcare workers are least likely to protect themselves.

Arguably, healthcare workers should be educated about the risks of Ebola and the benefits of the vaccine and then be allowed to choose whether to get vaccinated. However, hospitals must also consider the safety of other patients. The risk that the virus will be transmitted from one patient to another is very small, so long as the infected patient is kept isolated from others. The risk that a healthcare worker will be infected while treating an Ebola patient is much greater.[242] Of course, healthcare workers should take precautions to avoid contaminating patients with the bodily fluids of other patients, and vaccinating all healthcare workers will not prevent transmission to another patient if the worker fails to properly wash or decontaminate before caring for other patients. However, vaccination will prevent transmission if a healthcare worker in infected with Ebola and goes to work and interacts with patients when the worker is contagious. The risk of such transmission is likely small because healthcare workers are likely to know that they were exposed to Ebola before they develop symptoms. Moreover, their employers are likely to know that they have been exposed and should keep them under observation and away from the hospital until the incubation period has passed.[243] However, in light of the two nurses who were infected while caring for Mr. Duncan in 2014, and the subsequent

---

December 2015 only to have new cases diagnosed in March 2016. *Id.*

[241] http://www.cdc.gov/vhf/ebola/healthcare-us/preparing/clinicians.html "Initial signs and symptoms are nonspecific and may include elevated body temperature or subjective fever, chills, myalgias, and malaise. Because of these nonspecific symptoms, particularly early in the course of the disease, EVD often can be confused with other more common infectious diseases such as malaria, typhoid fever, meningococcemia, and other bacterial infections (for example, pneumonia)." *Id.*

[242] "Healthcare providers caring for Ebola patients and family and friends in close contact with Ebola patients are at the highest risk of getting sick because they may come in contact with infected blood or body fluids." http://www.cdc.gov/vhf/ebola/transmission/index.html

[243] The CDC suggests that hospitals adopt the following policy:

> For asymptomatic [healthcare personnel] who had an unprotected exposure (not wearing recommended PPE at the time of patient contact or through direct contact to blood or body fluids) to a patient with EVD
>
> - Should receive medical evaluation and follow-up care including fever monitoring twice daily for 21 days after the last known exposure.
> - Hospitals should consider policies ensuring twice daily contact with exposed personnel to discuss potential symptoms and document fever checks.

http://www.cdc.gov/vhf/ebola/healthcare-us/hospitals/infection-control.html

public hysteria, the risk may be too high for some hospitals.

c. Old vaccines for new outbreaks

With respect to diseases for which vaccines have been available and in use for many years, there is likely to be sufficient information for employers (and courts) to determine whether the effectiveness of the vaccine and risks to patients justify mandatory vaccination over religious or medical objections. One example is the smallpox vaccine. The attacks of September 11, 2001 prompted federal officials to consider compulsory smallpox vaccination regulations for certain segments of the population, particularly those serving in the armed forces.[244]

As late as 2004, the smallpox vaccine was known to have potentially fatal side effects, particularly in those with compromised immune systems. Moreover, the vaccination process requires infecting the patient with the live virus into an open would that took weeks to heal. During that time the vaccinated patient risked transmitting the virus to others.[245] Given that the risk of an outbreak was thought to be small, it is not surprising that when offered the vaccine most healthcare employers declined and only a small percentage of the targeted population was vaccinated.[246]

The risks and side effects associated with the smallpox vaccine, the low probability of an outbreak and questions about liability for those who suffered illness or death because of the vaccine, led to far fewer people receiving the vaccine than were originally intended.[247] Government officials did not attempt to persuade or pressure civilians to be vaccinated in greater numbers, but scholars have used that experience to theorize more effective ways for the government to approach large-scale vaccination programs.[248] In sum, without an identifiable and substantial risk of a smallpox outbreak, a state mandatory vaccination policy is likely to be struck down as unreasonable and unconstitutional.

[244] *See* Edward P. Richards, Katherine C. Rathbun & Jay Gold, *The Smallpox Vaccination Campaign of 2003: Why Did it Fail and What are the Lessons for Bioterrorism Preparedness?* 64 LA. L. REV. 851, 894 (2004).

[245] *Id.* at 865-867 (discussing the contemporary smallpox vaccine and its complications).

[246] *Id.* at 853 (2004) (explaining that the civilian smallpox vaccination plan failed in large part because healthcare employers and institutions decided not to participate).

[247] *See id.* at 852, 859.

[248] *See id.* The authors advocated preparing for the possibility that smallpox could be used as an agent of bioterrorism by immunizing specific groups of people to make them immune to smallpox. *Id.* at 904. Moreover, large quantities of the vaccine should be stockpiled securely in various locales; enough people should be trained to administer the vaccine that large numbers of people can be vaccinated quickly in the event of an outbreak. *Id.* at 901-904

Private employers also need to be concerned about the potential impact of smallpox vaccination and potential liability flowing from transmission of the disease by the vaccinated employees to other employees and customers. The vaccinated employee could suffer side effects that result in an inability to work or illness requiring treatment, or both. If the vaccination poses a risk to people other than the vaccinated person, the employer may need to insist that the employee stay home or adopt procedures to reduce or eliminate the risk of transmission to others. In all of these cases, the employee may expect or demand compensation for lost work, medical treatment, and indemnity if the employee infects others and faces liability. In the absence of a specific, credible threat, employers have little incentive to require smallpox vaccination.

Recent measles outbreaks may motivate some employers to consider requiring employees to prove that they have been vaccinated against measles or otherwise have developed immunity, at least during an outbreak.[249] Any such policy would be for the benefit of the employer—to prevent having a large number of employees out sick at the same time—rather than to protect the employees, since they can protect themselves simply by choosing to get vaccinated.

Conclusion

Vaccines save lives. For this reason states have ample incentive to encourage people of all ages to get vaccinated. However, states have generally only required limited vaccinations for healthcare workers and schoolchildren. That leaves individual healthcare employers with the decision whether to require other vaccinations and non-healthcare employers to decide whether and under what conditions to require any vaccinations for their employees. While most employers can legally require employees to get any vaccinations that the employer desires (with possible exemptions for religious and medical objections), there is rarely a compelling reason for such a mandate.

But employers cannot afford to dismiss the possibility of a compulsory vaccination policy. During an outbreak of a highly contagious disease, or when their employees are likely to contract and transmit vaccine-preventable diseases to other employees, vulnerable patients, or customers, a targeted mandate may be necessary to avoid liability or serious business losses. Identifying when the employer has a duty to employees or customers and determining whether a vaccine mandate is necessary to fulfill that duty

[249] During the Disney measles outbreak, the Disney Corporation required employees to prove that they had been vaccinated before allowing them to return to work. *See* discussion *supra* Part IV.B.2.

requires an understanding of the risks posed by the disease and those posed by the vaccine. Only by carefully weighing the risks can an employer decide whether a mandate makes sense legally and financially.