Between Persuasion and Compulsion

Vaccination at the Turn of the Twentieth Century

"Carelessness in the matter of vaccination is sure to tell against the health of a community, sooner or later," the *New York Daily Tribune* editorialized in the winter of 1902, as a smallpox epidemic was raging in the city. In urging those who had not undergone the procedure recently to update their protection, the newspaper gave public voice to the private frustration of many municipal health officials. They should have been eminently capable of controlling smallpox, since a reliable preventive had existed for over a century, yet the very success of widespread vaccination caused many people to take their freedom from the disease for granted. How best to overcome this civic complacency—how to persuade people to protect themselves, for their own good and that of the community—was a recurring problem in a city where a huge population and the constant influx of immigrants meant an ongoing struggle with infectious threats.

At the turn of the twentieth century, the power of health officials to control smallpox through vaccination was argued in numerous legal actions and debated in state legislatures, in the popular and medical press, and in city neighborhoods. At issue was the question of whether those who did not wish to undergo the procedure should or could be compelled, legally or practically, to do so. When an epidemic loomed, many people waited voluntarily in long lines to receive their protection. For reluctant citizens, the Brooklyn and New York health departments sent teams of vaccinators door to door in affected neighborhoods and on-site

to large employers. Although these programs were ostensibly voluntary—New York State never placed a law on its books making vaccination compulsory for adults—the manner in which they were conducted was at least arguably coercive, and gave many people the impression that they had no choice but to submit.

This chapter analyzes the conflicts and tensions in vaccination policy during a transitional era in which health officials expanded their influence but negotiated an ambiguous relationship with both legal authority and public opinion. During two major outbreaks of smallpox, the health commissioners in Brooklyn and New York exercised de facto compulsion but portrayed their practices in the language of voluntarism, because they lacked a clear legal mandate and believed this strategy was the most effective way to accomplish their goals and reduce the likelihood of organized resistance. The inconsistent and sometimes conflicting rulings that emerged from the court battles over vaccination reveal how mutable were ideas about the proper role of the government in guarding the community's health during this period. These rulings set the stage for the landmark U.S. Supreme Court opinion in Jacobson v. Massachusetts in 1905, which explicitly addressed the question of how far individual liberty could be constrained in order to prevent the spread of disease. Both the court cases and the public reactions to vaccination reflected persistent doubts about the competence of the medical profession to prevent and treat illness, even as scientific advances were increasing doctors' diagnostic and therapeutic capacities. The events of this period—a crucial turning point in the history of vaccination in America—illustrate the growth and the limitations of the power wielded by municipal health departments and their difficult task as they sought to assert both their authority and their ability to ensure the welfare of the city's residents.

THE EPIDEMIC OF 1893-1894

At the turn of the twentieth century, public attitudes about smallpox were a mixture of complacency and dread. Although it had once been one of the most devastating diseases, it had long ceased to be a major source of either sickness or death in the United States and elsewhere in the Western world; other contagions, such as measles, scarlet fever, and diphtheria, exacted a far greater toll. Years of relative freedom from smallpox—due, many argued, to the success of vaccination—had engendered complacency among the public, and many physicians could no longer accurately diagnose it in its early stages, often mistaking it for measles or chicken pox.²

At the same time, the disease's gruesome symptoms, high fatality rate, and rapid spread made it greatly feared among any who had personal experience with it. So it was that a Brooklyn Health Department report noted that when outbreaks occurred, "the proximity of the contagion act[ed] as an efficient aid to the efforts of the vaccinators."

The safety of vaccination had improved considerably by the end of the nineteenth century as the use of calf's lymph gradually replaced the old arm-to-arm transfer of pustular material, but many people remained reluctant to undergo the procedure because of its checkered history of unpleasant and occasionally life-threatening side effects. Fears lingered about accidental infections, especially lockjaw, and the vaccination was well known to cause soreness that lasted for several days. Physicians who championed vaccination saw its proper administration as crucial to assuaging public qualms. The arm was scraped several times with a sharpened "point," usually of ivory, to break the skin, and a preparation of glycerinated lymph from a calf infected with cowpox was then applied to the incision. Discussions of the safest and most efficacious ways of vaccinating—how deeply to scratch the arm, how best to disinfect the site—featured prominently in the medical literature and at meetings of professional organizations.⁴ A physician writing in a medical journal scolded his colleagues for too often being slipshod, charging that "this perfunctoriness on the physician's part teaches parents to wish their children to have as little vaccination as possible, and encourages in them an active opposition." The use by some colleagues of impure or improperly prepared lymph from disreputable drug firms was a source of continuing consternation for doctors; every swollen, infected, or abscessed arm that resulted was a black eve to the profession and its efforts to gain respectability with an often skeptical public.

When smallpox reappeared in Brooklyn in 1893 after an absence of several years, many health officials were frustrated that they had no legal authority to compel the vaccination of reluctant citizens. To control the disease, vaccinators were dispatched to a site where a case had been diagnosed and then fanned out to the houses on either side, offering protection to the neighbors—"surrounding each case by an impenetrable wall of vaccination," as one health department report described the process.⁶ In the face of resistance, city doctors complained, "we can only persuade; arguments are our only resource." The limited legal authority to enforce vaccination reflected broader debates about the rights and responsibilities of the government in guarding the public welfare. State and local health departments began to be created in the



Figure 1. This 1882 cartoon in the popular magazine *Puck*, illustrating the pain and discomfort that vaccination caused, signified both acceptance of procedure and the uneasiness many people felt about undergoing it.

1860s, and, in general, health officials' authority expanded over the next decades. Spurred by the initial success of sanitary reforms in limiting the spread of cholera, they later used dramatic advances in bacteriology following Robert Koch's 1882 identification of the tubercle bacillus to bring more and more areas of city life under their purview. A new class of professionals trained in the latest techniques of chemistry, engineering, and medicine established regulations governing the production and distribution of meat and milk, tenement construction, garbage collection, private and public privies, and water supplies. Enforcement in all of these areas remained patchy, however, and officials often encountered opposition from private citizens who resented government intrusion into their lives, as well as from businessmen who viewed health regulations as interference with commerce. 9

The Brooklyn Health Department began taking a more aggressive stance toward smallpox when, at the height of the epidemic, a new commissioner took office. (Brooklyn at this time was independent of New York City and had its own well-established department of health.) Z. Taylor Emery, a physician and former president of the county medical society who had been practicing in the city for almost twenty years, started work on February 1, 1894, newly appointed by Brooklyn's popular Republican Mayor Charles Schieren. Confronted with an alarming increase in the number of smallpox cases, Emery moved aggressively, expanding the number of vaccinators, the scope of their activities, and the forcefulness with which they conducted their rounds.

In one of his first actions, he dispatched teams of doctors to the twenty-seventh ward, which had a predominately German population. The city's German immigrants were well known not just for opposing vaccination but for their more general suspicion of health officials. "Case after case occurred and was concealed, meanwhile the inmates were going about their usual work, many taking in tailoring and the children going to school," according to a report by the city's chief of contagious diseases. "There seemed to have been a mutual understanding among them to keep the cases from the Health Department." ¹⁰

The immigrants' resistance to state authority in this matter may have been influenced by their sentiments about Germany's compulsory vaccination law, which imposed a fine or three days' detention for refusal to be vaccinated. The law, enacted two decades earlier, had provoked widespread opposition, based both on skepticism about the efficacy of the procedure and on ideological objections to state interference with private matters such as parents' decisions about how to protect their children from illness. A health officer in Buffalo who encountered similar resistance among that city's German immigrants saw their refusal to be vaccinated as a repudiation of their native country's unpopular law: "The moment they land on our free soil, they imbibe the spirit of freedom, especially as regards vaccination." 12

Resistance to vaccination was also strong among Brooklyn's Italian immigrants. As one health department physician recalled,

The Italians are in great fear of vaccination, and resort to all sorts of means to hide themselves and their children. If the child is small enough they will put it in the bureau drawer. I have found dozens of babies there, and my experience has taught me never to overlook the smallest nook or cranny in searching for persons in the tenement houses. One woman whom we vaccinated admitted that she had escaped inoculation on four previous visits of the Health Department's vaccinators by crawling under the bed, and she bewailed her luck in at last getting caught. ¹³

Under Emery's direction, the department established free vaccination clinics at more than two dozen locations around the city, and doctors visited more than 200 factories and other places of business over the next several weeks to vaccinate the employees. ¹⁴ They also continued house-to-house sweeps in areas adjacent to cases that were discovered. The official "Rules for Vaccinators" issued by Emery to his teams gave the following guidance on dealing with public reluctance: "In case persons are found who have never been vaccinated, every effort should be made to induce them to accept it, and, if necessary, they should be visited a second or third time to bring about this result.... When the inmates of infected houses refuse to be vaccinated, the vaccinator may, at his discretion, direct the Sanitary Police to maintain a quarantine until all are vaccinated." ¹⁵ As the policy was implemented, however, it was not only those in "infected houses" who became subject to quarantine.

An example of the department's tactics and public resistance to them was the case of the McCauley family, a 65-year-old couple and their 27-year-old son, who were placed under quarantine after refusing vaccination. Smallpox had been diagnosed a block away, on Atlantic Avenue, and Emery ordered all the neighborhood's residents to bare their arms. The McCauleys alone refused, fearing dire health consequences from the procedure, and after the elder McCauley threatened the city's doctors with a rifle, two policemen were stationed at their doors. 16 "They were forbidden to leave their apartment, and the other tenants were warned, under penalty of arrest, not to deliver any messages for them," the New York Times reported. "The grocers, butchers, and bakers in the vicinity were also forbidden to deliver provisions,"¹⁷ The next day, shocked police discovered a two-foot-square hole in a closet wall. through which the family had crawled into an adjacent apartment that was unoccupied; a neighbor reported that the three had fled to New Jersey. Three days later, after being convinced by family members with whom they had taken refuge in Hoboken that they had nothing to fear from the procedure, the three surrendered themselves at the Atlantic Avenue police station and consented to be vaccinated. ¹⁸ In applying quarantine in this way, Emery was testing the elasticity of a state law that empowered local boards of health to "guard against the introduction of contagious and infectious disease" and to "require the isolation of all persons infected with and exposed to such disease." ¹⁹ How broad a net could be cast over those "exposed to" disease was unclear.

By the middle of March, the aggressive tactics of Emery's staff of vaccinators had begun to attract some public opposition. The *Brooklyn*

Daily Eagle criticized the department's "loose methods of quarantining," citing complaints that "families are shut up in tenement and apartment houses without any reason." One Brooklynite wrote to the Eagle charging that the system of paying health department vaccinators 30 cents for each operation they performed created an incentive for them to "terrorize or intimidate healthy people to be revaccinated by them under penalty of quarantine for refusal." 21

Well aware of the influence of the press, Emery used the *Eagle* throughout the epidemic to advance his case, issuing regular statements and giving interviews to the newspaper, in which he attempted to enlist public support for his actions. The day after the McCauleys' return, for example, Emery gave an interview to the *Eagle* in which he addressed himself to those who accused the department of overstepping its bounds in the name of public health. "The law clothes the department with ample authority to do all which it deems necessary, and it is pursuing a systematic course of vaccinating, disinfecting and quarantining," he said. "For the most part the citizens have shown a patriotic readiness to submit to all these unavoidable inconveniences.... In the few cases where selfishness and unreasonableness have led to opposition the officials have considerately but firmly insisted on carrying out their instructions." ²²

Emery's rhetoric, explicitly framing cooperation with the vaccinators as a matter of good citizenship, held special resonance in a multi-ethnic metropolis such as Brooklyn, whose large immigrant communities included Germans and Poles in the neighborhoods of Williamsburg and Greenpoint, Irish in the Navy Yard, and Italians in Red Hook.²³ These enclaves presented some of the greatest pockets of resistance in the city, and the health department's use of police force was in general more aggressive toward immigrants and the poor. But it would be erroneous to understand either the discourse or the methods of Emery's smallpox control program as representing the conflation of the foreign-born with the spread of contagion. Reluctance to be vaccinated, far from being confined to immigrants, cut across a wide swath of Brooklyn society, and, as we shall see, Emery used coercive means against Brooklyn's propertied classes as well as against the impoverished and politically marginal.

Emery was able to wield power as he did because he continued to enjoy political support among important constituencies who viewed the threat of smallpox as sufficiently grave to justify drastic measures. He retained the backing of Mayor Schieren—he was Schieren's family physician—and in March, the mayor granted an emergency appropriation to the health department for the hiring of additional vaccinators.²⁴

Emery was also backed by the city's Common Council, which passed a resolution in support of his actions in fighting the disease there.²⁵ The Kings County Medical Society passed a similar resolution, commending Emery's "energy, efficiency and zeal" in dealing with the outbreak.²⁶ The major newspapers of Brooklyn and New York, while they may have had qualms about some of the department's tactics, remained supportive of vaccination in general. The *New York Times* commented in an editorial that those opposed to the practice were engaged "in a futile attempt to head off human progress and to reopen a question about which pretty much all of the world has made up its mind."²⁷

As winter turned into spring and the epidemic showed no signs of abating. Emery's vaccinators continued to blanket the city, focusing especially on large employers. At the Havemeyer & Elder sugar refinery, some 2,000 "big men bared their brawny arms and were inoculated," according to the New York Times.²⁸ At the Chelsea Jute Mills in Greenpoint, almost all 800 workers were scraped, while at the nearby Dunlap's hat factory, half of the 500 employees were. All the operators of the city's surface and elevated railways were to be vaccinated.²⁹ Such efforts were not only carried out at the health department's insistence; many companies, concerned about the devastating effects an outbreak of the disease among their employees might have on their businesses, requested that a team of vaccinators come on-site. Workers' anxiety over the threat of unemployment—the nation had plunged into a depression the previous summer, and thousands of Brooklynites were thrown out of work probably made many of them more inclined to go along with the programs without complaint.

The use of neighborhood sweeps with police accompaniment continued, sometimes sparking civil unrest. After four more cases of the disease were discovered on Atlantic Avenue, not far from the McCauleys' house, Emery sent in a team of vaccinators accompanied by six policemen. According to a newspaper account, after a "small riot" broke out among the mostly Scandinavian residents, there were "hurried calls for more policemen and for an hour patrol wagons filled with bluecoats came scurrying in from the outlying precincts, until finally the entire two blocks were guarded by policemen." Another focus of concern were the city's seventy-two lodging houses, which sheltered a transient population of some 2,400 each night. "[I]n them are gathered nightly a large proportion of those homeless and vagrant ones in our population whose unwholesome heredity and unsanitary lives render them liable not only to the commission of crime, but to the contraction of disease," a health department

report noted, in language that revealed the close connection that persisted in the popular imagination between moral degeneracy and illness. "In the presence of an epidemic, such houses become strategic points in the consideration of places to prevent its spread."³¹

Meanwhile smallpox was ravaging other major U.S. cities, and their health boards were also moving aggressively to contain it, with mixed reactions from citizens. The resistance of the German immigrant community played a prominent role in events in Milwaukee, where the health department's insistence on forcibly removing patients, especially children, from their homes became a flashpoint for opposition and resulted in several violent uprisings against department inspectors and their police escorts.³² In Chicago, teams of vaccinators accompanied by police went house to house, using quarantine as they saw necessary, which also provoked community opposition.³³ The health boards of Minnesota and Wisconsin requested that Chicago authorities be especially vigilant in ensuring that no travelers sick with the disease were able to depart by train to neighboring states, but the city had difficulty finding enough physicians to keep watch for suspects at all the railway stations.³⁴ When smallpox appeared in Muncie, the Indiana Board of Health banned all public gatherings in the city and ordered that no one be allowed to leave the city by rail without first being vaccinated; but due in part to agitation by the local anti-vaccination society, there was widespread failure to comply with the quarantines placed around infected neighborhoods.³⁵ In Providence, the state legislature voted to repeal Rhode Island's compulsory vaccination law following years of agitation by anti-vaccination activists.³⁶

In mid April, Emery's teams intensified their efforts in Brooklyn's schools. Proof of vaccination upon enrollment was required for students under state law, but enforcement was desultory, and spot checks by the department discovered that in many schools, scarcely half the children were protected.³⁷ A team of fifty-six vaccinators was sent out and administered a total of about 27,000 vaccinations to the city's young scholars.³⁸ The doctors encountered an especially delicate situation in the elite schools where the children of Brooklyn's leading citizens studied. Only those students who could show a recent scar were to be spared the vaccinator's lance, but the custom among the upper classes was not to vaccinate on their daughters' arms, because the scar would spoil the beauty of a young debutante wearing a sleeveless gown. The teenage girls could hardly show an unknown health department doctor the place on their body where they had been vaccinated, and after tense consultations between Emery and at least two school principals, the

department arranged to have its three women doctors verify protection among the daughters of the well-to-do.³⁹

Perhaps sensing an opportune moment to capitalize on public unease about health department tactics, a group made up mostly of homeopathic doctors formed the Brooklyn Anti-Vaccination League in April 1894. In addition to demanding the repeal of all state and local laws on the practice, the league launched a number of charges against Emery, accusing him, among other crimes, of falsifying death certificates to conceal the fact that vaccination was having fatal consequences for some of those who underwent it.⁴⁰ The group was to remain a thorn in the side of Emery and the Brooklyn Health Department, especially in the courtroom, where a series of protracted lawsuits would set limits on what health officials could do in the name of protecting the community's welfare.

VACCINATION ON TRIAL

On May 2, 1894, two health department vaccinators visited a livery stable in the Greenpoint neighborhood where William H. Smith operated an express delivery and hauling business. Smith employed more than a dozen men and boys who delivered goods from factories in the metropolitan area to retail businesses and from businesses to homes, as well as hauling away discarded items. In addition to offices, the upstairs quarters of the stable included a parlor, where Smith sometimes spent the night after working late. A case of smallpox had been discovered in the area, and the department was concerned that because of the nature of their business, Smith and his employees might be vectors for spreading infection. In making this decision, Frederick Jewett, who headed the Bureau of Contagious Disease, must have remembered a similar case during the outbreak of 1886, when he was serving as an assistant sanitary inspector, and a driver employed in the same type of hauling business had been found to spread the disease, leading to the death of at least one child.

The inspectors gave Smith and an employee at the office, Thomas Cummings, twenty-four hours to be vaccinated, and when they returned the following day and found that the two men had not followed their orders, stationed a police guard at the front door and declared the business under quarantine. Smith called Charles Walters, his family physician, who—unfortunately for the health department—was a member of the Brooklyn Anti-Compulsory Vaccination League. Walters immediately hired a lawyer to seek a writ of habeas corpus from a special session of the state supreme court, demanding that the two men be released from custody.⁴³

The next day Smith's lawyer managed to obtain a hearing before Judge William J. Gaynor. It is unclear whether Smith specifically sought out Gavnor to hear the case, but he could hardly have chosen a more receptive audience for his complaint. Like Emery a friend and ally of Mayor Schieren, Gaynor was a well-known figure in local political circles. As a longtime prosecutor in the Brooklyn courts, he had led crusades against municipal corruption; a libertarian mistrustful of government power, he had in his short time on the bench become well known for rulings protecting the rights of the common citizen, as well as for his brusque and irascible temperament. 44 "Each day the judge fires sharp and caustic remarks to lawyers who have not prepared their cases," according to one newspaper account, "[and] to witnesses who are slow beyond endurance or tricky in their answers."45 Upon being presented with the case, Gaynor acted with the swift decisiveness for which he was well known. He granted Smith's writ the following day, commanding that the quarantine be lifted and the men be freed pending his decision on the legal aspects of the case.

Meanwhile, Emery continued to press his case with the public that the health department's control measures were just and appropriate. On May 7, he issued a lengthy statement, reprinted in the Daily Eagle, offering his rationale for strict enforcement of vaccination and quarantine. He appealed most of all to civic duty, claiming that "in the presence of imminent peril private rights must subserve to public necessity." He attempted to portray the procedure as widely accepted, asserting that the "vast majority of people have sympathized with the department and aided us in every practicable way, even where it involved considerable personal sacrifice." He invoked economic necessity, citing figures showing that if Philadelphia had adopted more aggressive control measures during its 1872 outbreak, it could have saved more than \$24 million worth of lost commerce. He pointedly noted that "carriers of miscellaneous parcels, such as bedding, furniture, packages and other baggage are especially liable to come in contact with and spread the disease." Finally, he cited several cases, by name, of people who had refused vaccination and had met with predictably dire fates, including death.46

When Gaynor's ruling came on May 18, it proved a blow to the health department. Refusing to acknowledge that Smith and Cummings were a danger to the community, Gaynor asserted that the legislature had conferred on Emery no power to quarantine those who were not actually infected with a disease. "Arbitrary power is abhorrent to our system of government," he declared. "If the Legislature desired to make

vaccination compulsory, it would have so enacted.... [The law] does not confer on the Commissioner the right to imprison any more than to take life."⁴⁷

Emery promptly appealed the decision, hoping to obtain a ruling that would throw the weight of the law behind his actions. Testifying at a later trial, Emery revealed his motivation for pressing the case against Smith. "My motive [in appealing Gaynor's decision] was for the purpose of obtaining a ruling defining the powers and rights and the duties of the Health Boards, this Health Board as well as others. And I deemed it essential to the efficient discharge of my duty and the duty of my subordinates that my authority should be particularly defined in that crisis." Notably, he was not seeking a law that would explicitly declare vaccination compulsory; rather, he wanted a more general affirmation of the right to use his discretion in how he protected the city.

Gaynor's action was widely reported in the press, garnering notices in the *Daily Eagle* along with the *Times*, *Daily Tribune*, and *World*, ⁴⁹ and public awareness of the ruling emboldened those who were inclined against vaccination. At the end of May, one of the employees at the Standard Oil factory in the Newtown Creek neighborhood took ill, and Emery sent a squad to the plant to vaccinate the man's co-workers. When the men refused and the doctors tried to insist, one of the workers pulled out a copy of a newspaper that had printed Gaynor's decision. "You can't touch us," the men were reported as saying. "We are protected by the law."

Although the imposition of quarantine had been suspended, the use of coercive measures continued. In one late-night raid, a squad of 40 physicians accompanied by 120 police officers swept into an Italian quarter of Flatbush brandishing points. The *Eagle* reported that upon seeing the policemen's badges, many "sprang through windows and doors," but they were soon caught. The following night, approximately 50 doctors and more than 100 police conducted another raid. A scuffle broke out when one of the residents lunged at a doctor and attempted to stab him with a pocket knife. 52

The Brooklyn Anti-Compulsory Vaccination League had a field day with Emery's legal troubles, and at the end of May, it publicly called for his removal. 53 Emboldened by Gaynor's ruling, which seemed to open a legal door to further action against vaccination, the league next mounted an attack on the state law requiring the practice for school enrollment. Charles Walters—the family physician who had come to William Smith's aid—filed suit against the principal of Brooklyn Public School No. 22

seeking to compel him to admit Walters's two children, who had not been vaccinated.⁵⁴ On this front, however, the group was unsuccessful. A month later a judge ruled, "A common school education, under the existing constitution of the State of New York, is a privilege rather than a right.... It follows that the State can certainly exercise this discretion by debarring from attendance at the public schools such persons as are unwilling to adopt a precaution which, in the judgment of the legislature, is essential to the preservation of the health of the large body of scholars." The judge was careful to point out that the legal question in this case was different from that which Judge Gaynor had considered in the Smith case.

From March through August of 1894, when the epidemic finally dwindled, the health department administered approximately 225,000 vaccinations (close to one-quarter of the city's population), in addition to an unknown number that were done by private physicians. Of the vaccinations performed by city doctors, close to three-quarters were done house-to-house. Smallpox virtually disappeared from Brooklyn the following year, but the legal battles over what had occurred during the 1894 outbreak, and over the practice of vaccination more generally, continued to be waged in the courtroom.

In February 1895, Emery claimed a victory for health department authority when an appellate court overturned Gaynor's ruling of the previous May asserting that Emery had overstepped his bounds. The new ruling underscored just how ambiguous the definition of terms such as "compulsory" could be, and how much disagreement remained over whether vaccination constituted an assault or a public service. "There was neither coercion nor compulsion" in the health department's actions, the judges ruled. Smith and Cummings "were isolated and deprived of their freedom because they had been exposed to small pox and were liable to be seized therewith.... If they availed themselves of the privileges tendered to them, their acceptance would terminate their quarantine." It was an unalloyed victory for the kinds of broad powers Emery had claimed for the department of health.

Lawyers for Smith and Cummings appealed, however, and on May 3, 1895, exactly a year after the health department had placed the quarantine on Smith's business, a three-judge panel on the court of appeals affirmed Gaynor's original ruling that Emery had overreached. "That the powers conferred upon the health commissioner by the provisions of the city charter give him the right to compel the vaccination of every citizen in the city of Brooklyn, if he would escape quarantine, seems an

unnecessary and it is an unwarrantable inference in the language," the decision said. While the judges did not doubt that the law properly invested the health department with certain powers to protect the public, "Like all enactments which may affect the liberty of the person, this one must be construed strictly." ⁵⁸

Not content with Gaynor's order releasing him from quarantine, Smith had also filed suit against Emery seeking damages for lost business during his confinement. Smith's complaint alleged that the health department's action constituted an unlawful arrest without probable cause that had led to the loss of \$10,000 as a result of his inability to continue his business. (The suit for damages, *Smith v. Emery*, was a separate legal action from *In re Smith*, the original suit contesting forced vaccination, although for several months during 1894–95, both were pending simultaneously in the state court system.) The second suit came to trial in the Brooklyn circuit court on the first day of December, 1895, and two weeks later, the judge awarded Smith \$641.32 in damages after the jury found in his favor.⁵⁹

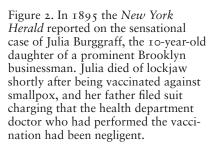
The trial of the damages suit revealed the wide gap between the rationale of the health department doctors and the legal perspective of the court. To justify the attempt to force vaccination on Smith and Cummings, Emery's lawyers produced multiple types of evidence to demonstrate the rapid spread of smallpox and the grave peril it posed to the population: statistics on the incidence of the disease, city maps depicting the distribution of cases, testimony by department inspectors, resolutions from the Common Council and the medical society describing the scope of the threat. But Judge Charles Brown found all of this irrelevant. "I do not regard it as at all material that there was smallpox in the City of Brooklyn or that they had 140 cases a day," he told Emery's lawyers during cross-examination.⁶⁰ The sole relevant issue, according to Brown, was whether or not Smith himself had actually been diagnosed with the disease; failing that, quarantine was unjustified. 61 Brown's decision over the use of quarantine, like Gaynor's before him, underscored the difference between types of evidence that were persuasive to health officials and those that stood up in courts of law.

Smith's suits over quarantine were not the only legal actions arising from the smallpox outbreak. In 1895–1896, the health department faced at least three other suits charging it with either assault or wrongful death as a result of vaccination. These suits were among a handful brought during this period against private or public sector doctors by disgruntled citizens who claimed they had been harmed by negligently

performed vaccination.⁶² These actions partly reflected a larger legal trend around the turn of the twentieth century: a sharp rise in personal injury lawsuits. But only a tiny fraction of these suits involved medical malpractice; most were for injuries sustained in the workplace or through traffic or transportation mishaps.⁶³

Although none of the cases against the Brooklyn Health Department had a direct bearing on the issue of the department's legal authority, the negative press coverage they generated fueled public unease about the safety of the procedure and, more generally, about the competence of the medical profession to protect the community from disease. At the end of 1895, a jury awarded \$1,500 to Emil Schaefer, who claimed that he had come "near dying from loss of blood and shock" after being vaccinated against his will by the same health department doctors who had attempted to force the procedure on Smith and Cummings. 64 In early 1896, two suits involving the death of children during the outbreak of 1894 outbreak reached the court. The more well publicized of these involved 10-year-old Julia Burggraff, the daughter of a Williamsburg mineral water manufacturer. Within three days of being vaccinated at her school by a city doctor, "her entire left side had become swollen and inflamed," according to a press account; the muscles in her arms, legs and neck became rigid, she lost her ability to swallow, and three weeks later she died. The family doctor declared the cause of death to be lockjaw. 65 Peter Burggraff, Julia's father, filed a wrongful death suit against Emery and the vaccinator, Frank Boyden, seeking \$5,000 in damages. 66 The question was one of medical negligence: had Boyden, in administering the procedure, exercised "proper care" and ensured that the site of the girl's incision was adequately cleansed?⁶⁷ Burggraff claimed that the doctor had been criminally incompetent in his work, while Boyden maintained that the girl's wound had become infected when her mother had rubbed Vaseline into it.⁶⁸ The jury was ultimately unable to reach a decision and the case was dismissed.⁶⁹

In December 1896, the circuitous legal battles between Emery and his antagonist William Smith finally came to an end when a panel of judges in the appellate division of the state supreme court heard Emery's appeal of the damage award that Smith had won against the health department a year earlier. The court found that the judge in the earlier trial had improperly excluded from consideration the evidence Emery's lawyers had submitted concerning the prevalence of smallpox and his judgment about Smith's and Cummings's risk of contracting the disease through their work. The appeals court ruling affirmed the validity of the professional



opinion Emery had attempted to present. "The conditions requisite to constitute exposure, and whether those which actually exist ... are not necessarily, and may not be, matters within common understanding," the judges declared, showing striking deference to the authority of scientific knowledge. "They present medical questions, and the effect of them in a given case is the subject of professional opinion." With these words, they overturned the previous court's ruling.

It was at best an ambiguous victory for Emery and the health department, finding not that the attempt to compel vaccination was justified but that Emery had not had adequate opportunity to prove it so. Smallpox having passed from the city, however, the issue had lost its urgency for the moment. But the question of the limits of compulsion would resurface in a few years, in a somewhat different form, when the disease returned to the city just after the commencement of the new century.

THE EPIDEMIC OF 1901–1902

Smallpox was largely absent from New York in the final years of the nineteenth century, during which time Manhattan joined with Brooklyn and the surrounding boroughs to create the greater city, with a total population of some 3.5 million. But an unsettling outbreak of cases in the northern wards of the city in December 1900 prompted long lines to form at the health department's midtown headquarters. The health commissioner, Ernst Lederle, moved swiftly against the new cases. Lederle, who held a doctorate in chemistry, authorized the allocation of \$22,500 to hire seventy-five vaccinators, who over the next several months administered close to 375,000 immunizations.

Over the 1890s, the stature of the New York City Department of Health had steadily risen in the eyes of city residents. It had gained an international reputation as one of the leading municipal departments in the country, thanks in large part to the pioneering work of its bacteriology laboratory, which had served as a model for similar programs around the country. The laboratory's highly publicized introduction in 1895 of diphtheria antitoxin, which it was the first in the country to produce, had been a great success, dramatically reducing the death rate from the city's most common childhood disease over the next few years, especially among the children of poor tenement dwellers, who were disproportionately afflicted with diphtheria. The suppose of the status of the status of the status of the suppose of

Some of the goodwill generated by the department's success in controlling diphtheria was probably transferable to persuading people to be vaccinated. But smallpox vaccination differed from diphtheria antitoxin in two important ways. First, the antitoxin had been introduced with great fanfare and was emblematic of advances in the new scientific medicine, while vaccination predated the wondrous discoveries of the bacteriologists and remained freighted with uncertainty about its safety. Second, diphtheria antitoxin was a treatment, the success of which people could see—children who were sick became well. Vaccination, on the other hand, was a preventive, and as such, its powers had to be taken on faith, since people who underwent it and then remained free from the disease could never be sure that they would not have escaped anyway had they not been vaccinated. For these reasons, suspicion and hostility toward vaccination remained among some New Yorkers who welcomed other medical innovations.

The extent to which such resistance remained among city residents was revealed by their frequent attempts to evade health department

vaccination squads in their neighborhood sweeps. One such incident occurred in the Morrisania section of the Bronx. After a case was discovered in the area and the news spread that everyone would have to submit to a doctor's lance, people "fled from houses and sought to elude the vaccinators," the *Daily Tribune* reported. "Many of the men and women attempted to escape by going down the fire escapes and climbing to the roofs, but policemen were at hand at every place of egress, and appeals and entreaties were unheeded."⁷⁶

Such aggressive measures were proving insufficient to contain the epidemic, and in 1901, just under 2,000 cases of smallpox were diagnosed, with about one out of five victims dying of it.⁷⁷ As 1902 began and the epidemic showing no signs of dying out, Lederle intensified his efforts, increasing the vaccination force to almost 200 and sending letters to all large manufacturers and businesses in the city offering free on-site immunizations. ⁷⁸ In response to a request by the board of health, the city's operators of elevated trains ordered all of their motormen and conductors to be vaccinated.⁷⁹ The department also passed a regulation targeting lodging houses: every lodger at Manhattan's 105 establishments had to show proof of vaccination before being given a room, or consent to the procedure, otherwise the proprietor risked revocation of his license. The gritty nature of the vaccinators' work among the lodgers was captured in the first-person account of the young physician John Sedgwick Billings, describing a night's rounds in the winter of 1897 after a single case of smallpox had been found in the city's Bowery neighborhood:

I cannot describe to you the filth, and dirt and rank, reeking, penetrating foulness of the place.... 180 men were there, and I vaccinated over 140 of them—one eighth too dead drunk to even remonstrate—another eighth fighting drunk.... I had one row—the fellow struck me, and I knocked him down and the policeman arrested him—I told him I would let him go if he would be vaccinated. He came around like a lamb, and all the other men in the room ... could not come up and bare their arms quick enough. 80

Days after the new regulation was passed in 1902, health department inspectors made similar nighttime visits and vaccinated some 6,000 men.⁸¹

The severity of the outbreak, which was raging in major cities across the Northeast, presented the city with a frustrating paradox. One the one hand, the number of vaccinations administered by the health department was impressively large and seemed to indicate the success of its nominally voluntaristic policy. On the other hand, smallpox was spreading unabated, suggesting to some that more aggressive control measures—backed up with explicit legal authority—were needed. It was the lack of such a mandate, after all, that had stymied Emery's efforts to compel vaccination during the 1894 epidemic in Brooklyn. In May 1901, the New York County Medical Association appointed a special committee to consider the question of whether vaccination should be made compulsory and invited all the group's members to offer their opinions.⁸²

After several months of study, the group prepared a recommendation in favor of a compulsory law and gained the sponsorship of State Senator James McCabe, a physician who had formerly practiced at the Long Island College Hospital. In February 1902, McCabe introduced a bill that would require each city in the state to enforce the vaccination of every citizen in any instance where the department of health deemed it necessary; anyone who refused would be guilty of a misdemeanor and subject to a fine of at least \$50 and imprisonment of at least ten days. No company employing more than ten people would be allowed to hire anyone who had not been vaccinated within the previous five years.⁸³

The bill sparked a fierce debate that revealed fissures within the medical profession about whether compulsion best served the ends of the public health. Although the medical profession had become more uniform in its use of allopathic methods, it remained highly fractured throughout this period along lines of practice setting; doctors associated with health departments, who embraced the power of bacteriology and laboratory methods in diagnosing and treating disease, clashed with physicians in private practice, who placed greater value on the empiricism of clinical experience. Private practitioners often resented health department regulations such as mandatory reporting of infectious disease, which they saw as an intrusion on the doctor-patient relationship. But the debate over compulsory vaccination did not break out along any typical or predictable lines.

An editorial in the *Brooklyn Medical Journal* spoke candidly about the politically strategic reasons for keeping the practice voluntary. "[I]t is unwise to make vaccination compulsory, for fear of arousing an antagonism to it which would defeat the very object it seeks to secure.... The antivaccinationists meet with very little encouragement, and their efforts to stay the onward march of the army of vaccinators amount to nothing. It is the fear of putting a powerful weapon in their hands which makes the Board of Health hesitate to endorse the bill of Senator McCabe." Similarly, the *New York Medical Journal* stressed the value

of retaining a policy that was voluntary—at least in name. "We have always felt that an out-and-out compulsory vaccination law ... was doomed to more or less complete failure.... Compulsion in the matter of vaccination is an unwarrantable encroachment upon personal liberty and therefore one to be resisted." Instead, the journal's editors favored a strategy of what they termed "indirect compulsion" through which businesses with extensive public contact could assure compliance of their customers: "[T]here are other agencies than the government that have it well within their power to enforce general revaccination, notably the railway companies." In other words, coercion was accomplished more appropriately, and more effectively, through the private sector. The editorial went on to describe with approval a plan recently instituted in Illinois, in which all the principal railway lines leading to Chicago were to require proof of vaccination for travelers embarking in localities where smallpox was prevalent.

Yet many physicians expressed a very different view of the merits of compulsion. The editors of the *Medical Record* declared that the bill "deserves the support of the medical profession." Compulsion was justified because "the good of the many is the first consideration. A person who has been exposed to the contagion of smallpox is clearly a public menace." Writing in the *Journal of the American Medical Association*, a health officer with the state of Kentucky (one of the states that did have such a law on the books) declared that "compulsory vaccination and surveillance of the exposed, has never yet failed to bring an outbreak under quick control."

Members of the New York Medical Association personally visited health department officials hoping to gain an endorsement of the measure. But Ernst Lederle and his colleagues on the board of health ultimately came down firmly in opposition to McCabe's bill, describing it as "unwise and uncalled for" and contending that "vaccination should be taught not by force but by education"—a somewhat ironic claim given the health department's strong-arm tactics. Similar legislation had been heard in the state house at least once before, in 1889. At that time, however, the health commissioner, Cyrus Edson, had endorsed the bill, further illustrating the diversity of views among municipal health officials of the day on the open use of coercion. "We have in New York City a class, mostly Bohemians, who are a source of danger to the rest of the people by reason of their prejudice to vaccination," Edson had told the state assembly's committee on public health. "They will yield only to the strong hand of the law." Edson and Lederle both made extensive

use of the city's police powers to regulate the actions of recalcitrant citizens, but whereas Edson was comfortable with public assertions of state authority—and indeed had used the open exercise of such power as a strategic tool to heighten public respect for the health department—his successor Lederle preferred to cloak such paternalism in the mantle of voluntarism.⁹³

Lederle's position on the bill was no doubt influenced by current events in Massachusetts. Only a month before McCabe introduced his bill in the New York state legislature, anti-vaccination activists in Massachusetts, who had successfully attacked various provisions of local laws on smallpox control over the years, introduced legislation at the statehouse in Boston to repeal that state's compulsory law. The result was a protracted political fight between activists and the Massachusetts Medical Society, which supported the law. He light of the controversy in Massachusetts, a compulsory law must have appeared to Lederle not so much as a means to gain greater compliance with their programs, but rather as a likely spur to resistance and a potential source of political and legal headaches. Lederle also could not have failed to notice that the Massachusetts law did not seem to be helping it greatly: smallpox was just as prevalent in that state as in New York. He was a province of the political and legal headaches in the state as in New York.

The wisdom of Lederle's assessment appeared to be borne out by the tepid response that anti-vaccination activists had been receiving in their attempts to generate public outrage during the current epidemic. A meeting of the New York Anti-Compulsory Vaccination League, at which the group called for an immediate end to the house-to-house sweeps by city doctors, was, according to the *Times*, attended by "nine men, one boy and seven reporters." The group's message depended on two parts: first, that vaccination was unsafe and ineffective; and second, that legal enforcement of it constituted an unacceptable tyranny. The absence of a law on the books at least partially defused the second half of the message and deprived it of much of its resonance. New Yorkers might attempt to escape when they saw the vaccinator coming, but in general they declined to join any active resistance to the city's practices.

Amidst a heavy legislative schedule, the bill died in the state assembly in March 1902 without making it to the governor's desk. Within a few months, the epidemic finally seemed to have burned itself out. A total of about 800,000 people were vaccinated in 1902, almost one out of every four city residents.⁹⁷

At the turn of the twentieth century, the question of how much a state or local government could limit the liberty of residents in order to protect the community welfare remained unsettled. Decades of litigation by vaccination opponents had resulted in dozens of decisions in courts around the country. Most upheld compulsory vaccination laws, especially as they applied to school attendance, but there were notable exceptions, such as the ruling in William Smith's suit against the Brooklyn Health Department. Several of these cases, like Smith's, turned on the question of whether or not the state legislature had expressly authorized the use of compulsion. These conflicting opinions set the stage for a landmark U.S. Supreme Court ruling that established the right of states and localities to use broad police powers in controlling epidemic disease.

JACOBSON V. MASSACHUSETTS AND THE ENFORCEMENT OF HEALTH

Like the rest of the Northeast, Massachusetts was hit hard during the epidemic that struck in the first years of the new century. The state was well known for being a hotbed of anti-vaccination activism, which had had a ripple effect on the actions of the general citizenry. According to the *Medical News*, many people in the Boston area, "though themselves without pretense of being antivaccinationists, have shirked their duty to the public health because of the amount of talk indulged in and have put off their vaccination from year to year." Between 1901 and 1903, Boston, which had a population of roughly half a million, recorded some 1,600 cases and 270 deaths from smallpox. 100

It was in the depths of the winter of 1902 that the board of health of the city of Cambridge passed a resolution requiring all citizens who had not been vaccinated in the previous five years to undergo the procedure again. The board did so in accordance with a state law that empowered localities to enforce general compulsory vaccination when deemed necessary for the public safety. On March 15, two weeks after the resolution was enacted, Dr. E. Edwin Spencer, the chairman of the board of health, visited Henning Jacobson and offered to vaccinate him; if he refused, Spencer informed him, Jacobson would face a fine of \$5. Jacobson's refusal both to be vaccinated and to pay the fine instigated a series of legal actions that led over the next three years through the Massachusetts court system to the U.S. Supreme Court.

Little is known about the life of Henning Jacobson. He was born in Sweden in 1856 and came to the United States when he was thirteen. He attended college in Illinois and as a young man underwent a spiritual

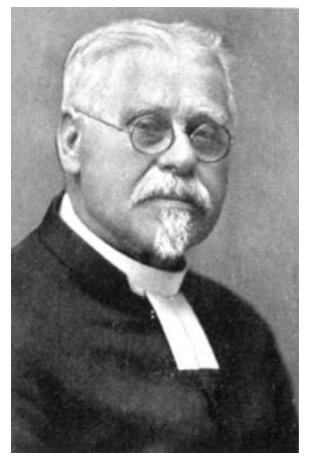


Figure 3. The Reverend Henning Jacobson, the most famous opponent of vaccination in U.S. history, in an undated photo. Photo courtesy of the Archives of the Evangelical Lutheran Church in America.

awakening that led him to travel as a student pastor in the Midwest and Northeast and pursue studies at Yale Divinity School. In 1882, he married Hattie Anderson, a student at a Lutheran college in Minnesota, and together they had five children. He was ordained as a pastor in the Swedish Evangelical Lutheran Church in 1892. The following year the church called upon him to establish a congregation in Cambridge, Massachusetts, where he would live the rest of his life. He was reputed to be a powerful orator, exceptionally devoted to his congregation. ¹⁰¹

While the court case that bears his name has made Jacobson the most famous opponent of vaccination in U.S. history, it is unclear whether he ever participated in any organized anti-vaccination activities, or what events in his background led him to carry on his fight so persistently. His subsequent legal briefs indicated that both he and one of his sons had at some point "suffered severely" from being vaccinated, but we do not know when these incidents occurred and what impact, if any, they had on Jacobson's attitudes or behavior in the years prior to his confrontation with the Cambridge authorities.

For his refusal to pay the fine, Jacobson was brought in July 1902 before the third district court in the county of Middlesex, along with two other Cambridge men who had also violated the health board's order. After the district court found him guilty, Jacobson appealed for a jury trial in the county's superior court. At that trial, Jacobson argued that the state's vaccination law violated several provisions of both the Massachusetts and U.S. constitutions. He attempted to introduce fourteen facts relevant to vaccination that in his view would serve to demonstrate the unreasonableness of the law. The first twelve facts related to the general lack of safety and efficacy of the procedure; point number one, for example, contended that vaccination "quite often causes or results in a serious and permanent injury." 102 The last two facts were specific to Jacobson himself: that "he had, when a child, been caused great and extreme suffering, for a long period, by a disease produced by his vaccination," and that "he had witnessed a similar result of vaccination in the case of his own son."103 The court, however, excluded all fourteen facts as immaterial, and at the end of February 1903, the jury found him guilty. 104 He thereupon appealed to the state's highest legal authority, the supreme judicial court, on the ground that the superior court had improperly excluded his evidence.

The following month, the supreme judicial court heard two cases, Jacobson's and a similar one brought by another Cambridge resident, Albert Pear, who had also sought unsuccessfully in lower court to overturn the vaccination law. Both men challenged the constitutionality of the statute, and Jacobson, in addition, argued that the lower court jurors should have been allowed to hear his fourteen facts. The state's high court found no merit to any constitutional objections to the law. It was a reasonable measure, the judges held, duly enacted by the legislature, to protect the people from a known hazard. Citing numerous precedents, the judges noted that other courts had been deferential to the enactment of health regulations; in the few cases that had been

decided otherwise, such as *In re Smith*, it was because the wording of the contested statute did not provide sufficient authorization for the restrictions that were imposed.¹⁰⁵

Turning to Jacobson's complaint that the lower court had improperly excluded evidence that he would have been physically harmed by undergoing vaccination, the judges affirmed the previous ruling that any such evidence was immaterial. "It would not have been competent to introduce the medical history of individual cases," the judges claimed. While the majority of the doctors "have recognized the possibility of injury to an individual from carelessness in the performance of [vaccination], or even in a conceivable case without carelessness, they have generally considered the risk of such an injury too small to be seriously weighed as against the benefits coming from the discreet and proper use of the preventive." Thus, the court held, the "theoretical possibility of an injury in an individual case as a result of [the law's] enforcement does not show that as a whole it is unreasonable." Faced with the third ruling holding him liable for the \$5 fine, Jacobson filed a petition to the U.S. Supreme Court, and on June 29, 1903, his case was added to the court's docket.

The case came before the justices in December 1904. A large crowd, including officers of the Massachusetts Anti-Compulsory Vaccination Association, attended the day the arguments in the case were heard. 108 Jacobson was represented before the court by the prominent lawyer and politician George Fred Williams. A former Mugwump and activist in the free silver wing of the Democratic party, Williams had represented Massachusetts in the U.S. Congress and made three unsuccessful bids to be elected state governor. 109 The briefs submitted by Williams offered numerous examples of the wavs in which Massachusetts law violated the due process and equal protection provisions of the Fourteenth Amendment. For example, the law provided an exemption for persons under age twenty-one who presented a certificate from a physician that they were "unfit subjects" for vaccination, but no such allowance existed for adults. 110 It was unreasonable for the state to interfere with Jacobson's liberty when he had not been taken with any illness, the brief claimed; although there was no doubt that the police powers could be brought to bear against "existing offensive acts or conditions," it did not then follow that such force "can be imposed upon healthy citizens, merely because as human beings they have the potentiality of contracting contagious diseases."111

In his brief for Massachusetts, the state's attorney general cited the numerous lower court rulings from around the country that had upheld the power of local and state legislatures to enact laws for the common welfare and to delegate the authority for their enforcement to administrative bodies. The brief asserted, somewhat misleadingly, that Jacobson "did not seek to show that in his own case the requirement of the board of health was oppressive, or that by reason of his state of health or other circumstance vaccination would be dangerous to him." But, in fact, the last two points of Jacobson's fourteen points of evidence, which the lower courts had refused to hear, had concerned his own and his son's prior adverse reactions to vaccination.

On February 20, 1905, the Supreme Court handed down a seven-two decision in favor of Massachusetts. Writing for the majority, Justice John Marshall Harlan declared that while the high court had never attempted to define the limits of the police powers, it had distinctly recognized the authority of the states to enact "health laws of every description" to guard the common good in whatever way the citizens, through their elected representatives, thought appropriate. He state could legitimately impose penalties such as fines or quarantine on those who refused to cooperate with such laws. Turning to the central question of whether the statute violated Jacobson's liberty, Harlan offered an unequivocal vision of the role the individual within society:

[T]he liberty secured by the Constitution of the United States to every person within its jurisdiction does not import an absolute right in each person to be, at all times and in all circumstances, wholly freed from restraint. There are manifold restraints to which every person is necessarily subject for the common good. On any other basis organized society could not exist with safety to its members. Society based on the rule that each one is a law unto himself would soon be confronted with disorder and anarchy.¹¹⁵

The compulsory vaccination law, Harlan contended, was consistent with what the Massachusetts constitution had laid out as "a fundamental principle of the social compact that the whole people covenants with each citizen, and each citizen with the whole people." Harlan conceded that there might be instances where a public health statute would be sufficiently "arbitrary and oppressive ... as to justify the interference of the courts," such as the case of an adult who would be physically harmed by being forced to undergo vaccination; in that situation, enforcement of the statute would be "cruel and inhuman to the last degree." But, Harlan insisted, "no such case is here presented. It is the case of an adult who, for aught it appears, was himself in perfect health and a fit subject of vaccination." Harlan was apparently unconvinced

COMPULSORY VACCINATION UPHELD BY HIGHEST COURT

Various Boards of Health Paramount in This State, United States Supreme Court Decides in Cambridge Case.

(Special Displace to the Rosens Herald.)
WASHINGTON, D. C. Feb. 20, 1966.
Under a decision rendered by the supreme court of the United States today,
the various heards of health of the
state of Massachusetts have a right to
enforce any order they may issue to
compet inhabitants of the state to submit to vaccination to prevent the spread
of smallpex."

rendered today in which the lower couétas conditioned in its detree, the following statements being made by the higher-court in Mr. Harian's decision: "We assume for the burpose of the present inquiry that adults not under guardaniship and remaining within the limits of the city of Cambridge must subsuit to the regulating of the board of health. On any other hads, organized society could not exist with safety to its members. Society based on the rule that each one is a law unto him-

Figure 4. The *Boston Herald* of February 20, 1905, featured the verdict in *Jacobson v. Massachusetts* on its front page. The U.S. Supreme Court's ruling on the constitutionality of compulsory vaccination settled a legal issue that had been the subject of dozens of lawsuits over the previous decades.

by Jacobson's assertion that his having previously suffered from vaccination was evidence that he would have been in special danger if he underwent the procedure again.¹¹⁸

Two justices, David Brewer and Rufus Peckham, dissented from the ruling without opinion. Two months later, they were in the majority when the court handed down another opinion centering on the state's police powers and a health regulation. Lochner v. New York, which would ultimately prove a more far-reaching and influential decision outside the realm of public health, contrasted starkly with the court's position in *Jacobson*. The case concerned a New York State law that limited the working hours of bakers to a maximum of ten per day or sixty per week. Writing for the five-member majority, Justice Peckham rejected the notion that bakers warranted special protection under a health law: "the trade of a baker, in and of itself, is not an unhealthy one to that degree which would authorize the legislature to interfere with the right to labor, and with the right of free contract on the part of the individual." ¹¹⁹ By interpreting the Fourteenth Amendment's due process clause as safeguarding, above all, the right of employee and employer to negotiate the terms of their labor with each other, Lochner articulated a conception of liberty that was centered on the freedom of economic contract, and thus came to serve, over the next three decades, as the classic defense of laissez-faire capitalism.

In dissenting from *Lochner*, Justice Harlan argued that it was for legislatures, not courts, to decide whether a given statute warranted an infringement on individual rights. Citing his own opinion on vaccination from earlier in the term, Harlan wrote, "I take it to be firmly established that what is called the liberty of contract may, within certain limits, be subjected to regulations designed and calculated to promote the general welfare or to guard the public health, the public morals or the public safety." ¹²⁰ In a separate dissent, Justice Oliver Wendell Holmes also pointed to the decision in *Jacobson* as proof that freedom may be constrained for the social good. "The liberty of the citizen to do as he likes so long as he does not interfere with the liberty of others to do the same ... is interfered with by school laws, by the Post Office, by every state or municipal institution which takes his money for purposes thought desirable, whether he likes it or not," Holmes wrote. ¹²¹

The ruling in Jacobson v. Massachusetts, though it did not attract wide attention in the press, garnered favorable editorial comment in newspapers in Boston and New York. "It is too much to expect that this [ruling] will abate the obstinacy of the anti-vaccinationists," declared the Boston Herald, "but they will probably recognize the inexpediency of putting their obstinacy in practice as against the health authorities when the latter undertake to execute the law." 122 The New York Times predicted that the ruling "should end the useful life of the societies of cranks formed to resist the operation of laws relative to vaccination." 123 These confident forecasts turned out to be premature, however. Three years later, the Anti-Vaccination League of America would be founded in Philadelphia, and a diverse assortment of activists would, over the next quarter-century, redouble their efforts at combating attempts to force vaccination upon the people. These challenges to authority, embodying fundamental conflicts between democratic values and scientific expertise, are the subject of chapter 2.