CHAPTER ONE

A Theory and Definition of Public Health Law

[Public health law] should not be confused with medical jurisprudence, which is concerned only in the legal aspects of the application of medical and surgical knowledge to individuals. . . . Public health is not a branch of medicine, but a science in itself, to which, however, preventive medicine is an important contributor. Public health law is that branch of jurisprudence which treats of the application of common and statutory law to the principles of hygiene and sanitary science.


The intersection of law and health has generated a rich body of academic literature, statutes, and judicial opinions. Health law is widely taught (in schools of law, medicine, public health, business, and health administration), practiced, and analyzed by scholars.¹ Public health law shares conceptual terrain with the fields of health care law, bioethics, and health policy but remains a distinct discipline, with a growing body of literature, statutes, and judicial decisions of its own.² Our claim is not that public health law is contained within a tidy doctrinal package; its boundaries are blurred and overlap other paths of study in law and health. Nor is public health law easy to define and characterize: the field is as complex and confused as public health itself. Rather, we posit, public health law is susceptible to theoretical and practical differentiation from other disciplines at the nexus of law and health.

Public health law can be defined, its boundaries circumscribed, and its analytical methods detailed in ways that distinguish it as a discrete discipline—just as the disciplines of medicine and public health can be
demarcated. With this book we hope to provide a fuller understanding of the varied roles of law in advancing the public’s health. The core idea we propose is that law is an essential tool for creating conditions to enable people to lead healthier and safer lives.

In this opening chapter, we offer a theory and definition of public health law, an examination of its core values, an introduction to evolving models of public health problem solving, a categorization of legal tools to advance the public’s health, and an assessment of the legitimate scope of public health. We consider the following questions: What is public health law and what are its doctrinal boundaries? Why is health a salient value? What are the legal foundations of government intervention to promote public health? How can law be effective in reducing illness, injury, and premature death? And what are the political conflicts faced by public health in the early twenty-first century?

**Public Health Law: A Definition and Core Values**

Here we present our definition of public health law; the remainder of this chapter offers a justification and elaboration of the ideas it encompasses.

Public health law is the study of the legal powers and duties of the state to assure the conditions for people to be healthy (to identify, prevent, and ameliorate risks to health in the population) and the limitations on the power of the state to constrain the autonomy, privacy, liberty, proprietary, or other legally protected interests of individuals for the common good. The prime objective of public health law is to pursue the highest possible level of physical and mental health in the population, consistent with the values of social justice.

Several themes emerge from this definition: (1) government power and duty, (2) coercion and limits on state power, (3) the population perspective, (4) the prevention orientation, and (5) the social justice commitment (see figure 1.1).

**Government Power and Duty: Health as a Salient Value**

Anyone concerned about health, and about whether, when, how, and why it gives rise to meaningful responsibilities, needs to address the question *what makes health public?*

Why does government have the power and duty to safeguard the public’s health? To understand the state’s obligations, it will be helpful first to explore the meaning of the concepts of public health and the common good.

The “Public’s” Health
The word public in public health has two overlapping meanings: one that explains the entity that takes primary responsibility for the public’s
health, and another that explains who has a legitimate expectation of receiving the benefits.

The government has primary responsibility for the public’s health. The government is the public entity that acts on behalf of the people and gains its legitimacy through a political process. A characteristic form of “public” or state action occurs when a democratically elected government exercises powers or duties to protect or promote the population’s health.³

The population as a whole has a legitimate expectation of benefiting from public health services. The population elects the government and holds the state accountable for a meaningful level of health protection. Public health should possess broad appeal to the electorate because it is a universal aspiration. But what best serves the population may not always be in the interests of all its members, making public health highly political. What constitutes “good enough” health? What kinds of services are necessary? How will services be paid for and distributed? These remain political questions. Governments will never devote unlimited resources to public health. Core public health functions compete for scarce resources with other demands for services, and resources are allocated through a prescribed political process. In this sense, Dan Beuchamp is instructive in suggesting that a healthy republic is not achieved solely through a strong sense of communal welfare but is also the result of a vigorous and expanded democratic discussion about the population’s health.⁴

“The Common” and “the Good”

If individual interests are to give way to communal interests in healthy populations, it is important to understand the value of “the common” and “the good.” The field of public health would profit from a vibrant conception of “the common” that sees the public interest as more than the aggregation of individual interests. A nonaggregative understanding of public goods recognizes that everyone benefits from living in a society that regulates the risks shared by all.³ Laws designed to promote the common good may sometimes constrain individual actions (such as smoking in public places or riding a motorcycle without a helmet). Members of society have common goals that go beyond narrow personal interests. Individuals have a stake in healthy and secure communities where they can live in peace and well-being. An unhealthy or insecure community may produce harms common to all, such as increased
crime and violence, impaired social relationships, and a less productive workforce. Consequently, people may have to forgo some self-interest in exchange for the protection and satisfaction gained from sustaining healthier and safer communities.

We also need to better understand the concept of “the good.” In medicine, the meaning of “the good” is defined purely in terms of the individual’s wants and needs. It is the patient who decides the appropriate course of action. In public health, the meaning of “the good” is far less clear. Who decides which value is more important—freedom or health? One strategy for public health decision making would be to allow people to decide for themselves, but this would thwart many public health initiatives. For example, allowing individuals to decide whether to acquiesce to a vaccination or permit reporting of personal information to the health department would result in a “tragedy of the commons”: that is, what is good for the individual may be harmful for the community at large.

Public health advocates take it as an article of faith that health must be society’s overarching value. Yet politicians do not always see it that way, expressing preferences for funding, say, highways, energy, or the military. The lack of political commitment to population health can be seen in relatively low public health expenditures. Public health professionals often distrust and shun politicians rather than engage them in dialogue about the importance of population health. What is needed is a clear vision of, and rationale for, healthy populations as a political priority.

Why should health, as opposed to other communal goods, be a salient value? Two interrelated theories support the role of health as a primary value: (1) a theory of human functioning, whereby health is seen as a foundation for personal well-being and the exercise of social and political rights; and (2) a theory of democracy, whereby the primary role of government is seen as achieving health, safety, and welfare for the population.

**Health as Foundational**

Health is foundationally important because of its intrinsic value and singular contribution to human functioning. Health has a special meaning and importance to individuals and the community as a whole. Every person understands intuitively why health is vital to well-being: it is necessary for much of the joy, creativity, and productivity that a
person derives from life. Physical and mental health allow individuals to recreate, socialize, work, and engage in family and social activities that bring meaning and happiness to their lives. Certainly persons with poor health or disabilities can lead deeply fulfilling lives, but personal health facilitates many joys and accomplishments. Every person desires the best physical and mental health achievable, even in the face of existing disease, injury, or disability. The public’s health is so instinctively essential that human rights norms embrace health as a basic right.9

Perhaps not as obvious, however, is that health is also essential for the functioning of populations. Without minimum levels of health, people cannot fully engage in social interactions, participate in the political process, exercise rights of citizenship, generate wealth, create art, or provide for the common security. A safe and healthy population provides the basis for a country’s government structures, social organizations, cultural endowment, economic prosperity, and national defense. Population health is a transcendent value because a certain level of human functioning is a prerequisite for activities that are critical to the public’s welfare—social, political, and economic.

Health, then, has an intrinsic and instrumental value for individuals, communities, and nations. People aspire to achieve health because of its importance to a satisfying life, communities promote the health of their members for the mutual benefits of social interactions, and nations build health care and public health infrastructure to cultivate a decent and prosperous civilization.

**Government’s Obligation to Promote Health**

Over the course of the past two centuries, studies and interventions influenced by the population perspective have taught the world much and paved the way for collective actions that have saved millions of lives. More often than not, these interventions have relied on law.


Why does government have an enduring obligation to protect and promote the public’s health? The answer lies in theories of democracy. People form governments for their common defense, security, and welfare—goods that can be achieved only through collective action. The first thing that public officials owe to their constituents is protection against natural and human made hazards. Michael Walzer explains that public health is a classic case of a general communal provision because public funds are
expended to benefit all or most of the population without any specific distribution to individuals.\textsuperscript{10}

A political community stresses a shared bond among members: organized society safeguards the common goods of health, welfare, and security, while members subordinate themselves to the welfare of the community as a whole. Public health can be achieved only through collective action—often expressed in law—rather than through individual endeavors. Any person of means can procure many of the necessities of life, such as food, housing, clothing, and medical care. Yet no single individual can assure his or her health and safety. Meaningful protection and assurance of the population’s health require communal effort. The community as a whole has a stake in hygiene and sanitation, clean air and water, uncontaminated food, safe roads and products, and control of infectious disease. These collective goods, and many more, are essential conditions for health, and these benefits can be secured only through organized action on behalf of the people.

**The Power to Coerce and Limits on State Power**

We have suggested that public health law is concerned with government responsibilities to the community and the well-being of the population. These ideas encompass what can be regarded as “public” and what constitutes “health” within a political community. Although it may not be obvious, we also suggest that the use of coercion must be part of an informed understanding of public health law, and that the state’s power also must be subject to limits.

Government can do many things to safeguard the public’s health and safety that do not require the exercise of compulsory powers, and the state’s first recourse should be voluntary measures. Yet government alone is authorized to require conformance with publicly established standards of conduct. Governments are formed not only to attend to the general needs of their constituents but also to insist, through force of law if necessary, that individuals and businesses act in ways that do not place others at unreasonable risk of harm. To defend the common welfare, governments assert their collective power to tax, inspect, regulate, and coerce. Of course, different ideas exist about what compulsory measures are necessary to safeguard the public’s health. Reconciling divergent interests about the desirability of coercion in a given situation—should government resort to force, what kind, and under what circumstances?—is a matter for political resolution. In chapter 2, we
propose standards for evaluating public health regulation to help guide policy makers.

**The Power to Compel Individuals and Businesses for the Common Good**

Protecting and preserving community health is not possible without constraining a wide range of private activities that pose unacceptable risks. Private actors can profit by engaging in practices that damage the rest of society: individuals derive satisfaction from intimate relationships despite the risks of sexually transmitted infections; industry has incentives to produce goods without consideration of workers’ safety or pollution of surrounding areas; and manufacturers find it economical to offer products without regard to high standards of health and safety. In each instance, individuals or organizations act rationally with respect to their own interests, but their actions may adversely affect communal health and safety. Absent governmental authority and willingness to coerce, such threats to the public’s health and safety could not easily be averted.

Although the aim of public health regulation is to safeguard the health and safety of the public as a whole, it often has disproportionate benefits for those most at risk of injury and disease. For instance, reducing air pollution, removing lead paint from rental housing units, and eliminating trans fats in the food supply have particular significance for vulnerable populations. Those at increased risk may be particularly vulnerable because of their socioeconomic status, neighborhood, race, ethnicity, age, sexual orientation, gender, or disability.

Perhaps because engaging in risky behavior may promote personal or economic interests, individuals and businesses often oppose government regulation. Resistance is sometimes based on philosophical grounds of choice or freedom from government interference. Citizens, and the groups that represent them, claim that regulating self-regarding behaviors, such as the use of motorcycle helmets or consumption of sugary drinks, is not the business of government. Sometimes these arguments are raised against regulation of activities or situations that harm others, such as unsafe workplace conditions, fuel-inefficient vehicles, or unhygienic restaurants.

Industry often asserts that economic principles militate against state interference. Entrepreneurs tend to accept as a matter of faith that government health and safety standards retard economic development and should be avoided. In political arenas, they contest these standards in the
name of economic liberty, characterizing government taxation and regulation as burdensome and inefficient. Overall, they trust the market to adjust to consumer preferences, including those related to health and safety.

Public health has historically constrained the rights of individuals and businesses to protect community interests. Whether through the use of reporting requirements affecting privacy, mandatory testing or screening affecting autonomy, environmental standards affecting private property, industrial regulation affecting economic freedom, or isolation and quarantine affecting liberty, public health has not shied away from controlling individuals and businesses for the aggregate good.

**Limitations on State Power**

Public health powers can legitimately be used to restrict human freedoms and rights to achieve a collective good, but they must be guided by science and exercised in conformity with constitutional and statutory constraints on state action. The state’s inherent prerogative to protect the public’s health, safety, and welfare is known as the police power. Legally protected interests (e.g., autonomy, privacy, liberty, and property), however, place limits on the police power. Achieving a just balance between the powers and duties of the state to defend and advance the public’s health and legally protected personal interests poses an enduring problem for public health law.

Any theory of public health law presents a paradox. On the one hand, government is compelled by its role as the elected representative of the community to act affirmatively to promote the health of the people. Many consider that this role requires vigorous measures to control obvious health risks. On the other hand, government cannot unduly limit individuals’ rights in the name of the common good. Health regulation that overreaches, in that it achieves a minimal health benefit with disproportionate burdens, is not tolerated in a society based on the rule of law. Consequently, a tension exists between the community’s claim to reduce obvious health risks and individuals’ claim to be free from government interference. This perceived conflict might be agonizing in some cases and absent in others. Thus public health law must always pose the questions of whether a coercive intervention truly reduces aggregate health risks and what, if any, less-intrusive interventions might reduce those risks as well or better. Respect for the rights of individuals and fairness toward groups of all races, religions, and cultures remain at the heart of public health law.
Public health and individual rights are not always in conflict; in some cases they are synergistic. A decision to avert a health risk through coercion may result in an aggregate increase in injury or disease in the population. The exercise of compulsory powers of isolation or quarantine, for example, may prevent individuals from transmitting a communicable infection. But by fostering distrust and alienation, coercion may cause other individuals to avoid testing, counseling, or treatment, ultimately increasing the spread of disease. The decision to coerce affects group behavior and, ultimately, the population’s health.

Distinct tensions exist in public health law between voluntarism and coercion, civil liberties and public health, and discrete (or individual) health threats and aggregate health outcomes. The substantive standards and procedural safeguards that balance these competing interests form the corpus of public health law.

THE POPULATION PERSPECTIVE

Public health’s assertion of both the empirical and ethical relationship between the health of individuals and the wellbeing of their communities helps underpin the . . . population perspective.

At the heart of public health, as we have sought to demonstrate, is a public or government entity that harbors the power and responsibility to assure community well-being. Perhaps the single most important feature of public health is that it strives to improve the functioning and longevity of populations. Classic definitions of public health emphasize this population-based perspective: “‘Public health’ means the prevailing healthful or sanitary condition of the general body of people or the community in mass, and the absence of any general or widespread disease or cause of mortality. It is the wholesome sanitary condition of the community at large.”

Public health differs from medicine, which treats the individual patient as its primary focus. The physician diagnoses disease and offers medical treatment to ease symptoms, prevent complications, and, where possible, to cure disease. British epidemiologist Geoffrey Rose compares the scientific methods and objectives of medicine with those of public health. Medicine asks, “Why did this patient get this disease at this time?,” underscoring a physician’s central concern for sick individuals. Public health, on the other hand, seeks to understand the conditions and causes of ill
health (and good health) in the populace as a whole. It seeks to ensure a favorable environment in which people can maintain their health.

Public health cares about individuals too, of course, because of their inherent worth and because a population is healthy only if its constituents (individuals) are relatively free from injury and disease. Indeed, many public health agencies offer medical care for the poor, particularly for conditions that have spillover effects for the wider community, such as sexually transmitted infections (STIs), tuberculosis (TB), and HIV/AIDS. Still, public health’s quintessential interest is in the well-being and security of populations, not individual patients.

The focus on populations rather than individuals is grounded not only in theory but also in the methods of scientific inquiry and the services offered by public health. The analytical methods and objectives of the primary sciences of public health—epidemiology and biostatistics—are directed toward understanding risk, injury, and disease within populations. Epidemiology, a term derived from Greek, is “the study (logos) of what is among (epi) the people (demos).” Roger Detels notes that “all epidemiologists will agree that epidemiology concerns itself with populations rather than individuals, thereby separating itself from the rest of medicine and constituting the basic science of public health.” Epidemiology encompasses scientific study of the distribution and determinants of health (and related states and events) in populations and the application of resulting knowledge to the control of injury and disease. It adopts a population strategy “to control the determinants of incidence, to lower the mean level of risk factors, [and] to shift the whole distribution of exposure in a favourable direction.” The advantage of a population strategy is that it addresses the underlying causes that make diseases or injuries common in populations, creating the potential for reductions in morbidity and premature mortality at the broadest population level.

THE PREVENTION ORIENTATION

We are moved by sensational images of heroes who leap into action as calamity unfolds before them. But the long, pedestrian slog of prevention is thankless. That is because prevention is nameless and abstract, while a hero’s actions are grounded in an easy-to-understand narrative.

—Nassim Nicholas Taleb, “Scaring Us Senseless,” 2005

The field of public health is often understood to emphasize the prevention of injury and disease as opposed to their amelioration or cure, which are the province of medicine. Public health historians tell a classic
story of the power of prevention. In September 1854, John Snow wrote, “The most terrible outbreak of cholera which ever occurred in this Kingdom, is probably that which took place in Broad Street, Golden Square [Soho, London], and the adjoining streets, a few weeks ago.” Snow, a celebrated epidemiologist, linked the cholera outbreak to a single source of polluted water—the Broad Street pump. He convinced the Board of Guardians of St. James Parish, where the pump was located, to remove the pump handle. Within a week, the outbreak was all but over, with the death toll standing at 616 Soho residents.20

A foundational article by Michael McGinnis and William Foege, examining the leading causes of death in the United States, reveals the distinct analytical orientations of medicine and public health.21 Medical explanations of death point to discrete pathophysiological conditions
such as cancer, heart disease, cerebrovascular disease, pulmonary disease, poisoning, or physical trauma. Public health explanations, on the other hand, examine the root causes of these conditions. From this perspective, the leading causes of death are environmental, social, and behavioral factors such as smoking, alcohol and drug use, diet and activity patterns, sexual behavior, toxic agents, firearms, and motor vehicles. McGinnis and Foege observe that the vast preponderance of government expenditures is devoted to medical treatment of diseases ultimately recorded as the nation’s leading killers on death certificates. Only a small fraction of funding is directed at addressing the root causes of death and disability. Their central message, of course, is that prevention is often more cost-effective than treatment, and that much of the burden of disease, disability, and premature death can be reduced through prevention.

Prevention activities fall into four stages: community (also referred to as preprimary, or primordial), primary, secondary, and tertiary (see figure 1.2). These stages mark a continuum in which public health and medicine, prevention and amelioration are intertwined. Public health experts often think of this continuum in terms of “upstream” and “downstream” interventions, echoing a parable in which the residents of a riverside village become so overwhelmed by rescuing people who are drowning that they do not have time to travel upstream to discover why so many people are falling in.

Many of public health’s most potent activities are oriented toward community prevention (e.g., sanitation and waste removal systems to reduce exposure to infectious agents, commercial regulation to reduce exposure to environmental toxins, water fluoridation to avert dental caries, occupational and consumer product safety regulations to reduce exposure to hazards, and safety-net programs to ensure adequate nutrition for pregnant women, infants, and schoolchildren) and primary prevention (e.g., vaccination against infectious diseases, health education to reduce risk behavior, and the use of seat belts or motorcycle helmets to avoid injuries). Medicine, by contrast, is often focused on tertiary prevention and on treatment of disease or trauma after it has occurred (e.g., by prescribing drugs to control blood pressure or cholesterol, surgically removing an arterial blockage to prevent heart attack, administering antimicrobial drugs to cure infection, and repairing injuries suffered in a motor vehicle crash).

The prevention orientation, the population focus, and the social-ecological model of public health (discussed below) are equally important in demarcating the permeable boundary between public health and
COMMUNITY prevention reduces exposure to health hazards by addressing environmental, economic, social, and cultural determinants of health at the community level, e.g., sanitation systems, vector control to eliminate disease-carrying pests, walkable neighborhoods with access to healthy food, clean air and water, and healthy workplaces and schools.

PRIMARY prevention averts the onset of disease or injury by enhancing protective factors, reducing risk factors, and influencing individual behavior, e.g., vaccination, nutrition education, smoking cessation, safer sexual practices, and helmet and seatbelt use.

SECONDARY prevention minimizes the impact of disease or injury through early detection and treatment, e.g., screening tests for concussion, blood pressure, blood sugar, cholesterol, and cancer, and treatment of coronary artery disease to prevent heart attack.

TERTIARY prevention slows the progression of disease or injury to minimize premature death and morbidity, e.g., management of diabetes with insulin to prevent complications.

**Figure 1.2.** The stages of prevention.
When physicians and other health care providers engage in primary prevention (e.g., by counseling patients to adopt healthier behaviors and administering vaccinations), and secondary prevention (e.g., by screening patients for risk factors and asymptomatic, early-stage disease), their efforts remain focused on individuals. By the same token, when public health officials engage in secondary prevention, tertiary prevention, and treatment (e.g., clinical services for infectious diseases, reproductive health, noncommunicable disease screening, and child health), their efforts remain focused on populations. Whereas medicine tends to focus almost exclusively on addressing individual risk factors and behaviors (e.g., genetic predisposition, blood pressure, susceptibility to infection, and tobacco and alcohol use) and agent-specific countermeasures (e.g., antibiotics to kill bacteria and chelation therapy to remove toxic lead from the blood), public health broadens the focus to encompass the entire epidemiological triangle (see figure 1.3), including environmental factors (e.g., roadway and motor-vehicle design features, advertisements promoting harmful products, and climatic conditions that foster exposure to disease-carrying mosquitoes).

Increasing affordable access to high-quality health care and health education to promote early detection (secondary prevention) and effective treatment (tertiary prevention) of disease are public health goals because they serve population health as well as individual health needs. The goals of medicine and public health are especially intertwined in the field of infectious diseases, where medical treatment can reduce contagiousness: the individual benefits from treatment, and society benefits from reduced exposure to disease.
Social justice is viewed as so central to the mission of public health that it has been described as the field’s core value: according to Dan Beau-champ, “The historic dream of public health . . . is a dream of social justice.” Social justice captures the twin moral impulses that animate public health: to advance human well-being by improving health and to do so particularly by focusing on the needs of the most disadvantaged. This account of justice has the aim of bringing about the human good of health for all members of the population. An integral part of that aim is the task of identifying and ameliorating patterns of systematic disadvantage that profoundly and pervasively undermine prospects for the well-being of subordinated groups—people whose prospects for good health are so limited that their life choices are not even remotely like those of others. These two aspects of justice—health improvement for the population and fair treatment of the disadvantaged—create a richer understanding of public health. Seen through the lens of social justice, the central mission of the public health system is to engage in systematic action to assure the conditions for improved health for all members of the population and to redress persistent patterns of systematic disadvantage.

Distributive Justice

Socially, culturally, and materially disadvantaged people live shorter, less healthy lives. The relationship between socioeconomic status and health often is referred to as a gradient because of the graded, continuous nature of the association; proportional increases in income are linked to proportional decreases in mortality across the income distribution. These empirical findings have persisted across time and cultures. Inequalities of one kind beget other inequalities, for individuals, families, and communities, thereby compounding, sustaining, and reproduc-
ing a multitude of deprivations. Taken together, multiple disadvantages add up to markedly unequal life prospects.

Distributive justice—which stresses the fair disbursement of common advantages and sharing of common burdens—requires government to limit the extent to which the burden of disease falls unfairly on the least advantaged, and to ensure that the burdens and benefits of interventions are distributed equitably. This account of social justice is interventionist, not passive or market-driven. The critical questions at the intersection of public health and justice are which people in society are most vulnerable and at greatest risk, how best to reduce the risk or ameliorate the harm, and how to fairly allocate services, benefits, and burdens.

**Participatory Parity**

Social justice demands more than fair distribution of resources. Policy-making processes that are not fully representative of the population predictably result in neglect of the needs of disadvantaged groups. For example, during the Gulf Coast hurricanes in 2005 and hurricanes Irene and Sandy in 2011 and 2012, state and federal agencies failed to act expeditiously and with equal concern for all citizens, including the poor and disabled. Lack of participatory parity harms the whole community by eroding public trust and undermining social cohesion. It fails to show the respect due to all members of the polity and signals to those affected and to everyone else that the human needs of some matter less than those of others. Social justice thus encompasses participatory parity: equal respect for all community members and recognition, participatory engagement, and voice for historically underrepresented groups.

**Communitarianism and Civic Engagement**

Beyond understanding the variance of risk within and across groups, public health encourages connectedness to the community. Individuals who feel they belong to a community are more likely to strive for health and security for all its members. Viewing health risks as common to the group, rather than specific to individuals, helps foster a sense of collective responsibility for well-being. Finding solutions to common problems can forge more cohesive and meaningful community associations.
Many forward thinkers urge greater community involvement in public health decision making so that policy formation becomes a genuinely civic endeavor. Under this view, citizens strive to safeguard their communities through civic participation, open forums, and capacity building to solve local problems. Public involvement should result in stronger support for health policies and encourage citizens to take an active role in protecting their health and that of their neighbors. Public health authorities, for example, might practice more participatory and deliberative forms of democracy, involving closer consultation with community organizations. This kind of deliberative democracy in public health is increasingly evident in government-community partnerships at the federal, state, and local levels (e.g., to promote AIDS action, breast cancer awareness, and access to fresh, healthy food).

**Evolving Models of Public Health Problem Solving**

Disease is always generated, experienced, defined, and ameliorated within a social world. Patients need notions of disease that explicate their suffering. Doctors need theories of etiology and pathophysiology that account for the burden of disease and inform therapeutic practice. Policymakers need realistic understandings of determinants of disease and medicine’s impact in order to design systems that foster health. The history of disease offers crucial insights into the intersections of these interests and the ways they can inform medical practice and health policy.


Public health law is in the midst of a dramatic resurgence. For much of the twentieth century, it was viewed primarily as the law of communicable disease control, concerned with such undertakings as compulsory vaccination and treatment, isolation and quarantine, and disease surveillance. This “old” public health law was increasingly viewed as irrelevant as the perceived threat from infectious diseases appeared to wane. We now understand that infectious diseases remain a significant threat, whether through emerging diseases (e.g., HIV and novel coronavirus and influenza strains), growing antimicrobial resistance, or bioterrorism. At the same time, an expansive new social-ecological model of health has revealed a multitude of avenues for using law and policy tools to reduce the incidence of noncommunicable diseases and injuries, which were previously viewed fatalistically, as the consequence of moral failure or bad luck.
The renaissance of public health law has been prompted in part by the reemergence of communicable disease threats, but it is also being shaped by a very different set of influences. Social epidemiology has exposed the crucial role of social, economic, and environmental factors in determining health outcomes at the population level. The outcomes of interest for “new” public health law include infectious diseases as well as chronic, noncommunicable diseases (e.g., diabetes, cardiovascular disease, cancer, chronic obstructive pulmonary disease, and asthma). The new public health reaches beyond the limited goals of health protection (controlling negative influences on health) to the broader objectives of health promotion (encouraging healthier behaviors and building healthier physical and social environments).

Scholars have identified four basic eras in the history of public health, each with an accompanying paradigm for understanding and influencing the determinants of health: the miasma model, the agent model, the behavioral model, and the now-dominant social-ecological model. Each model represents a particular approach to combating disease and promoting health. The relevance of law and policy and the balance between science and advocacy has varied from model to model.

The Miasma Model
The basic objectives and methods of public health can be traced to the earliest civilizations, but the relationship between policy and epidemiology as an organized scientific discipline dates back to the miasma model of the nineteenth-century sanitarian movement—theorizing that rotting organic matter or noxious “bad air” contributed to disease. In the early to mid-nineteenth century, sanitarians sought to prevent disease by improving the physical environment in urban slums. They studied variation in mortality rates by neighborhood, occupation, and diet. They championed public expenditures for improved water and sewer systems, garbage collection, public baths, and housing. They also advocated for the creation of state and local health authorities and for regulating commercial activities harmful to the public’s health. These interventions, they believed, would disperse miasmas, reduce mortality and morbidity, and alleviate poverty.

The Agent Model
By the start of the twentieth century, scientists had reached consensus that diseases were attributable to specific causes rather than to general
environmental miasmas. The gradual identification of the bacteria, viruses, and toxins responsible for illness made possible effective vaccination and medical treatment. It also resulted in a major shift toward the agent model of public health.\textsuperscript{40} Unlike the environmentally focused interventions of the sanitarians, agent-model interventions applied primarily to individuals: controlling infectious disease through vaccination, quarantine of the exposed, isolation of the sick, and treatment with antibiotics. But vaccination and treatment can eradicate an infectious disease only if a high percentage of the population is immunized (creating herd immunity) and if the infected are treated before they can spread the disease.\textsuperscript{41}
led some to resist. Legislators therefore adopted compulsory measures to ensure adequate uptake.

The Behavioral Model

As chronic, noninfectious diseases overtook communicable diseases as the leading causes of death in wealthy countries, the public health model shifted once again toward a behavioral model. Initially at least, the medical etiology of these diseases was poorly understood, making the agent model inapposite. In the second half of the twentieth century, problems like ischemic heart disease, cancer, and type 2 diabetes were associated with behaviors such as diet, physical activity, smoking, and sunbathing. Sexual promiscuity and injection-drug use were similarly associated with infectious diseases, including syphilis and, later, HIV/AIDS. Based on these observations, the behavioral model of public health advocated behavior change as a prevention strategy.

Informing people of the risks associated with smoking, physical inactivity, unhealthy eating, and unprotected sex was primarily a task for physicians counseling patients and for public education campaigns. It was a project to which the law (initially at least) had little relevance, and public health law became a considerably less important part of the American legal landscape. Its primary statutes were left unrevised and largely unused for decades.

The Social-Ecological Model

Responding to the findings of social epidemiology is perhaps the true “grand challenge” of our time in public health.

— Scott Burris, “From Health Care Law to the Social Determinants of Health,” 2011

Stymied in their efforts to convince people to change behaviors, researchers began to investigate the ways in which social, economic, and environmental factors influenced behavioral choices and health outcomes. At the end of the twentieth century, the model of public health expanded yet again to encompass not only the agents of disease or injury and personal behaviors, but also the social and physical environment in which the agent and the individual interact.

A core insight of the social-ecological model is that there are multiple causal pathways by which the social determinants of health contribute to health outcomes. The association between socioeconomic factors
PHOTO 1.4. The cover of a 1940s Public Health Service publication on syphilis control emphasized the role of state and local health departments in planning and conducting campaigns for the diagnosis, treatment, and control of the disease. Reprinted with permission from Institute of Medicine, The Future of the Public’s Health in the 21st Century (Washington, DC: National Academies Press, 2003).
and health is stubbornly persistent, even in places with universal health care. This persistence strongly suggests that healthy living conditions and behaviors are fundamental determinants of good, and ill, health. The causal pathways by which socioeconomic factors, race, ethnicity, geography, disability, age, and sexual orientation determine health at the population level include substandard housing, poor educational opportunities, polluted environments, unsafe working conditions, community violence, disproportionate incarceration, political disenfranchisement, and social disintegration. These and many other determinants lead to systematic disadvantage not only in health but also in other aspects of social, economic, and political life.

The social-ecological model places individual choices into their social context and emphasizes structural explanations for health behaviors and outcomes. In this view, eating a diet high in calories and low in nutritional value is not merely a personal choice but is socially constructed. Risk behaviors are influenced by environmental factors, such as an information environment loaded with commercial marketing and a food environment dominated by unhealthy options that are cheaper and more accessible than healthy choices. Physical inactivity is not simply a personal failure but is heavily influenced by built environments that discourage walking and provide few opportunities for recreation and exercise. In turn, underlying social and economic factors help determine the environment in which people live, work, and play. Poor neighborhoods have more fast food outlets and fewer grocery stores than middle-income neighborhoods. Low income children are exposed to more television and thus to more marketing of unhealthy foods. They are also more likely to live in communities where public parks and playgrounds are in disrepair and where the threat of violence keeps people indoors. These are only a few of the factors that determine supposedly personal choices, and healthy eating and physical activity are only two of many health-related behaviors in which a social gradient is evident.

The social-ecological model of health has expanded the frontiers of public health law. As public health scientists began to explore ways to alter the environment, they found, once again, that lawyers and policy makers were crucial allies. Public health law began to evolve from infectious disease control toward the broader discipline we describe in this volume.

Public health researchers seek to identify the causal pathways through which distal determinants, such as socioeconomic class, educational attainment, race, and ethnicity, affect proximal determinants, such as
risk behaviors and exposure to toxins, infectious agents, or violence. Along these pathways are multiple sites at which interventions could effectively break the causal chain. Interventions can be upstream (involving structural factors) or downstream (preventing morbidity or mortality shortly before or after disease or injury has occurred). Upstream interventions are often associated with greater concomitant benefits. For example, increasing educational opportunities for young mothers or housing security for families might have a multitude of positive health effects for children, reducing their lifetime risk of asthma, lead poisoning, sexually transmitted infections, and diabetes, to name a few.
LAW AS A TOOL FOR THE PUBLIC’S HEALTH: 
MODES OF LEGAL INTERVENTION

The possibilities for rational social action, for planning, for reform—in short, for solving problems—depend not upon our choices among mythical grand alternatives [like socialism and capitalism] but largely upon choice among particular social techniques . . . . Whether the rapidity of innovation in new techniques of control is or is not the greatest political revolution of our times, techniques and not “isms” are the kernel of rational social action in the Western world.

The definition we offer does not depict the field of public health law narrowly as a complex set of technical rules buried in state health codes. Rather, public health law should be seen broadly as the authority for and responsibility of organized society to assure the conditions for the population’s health. Law and policy tools can facilitate many public health interventions, such as ensuring access to education, economic opportunity, healthy food, safe housing, and medical care; facilitating healthier behavior choices; reducing environmental pollution; and creating health-promoting built environments.

Law itself is a social determinant of population health, and it can have negative as well as positive effects. For example, criminalizing disease transmission may drive an epidemic underground; prohibiting distribution of clean needles to intravenous drug users may foster the spread of disease; and deeming possession of multiple condoms evidence of prostitution may inhibit prevention efforts. Discrimination based on health status (e.g., HIV/AIDS) can have multiple adverse health effects. Conversely, law can be empowering, providing innovative solutions to challenging health threats. Of the ten great public health achievements in the twentieth century listed in table 1.1, all were realized, at least in part, through law reform or litigation (e.g., vaccination mandates; workplace, food, and motor vehicle safety standards; cigarette taxes and smoke-free laws; and programs to ensure access to prenatal and pediatric medical care and nutrition). Consider what role the law might play in addressing the major challenges of the twenty-first century described in table 1.2.

The study of public health law, therefore, requires a detailed understanding of the legal tools and regulatory techniques available to prevent injury and disease and to promote the health of the populace. Here we offer a taxonomy of modes of legal intervention to advance the public’s health and safety: direct regulation; indirect regulation through taxation and spending; indirect regulation through tort liability; and
deregulation. Although the law can be a powerful agent for change, specific interventions raise critical social, ethical, or constitutional concerns that warrant careful study. We frame these problems quite simply here but develop the ideas more systematically in ensuing chapters. What is clear is that public health law is not a scientifically neutral field but is inextricably bound to politics, economics, and society.\textsuperscript{52}

**The Power to Tax and Spend**

The power to tax and spend is found in Article I of the U.S. Constitution, providing government with important regulatory tools.\textsuperscript{53} The power to spend supports a broad array of health-related services, ranging from education to research. Government spends to estab-
lish and maintain a public health infrastructure consisting of a well-trained workforce, electronic information and communications systems, rapid disease surveillance, laboratory capacity, and response capability. Social safety-net programs provide nutrition assistance, access to medical care, housing, early childhood education, job training, and supplemental income to eligible individuals and families. In addition to direct funding, government can set health-related conditions on the receipt of public funds. For example, Medicaid, housing assistance, and nutrition assistance programs impose health-related conditions on beneficiaries, retailers, service providers, and housing developers.

Compared to similarly situated countries, however, U.S. spending priorities are not well aligned with a social-determinants strategy. On average, members of the Organization for Economic Co-operation and Development (OECD) spend twice as much on non–health care social expenditures as they do on health care. In the United States, by contrast, health care spending far exceeds non–health care social spending.54

In addition to financing public expenditures, taxation provides inducements to engage in beneficial behavior and disincentives to engage in high-risk activities. Tax relief can be offered for health-producing activities such as medical services, childcare, and charitable contributions. Tax burdens can be placed on the sale of hazardous products such as cigarettes, alcoholic beverages, and firearms. Of course, this form of taxation can create perverse incentives, as in the case of tax relief for the purchase of unsafe and fuel-inefficient sport utility vehicles.55

Taxation is controversial as a public health strategy. Conservatives oppose taxes on sugar-sweetened beverages, for example, viewing such proposals as paternalistic and meddlesome. At the same time, progressives criticize some tax rules as inequitable. Some tax policies serve the rich, the politically connected, or those with special interests (e.g., tax breaks for capital gains, offshore tax shelters, and preferential tax policies for energy companies or industrial farming operations). Other taxes are regressive, exacting a higher proportion of income from the poor than from the rich. For example, almost all public health advocates support cigarette taxes, but the individuals who shoulder the principal financial burden are disproportionately poor and nonwhite.56

The Power to Alter the Information Environment

The public is bombarded with information that undoubtedly affects health and behavior. Government has several tools at its disposal to
alter the information environment, thereby encouraging people to make more healthful choices. First, it can use communication campaigns to educate the public on health matters. Second, it can require businesses to label their products to include instructions for safe use, disclosure of contents or ingredients, and health warnings. Third, it can limit harmful or misleading information in private marketing by regulating advertising for potentially harmful products.

At first look, there is nothing controversial in ensuring that consumers receive full and truthful information while encouraging them to make healthier choices. Yet health communication campaigns on topics such as sexual practices, abortion, smoking, and food and beverage consumption can be highly contested. Businesses object to advertising restrictions and compelled health warnings. Powerful economic and constitutional interests are at stake in any intervention designed to alter the information environment.

The Power to Alter the Built Environment

The design of the physical environment holds great potential for preventing major health threats. Public health has a long history of altering the built environment to reduce injury (e.g., workplace safety, traffic calming, and fire codes), infectious diseases (e.g., sanitation, zoning, and housing codes), and toxic exposures (e.g., regulations to reduce the use of lead paint and toxic emissions). Local governments may also use their zoning, licensing, and permitting to encourage healthier choices about consumption of harmful products (e.g., by reducing the density of tobacco, alcohol, or fast food retailers and increasing access to grocery stores) and physical activity (e.g., by increasing recreational space and promoting active forms of transportation). The nature of built environments can also affect the social cohesiveness of communities.

The Power to Alter the Socioeconomic Environment

Epidemiological research consistently shows that household and neighborhood socioeconomic status is strongly correlated with morbidity, mortality, and functioning. Some researchers go further, concluding that the overall level of economic inequality in a society correlates with population health. That is, societies with wide disparities between rich and poor tend to have worse health status than societies with smaller disparities (after controlling for per capita income). These researchers
hypothesize that societies with higher degrees of inequality provide less social support and cohesion, making life more stressful and pathogenic. Drawing on this line of argument, some ethicists contend that “social justice is good for our health.”

The evidence for a correlation between economic equality and health is persuasive. For example, the United States ranks forty-second in the world in life expectancy, behind countries with half the income and half the health care expenditures per capita. Of countries with available data, all but four of the twenty-eight ranking above the United States have more equal income distributions. Sweden and Japan, which lead the world on many measures of social well-being, take very different approaches to social spending but share a high level of income equality.

The evidence that income inequality causes poor health outcomes, however, is mixed. The authors of a meta-analysis cast doubt on the theory that income inequality is a determinant of health while acknowledging that raising the incomes of the least advantaged will improve health outcomes: “Despite little support for a direct effect of income inequality on health per se, reducing income inequality by raising the incomes of the most disadvantaged will improve their health, help reduce health inequalities, and generally improve population health.”

Opponents of redistributive policies challenge this last claim, arguing that such policies punish personal accomplishment, thereby impeding economic growth. Pointing to the correlation between population-wide health and national per capita income, they say redistribution reduces population-wide health over the long run by suppressing the growth of per capita income. Redistribution of private wealth, they contend, is a political matter, outside the appropriate scope of the public health enterprise. The political divide on the role of socioeconomic status in population health may be impossible to bridge. Public health advocates believe a reduction in health disparities is a social imperative, while economic conservatives believe a free-market economy is indispensable to a vibrant and prosperous society.

Direct Regulation of Persons, Professionals, and Businesses

Government has the power to directly regulate individuals, professionals, and businesses. In a well-regulated society, public health authorities set clear, enforceable rules to protect the health and safety of workers, consumers, and the population at large. Regulation of behavior reduces injuries and deaths (e.g., by mandating the use of seat belts and motorcycle
helmets). Licenses and permits enable government to monitor and control the standards and practices of professionals and institutions (e.g., doctors, hospitals, food-service establishments, and tobacco retailers). Finally, inspection and regulation of businesses help ensure safe working conditions, reduce toxic emissions, and encourage healthier lifestyles.

Despite its undoubted value, health regulation is highly contested terrain. Civil libertarians favor autonomy, privacy, and liberty, and these personal rights are increasingly being extended to protect corporations from regulation. The fault lines between public health and civil liberties were exposed during the debates about the Model State Emergency Health Powers Act following September 11, 2001, and the subsequent anthrax attacks (see chapter 11). Should government act boldly in a public health emergency to quell health threats, or should it give precedence to personal liberties? Similar tensions are evident in the area of commercial regulation. Influential economic theories (e.g., laissez-faire) favor open competition and undeterred entrepreneurship. Theorists support relatively unfettered private enterprise and free-market solutions to social problems. Many citizens see a changing role for government from one that actively orders society for the good of the people (the “nanny state”) to one that leaves individuals and businesses free to make their own personal and economic choices.

**Indirect Regulation through the Tort System**

Attorneys general, public health authorities, and private citizens possess a powerful means of indirect regulation through the tort system. Civil litigation can redress many kinds of public health harms: environmental damage (e.g., air and water contamination), exposure to toxic substances (e.g., pesticides, lead paint, and asbestos), badly designed or defective products (e.g., children’s toys, recreational equipment, and household goods), and marketing and distribution practices for hazardous products (e.g., tobacco, firearms, and prescription opioids). Public health advocates, drawing lessons from successful tobacco strategies, have brought tort actions against the lead paint, firearms, fast food, and pharmaceutical industries, but with only modest success.

Tort law can be an effective method of advancing the public’s health, but, like any form of regulation, it is not an unmitigated good. The tort system imposes economic and personal burdens on individuals and businesses. Litigation, for example, increases the cost of doing business, thus driving up the price of consumer products. Tort actions can deter
not only socially harmful activities (e.g., unsafe automobile designs) but also socially beneficial ones (e.g., innovation in vaccine development). Legislators have sharply limited tort liability in realms ranging from fast foods to firearms. Thus, although tort litigation remains a viable strategy for the public’s health, it is actively resisted in some political circles.

**Deregulation**

Sometimes laws are harmful to the public’s health and stand as an obstacle to effective action. In such cases, the best remedy is deregulation. Politicians may urge superficially popular policies that have unintended health consequences. Consider laws that penalize needle-exchange programs and pharmacy sales of sterile syringes for injection-drug users, or that criminalize sex for persons with HIV/AIDS, thereby potentially driving the epidemic underground. Deregulation can be controversial because it often involves a direct conflict between public health and other social values, such as crime prevention or morality. Public health advocates may believe passionately in harm reduction, but the political community may want to use the law to demonstrate social disapproval of certain activities.

The government, then, has many legal levers to prevent injury and disease and promote the public’s health. Legal interventions can be highly effective and need to be part of the public health advocate’s arsenal. However, they can also be controversial, raising important ethical, social, constitutional, and political issues. These conflicts are complex, important, and fascinating for students and scholars of public health law. Much of the remainder of this book examines these difficult problems at the intersection of law, health, and politics.

**THE LEGITIMATE SCOPE OF PUBLIC HEALTH AND THE LAW**

Public health is purchasable. Within natural limitations, every community can determine its own death rate.

—Hermann Biggs, 1894

The roads to unfreedom are many. Signposts on one of them bear the inscription: HEALTH FOR ALL.


Public health law establishes the mission, functions, funding, and powers of public health agencies and supplies an array of interventions to assure the conditions in which people can be healthy. Most public health law
has deep historical roots and strong public support. However, activities at the cutting edge of population health often spark social and political dissent. Much of this controversy is about the legitimate scope, or “reach,” of public health. The controversy is informed, in large part, by ideas of individualism, freedom, self-discipline, and personal responsibility that have deep resonance in American culture. Laypeople often think of health largely as an individual matter rather than a societal responsibility.

The broadening of public health law to encompass a wide range of determinants of both infectious and noncommunicable diseases has been characterized as a modern revolution. Interventions such as bans on trans fats, graphic warning labels on cigarettes, portion-size limits for sugary drinks, nutrition standards for restaurant meals marketed to children, and zoning regulations that limit parking spaces to encourage people to walk generate heated debate. Even long-standing public health interventions like vaccination and water fluoridation are facing new political and legal challenges.

Criticism of modern public health law is to some extent inevitable. The “new” public health has raised political conservatives’ ire by extending its reach beyond the traditional domain of infectious disease to social and economic influences on population-wide health. Public health advocates challenge powerful industries, such as tobacco, coal, firearms, fast food, and beverage companies. Certainly the critical response to the new public health is partly motivated by material interests. But it also touches on deep-seated philosophical and cultural views about whether modern health threats should be treated as predominantly public or private in nature.

Legal scholars have articulated coherent and principled critiques of the broad definition of public health law we present here. They argue that designating health problems as “public” changes the terms of the debate. Labeling risky behaviors as “public health” problems appears to privilege heavy-handed state intervention over protection of individual rights. “The case for government intervention . . . gets that extra boost of legitimacy” when framed as a public health issue.

On a philosophical level, the debate over the new public health arises from a tension between public health’s communitarian foundations and the foundations of American law and policy. The dominant philosophy of American law is classical liberalism—“a language centered on the values of freedom, self-determination, self-discipline, personal responsibility, and limited government.” Broadly conceived, public health
offers a distinctly different language for talking about “how a society balances personal responsibility and social accountability in public policies that impact health”—a language that has always been part of the American experience.79

The debate over the legitimate scope of public health is also framed by cultural understandings about whether modern threats are personal or public in nature. Critics posit a choice between the “old” public health, primarily concerned with infectious disease control (the agent model), and the new public health of the social-ecological model. But, as the legal historian William Novak notes, this story isn’t quite right.80 In a sense, the social-ecological model represents a return to the basic approach of the sanitarians—who argued that health issues “were societal and that the appropriate measures thus had to be applied across society.”81 The real tension is between the behavioral model, which supported the cultural ideal of personal responsibility, and the social-ecological model, which challenges that vision. Although the agent model drew resources and attention away from the sanitarian reform movement, it was the behavioral model that reinforced the idea that so-called lifestyle diseases were beyond the reach of the law.

Although we embrace a broad focus on the underlying social, economic, and environmental causes of injury and disease, we understand the criticisms of the new public health. Certainly, designating a social problem as a public health threat has important legal consequences. To the extent that the “public” is invoked as a liberty-limiting principle, it should be thoughtfully defined and theorized.82 Almost everything human beings undertake affects the public’s health, but this does not necessarily justify an overly expansive reach. Public health agencies lack the expertise and resources to tackle problems relating, for example, to culture, housing, and discrimination—although public health advocates can introduce public health problem-solving models into the work of agencies responsible for overseeing sectors such as agriculture, housing, and transportation. Collaboration, not colonization, should be the model for public health strategies that cut across “non-health” sectors.

In the end, the field of public health is caught in a dilemma. If it conceives of itself too narrowly, then it will be accused of lacking vision. It will fail to address the root causes of ill health and fail to use the full range of social, economic, scientific, and behavioral tools needed to achieve a healthier population. At the same time, if public health conceives of itself too expansively, it will be accused of overreaching. The field will lose its ability to explain its mission and functions in
comprehensible terms and, consequently, to sell public health in the marketplace of politics and priorities.

The politics of public health are daunting. American culture openly encourages the expression and enjoyment of wealth and privilege, and it is inclined to treat people’s disparate life circumstances as a matter of personal responsibility. Meanwhile, voters have become skeptical of government’s ability to ameliorate the harshest consequences of economic and social disadvantage. Political liberalism has been complicit in these trends. Over the past fifty years, emphasis has shifted from social obligation and economic fairness to individual freedom and self-reliance, thus relocating health from the public sphere to the private realm. Recently, however, our increasingly collective approach to financing health care has generated a renewed sense that the social and behavioral determinants of health are matters of deep public concern.

These are the challenges of public health law: Does it act modestly or boldly? Does it choose scientific neutrality or political engagement? Does it leave people alone or change them for their own good? Does it intervene for the common welfare or respect civil liberties? Does it aggressively tax and regulate or nurture free enterprise? The field of public health law presents complex tradeoffs and poses intellectual challenges essential to the body politic.