Chapter 1

Introduction to Public Health in the United States

A. Introduction

A threshold question in undertaking the study of any area of law is how to define the subject matter. Public health is all about finding a balance between risks and rights—how to identify, characterize, classify, quantify, prevent, or at least control risks to the public without negatively affecting human rights. Public health law is all about identifying and characterizing risks that are amenable to specific government actions. Thus, the meaning of risk and the meaning of rights are central to the study of public health and public health law, the contours of which we begin to develop in Part B. Part C begins our exploration of risk, starting with causes of death and how risks are calculated and presented to the public meaningfully. Part D considers whether particular risks should be considered public health risks. Part E samples materials on risk perception to understand why people may perceive particular risks quite differently. Understanding risk perception is a foundation for analyzing public health law, as understanding the nature of risks informs options for preventing illness and injury. Part F then applies these materials to weigh the benefits and costs of prevention to analyze whether and when to screen for chronic disease risks. Part G introduces human rights, highlighting at the outset that public health is global health and is seldom usefully viewed solely through a U.S. lens.

This chapter introduces four themes that recur throughout the book. The first is the sometimes contentious question of what counts as a public health problem. This definitional question is the heart of the matter, because most (though not all) risks to the public are subject to government intervention, and government is the sole source of legitimate coercive power—for good or for ill. Labeling anything a risk to public health opens the door to government action and therefore requires precision.

Second, government power has limits, both jurisdictional and practical. Most important are rights protected by the U.S. Constitution, and the majority of materials in the book address constitutional issues, though legislation, regulations, and common law also impose restrictions on government action. Regardless of legal constraints, some risks are not suitable for legal control, because prevention is not feasible for financial, structural, or political reasons, and sometimes because the public simply resists. Balancing government power with individual rights is a
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common exercise in public health law and appears throughout the book. Stated more succinctly, the issue often is: do the ends justify the means?

A third theme is that there are a variety of legal actions that are usually available to address specific risks in different ways, all of which can influence the health and safety of the general population. Legal options often include criminal prohibitions, licensure requirements, financial incentives (taxes, surcharges), tort liability, product standards, environmental controls, or workplace standards. Each legal option represents specific constraints or requirements, some of which may be debatable. Yet those standards may be clearer than the policy or ethical rationale underlying the choice. Thus, a different type of “choice of law” analysis is necessary: choosing the best approach, first by analyzing a law’s doctrinal applicability and then by evaluating its utility and fairness in solving a particular problem.

The final theme is that of fairness and justice. History shows at least two sides to public health aspirations. Many public health programs are designed to improve the health of disadvantaged and vulnerable populations who lack the resources available to more affluent populations. Sometimes, however, a well-intended program results in depriving disadvantaged groups of their dignity, equality, or even their freedom. Recognizing the consequences for justice and fairness of each choice of law is an essential and exciting part of the process of public health law analysis.

B. What Is Public Health?

Americans today enjoy better health than at almost any time in their history. Average life expectancy at birth rose from 47.3 years in 1900 to 78.6 years in 2016, although more recently it has declined slightly because of the ongoing opioid epidemic. Ctrs. Disease Control & Prevention, Health, United States Report, 2017; https://www.cdc.gov/nchs/hus/index.htm (visited Jan. 2019). Most of this increase is attributed to public health measures, especially the decline of infectious diseases. In the eighteenth and nineteenth centuries, public health activities centered on controlling epidemics of contagious diseases, like smallpox, cholera, and yellow fever. The introduction of vaccines, as well as programs to purify the water supply, construct hygienic sewage systems, and remove contaminants from food, milk, and drugs, dramatically reduced infections, illnesses, and deaths. In the twentieth century, federal and state programs removed workplace hazards, controlled pollution, required safer products like automobiles, imposed safe building and road construction standards, and regulated the quality of hospitals, medical providers, pharmaceuticals, and medical devices through licensing. Health improved alongside rising levels of literacy and income. U.S. Dep’t of Health and Human Servs., Healthy People 2020, https://www.cdc.gov/nchs/healthy_people/hp2020.htm (visited Jan. 2019).

Of course, the benefits of public health have not always been evenly distributed. Infant mortality is higher and life expectancy is lower among low-income groups,
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Recent immigrants, Native Americans, and populations of color. National Academy of Medicine, Perspectives on Health Equity & Social Determinants of Health (2018). Moreover, the United States lags behind other industrialized democracies, ranking twenty-eighth out of 44 countries in life expectancy. OECD, Health at a Glance 2017 (25 OECD countries have life expectancies of more than 80 years), www.oecd-ilibrary.org/sites/health_glance-2017-en/1/2/3/1/index.html?itemId=/content/publication/health_glance-2017-en&_csp_=980fbc145e1f57ab4011c6cda9e70d#sect-33 (visited Jan. 2019). Yet the United States spends more on health care ($10,224 per capita in 2017) than the other 34 OECD countries. We spend 80% more per person than Germany, and 25% more than Switzerland, the second highest spender. It is commonly reported that the United States spends roughly 3% of national health expenditures on prevention. Such reports all seem to be based on a 1992 CDC summary of an unpublished report of 1988 data. A 2008 study increased the estimate to between 8% and 9%, but that may still be an underestimate, since public health expenditures occur in many sectors of the economy outside the public health and medical sectors.

In the United States, as in most of the industrialized world, the primary causes of death today are noncommunicable diseases, specifically heart disease, stroke, and cancers. Chronic diseases gained more prominence as the threat of infectious diseases declined in the twentieth century. Public health agencies began to consider how to organize programs to reduce mortality and morbidity from chronic diseases. The Lalonde Report, initiated by Canadian Minister of Health Marc Lalonde, brought attention to the ways individuals may affect their own health by using illicit drugs like heroin, cocaine, or marijuana, drinking alcohol, smoking cigarettes, driving without seat belts, cycling without a helmet, eating a poor diet, getting little exercise, or engaging in promiscuous unprotected sex. Marc Lalonde, A New Perspective on the Health of Canadians (April 1974), http://www.phac-aspc.gc.ca/ph-sp/pdf/perspect-eng.pdf. The report presented a new direction for health policy emphasizing prevention, rather than curative medical care, and focusing on the environment, human biology, lifestyle, and health care organization. By the end of the twentieth century, chronic disease prevention, often called “health promotion,” was firmly on the public health agenda in the United States and elsewhere.

Attention to chronic conditions is, in part, a reaction to their treatment costs, often said to account for more than 60% of health care expenditures. However, preventing chronic diseases is even more complicated than preventing infectious diseases, because chronic diseases often result from complex and in many cases still unknown factors, including the environment, genetic heritage, personal behavior, and social determinants like wealth, occupation, and education. Moreover, reducing the risks may require preventive measures long before anyone could become ill or disabled. The lag between the time for intervention and the materialization of any harm creates some conceptual problems for applying several legal principles. Equally difficult questions arise from the fact that most, though not all, healthful
changes in personal behavior benefit the individual rather than protecting other
people—the public—from harm.


Wendy K. Mariner, Law and Public Health: Beyond Emergency Preparedness
38 J. Health L. 251–68 (2005)

Public health has been both broadly and narrowly defined, usually as a function
of its political influence. Broad definitions offer a more accurate description, as in
the classic definition by C.E.A. Winslow:

Public Health is the science and art of preventing disease, prolonging life,
and promoting physical health and efficiency through organized community effort for the sanitation of the environment, the control of communicable infections, the education of the individual in personal hygiene, the organization of medical and nursing services for the early diagnosis and preventive treatment of disease, and the development of the social machinery to insure everyone a standard of living adequate for the maintenance of health, so organizing these benefits as to enable every citizen to realize his birthright of health and longevity.

This broad description still accurately depicts the wide range of activities of people who work in the field of public health. It is also consistent with the broad range of laws enacted in the name of public health. Given such a broad scope, public health might be equated with any public policy that serves in any way to prevent physical or mental harm or to maintain or improve health. This may pose some definitional problems for those seeking a unifying vision of public health. But the fact that different groups working within public health define their own territory
more narrowly should not deter lawyers from recognizing the broad scope of issues relevant to health.

Six trends in public health demonstrate how the field of public health is changing today, in some ways going back to its roots, in others expanding well beyond them.

1. Social Determinants of Health

... The field of "social hygiene" began with the nineteenth century recognition that environmental hazards, as well as poor personal hygiene, could cause illness. Sanitary engineers, perhaps the first real public health workers, eliminated cholera and other water-borne diseases by creating systems for sewerage and purifying the water supply; other infectious diseases by regulating waste at animal slaughter houses and dockyards and pasteurizing milk; and dramatically reduced tuberculosis by cleaning up slum housing. Many public health pioneers were social reformers, who sought to reduce the hazardous living and working conditions in nineteenth century cities and factories. Their motives varied, from genuine concern for the disadvantaged, to the economic benefits of hiring healthier workers, to forestalling class rebellion by the poorer classes.

... Today, empirical research offers growing evidence that socioeconomic factors, such as the distribution of wealth and income, political inequality, education, employment, and housing, can affect health. Known as the "social determinants of health," these factors recall the concerns of early public health reformers and remind us that contagious disease is not the sole threat to health in the United States. Attention to the social determinants of health poses a challenge to defining public health as a unified or recognizable field. On one hand, scholars in public health have made significant contributions to research identifying social and environmental factors affecting the health of populations. As a practical matter, it may be difficult, if not impossible, to improve health significantly in the future without addressing the social factors ... . On the other hand, including housing, employment, and political inequality may spread the health sphere so thin that it ceases to have any discernible limits. Some critics argue that research on wealth as it affects health is still too crude to produce useful information for making policy and there are dangers in medicalizing so many social issues. Nonetheless, it is increasingly difficult to avoid recognizing how broad social policies, such as those concerning drug abuse and homelessness, affect health. It should be possible to study and identify the effect of factors external to individuals without necessarily making it the responsibility of health professionals to devise or implement solutions. Only if such factors are investigated can their effects be accurately understood.

2. Medicine and Public Health

People in public health have traditionally distinguished their field from medicine by emphasizing that physicians treat individual patients while public health practitioners "treat" entire populations. This distinction, however, is rapidly blurring. It is true that the population-based approach had as much or more success than
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physicians did with their patients until shortly after World War II, when federal support for hospital construction and medical research fueled the development of modern medical science. The growth of medical technology, beginning with new vaccines and drugs, enabled physicians to save patients' lives, and medicine was rewarded with the mantle of scientific and political superiority.

Nonetheless, medicine and public health have often worked in synergistic ways, both to identify opportunities for research and to translate new technologies into practice. Discovery of bacteria and the germ theory by researchers gave public health its first scientific credibility, as laboratories began to identify specific causes of disease. Medical research also produced the vaccines that enabled public health immunization programs to eradicate or control many infectious diseases, and physicians and nurses, in private practice as well as public clinics, administered the vaccines. Public health research on the distribution of HIV infection in the early 1980s helped academic scientists target their research to identify the virus and also helped practicing physicians counsel their patients about how to prevent transmission of the infection. Public health screening programs, like those for cholesterol or diabetes, are intended to encourage people to get medical care to control their condition. These are only a few examples of essential and productive links between medicine and public health.

Artificial separation of public health and medicine may have more to do with economics and political influence than substance. Until very recently, physicians have been the dominant professionals in health policy, and medicine (and medical research) has received the vast majority of public and private funding. Physicians still play most primary leadership roles in public health. Public attention to public health has waxed and waned, usually rising in response to a crisis, such as, recently, the September 11 attacks, the anthrax letters, severe acute respiratory syndrome (SARS), the recall of Vioxx, and possible avian influenza. Historically, public health has received only a tiny fraction of national expenditures for health, and its share has not risen substantially even with additional post-September 11 funding.

Public health tends to be defined by its general goal, improving health, not by the methods it employs, which are legion. Physicians also pursue health as a goal, but the medical profession is defined by a universal method of training for physicians. Similarly, the legal profession is defined by a universal method of training for lawyers. Professions typically are identified by a common (if complex) methodology and knowledge base. These skills can be used to achieve many different goals. In contrast, people who work in public health are trained in many different skills that use very different methodologies. They are united only by the goal they use their skills to achieve—health.

A related distinction between public health and medicine lies in the difference between defining health goals in terms of an entire population (whether defined by geography, sex, or race, for example) as opposed to an individual patient. Success in public health depends on improving the health of the entire population, which can only be measured in aggregate statistics, such as life expectancy and rates of
mortality, disease, and disability. Physicians deal with one patient at a time and measure success patient by patient. Although physicians want to save lives and prevent or cure disease, they have an obligation to do what the individual believes to be in her own best interest. Thus, physicians are also successful when their patients succeed in making their own decisions. This kind of individual “success” does not necessarily count as success in public health terms. Patients who refuse life-saving therapy because they find it too burdensome may adversely affect population mortality rates. Public health programs that focus on aggregate outcomes for a population cannot account for individual values in the same manner as medicine.

Nevertheless, some occupational groups within medicine and public health have greater affinity with each other than with other specialists in their own field. For example, academic researchers have similar research methods and values, whether they conduct laboratory experiments with cells or epidemiological studies using large databases. They may have more in common with each other than with practitioners who provide clinical services to patients. Physicians who treat patients in private practice and public health workers who offer substance abuse treatment use similar methods to help individuals, just as physicians and public health workers who offer preventive services share similar methods and concerns. Indeed, a substantial proportion of public health expenditures are for individual healthcare services.

It is difficult to disentangle these professions from one another simply by looking at what people do. This suggests that, whether they acknowledge it or not, public health and medicine are already integrated to a remarkable degree, primarily by the methodology they use, and that it would be both disingenuous and counterproductive to insist on separation.

3. Health Promotion: External and Internal Risks to Health

Public health successes in eradicating or controlling contagious diseases in the nineteenth and mid-twentieth centuries, coupled with research on the causes of disease may have combined to produce another trend—health promotion. In the past, public health programs were most successful at preventing or controlling infectious diseases. The goal was to protect the population from external sources of disease. Relatively straightforward measures, like purifying the water supply, creating sewage systems, monitoring the food supply, and encouraging immunization, dramatically reduced the threat of immediately life-threatening diseases. Ironically, perhaps, these important successes left public health programs with less to do and less public support and funding.

The top four leading causes of death today in the United States are heart disease, cancers, stroke, and chronic respiratory diseases, with accidental injuries in fifth place. Unlike infectious diseases, these problems lack a single viral or bacterial cause. Rather, they may result from multiple factors, including genetic predisposition, diet, personal behaviors, exposure to environmental or occupational hazards and dangerous products, as well as social, economic, and political factors. In addition, chronic diseases develop over a long period, often decades. There are few single
interventions that completely prevent or cure a chronic disease comparable to those for an infectious disease. Prevention is multifaceted and success uncertain. The public is likely to think first of medicine, not public health, as the profession with the most expertise in chronic diseases and the most to offer, primarily in the form of curative medical therapies. At the same time, however, the many factors contributing to chronic disease, coupled with their increasing prevalence, may have encouraged the field of public health to characterize such diseases as public health problems.

As the types of diseases affecting Americans changed, the public health field shifted its attention to health promotion, encouraging public education about the causes of chronic diseases, as well as regulations that reduce environmental risks. Given the complex causes of many chronic diseases, one might expect public health programs to focus renewed attention on the full range of social determinants of health. There have been some attempts to educate the public about hazardous working conditions or housing. The mapping of the human genome increased awareness of genetic predispositions to certain diseases. So far, however, most public health campaigns, from education to advocacy for new laws, have focused on the risks to health that arise from personal behaviors, such as a high fat diet, lack of physical exercise, smoking cigarettes, and violence. This emphasis on personal risk behaviors lends support to those who wish to characterize the primary problems in public health as the personal responsibility of individuals themselves, rather than as problems that require societal solutions. Rather than making the world safer for people, it seeks to have people protect themselves from risks in the world as it exists.

The trend toward changing personal behavior coincides with renewed concern about the rising cost of healthcare and a political climate that emphasizes personal responsibility and discourages reliance on public benefit programs. If people change their behavior in ways that improve their health, they are less likely to need expensive medical care. Employers have adopted policies forbidding their employees from smoking or drinking at home as well as on the job. While such policies can be justified as encouraging healthy behavior, they are often initiated primarily to reduce health insurance costs.

Public awareness of how to improve one’s health is usually a good thing. If health policy targets personal behavior to the exclusion of more influential causes of ill health, however, it may prove ineffective. Public education programs require a long-term commitment to public education. Moreover, programs that depend on individuals to change their behavior are typically less effective than programs that remove risks from the external environment. Health promotion programs increasingly target conditions that, unlike contagious diseases, affect only the individual. Both diabetes and obesity have been declared “epidemics,” giving a new meaning to the term. It also moves the field of public health farther from any concentration on preventing the spread of disease (from one place or person to another person), and places it squarely beside medicine in the effort to improve the health of an individual for his own sake.
4. Federalization of Public Health

Public health practitioners often think of public health as primarily a local and state endeavor. The Institute of Medicine perpetuated this view in its influential 1988 report by defining public health activities as by and for the community and confining the community to the state, city, or town level, barely mentioning national or international activities. It is true that, when the country began, most governmental efforts to prevent disease were carried out by local officials, but the federal government was never entirely absent from the field. After all, it was the federal government that sent federal public health officials to try to control the spread of plague in San Francisco at the turn of the twentieth century. By the late twentieth century, the federal government had moved decisively into public health and medicine, with legislation such as Medicare and Medicaid, the Occupational Safety and Health Act of 1970, and the Clean Air and Clean Water Acts. Indeed, many of the most important public health achievements have come from federal legislation.

Today, countless public health programs are influenced, if not controlled, by a federal government agency. Despite recent Supreme Court decisions limiting the scope of congressional authority under the Commerce Clause, the federal government retains ample power. Even with block grants and decentralization, the federal government controls the shape and direction of many state and local public health programs through the power of its purse. Most states enacted laws requiring drivers to wear seat belts when having those laws in place became a prerequisite for the state to receive certain federal highway funds. Similarly, most states enacted laws raising the minimum age for drinking alcoholic beverages to twenty-one years in order to qualify for federal highway funding. Title X funding for family planning programs is subject to specific requirements for how funds are spent. Many state disease-reporting systems might not exist without federal funding from the Centers for Disease Control and Prevention (CDC), and such funding is increasingly tied to legislative requirements. As states face declines in tax revenues and pressure for more services, they may have to rely on federal financial assistance to carry out many of their basic programs. Thus, today, it is often difficult to disentangle federal from state control over even, ostensibly, state public health programs.

After September 11, 2001, as part of the war on terror, the federal government has asserted even greater influence in matters that affect public health—as a matter of national security subject to federal jurisdiction. Even if the states remain primarily responsible for carrying out public health activities, they will often take their cue from Washington, DC.

5. Globalization of Health

Increasing interdependence among global economies is pushing the public health field more firmly into the international sphere. As companies expand their operations around the world, they are beginning to recognize the need for consistent international standards in product safety, environmental controls, and occupational
hazards. Sales of goods over the internet raise questions about which product safety standards and marketing rules should apply. Climate change and natural disasters require a coordinated global response from many countries. Disasters like the December 2004 Tsunami create financial and logistical challenges, from identifying the dead to housing and feeding the displaced, that no single country can meet alone. Even war is increasingly recognized as an international public health concern, which requires multinational efforts to provide for the health and safety of civilians, who are often targets of military or terrorist violence. Here, especially, the international human rights movement has brought attention to the positive relationship between human health and respect for human rights.

People in public health are rightly paying more attention to these global issues. Research itself is increasingly international, with scientists in different countries sharing insights and techniques to study everything from genetic diseases to management. As in the United States, affinities tend to follow the subject matter rather than the professional category.

Infectious diseases that cross national borders no longer exhaust the subject matter of global health concerns, but they remain firmly on the radar. Global travel and migration make it relatively easy for viruses and parasites to become world travelers, as SARS’ leap from Hong Kong to Toronto demonstrated. Although SARS proved to be less hardy than feared, with most deaths in Canada occurring among people infected before the disease was recognized and most infections occurring in the hospital, a new virus might be more lethal, especially if the population has no natural immunity and no vaccine or treatment is available.

Although no one knows whether such a viral shift will occur, it would be prudent to pursue not simply an early warning system, but public education about contact with animals, research on possible vaccines, and organizing services to care for people who become ill. Perhaps the most effective preventive measure would be to create new job opportunities that make it unnecessary for people to rely on raising chickens and ducks to survive.

6. Bioterrorism

An image of the world as an incubator of dreadful diseases that can cause epidemics gained currency with the spread of HIV infection in the 1980s, reinforced by popular books like “The Hot Zone” and movies like “Outbreak.” When letters containing (non-contagious) anthrax killed five people soon after September 11, 2001, federal officials warned that terrorists might bring smallpox into the country next. Concern for infectious diseases “imported” from abroad transmogrified from a manageable medical problem into a terrifying worldwide conspiracy against Americans. Not only might viruses and parasites accidentally board a ship or airplane and fall out in America, but a terrorist might deliberately attack the country with biological weapons.

The combination of terrorism and disease has simultaneously focused much needed attention on public health and perversely narrowed public appreciation of
public health largely to bioterrorism. The most positive response has been new federal funding to shore up the perennially neglected “public health infrastructure,” the collection of public and private programs that study, prevent, and treat health problems that affect communities large and small. Less positive has been the emphasis on emergency preparedness to the detriment—some would say exclusion—of the less glamorous, ordinary tasks of public health practitioners, which may offer better protection against illness and death.

The country already has some experience with what today would be called bioterrorists—from United States residents who used viruses or bacteria to frighten and make people sick. Only five deaths resulted, all from the anthrax letters mailed in 2001, while each year, influenza kills twenty to thirty thousand Americans. The federal government is spending millions of dollars to prepare for a terrorist attack using smallpox or other biological weapons, but still has not developed a plan to assure an adequate annual supply of influenza vaccine.

B. Summary

These six trends suggest that, despite current public attention to bioterrorism, the field of public health is in fact wide-ranging and even expanding. It reaches around the world because both risks to health and ways to protect health are increasingly global, requiring more coordinated international attention. This global reach, coupled with concerns about bioterrorism and renewed constraints on state budgets, places the federal government in the forefront of public health today. A national view of public health may encourage recognition of its importance and the many social determinants of health. Indeed, as public health is increasingly tied to medicine, with internal specialties crossing professional boundaries and public health professionals increasingly seeking individual health promotion instead of removing external threats to populations, it may be time to change our terminology. Instead of medicine and public health, the world sees a field of Health, writ large, with shared components of research, prevention, treatment, and care throughout.

Sandro Galea & George J. Annas, Aspirations and Strategies for Public Health
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Public health is responsible for extraordinary achievements over the past century, such as remarkable gains in life expectancy and substantial decreases in infectious disease mortality, and could make similar critical contributions to health in this century. Public health should be ascendant, but ample evidence suggests that it is on the defensive today, underappreciated, and underfunded. Government actions to improve the health of populations are widely suspect, as illustrated by the controversies involving efforts to curb soda container sizes in New York City, state and federal efforts to limit reproductive health rights, and global efforts to address climate change.
By contrast, traditional medicine continues to be privileged. The burgeoning precision medicine agenda and the continuing emphasis on the treatment for cancer have captured the imagination of funding agencies and politics at the highest levels. The result is diversion of resources in the direction of individualized efforts at disease prediction through genomic approaches, and away from the structural changes with broader population-based effects that have long characterized public health action. Public health is not alone, sharing funding and infrastructure deficiencies with transportation, education, and even public safety (eFigure in the Supplement).

The Challenge to Public Health Aspirations

Definitions of public health have long been criticized as either overly broad in subject matter or too narrow in operation. Nonetheless, the challenge to public health does not center on its goals. Protecting and promoting the health of populations has always been, and remains, a widely accepted and valued mission and is at the center of all mainstream definitions of public health.

This challenge is 2-fold. First, public health has inexorably shifted its focus to the operational aspects of disease surveillance and control without sufficient recognition of the aspirational, population-health, purpose-driven mission. Maintenance of core functions and activities cannot constitute the future; rather it suggests doing more of what worked in the last century in a different, rapidly changing environment. It has been suggested, for example, that public health should “expand its past successes to further reduce tobacco and alcohol use, control persistent infectious diseases, increase physical activity, improve nutrition, and reduce harms from injuries and other environmental risks.”

Second, exacerbating this challenge, in high-income countries, the “easy” work of public health is done—sanitation, vaccination, and response to epidemics that form the bedrock of a healthy society are largely in place and have been successful. The health problems of the 21st century, including the increased prevalence of chronic illnesses and the challenges of healthy aging, are more complex. These problems require solutions at the interstices of social, political, cultural, and economic domains where public health’s role shifts from acting alone to engaging as a coordinator and motivator of various, sometimes unusual, partners in sectors not directly responsible for health. This suggests that an agenda that focuses on core operations of traditional public health functions has become too narrow and is responsible for public health losing ground to medical concerns in the national conversation.

Public health’s bold population health improvement goals will never be met, or even taken seriously, if public health shifts its attention away from these goals. To invigorate what public health already does well and nudge the field into areas of innovation, public health should strive to meet 2 major aspirations that are informed by the state of the field, the challenges public health faces, and the current and future threats to public health.
Public health must engage the social, political, and economic foundations that determine population health (Box 1.1). The conditions that make people healthy often are outside what have historically been considered the remit of the health professions: health improvement now requires participation in politics and social structures. Such engagement is much more perilous than traditional efforts to maintain population health such as sanitation, food safety, and response to epidemics. Operationally, engaging issues such as racial segregation in housing and education requires clarity of advocacy by the public health professionals who must, to be effective, work with media, business, and academia, as well as in the governmental public health infrastructure. This will require a boldness on the part of public health, and the reliance on agents of public health action, such as universities, that are less beholden to political pressures in establishing their budgets and their educational and research agendas.

**Box 1.1. Aspirations for Public Health**

1. Take a leadership role in confronting and influencing the social, political, and economic factors that determine population health to sustainably protect the health of the public against old and new threats.

2. Take a leadership role in reducing inequities by working to narrow health gaps across groups in ways that promote social justice and human rights.

In addition, public health must balance overall improvement of population health with the achievement of health across groups and the narrowing of health gaps. Although the roots of public health align with efforts to promote health among vulnerable and marginalized populations, public health has achieved broad acceptance through an unstinting focus on improving the health of the aggregate, making populations healthier. Nonetheless, health inequities remain at the core of the conceptual underpinning of why public health leaders and practitioners do what they do, and the drivers of these inequities are the same drivers that have animated some of the difficult national social justice conversations that have resurfaced in the past few years. It stands public health in enormously good stead to be at the forefront of this national conversation, to engage in the foundational drivers of health, and to change a national conversation around health, in the service of public health’s aspirations.

**Public Health Strategies**

What are the best strategies to meet these aspirations? Four main strategies offer a way forward (Box 1.2). First, the breadth of public health engagement requires relentless prioritization, engaging both intellectually and pragmatically with the core question of what matters most to the health of populations. This question is time-specific and subject to change. As Vickers suggested in 1958: The “critical and ubiquitous question [is] what matters most now?” Setting and changing priorities
will require rethinking how intellectual work is approached and accomplished, and how that work intersects with the actions of public health.

**Box 1.2. Public Health Strategies for the 21st Century**

1. Relentlessly prioritize actions to do what matters most to the health of populations.
2. Engage the mechanisms that explain how core foundational structures produce population health.
3. Move from government-dominated public health to multisectorial public health.
4. Formally adopt the Universal Declaration of Human Rights as the Code of Public Health Ethics.

Second, practitioners of public health must actively engage the mechanisms that explain how core foundational structures produce population health. This argues for a perspective that seeks balance, navigating the importance of understanding and intervening on mechanistic processes, without losing sight of the core foundational drivers that will determine the sustainability of any progress. Public health would do well, for example, to be a part of a conversation that engages “-omics”-related research, while recognizing that the translation of this research is likely to be a rather small piece of a much more complicated production of health of populations.

Third, the vision of public health as solely a government-mandated and financed activity is rapidly evolving, and public health advocates must work with actors across government, academia, industry, and non-profit sectors to achieve the goals of public health. Public health should be at the forefront of generating and sustaining a broad national and global conversation around centrality of population health to all well-being. This will require substantial engagement in education, both of traditional partners across sectors and of a broader public and stakeholders. It also requires elevating health in public consciousness and recognizing that individual health has a glass ceiling without an improvement in the health of the collective.

Fourth, public health needs an ethic to help guide its practice. The fact that much of public health is still directed by governments suggests that human rights, as articulated in the Universal Declaration of Human Rights, provides a solid ethical framework for public health practice. In practice, many in public health have already adopted human rights as the primary guide for their work. This is because not only do human rights include a “right to health” for all people, they also provide a wide array of government obligations to “respect, protect, and fulfill” the rights of people in ways that directly promote population health and advance social justice.

The potential of public health to continue to improve the health of populations is being challenged and undermined by multiple factors, including an overemphasis
on curative medicine. A lack of clarity about its population-centered purpose has made public health less effective than it could be. Identifying 2 core aspirations and 4 strategies for public health can help shape the resolve toward public health achievement in the remainder of the 21st century.

Notes and Questions

1. Defining public health. The term “public health” has several different meanings and connotations. See The Contested Boundaries of American Public Health (J. Colgrove, G. Markowitz, D. Rosner eds., 2008). A frequently cited definition by C.E.A. Winslow is quoted in the Mariner article above. The Oxford Textbook of Global Public Health defines public health as “the art and science of preventing disease, prolonging life, and promoting health through the organized efforts of society,” with its goal being “the biological, physical, and mental well-being of all members of society.” Roger Detels & Chorh Chuan Tan, The Scope and Concerns of Public Health, 1 Oxford Textbook of Global Public Health, 6th ed., §1.1 (R. Detels et al. eds., 2015). In 1988, the Institute of Medicine (IOM, now renamed the National Academy of Medicine) issued a report titled The Future of Public Health, which described the mission of public health as follows:

The committee defines the mission of public health as fulfilling society’s interest in assuring the conditions in which people can be healthy. Its aim is to generate organized community effort to address the public interest in health by applying scientific and technical knowledge to prevent disease and promote health. The mission of public health is addressed by private organizations and individuals as well as by public agencies. But the governmental public health agency has unique function: to see to it that vital elements are in place and that the mission is adequately addressed.


The report was criticized as being backward-looking rather than forward-looking in G.J. Annas, L.H. Glantz & N.A. Scotch, Back to the Future: The IOM Report Reconsidered, 81 Am. J. Public Health 835 (1991) (“The report is primarily descriptive of the current state of affairs and provides no new or futuristic vision. [On the other hand] “public health” is about as self-defined a term as one can find.”)

In 2003, the IOM issued an updated report, The Future of the Public’s Health in the Twenty-First Century, largely echoing its 1988 report. But a new element was the report’s use of the terms “public health” and “health” virtually synonymously. Another notable element was renewed attention to the social determinants of health—factors like the environment, education, conditions of employment, diet, and physical activity.

Does it matter how the field is defined? If public health is virtually anything that has to do with the health status of the American public, is there any real difference between the terms “health” and “public health?” One possible distinction, espoused