

The EXODUS of Public Health

What History Can Tell Us About the Future

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We trace the shifting definitions of the American public health profession's mission as a social reform and science-based endeavor. Its authority coalesced in the late nineteenth and early twentieth centuries as public health identified itself with housing, sanitation, and labor reform efforts. The field ceded that authority to medicine and other professions as it jettisoned its social mission in favor of a science-based identity. Understanding the potential for achieving progressive social change as it moves forward will require careful consideration of the industrial, structural, and intellectual forces that oppose radical reform and the identification of constituencies with which professionals can align to bring science to bear on the most pressing challenges of the day. (*Am J Public Health*. 2010;100:54–63. doi:10.2105/AJPH.2009.163956)

NEARLY A CENTURY AGO, public health official Hibbert Hill wrote a provocative book, *The New Public Health*. In it he sought to capture the fundamental changes that had overtaken the field over the previous fifty years and to present a road map to the future. The “essential change” he characterized succinctly: “The old public health was concerned with the environment; the new is concerned with the individual. The old sought the sources of infectious disease in the surroundings of man; the new finds them in

man himself. The old public health . . . failed because it sought them . . . in every place and in every thing *where they were not.*”¹

For Hill, to improve the health of the nation, one had to begin changing behavior a single person at a time. The field had to abandon universalist environmental solutions—introducing pure water, sewage systems, street cleaning—and begin focusing on training people how to live cleaner, more healthful lives. Bacteriology held out hope for “efficient” public health. The logic of the sanitarians’ ideas ultimately led to radical reformation of the environment (e.g., tearing down filthy, air-deprived slums, improving the infrastructures of entire neighborhoods), whereas education and control of the actions of the infected individual merely required a focus on the renegade few. Treating a few thousand victims of disease was, in his analysis, far cheaper—he estimated “one seven-hundredth the

magnitude”—than improving housing for millions.²

Hill’s analysis reflected one of two major strands of Progressive Era thought: efficiency as repudiation of reform through social, as opposed to individual, action. Hill sought a model for addressing disease that could limit the myriad responsibilities public health had accumulated in the nineteenth century. It also marked the beginning of a struggle to define the mandate of public health, a struggle that has consumed the field since the early years of the twentieth century. At the heart of the more than one hundred efforts to define the “new” public health that followed Hill’s 1916 call for refocusing has been the question of the extent to which public health, as an agent of science, can also promote social, economic, and political reforms.³

In the late nineteenth and early twentieth centuries, public health reformers recognized a common core to their work. It revolved not around clearly defined

activities or even a delimited environmental sphere of influence but rather around a shared understanding of the causes of disease and the ambitious, sweeping action that would be required to promote the public's health. During the first two decades of the twentieth century, science and technology emerged as major forces in American life and helped to reshape public health and medicine. With this change and the decline of infectious diseases, the old core of beliefs and actions began to collapse.

History poses a challenge to go “back to the future”: to understand how the field attempted to balance what it came to view as a tension between reform and science after the Progressive Era. We do not promote yet another vision of the “new” public health. Nor do we attempt to define this dynamic and ever-changing field that has responded, over the course of more than a century, to pandemics of infectious disease, housing crises, obesity, violence, drugs and alcohol, and even nuclear war, with an expanding panoply of players drawn from the professions, civil society, academics, and social activists. These conditions and the activities meant to allay them defy easy description.⁴ Indeed, history tells us that attempting to define the field in terms of activities will make our current initiative just one more in the series of efforts.

We argue that the death of progressivism and the advent of the conservative political and social environment of the 1920s pushed public health into the laboratory and the university and away from the traditions that had once been central to its identity. Although the Depression created new opportunities for public health, allowing for alliances with

the labor movement in support of a national health plan and local initiatives to set up community health centers for the vast number of unemployed, the growing power of medical science and narrowly defined “efficiency” continued to push public health away from its reformist roots.

In the years after World War II, the end of the New Deal, the rise of consensus politics of the affluent consumer society, and the invention of new medical and therapeutic technologies once again led public health to shift its focus away from social reform in favor of “magic bullets” as the preferred means for addressing disease. Since the 1960s, public health practitioners have struggled with their identities as scientists and activists. Although issues of socioeconomic disparities and inequality have become a part of the public health agenda, we remain uneasy with forming political alliances even as our initiatives have been challenged by a host of activists.

Although public health cannot be easily characterized, we can see in the history of the field a broader unifying mission and a new political and economic context for articulating it. Understanding the potential for setting forth an ambitious charge as the field moves into the twenty-first century will require careful consideration of the current social backdrop, particularly as it relates to how we define the relationship between science and action.

A CALL TO ACTION

The mission of public health has its roots in the mid-nineteenth century, when physicians, housing reformers, advocates for the poor, and scientists trained in new techniques of chemistry and

civil engineering came together to fight problems growing out of urbanization, industrialization, and large-scale immigration. This coalition transformed the nation's economy and environment and, in turn, its health. High death rates and pestilence had long affected rich and poor communities alike. In contrast to the Colonial period—when, in New England at least, life spans were relatively long⁵—Americans' health had de-

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teriorated by the mid-nineteenth century.⁶ Epidemic diseases such as smallpox, cholera, typhoid, yellow fever, and a host of intestinal ailments became powerful symbols of uncontainable social decline and were often blamed on the immigrant poor.

Amid alarm over the “conditions of the poor,” civic leaders around the nation launched investigations into the social and environmental, as well as the individual, causes and consequences of disease. In Chicago, social reformers in Hull House focused on living conditions as the reason for the declining health and well-being of workers, women, and children. In Boston, charity workers looked at the slums in which the Irish lived as the source of disease. In Philadelphia, New York, and Boston, reformers focused on housing as a cause of the city's physical, social, and moral decline.⁷ These efforts mirrored the work of reformers and social critics in Europe, who saw in the relationship between poverty and

disease the foundation for a call for radical social change.⁸

In the decades before the professionalization of public health, the sanitarians who led reform efforts in the nineteenth and early twentieth centuries generally saw themselves as more than technical experts trained in a specific skill. Some had come from elite merchant families, and others had been educated in the ministry. Others had been militant abolitionists, allied with the anti-slavery movement; still others were suffragists, seeking equality for women in the workplace and in the voting booths.⁹ They defined their mission as much in moral as in secular terms and believed that illness, filth, class, and disorder were intrinsically related. Individual transgression and social decay were equally at fault for poor health.¹⁰

With the turn to bacteriology that followed the discoveries of Louis Pasteur, Joseph Lister, and Robert Koch in the later decades of the nineteenth century, a new faith in laboratory science emerged among physicians engaged in public health. A new model began to gain greater acceptance: germs make people sick. The slums of large cities were “breeding grounds” that were “seeded” with bacilli waiting to infect the susceptible victim.¹¹

For a time, however, sanitarian dictums meshed well with the new bacteriological discoveries.¹² United by moral certainty regarding the need to act, sanitarians, epidemiologists, and bacteriologists, the old and new sciences of public health, were marshaled to achieve radical reform. Although the movement could and often did focus on the moral characteristics of those who succumbed to disease, it was nonetheless allied

with social and labor reformers seeking to transform housing and work conditions for city dwellers at the turn of the century.¹³

New housing was now required to have indoor plumbing and connections to water and sewer lines, which were replacing wells and privies. Tenement laws mandated that all rooms in newly constructed buildings have windows that opened to the outside. Restrictions on housing density and new nuisance laws began to have an effect on rates of tuberculosis and other diseases.¹⁴ Laws governing foodstuffs, meat, and milk as well as regulation of “noxious trades” such as slaughterhouses and tanneries began to produce improvements in health.¹⁵ In rural areas, malaria, yellow fever, and pellagra were addressed through engineering and social reforms from the draining of swamps to the provision of better diets and work to poor sharecroppers both Black and White.

Perhaps most remarkable was the degree to which public health served as both an organizing and a unifying concept. For example, throughout the country, health officials sought to control the tuberculosis bacillus, but they did so with an eye to the individual in his or her social context.^{16–18}

Within the field of industrial health, crusaders such as Alice Hamilton and Florence Kelley, who focused on the link between illness and working conditions, likewise operated within a broad network. Such reformers forged links between settlement houses, industrial reform, and labor movements. This kind of alliance helped spur factory inspection after the 1911 fire at the Triangle Shirtwaist Company, the industrial disaster that horrifically claimed the lives of 146 workers at Manhattan’s

Asch Building and marked a turning point in workplace regulation and the movement for workers’ compensation laws.

The understanding that working conditions were critical to health would continue to inform the efforts of the Consumer’s League and the International Ladies’ Garment Workers’ Union to attach the “union label” to garments as a symbol of clean working conditions (and, therefore, healthy, tuberculosis-free garments) in the 1920s. Although Alice Hamilton was speaking specifically of the federal government, understanding the intersection of different groups around public health issues helps to shed light on what she meant when she said that the state was no more or less than “ourselves—ourselves organized.”¹⁹

THE RETREAT OF PUBLIC HEALTH

If epidemics were a hallmark of the crowded, centralized cities of the East Coast during the nineteenth century, then cancers and other chronic illnesses became the paradigmatic conditions that plagued the twentieth century. The first part of that century saw fundamental changes in land use and transportation that improved health in many respects but created new hazards and new diseases. Exposures to synthetic materials, the creation of a huge marketing industry that promoted toxic materials for consumer uses (e.g., lead paints and tobacco), and air, water, and soil pollution led to an epidemiological revolution as infectious diseases gave way to chronic conditions.

Ironically, in the wake of these social and epidemiological transformations, the public health community embraced bacteriology,

with its focus on the laboratory rather than the social and environmental context, as an authoritative science that did not require political alliances: science spoke for itself. Departments of public health shed sanitation, housing reform, and even hospital care. The interdisciplinary alliance that lent power to public health splintered, with profound consequences for the subsequent evolution of the field.

This fragmentation was reflected in the rise of academic public health. As noted by Elizabeth Fee, bacteriology and sanitary reform had been “the twin pillars of public health”: “Bacteriology represented the achievements of laboratory research,” whereas sanitary engineering represented “the practice of providing clean water supplies and treating sewage wastes.”²⁰ William Welch, the first dean of the Johns Hopkins School of Hygiene and Public Health and the father of public health education, recognized the contribution of housing and urban reform to health but saw them as properly located in the fields of engineering, social work, and urban planning. Public health education would center on the laboratory. Welch, the Rockefeller Foundation’s Abraham Flexner, and other actors in public health educational reform were also participants in the concurrent reform of medical education, which similarly sought to transform medicine into a clinic- and laboratory-based discipline.²¹

In 1940, the American Public Health Association passed a resolution codifying the standard repertoire of services that local health departments should provide, what became known as the “basic 6.” Although there was interstate variation,^{22,23} by and

large the responsibilities of health departments were narrowed to six areas: collecting data on vital statistics; controlling communicable diseases via methods such as outbreak investigations, contact tracing, partner notification, and (rarely) isolation and quarantine; ensuring environmental sanitation (e.g., with respect to municipal water supplies); providing laboratory services for the diagnosis of illnesses by private doctors, hospitals, and other clinicians; offering maternal, infant, and child health services; and providing education, via brochures, posters, and other mass media, to promote healthy behaviors.²⁴ Thus, at the same moment that it prioritized objective science over social reform and alliances with relatively powerful progressive constituencies such as labor, charity, social welfare organizations, and housing reformers, the field was marginalized and left with no political base.

NATIONAL HEALTH PLANS

The shifting terrain of public health was evident at the national level. In the two decades between the beginning of the Roosevelt and the Eisenhower administrations, for example, Congress considered five major national health proposals. The purpose of the National Health Act of 1939 was to support public health and hospital and clinic construction, particularly in economically distressed areas. Significantly, the 1939 proposal contained no provisions for paying for medical care, public or private. Rather, it sought to ensure environmental reforms and economic services addressing older conceptions of the province of public health. Undergirding the proposal was funding to assist states “in the development,

and administration of plans for temporary disability compensation.”²⁵

The 1939 proposal thus reflected the degree to which the Roosevelt administration, as it attempted to resurrect the national health program sacrificed to ensure passage of the Social Security Act of 1935,²⁶ viewed poor health not only as a problem of an inability to afford care but as a problem of the underlying economic structure. According to Roosevelt’s Interdepartmental Committee to Coordinate Health and Welfare Activities (ICCHWA), “The records of dependency and relief show how frequently illness is the cause of economic breakdown.” The ICCHWA Technical Committee consequently recommended a plan, modeled on “old age insurance,” to compensate workers during times of sickness as well as with disability insurance. The members concluded that “[s]ince not only the health of the wage earner, but that of his dependents is at stake, the Committee feels that maintenance of the sick worker’s purchasing power is an important part of any program for national health.”²⁷

The 1939 proposal did not simply envision that the sick should be able to purchase medical care. Florence Greenberg, representing the Citizens Committee for Adequate Medical Care at the 1939 hearings, argued that although workers needed to be able to pay for medical services, “of equal importance is finding ways to increase [the] economic security of the worker, the assurance of a job and income.”²⁸ The importance of ensuring wages in the context of maintaining public health was also given voice by representatives of the National Association

for the Advancement of Colored People (NAACP), although with an eye toward curbing racism. As noted by Louis T. Wright, chairman of the NAACP's Board of Directors, "We are familiar with the established practice and policies of several of the States to discriminate in the payment of salaries and wages to employees on the basis of sex and race or color. We, therefore, ask that provisions be placed in the bill preventing discriminaton [sic] in salary or wages paid by the several States for services under the bill."²⁹

Those who testified viewed ensuring social and economic inter-

hospital work required [as] a good way to measure our failure to function in the field of health."³⁰

By the beginning of the Cold War, however, the idea of public health as a sweeping enterprise was all but moribund. In the national health insurance proposals that emerged after World War II, the idea of disability insurance was replaced by a "prepaid health benefit" plan for medical services. Hospital construction and clinical, as opposed to population-based, research had become a national priority. At the same time, some of the sanitary activities for which health departments had been responsible, such as garbage collection, air pollution control, and noise abatement, were pulled under the aegis of other professions and government agencies.³¹ It was now medicine that was positioned to protect the nation's health.

The rise of the hospital and the hegemony of medical research was not inevitable, however. "Deficiencies in basic living conditions . . . are the breeding ground for disease and poor health," argued Solomon Barkin of the Textile Workers Union of America: "No program for the improvement of the Nation's health is complete which does not have the elimination of . . . deficiencies in basic living conditions . . . as one of its goals."³² Although this position received strong support from individuals such as Senator Claude Pepper and Fiorella LaGuardia, who represented the United States Conference of Mayors, voices of public health professionals in academia and state or local health departments were strikingly absent throughout the years of congressional testimony regarding the place of public health within a national health plan.

Public health ceded medical care to insurance companies, hospitals, physicians, and other interest groups that did not understand (or actively opposed) the role public health could or should play in postwar America.

Science and medicine became great levelers, allowing public health professionals to ignore social factors—including the racial segregation, poverty, inequality, and poor housing that had been the traditional foci of public health reformers only thirty years before—and explain disease without any of the disruptive implications of a class analysis. Thomas McKeown famously critiqued prevailing understandings of disease as a medical phenomenon rather than an indicator of social relations. The Progressive Era emphasis on social welfare and urban reform became ideologically dangerous when class analysis lost status within the intellectual community and was even equated with anti-Americanism in the context of the affluent society of the McCarthy era.

New medical technologies—antibiotics, vaccines, psychotropic medications, and a host of other clinical interventions—provided apolitical means of attacking disease without disrupting the social order.³³ Furthermore, public health education often depended on external funding from tobacco, lead, insurance, and other industries that had a stake in the existing social order and on a view of science that divorced public health from what were considered disruptive health movements.³⁴ Nor does it seem that there was any resistance to this way of funding schools of public health from within those schools or from public health professionals in general.

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ests as a public health responsibility. Such a vision could be advanced because of the array of social reformers who had coalesced in support of it through the 1940s: Progressive Era reformers such as Helen Hall and Alice Hamilton, the Associated Women of the American Farm Bureau Federation, the National Farmers Union, the American Federation of Labor, the Congress of Industrial Organizations, the NAACP, and the Textile Workers Union of America, to name a few. Even some representatives from industry backed structural support for America's workers. For example, a representative from the American Cast Iron Pipe Company of Birmingham, AL, made powerful arguments about the need to prioritize public health, seeing "the amount of

OCCUPATIONAL DISEASE

Public health thus reframed science as a practice that stood outside of politics and the social reform efforts that had defined public health in the nineteenth century. Although public health departments could claim the right to conduct surveillance for occupational diseases, it was unclear whether they could claim the authority to intervene on the basis of any evidence of harm they gathered. By 1911, six states—California, Connecticut, Illinois, Michigan, New York, and Wisconsin—had passed laws requiring physicians to report occupational diseases.³⁵ Some laws required that physicians report diseases to commissions of labor; others reported to the boards of health favored by the state and territorial health authorities.

However, whereas inspectors from state departments of labor were empowered by law to enter the workplace, no such power was accorded to state public health departments. The factory was seen as private property. Although departments of labor did not exert great power either, they could legally enter workplaces and issue orders to abate immediate hazards.³⁶ In the face of industrial resistance and tradition, public health officialdom never pressed for the legal right to interfere.

Commitment to industrial health by the Public Health Service (PHS) emerged only after several bills introduced into the 1913 Congress proposed a Bureau of Industrial Safety in the new Department of Labor. Alarmed at the prospect of “another health bureau, in another department of the government,” Surgeon General Rupert Blue established the Division of Industrial Hygiene.³⁷ Some companies

used state labor agencies to stonewall investigations by the PHS, refused to allow PHS researchers to perform medical examinations on their employees, or agreed only on the condition that researchers share with management the results of each employee’s medical exam.³⁸

By 1917, the PHS had begun withholding the individual results of their examinations from both employee and employer “in view of the confidential character of the information obtained,” a policy that the PHS would employ in workplace investigations in ensuing decades.³⁹ Although this practice protected sick employees from dismissal or reprisal on the part of industrial employers and ensured that the PHS would continue to have access to the data, it also denied workers knowledge and power they could use to press for the kinds of changes imagined by Progressive Era reformers. The dominance of the PHS “research-only” approach to occupational disease surveillance emerged in response to a combination of business and political resistance to governmental interventions in the workplace during the Depression.⁴⁰ PHS accommodation to industry ultimately led public health departments to shut down many of their own divisions of industrial hygiene as a result of lack of funds.⁴¹

Even the landmark Occupational Health and Safety Act of 1970 left intact the long-standing division of responsibility between the departments of labor and health. The Occupational Safety and Health Administration, housed in the Department of Labor, was to set and enforce standards; research informing those standards would be performed by the newly created National Institute for Occupational

Safety and Health (NIOSH), housed in the Department of Health, Education, and Welfare.⁴² Pro-labor forces within NIOSH referred to what was then their umbrella organization, the Centers for Disease Control and Prevention, as “the Plantation”: a cost-conscious, conservative entity that siphoned funds from NIOSH while providing little in return.⁴³ Science demanded action: what was the use of scientific evidence if it were not widely disseminated and used as the basis for reform? In the 1970s, the public increasingly demanded public health action, expressing dissatisfaction and even outrage when it perceived health officials to be hiding behind science (Figure 1).

THE BROADER STRUGGLE

In the face of the retrenchment of public health, some of the profession’s activist members sought

FIGURE 1—Newspaper article reporting homeowner reaction to Federal officials’ involvement in the Love Canal pollution incident.

Source. New York Times, May 20, 1980: A1.

Homeowners at Love Canal Hold 2 Officials Until F.B.I. Intervenes

By JOSH BARBANEL

Special to The New York Times

NIAGARA FALLS, N.Y., May 19 — Angry homeowners locked two Federal environmental officials in the office of the Love Canal Homeowners Association here for nearly five hours today in a protest to press their demands for an immediate evacuation of their polluted neighborhood.

A crowd of 300 people gathered on a scraggly lawn of dandelions — where

some homeowners burned their mortgage papers — inside a chain link fence that encloses the office. The office is in one of 237 homes that were evacuated because 20,000 tons of highly toxic pesticides and chemical wastes had been dumped into the unfinished canal.

“We are not holding them hostage,” said Lois Gibbs, the president of the association. “We’re protecting them because the crowd outside will tear them apart.”

Led Out a Side Door

A few minutes before 9 P.M. three agents of the Federal Bureau of Investigation, four United States marshals and six members of the Niagara Falls Police Department entered the house and led the environmental officials out a side door as homeowners jeered and spat. Outside, five dark sedans with several plainclothes Federal agents lined the street.

Mrs. Gibbs said later that the F.B.I. had given her six minutes to release the agents.

“We had no choice,” she said. “The F.B.I. wanted to disperse the crowd. With

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to advance a broadly social vision of health that assigned greater responsibility to the government. In the 1940s and 1950s, physicians such as Thomas McKeown, Zena Stein, and Mervyn Susser articulated a new vision for medicine itself: social medicine.⁴⁴

George Rosen, historian and editor of the *American Journal of Public Health*, sought to import the European social medical tradition into the American context and introduced public health practitioners to their roots in social activism. He reviewed the work of Rudolf Virchow and other nineteenth-century social reformers who framed a radical vision of medicine and public health at the height of the revolutions of 1848: “Medical reform’ comes into being at a time when ... [s]evere and mighty political storms such as now roar over the thinking portion of Europe, shaking to the foundation all elements of the state, [and] indicate radical changes in the prevailing conceptions of life. In this situation,” Virchow commented, “medicine cannot alone remain untouched; it too can no longer postpone a radical reform of its field.”⁴⁵

The field of social medicine, in turn, would help spawn social epidemiology as a discipline within schools of public health.⁴⁶ However, although social epidemiology would begin to mark academic public health, the vision remained marginal within the American context, in which class politics were less pronounced than in Europe and even the most radical Progressive Era visions of social and political reforms rejected class struggle. Hence, American public health practitioners missed opportunities to shape the institutional landscape of health and disease.⁴⁷

Social, cultural, and institutional changes provide the backdrop to the waning authority of public health that began in the years after World War II. In the 1950s, the rise of medical authority went hand in hand with the ascendance of the hospital as the center of treatment and research. Power was consolidated in corporate interests and given force by a general cultural ethos of mass consumption and market-driven health care. In the 1970s, a powerful discourse of personal responsibility for health and disease placed blame on individuals and implicitly absolved corporations that marketed harmful products such as cigarettes and lead paint and polluted the nation’s water and air.

An influential 1974 report by Marc Lalonde, the Canadian minister of health, signaled a new focus on health promotion in the industrialized democracies: it was time to focus on changing risky behaviors. In a similar vein, John Knowles, former president of the Rockefeller Foundation, argued in a widely discussed article that “[t]he solution to the problems of ill health in modern American society involves individual responsibility.” Knowles set a critical tone for subsequent policy, which placed the blame for American morbidity and mortality on “careless habits” and individual “indulgence in ‘private’ excesses.”⁴⁸

An increasing focus on individual health promotion and disease prevention intersected with social movements concerned with issues of race, gender, sexuality, and medical authority, all of which challenged the public’s trust in expert judgments. This emphasis was given force by revelations regarding the 40-year history of unethical practices involved in the Tuskegee syphilis

study, as well as by the ill-fated plan of the Centers for Disease Control and Prevention in 1976 to protect the nation from swine flu.⁴⁹ These developments contributed to deep fissures in the field of public health.

The great social epidemiologist Thomas McKeown argued that radical social change would be necessary to alter the profile of social suffering.⁵⁰ Jack Geiger, working with civil rights organizations such as the Congress of Racial Equality, traveled to Mississippi to establish health centers for impoverished African Americans; Lorin Kerr’s work with the United Mine Workers forced black lung disease in Appalachia onto the national agenda; and many in the American Public Health Association pressed for strong alliances with women’s organizations, civil rights groups, and peace activists.

Yet, although they may have represented the social conscience of public health, these individuals were rarely able to alter power relationships on a broader scale. At the same time, others in the field openly opposed any role outside of public health science in addressing the health concerns of the nation. For example, epidemiologist Kenneth Rothman argued that, as a science, public health had no advocacy role in social debates; it might document the effects of poverty on health, for example, but it had no mandate to attack poverty.⁵¹

BACK TO THE FUTURE

In the view of critics, public health professionals have, over the course of a century, defined their mandate ever more narrowly and shrunk from political engagement with powerful interests such as corporations and

business that created unhealthful environments. They failed to confront medical specialists interested in defining preventive interventions as clinical and hence as reimbursable. This critique was made perhaps most memorably by Paul Cornely in a 1970 address to the American Public Health Association. Newly elected as the group's first African American president, Cornely leveled a blistering attack on what he saw as the complacency of his profession. It had been "a mere bystander" to the profound changes in the health care system that had taken place in the 1960s; its members wasted their time on "piddling resolutions and their wordings." Public health, he charged, remained "outside the power structure."⁵² Cornely's address was a clarion call for more aggressive action against a host of health problems integral to modern industrial society.⁵³

A century ago, Hermann Biggs described public health as "autocratic" and "radical" in nature.⁵⁴ To be sure, such an outlook shored up authoritarian and paternalistic public health practices that, today, we often condemn. But at the same time it conveyed a sense of ambition and authority on the part of public health. This capacity for deliberate action represented more than simply a resolute mind-set that allowed the field to overcome obstacles through the force of will and moral fiber: it represented alliances with social and political groups that were struggling for a place and power in American society.

For many decades, the field has been constrained by self-imposed limitations and, all too often, has avoided engagement with those who challenge complacency and existing power relationships. The histories of tobacco, lead

poisoning, and HIV bear all of the marks of the more-than-century-long history of modern public health, although in mirror image. Forsaking its early ideology, commitments, and crusading spirit, public health became unwilling or uncertain about how to use science to challenge powerful corporate interests, deeply entrenched moral beliefs, or profound social inequalities linked to gender, race, and class.⁵⁵ Yet, as different institutions, organizations, and communities mobilized in the name of public health, the field was pressed to join the coalitions making headway against HIV and the tobacco and lead industries, reasserting the radical role that public health had played in the late nineteenth and early twentieth centuries.

The current economic calamity, affecting the health and well-being of hundreds of millions of people around the world, provides the chance to rethink fundamental assumptions about our country's economic and social system. Public health is positioned to reclaim its place as part of an emerging reform movement. The future will present new challenges, from global warming and industrial pollution to bioterrorism and universal health care. We can either accommodate the status quo or confront political and economic power in the name of the public's health.

Public health must go "back to the future" and integrate power and agency into our models for promoting the public's health. History sensitizes us to the interplay of the varied social, political, and economic forces that positioned public health at different moments in time, regardless of the areas of responsibility the field claimed. History demands that we understand not only the forces

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that shaped public health action in the past but also the current forces that will shape the potential and limits of what we can do as professionals committed both to science and to its application.

The charge, then, is not to invoke our history in a nostalgic way. Nor is it to see history as a series of events contingent on arbitrary forces that leave us wandering in the wilderness. Through a close study of history, we can see the alliances that gave public health political authority in particular contexts but that the field failed to seize in others. If a commandment emerges from history, it is one that all sectors of the field can heed: find ways to align with constituencies, lend our science and our knowledge, and create a base of power for progressive social change. ■

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A.L. Fairchild and D. Rosner were the primary authors of the article. J. Colgrove provided critical text and analysis. R. Bayer and L.P. Fried provided

important insights into the ethical and policy implications of this historical case.

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