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"All for Health for All": The Local Dynamics of Rural Public Health in Maine, 1885-1950

Martha Anne Eastman

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"ALL FOR HEALTH FOR ALL": THE LOCAL DYNAMICS OF RURAL PUBLIC HEALTH IN MAINE, 1885-1950

By

Martha Anne Eastman

B.S. Boston University, 1981
M.S. Boston University, 1983

A THESIS
Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy (in History)

The Graduate School
The University of Maine
May, 2006

Advisory Committee:

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"ALL FOR HEALTH FOR ALL": THE LOCAL DYNAMICS
OF RURAL PUBLIC HEALTH IN MAINE, 1885-1950

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Martha Anne Eastman

Thesis Advisor: Dr. Marli F. Weiner

An Abstract of the Thesis Presented
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Following new discoveries in bacteriology, public health developed slowly in rural Maine during the late nineteenth and early twentieth centuries, initially in response to communicable diseases and poor sanitation. The legislature created the Maine State Board of Health in 1885 and in 1887 required towns to appoint boards of health. Local responses to public health problems and disease control methods led to both cooperation and resistance. By the 1920s governmental and non-governmental health programs involved the participation of farmers, housewives, school children, women’s club members, summer residents, business leaders and health professionals. Voluntary health organizations, such as the Maine Public Health Association, the American Red Cross, the Maine Federation of Women’s Clubs, and the Maine Medical Association cooperated to develop Maine’s public health services.

When an increasing number of health policies and programs originated at state and federal levels (such as the Sheppard-Towner Act of 1921 and the Social Security Act of 1935) or from the national offices of voluntary organizations (including the peacetime public health program of the American Red Cross initiated after World War I), tensions
emerged at the local level. Politicians disliked federal interference in state affairs; the legislature initially rejected the federal Sheppard-Tower funds for maternal and infant hygiene because of states’ rights concerns. Growing local support for public health nursing services changed Maine’s attitudes about this federal funding by 1927. With increased federal funding in the 1940s public health nurses organized town health councils throughout the state, assisting the Bureau of Health to better meet local needs.

The local dynamics of rural public health in Maine between 1885 and 1950 highlight changes in conflict and cooperation among those with similar goals. This study shows how health professionals and volunteers in communities across Maine improved public health among the state’s residents. While working to meet local needs, these individuals managed not only to gain a measure of control, but to give life to the slogan adopted by the Maine Public Health Association, “All for HEALTH for All.” Over time the balance of conflict and cooperation in rural public health shifted in favor of cooperation.
DEDICATION

To the late Doris Porter, my friend and Vassalboro neighbor, whose engaging stories about her caregiving experiences in the first half of the twentieth century launched me on this journey.
ACKNOWLEDGMENTS

Many people helped me achieve the goal of finishing this dissertation. First, for their patience and encouragement over the past seven years, I thank my dissertation committee: Marli F. Weiner, Nathan Godfried, Richard Judd, Howard Segal, and Nancy Fishwick. Dottie Poisson at the University of Maine Graduate School deserves special thanks for her prompt response to e-mail questions and her willingness to interrupt her busy schedule on short notice for in-person consultations about format issues and requirements. I also appreciated the understanding and assistance of Associate Dean Scott Delcourt.

I am especially grateful to all the archivists and librarians who assisted with finding documents and who sought answers to my numerous reference questions. Early in my research Daniel May welcomed me at the Metropolitan Life Insurance Company and pointed out Diane Bronkema Hamilton’s article in the Fall 1989 issue of the Bulletin of the History of Medicine. Thomas Rosenbaum and Erwin Levold retrieved documents during my time at the Rockefeller Archive Center, and Susan Robbins Watson helped me locate American Red Cross materials at the Hazel Braugh Records Center. Anne Small retrieved and photocopied materials at the Maine State Archives. Mel Johnson at Raymond H. Fogler Library at the University of Maine shared information about local sources and contacts as well as reference resources. Many other Fogler Library staff members assisted me along the way, including staff from the Reference, Circulation, Interlibrary Loan, Microforms, and Special Collections Departments. Those deserving special appreciation include: Betsy Paradis, Chris Whittington, Frank Whibby, Deborah Rollins, Christopher Tuthill, Nancy Lewis, Libby Norton, Ben Proud, Paige Lilly,
Richard Hollinger, Elaine Smith, and Cynthia Crosser. While researching at Special Collections I especially enjoyed talking with Francesca Ruggieri; her cheerful and industrious spirit encouraged me to stay on task.

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Several people shared personal experiences and took a particular interest in my study. The late Edward Dunham, III, of Seal Harbor, grandson of Mary Dows Dunham, referred me to his cousin, Lydia Vandenberg of State College, PA, who generously shared many documents and pictures belonging to her family. Retired public health
nurses Mary Hayes, of Dover-Foxcroft, the late Ella Young, of Otter Cliffs, and Eleanore Irish, of Yarmouth, answered questions about their experiences in the field. The late Doris Porter, of Vassalboro, Mary Flynn, of Dexter, and Pearl Hamlin, of Brownville, also added important details about rural health care in Maine.

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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AJPH</td>
<td>American Journal of Public Health</td>
</tr>
<tr>
<td>ALAM</td>
<td>Archives of the American Lung Association of Maine</td>
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<td>AMA</td>
<td>American Medical Association</td>
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<tr>
<td>APHA</td>
<td>American Public Health Association</td>
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<tr>
<td>ARC</td>
<td>American National Red Cross or a local chapter of American Red Cross</td>
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<tr>
<td>BHVIA</td>
<td>Bar Harbor Village Improvement Association</td>
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<tr>
<td>BPL</td>
<td>Bangor Public Library</td>
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<tr>
<td>BPW</td>
<td>Business and Professional Women’s Clubs</td>
</tr>
<tr>
<td>CB</td>
<td>Children’s Bureau</td>
</tr>
<tr>
<td>CWA</td>
<td>Civil Works Administration</td>
</tr>
<tr>
<td>CWS</td>
<td>Civil Works Service</td>
</tr>
<tr>
<td>DFC</td>
<td>Dunham Family Collection, at the Northeast Harbor Library in Mount Desert, ME</td>
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<tr>
<td>FERA</td>
<td>Federal Emergency Relief Administration</td>
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<tr>
<td>GFWC</td>
<td>General Federation of Women’s Clubs</td>
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<tr>
<td>JMMA</td>
<td>Journal of the Maine Medical Association</td>
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<tr>
<td>MBSS</td>
<td>Maine Baby Saving Society</td>
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<tr>
<td>MCC</td>
<td>Maine Children’s Council</td>
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<tr>
<td>MCH</td>
<td>Maternal and Child Health—affiliated with the Division of Maternal and Child Health at the Maine State Department of Health (later called the Bureau of Health under the State Department of Health and Welfare)</td>
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<tr>
<td>MCHC</td>
<td>Maine Child Health Council</td>
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<tr>
<td>MDNA</td>
<td>Mount Desert Nursing Association</td>
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<tr>
<td>MFWC</td>
<td>Maine Federation of Women’s Clubs</td>
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<tr>
<td>Abbreviation</td>
<td>Full Name</td>
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<tr>
<td>--------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>MMA</td>
<td>Maine Medical Association</td>
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<tr>
<td>MPHA</td>
<td>Maine Public Health Association</td>
</tr>
<tr>
<td>MSA</td>
<td>Maine State Archives</td>
</tr>
<tr>
<td>NACP</td>
<td>National Archives at College Park, MD</td>
</tr>
<tr>
<td>RAC</td>
<td>Rockefeller Archives Center, Rockefeller Family Archives, Record Group 2, Homes Series, Seal Harbor</td>
</tr>
<tr>
<td>SHVIS</td>
<td>Seal Harbor Village Improvement Association</td>
</tr>
<tr>
<td>UM</td>
<td>University of Maine</td>
</tr>
<tr>
<td>USPHS</td>
<td>United States Public Health Service</td>
</tr>
<tr>
<td>WPA</td>
<td>Works Progress Administration</td>
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INTRODUCTION

In the early twentieth century the Maine Public Health Association (MPHA) aimed to make Maine "the healthiest state."\(^1\) By the mid-1920s this voluntary health organization, which began in 1911 as the Maine Anti-Tuberculosis Association and was affiliated with the National Tuberculosis Association, had expanded its services from tuberculosis dispensaries and sanatoria to include health promotion for all people. In addition to tuberculosis, sections within the organization focused on cancer, mental hygiene, child health, public health nursing, the Modern Health Crusade, eye health, and social hygiene. In 1925, to highlight the state's healthfulness, MPHA staged an elaborate gathering in Augusta for people aged 75 and older, called the Maine Three-Quarter Century Club. This media stunt, intended to highlight the state's improving health statistics, attracted national attention.\(^2\) The gathering was such a success that MPHA made it an annual event.

MPHA's letterhead, used to contact members of the Committee on Arrangements for the 1926 annual Three-Quarter Century Club gathering, declared the association's motto: "All for HEALTH for All."\(^3\) In the late nineteenth and early twentieth centuries,

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\(^3\) Walter D. Thurber to S. O. Foss, Jr., 30 July 1926, in "Maine Three-Quarter Century Club Scrapbook, 1926," ALAM.
public health protection in rural Maine required individual participation as well as collaboration among community organizations, businesses and governmental agencies. While public health mandates at times interfered with individual rights and led to resistance, many residents welcomed and implemented expert advice to improve sanitation and prevent disease.

By the mid-twentieth century lay people embraced public health and state officials welcomed lay involvement. Towns relied on state public health nursing staff in district offices, in part because voluntary organizations changed their priorities and local health departments did not develop in most Maine communities. Many voluntary services continued, though, despite organizational changes. Expansion of official services through the Maine Bureau of Health, along with the endurance of voluntary public health activities, made the provision of rural public health services a complex combination of local, state and federal governmental efforts, along with voluntary and lay involvement. Despite decreases in communicable disease death rates as well as improved maternal and child health services, limited governmental control, organizational conflicts, and varying agendas made “all for health for all” an elusive goal.

Broadly defined, public health was the process of managing disease and promoting health in communities, and it involved everyone. Narrowly defined, the field of public health emerged as an elite medical specialty that focused on communicable disease control and sanitation. In this study the concept of public health is broad, encompassing lay people in communities as well as those professionals who specialized in guarding the public’s health. The concept of health includes safety, the environment, physical and emotional well-being, and a host of topics related to health care for individuals, families
and communities. This concept recognizes fluid boundaries as well as geo-political town, county, state and national lines; communities of people related across these borders.

For instance, despite the fact that Dexter and Milo were located in two separate counties, they shared a district tuberculosis nurse in 1915, and later state health officials occasionally mistakenly listed Dexter in Piscataquis instead of Penobscot County. Members of the French communities in Quebec and New Brunswick, Canada and their family members who had moved to Maine traveled back and forth frequently for business and pleasure between 1885 and 1950. This travel sometimes complicated disease control in Maine and necessitated cooperation among U.S., Maine and Canadian health authorities.

The context for the development of public health included expansion of the fields of bacteriology and immunology and scientific research itself. With late nineteenth century discoveries of specific bacterial causes of illnesses like tuberculosis, cholera, and diphtheria, as well as the invention of new laboratory techniques for visualizing microscopic pathogens, doctors had better methods for diagnosing illness. In 1878, Louis Pasteur described the germ theory of disease. In 1854, he had discovered that microbes spoiled wine and that heating, which became known as pasteurization, prevented this. In the 1860s, Pasteur conducted experiments that solved the mystery of a silkworm disease that was hurting the silk industry; microorganisms again caused the problem. In 1882, Robert Koch, a German physician, supported the germ theory by identifying the tubercle bacillus and demonstrating tuberculosis transmission in the laboratory. The development of rabies and anthrax vaccines and the diphtheria antitoxin were among other late-nineteenth-century discoveries that improved public health efforts to prevent deaths due to
communicable diseases. United States researchers followed these developments with interest. New understanding about disease transmission and medical treatments meant that many lives could be saved if illnesses were prevented, or at least diagnosed and treated early enough.

Medical theories about disease causation influenced the development of control methods. Medical historian George Rosen described three theoretical perspectives about disease in the nineteenth century. He noted that both contagionist and noncontagionist theories had long histories prior to the 1800s, but the idea of contagion gained support between the mid- and late-nineteenth century. Miasmatic theory, the noncontagionist view, held that disease occurred when “poor sanitary conditions produced a local atmospheric state,” while the contagionist view held that specific poisons or living organisms were the cause. Rosen noted that the most common theory in the nineteenth century was a combination of these two positions, a perspective he called “limited or contingent contagionism.” Ongoing concerns about bad air and filth, thought to carry or breed germs, meant that health officials still focused on cleaning up garbage that frequently had little or no role in disease transmission.

In the essay “Public Health, Preventive Medicine, and Professionalization: Britain and the United States in the Nineteenth Century,” Elizabeth Fee and Dorothy Porter described how advances in the field of bacteriology changed approaches to public health in the early twentieth century, giving the field “a new professional, scientific identity.” They noted the discoveries of particular germs as causative agents in various diseases both

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clarified the work and made it more specialized. According to Fee and Porter, bacteriology "became an ideological marker, sharply differentiating the 'old' public health, mainly the province of untrained amateurs, from the 'new' public health, which belonged to scientifically trained professionals." The ability to diagnose disease with laboratory tests and microscopic identification of germs gave bacteriologists status within medicine, but these new procedures led to conflicts; physicians disliked reporting diseases and having public health officials question their diagnoses or meddle with treatments. Fee and Porter outlined competing approaches to public health practice resulting from advances in bacteriology. Epidemiology, the dominant viewpoint, focused on disease control by preventing or stopping disease transmission and tracking down the source of infection. This approach valued accurate recording of vital statistics to monitor disease cases as well as causes of death, requiring up-to-date laboratory resources and expert knowledge.

Fee and Porter discussed three alternative viewpoints that considered broader ideas. One competing model of public health practice and research was that of Charles-Edward A. Winslow, head of public health at Yale, who defined the specialty as:

The science and art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts for the sanitation of the environment, the control of community infections, the education of the individual in principles of personal hygiene, the organization of medical and nursing service for the early diagnosis and preventive treatment of disease, and the development of the social machinery which will ensure to every individual in the community a standard of living adequate for maintenance of health.7

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Winslow's approach relied on help from a variety of sources beyond bacteriologists in the laboratory, including nursing and community organizations. Alice Hamilton provided another perspective when her study of industrial lead poisoning highlighted Americans' widespread exposure to lead through industries and consumer products, adding industrial hygiene as a focus of public health. In 1914, epidemiologist Joseph Goldberger and economist Edgar Sydenstricker offered still another approach to public health when they demonstrated a systemic socio-economic etiology for pellagra, a nutritional deficiency disease, at a time when many believed it originated from some yet-to-be-identified microbe. Although the many discoveries in bacteriology and epidemiology in the 1880s led some people to think bacteria must be the cause of all disease, various twentieth century approaches expanded the etiology of health problems to include social factors as well.

Fee and Porter argued that although disease control dominated public health, medicine as a whole undervalued the specialty. A variety of professionals participated in this disease control work including sanitary engineers, public health nurses, chemists, statisticians, and others. With the emergence of schools of public health in the second decade of the twentieth century, funded by the Rockefeller Foundation, public health became an interdisciplinary profession.9

In addition to the professionalization of public health and discoveries in bacteriology, both national and state developments contributed to the context of rural public health in Maine between 1885 and 1950. Researchers and government health


departments established laboratories and developed tests for diagnostic purposes and surveillance of water and food supplies. At the end of the nineteenth century, reforms in urban sanitation and nursing care, acceptance of the germ theory, and developments in scientific research paved the way for dramatic advances in epidemiology and preventive medicine during the Spanish-American War.\textsuperscript{10} The findings of President Theodore Roosevelt's Country Life Commission in 1908 spurred communities to improve rural living conditions and a country life movement emerged nationwide.\textsuperscript{11} With advances in laboratory sciences communities began to focus more on disease prevention.

Progressive era reforms also influenced the development of twentieth century public health services. Rural reformers cleaned up garbage, improved the safety of milk and promoted medical inspection in schools. Religious leaders and participants in the social gospel movement connected health preservation to social justice.\textsuperscript{12} During World War I poor health resulted in the rejection of many young men for military service because of conditions that might have been prevented in childhood. Thousands of soldiers who were not rejected developed tuberculosis and became unfit for duty. Numerous other illnesses, such as venereal diseases, took their toll and led to increased costs and lost military time. The impact on the military led to more awareness of the importance of prevention, particularly the need to improve child health. Activities of the increasing numbers of organizations interested in child health led to progressive

developments in school hygiene and health education. Increased state regulation of sanitary practices also contributed to the expansion of public health services. In addition, Maine's emerging identity as "vacationland" played a part in its citizens' interest in public health. This study covers the period from the late nineteenth century to after World War II, beginning with the creation of an official State Board of Health in Maine in 1885. Before Maine had a state board of health, its sanitation laws were "almost entirely inoperative" because there was no provision for enforcement. The Maine Medical Association supported the organization of a statewide governmental health department for several years in the late nineteenth century, when a cholera epidemic in Europe in 1884 prompted fears of its return to the United States. In preparation for another possible cholera pandemic, the legislature established the Maine State Board of Health in 1885. This law required the new State Board of Health to oversee the work of local health committees and that these committees report annually to the Board. Supporters of the newly created Board hoped that, by designating a body to oversee local public health functions, towns would enforce state health laws and adopt local health ordinances.

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Public health improved in the late nineteenth century in the nation’s cities, through the development of water works, sewers, epidemiological investigations, and disease control measures, but many rural citizens had limited access to these services. By 1920, for the first time in U.S. history, fewer people lived in rural areas than in cities, yet rural health needs remained. The Social Security Act of 1935 provided support for public health services at the state level, enabling state health departments to reach out to improve services in local communities. Improved transportation throughout the first half of the twentieth century also helped bring health services to rural areas. In addition, the mass media played a part in conveying information about health and health services to rural people, first through books, magazines and printed pamphlets, presentations with lantern slides, exhibits, and demonstrations, and later through radio broadcasts and moving pictures.

Lay involvement in public health grew throughout the first half of the twentieth century. Improved household and farm sanitation helped reduce water pollution, food contamination, and cases of communicable diseases. The discovery of vitamins and community education about them increased popular understanding of nutrition and its connection to health. Widespread epidemics of polio and influenza between 1916 and 1919 and the ongoing prevalence of tuberculosis increased lay people’s interests in illness prevention. Economic hardship during the Depression made rural residents more resourceful in maintaining family health and avoiding doctor bills. Although voluntary services declined and official governmental services expanded during the late 1930s and 1940s, lay involvement provided essential support for Maine’s public health services,
making “health for all” more possible than ever before. By the mid-1940s, lay involvement blossomed due to the strengthened public health infrastructure and to increasing health needs on the home front during World War II.

Maine avoided massive disease outbreaks like those experienced in the more urban areas of the United States and Canada. However, the state’s location in northern New England, with many of its rural communities located upstream from its cities, did not eliminate opportunities for importing diseases from other places. Tourists brought pathogens from cities with them to Maine; the coast connected the state with seaports nationwide and abroad; and Aroostook, Washington, Franklin, Somerset, and Oxford counties bordered Canada. Rural vacation spots, in turn, sent many visitors home with what became known as “vacation typhoid,” which they frequently contracted by drinking contaminated water. The state’s commerce with other states and countries and the growing tourist industry increased the connections between rural and urban public health.

Before 1900, the Maine State Board of Health accomplished several important milestones in the development of the state’s public health services. The Board began publishing vital statistics data in 1892 and developed guidelines for school sanitation the same year, a 295-page document published with its annual report. The first secretary of the Board of Health, Albion G. Young of Fort Fairfield, noted in 1909 that more people outside the state appreciated the school hygiene report than had people within it. Young

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18 In cities outbreaks frequently had hundreds of cases. See “Milk-Borne Typhoid Traced to a Carrier,” American Journal of Public Health (AJPH), 2 (January 1912): 57.


received numerous requests each year for copies, particularly from colleges and normal schools in other states, and he suspected that professors used it as a textbook. The State Board of Health recognized the need to educate the public about tuberculosis and in 1889 became the first board of health in the country to develop a health education pamphlet about preventing it. Young distributed this pamphlet, titled *Circular 54*, to as many Maine families as possible. He also sent copies to people from other states who inquired about Maine’s tuberculosis work. Maine health officials were proud of these accomplishments and in their publications frequently commented on the state’s leadership in public health.²¹

Despite its self-identification as a leader among states, Maine developed a growing list of public health shortcomings in the late nineteenth and early twentieth centuries including worsening water pollution, typhoid epidemics, and lax disease control practices in rural areas. The state served as an example of why public health services, with knowledgeable administration and adequate funding, were just as essential in rural areas as in cities. Maine’s “knowledgeable” administration varied over the years, and state funding for public health administration and services remained low.

This study describes how, in part due to this fluctuating support, the state’s public health services developed strong connections to voluntary health organizations. Voluntary organizations at times stepped in to raise funds and provide services that might have been provided by governmental agencies, if the Maine legislature or townspeople

had appropriated adequate funds. Individual residents, whether long-time citizens or new immigrants, natives or summer residents, professionals or lay people, or members of women’s clubs, granges and other community groups, did their part to improve public health in rural Maine.

Both of these categories of contexts, developments in the field of bacteriology along with expanding health services and reforms, influenced public health in Maine in the late nineteenth and early twentieth centuries. Between 1885 and 1950 Maine’s official state health department, first called the “Board of Health,” then “the Department of Health,” and finally the “Bureau of Health” within the “Department of Health and Welfare” expanded in size and responsibility. Though its progress remained slow, its cooperation with voluntary organizations contributed to its growth. This dissertation explores the evolution of Maine’s public health administration, local responses to disease control measures, and examples of cooperation and conflict, both within communities and among levels of government and voluntary organizations.

The National Health Council, a federation of professional and voluntary health organizations, studied Maine’s emerging health system in 1922. The Council looked at how the Maine Public Health Association related to local, state, and national health agencies. The investigators from the National Health Council visited Maine and interviewed state health officials and MPHA leaders as well as representatives of various other organizations, such as the Maine State Grange and the Chamber of Commerce. They were impressed with the level of cooperation among organizations and with the effectiveness of Maine’s collaboration among voluntary and official health agencies to promote public health. In many states a system of local and district health departments
grew out of communities’ needs to cope with public health problems. Although Maine experienced public health problems similar to those in other rural states, Maine’s public health system evolved differently in part because of the active role that voluntary health associations had in shaping it. Maine’s official health agency welcomed collaboration with voluntary groups. The National Health Council’s “Study of [the] Voluntary Health Situation in Maine” suggested that Maine’s example might provide useful information to guide standards and improve working relationships of official and voluntary health agencies nationwide.\(^{22}\)

Chapter 1 describes Maine’s public health administration from the time the legislature established the Maine State Board of Health through elimination of local boards of health in 1935. Problems of poor sanitation and disease lingered, in part due to a lack of political will to make public health a priority, reluctance to fund public health measures adequately, and state pride that led Maine health officials to hang on to ineffective and outdated disease control practices.

Chapter 2 explores the local responses to public health problems and the dynamics of implementing disease control methods. Some people, including members of the working class and rural family doctors, resisted the authority of state and local health officials. Middle and upper-class people appreciated public health reforms more than their working class counterparts. Community education helped a lot, but in many cases ideas about causes and cures of illness changed slowly. Ongoing threats to public health in the early decades of the twentieth century, including tuberculosis and other

\(^{22}\) National Health Council, “Voluntary Health Organization in Maine: Difficulties & Alternatives in the State Voluntary Health Situation,” March 1922, Human Services, Bureau of Health, Box 3, Maine State Archives, Augusta, ME.
communicable diseases, polluted water, contaminated milk, and limited access to health services, led at least some Maine citizens to recognize the need for government public health services to control disease.

The reorganized Maine State Department of Health fostered cooperation with community organizations statewide. Chapter 3 explores in depth the collaboration and conflict among voluntary health organizations in Maine, particularly the Maine Public Health Association, local anti-tuberculosis associations, and chapters of the American National Red Cross. This chapter also highlights how clubwomen across the state cooperated with other groups to remedy community health problems. Besides enhancing local services, cooperation among these groups helped raise awareness among Maine people about the potential advantages of improving public health in the state. Conflicts among agencies, organizations, and individual practitioners providing health services grew as agencies competed for donations and town funding.

Because industrial and domestic wastes polluted rivers, public health at times conflicted with other community values, such as economic development and recreation. Chapter 4 describes how many Maine businesses came to recognize that promoting public health was good for profits, although others resisted health regulations for the same reason. In addition to supporting vaccinations and health education for employees, some factories and lumber operations hired industrial health professionals who collaborated with government health officials to protect Maine workers from risks of diseases and occupational hazards.

As the tourist industry expanded in the late nineteenth and early twentieth centuries, with steamship excursions to coastal destinations and railroad connections to
wilderness getaways, Maine became more conscious of visitors' preferences for clean water and food. In some communities summer residents became involved in local health activities, such as forming village improvement associations. Chapter 5 analyzes the public health contributions of wealthy summer residents on Mount Desert Island, particularly in the village of Seal Harbor in the town of Mount Desert and in the town of Bar Harbor, from the early 1900s through the 1940s. Although most summer residents wanted to ensure the health of their own families and were less concerned about "health for all," summer residents contributed to public health in their communities.

Early public health services in Maine highlighted tensions among federal, state and local levels of government. Chapter 6 describes Maine's rejection of federal aid for maternal and infant hygiene between 1922 and 1925 and appropriation of state funds instead. This chapter explores gender issues in the delivery of maternal and infant health services. The eventual acceptance of the Sheppard-Towner funding in 1927 paved the way for further federal assistance in the 1930s. Beginning in 1936, the Social Security Act provided increased federal funding for improving public health infrastructure, which allowed the Bureau of Health to employ public health nurses throughout Maine. Some state officials objected to federal oversight and their resistance slowed implementation of the program.

Chapter 7 reviews changes in public health administration and the priorities of voluntary health associations between 1935 and 1950. After 1940, with the new leadership of public health nursing director Helen F. Dunn, town health councils organized in many communities, creating new opportunities for lay involvement. Those contributing to this effort included participants of health councils, farm bureaus, and
parent-teacher associations, among others. As voluntary health associations changed their priorities, local members of various groups assisted state public health nurses to expand rural health services.

The local dynamics of rural public health in Maine between 1885 and 1950 highlight changes in conflict and cooperation among those with similar goals. When an increasing number of health policies and programs originated at either the federal or state levels of government or in the state or national offices of voluntary organizations, tensions emerged at the local level. This study shows how health professionals and volunteers in communities across Maine improved public health among the state’s residents. While working to meet local needs, these individuals managed not only to gain a measure of control, but to give life to the slogan adopted by the Maine Public Health Association, “All for HEALTH for All.” Over time the balance of conflict and cooperation in rural public health shifted in favor of cooperation.
CHAPTER 1
PUBLIC HEALTH ADMINISTRATION

Understanding and administration of public health in rural Maine progressed slowly between 1885 and the early twentieth century. Acceptance of new scientific discoveries about disease control spread to the rural countryside over several decades. Due to sparse population and limited transportation, it took longer for public health problems to emerge in small towns than in urban regions of the country. Although rural death rates were generally lower than in cities, concerns about disease and sanitation stimulated the expansion of Maine's public health services and administration. Even though wider acceptance of the germ theory led physicians to have a more scientific approach to medicine, many still believed that filth, dampness, or miasmas caused illness. Despite much health publicity, rural voters and legislators were slow to appropriate funds or change policies to prevent disease. Contrasting with the state's beautiful natural resources, poor sanitation and pollution existed in many parts of Maine. Although public health administration aimed to improve sanitation and control disease, politicians remained ambivalent about funding; between 1885 and 1935 public health in the state improved haltingly, in part due to a combination of state pride, traditionalism, and fiscal conservatism. Trends during this time included increasing state control to manage disease threats and decreased local control over public health matters, leading to tensions at the local level.

After the creation of the Maine State Board of Health in 1885, Board members participated at the local, state, and national levels in efforts to improve sanitation and disease control. Following passage of an 1887 law requiring local boards of health, State
Board secretary Albion G. Young continued to monitor local needs for assistance, traveling throughout the state to help with disease investigations. However, despite its early success, pioneering in health education and late nineteenth century disease control, Maine’s public health administration did not sustain its leadership position beyond the turn of the twentieth century.

Then, between the 1910s and 1935, public health administration in Maine became more centralized at the state level. Progressive era reformers, including members of the Maine State Grange and the Maine Medical Association, supported the reorganization of the State Board of Health in 1917.¹ Under the leadership of Health Commissioner Dr. Leverett D. Bristol, the new State Department of Health initially improved public health administration by increasing education and supervision for local boards of health and health officers. The legislature did not support Bristol’s vision, though, and he left the state when it failed to appropriate adequate funds for his initiatives.

By 1922 the department that began as an effort to bring more public health expertise to rural towns became part of a fiscally conservative state government, determined to contain costs. In 1931 the legislature combined the state’s welfare and health departments and in 1935 it passed a law that disbanded local boards of health.² As public health administration at the state level expanded, Maine’s fiscal conservatism limited its public health resources. Although they had been on the cutting edge of late nineteenth century public health practice, Maine health officials in the early twentieth century maintained disease control methods based on tradition rather than science. State

pride in its earlier research and health education accomplishments contributed to the state’s resistance to change. With its authority centralized at the state level Maine’s public health administration differed from that of many other states; abolition of local boards of health in 1935 continued this independent trend.

**Early Official Health Services**

A smallpox epidemic in Montreal in 1885 killed 3,164 people between April and December and threatened communities throughout the region, so the establishment of the Maine State Board of Health was especially timely. Since Maine had few local health boards at that time, the State Board coordinated disease control efforts in towns as well as statewide. The Board received assistance from the U.S. Marine Hospital Service; to prevent the disease from spreading into Maine, state and national officials investigated the handling of smallpox cases in Canada and enhanced surveillance at the border and at several other locations. This epidemic provided an illustration of the economic necessity of local, state, and national public health systems.

The Montreal smallpox epidemic began in February 1885 after doctors at a hospital there failed to isolate a man with the disease. Instead of separating him from other patients, they cared for him together with 240 patients who did not have smallpox. Besides not isolating this early case to prevent others from getting sick, doctors at the hospital transferred several smallpox patients to another hospital. They also discharged patients hospitalized for other reasons who had no symptoms of smallpox, even though the discharged patients had been exposed. Because many of these yet asymptomatic

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patients were already infected, their discharge efficiently spread smallpox throughout the city.\(^4\)

The cases multiplied over the summer months and in August there were 239 deaths. The majority of the 3,164 died between September and November, as the epidemic moved out from Montreal into other towns in the Province of Quebec, along the St. Lawrence River toward Maine. Children who had never been vaccinated made up most of the dead, because many in the Catholic Church opposed vaccination and because of fears that vaccination caused syphilis. The French communities throughout Quebec and the French Canadian communities in Maine were largely unvaccinated; this concerned state health officials, who wanted to stop the epidemic before it reached Maine.\(^5\)

By early September the State Board of Health requested assistance from the U.S. Marine Hospital Service in Washington, D.C., because the Board’s budget was too small to launch the necessary border inspections and quarantines needed to control the epidemic. In addition to inspecting railroad travelers coming from Canada, the Board of Health realized the risk to Maine’s lumber industry and other manufacturing operations located in communities with large French Canadian populations. The Board encouraged vaccination of all persons, not just workers.\(^6\) Board Secretary Young likened this large epidemic to those that occurred several hundred years prior to 1885, before Edward Jenner’s work in developing smallpox vaccination, when the disease often killed

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\(^4\) Young, “Smallpox,” 54-55.


thousands in a single epidemic. To protect Maine from such devastation, the State Board of Health hoped to counteract the objections of anti-vaccinationists, particularly among French Canadian immigrants and members of the New England Anti-Compulsory Vaccination League. This epidemic highlighted the need to organize local boards of health and for increased legislative support for strengthening public health administration.

The new Maine State Board of Health met several times during its first year. Soon after board members began their work, they knew they needed more local assistance than the town health committees or selectmen could provide. They also realized the state needed to amend its outdated sanitation laws. The Board believed local boards of health, not town health committees or selectmen assuming responsibility for public health functions, would improve public health administration in each town. A member of both the State Board of Health and the local board of health in Augusta, J. O. Webster, M.D., wrote an article about this issue to educate his Maine Medical Association colleagues; Young included it in the Board's first annual report. Webster called ex-officio health committees and selectmen doing communicable disease control inefficient. Since Maine law granted extensive powers to boards of health, Webster suggested requiring every city and town to appoint such a board. He noted that the State Board would soon be distributing model health regulations for towns to adopt as

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ordinances. With more towns adopting health regulations and appointing local boards of health to enforce those ordinances, the State Board hoped it would be easier to control disease and improve sanitation.

During its initial year, while the Montreal smallpox outbreak expanded, State Board secretary Young sent all Maine municipal officers a list of model health regulations the State Board suggested each town adopt. The list included numerous forward-thinking actions based on new discoveries in bacteriology about the importance of improving sanitation and maintaining a safe water supply. Rule thirteen, for instance, prohibited wastes from flowing into waters used for drinking purposes. Towns ignored this suggestion for decades for several reasons: rivers were the only sewers in most rural areas, businesses along them provided economic security, and even public health officials believed the rivers could handle more waste without the increased pollution becoming a nuisance. The State Board of Health could suggest legislation and local ordinances, but local officials and townspeople established health policy. Within a year the State Board’s efforts to educate municipal officers and townspeople about the urgency of improving public health paid off, if not in adhering to recommendations for safeguarding water supplies, at least in passing state legislation to enhance local public health administration.

In 1887 the legislature passed “An Act to establish Local Boards of Health and to protect the People of this State from Contagious Diseases,” a version of a bill the State Board had drafted the previous year. Since 1853 towns could appoint a board and a health officer; this new law mandated each town to appoint a three-member local board of health. The law allowed municipal officers to hire a health officer, defined as a “well

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educated physician" who was the board's "sanitary advisor and executive" and who served at "the pleasure of the board." Still towns were not required to hire a health officer. By adopting this provision, legislators intended to further strengthen the towns' ability to control diseases. However, by specifying health officers' credentials but not requiring towns to hire them, the law continued the system of local control of public health that had become ineffective.

In towns without a health officer, the secretary of the board of health fulfilled these duties, including investigating disease outbreaks, initiating and maintaining quarantines, and disinfecting households. The law required regular reporting to the State Board of Health, both annually and in cases of disease outbreaks. It also strengthened the State Board's authority, by allowing it to request a meeting of a local health board. In addition to the duties of local boards, the law specified disease control responsibilities of physicians, householders, parents, nurses, teachers, landlords, neighbors, and persons recovering from diseases, among others.

On March 29, 1887, before the new law took effect, Young wrote to municipal officers throughout Maine and sent them copies of the law, reminding them that they must appoint a local board of health. Not waiting for questions or requests from local officials, Young advised them to appoint people who had an interest in health or had some qualifications for the job, but not to choose all three members from the same profession. Young asked, upon appointment of the board of health, that the municipal officers give the local board members copies of the 1887 law and "call their attention to the provision in Sect. 6, for the prompt report of their organization to the State Board of

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13 Secretary of State, "Chapter 123: An Act To Establish Local Boards of Health, and to Protect the People of this State from Contagious Diseases," Acts and Resolves of the Sixty-Third Legislature of the State of Maine (Augusta, ME: Sprague & Son, 1887), 91-92.
Health." While authoritative, his letter also intended to educate, orient them to their jobs, and enlist their help. Young wanted local officials to implement State Board directives, the original reason for the law mandating local boards.

When local boards complied and sent information about their organization, Young sent back a copy of Circular No. 32, titled “To Local Boards of Health.” The circular noted how the law granted them authority and described its purpose as follows:

This act is a long step in the direction of supplying a great want,—the lack of efficient sanitary laws and an efficient sanitary organization for the whole state. The State Board of Health has been in existence nearly two years and the want which has been most severely felt has been the need of more specific laws, and a distinct sanitary authority in every town with which it could cooperate in the work of removing the causes of disease and especially in the restriction of the infectious diseases. By “restriction,” Young meant both limiting the spread of disease and implementing disease control measures, including quarantine of persons who had been exposed and were thought to be potentially infectious. He clarified that the State Board would help, but emphasized the local board’s role in gaining the cooperation of householders and physicians. To help the local board educate its community, Young also endorsed printed notices describing local householders’ and physicians’ duties under the law.

Circular No. 32 outlined the local board of health’s duties regarding disease prevention and control, particularly how to stop diseases from spreading. It instructed

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15 Maine State Board of Health, “Circular No. 32: To Local Boards of Health,” reprinted in Third Report, 10. Health officials often used the terms “infectious,” “contagious,” and “communicable” interchangeably. Over time, as knowledge developed about how easily a disease could be transmitted from person to person, the meanings of these terms changed. The term “communicable” disease in this study refers to infectious disease transmitted from person to person or by infected food, water, or other substance that could result in serious illness or death and that periodically led to epidemics in communities.
members of local boards of health about their duty to act and the need to use their authority wisely. It stated:

A few words of advice from the executive officer of the local board may show the person to whom it is given better ways of doing things, and will often be gratefully accepted. Thus while possessing authority it will not always be necessary to show it. Needless meddling with private affairs, or officiousness, will not be borne by the people, but when it is clearly the duty of the health officer to interpose his authority to protect the public, there should be no hesitation. When the people can be made to understand that a thing is for their interest or for the protection of their health it will rarely occur that they will fail to support the local board of health.  

Thus, by sharing information that local people needed to prevent disease, improve health, and decrease deaths, the Maine State Board of Health believed local boards could establish rapport with the public. The Board recognized the potential for misuse of authority, but in 1887 it was optimistic that local people would accept the need for measures that sometimes inconvenienced them or disrupted their private homes.

By the end of 1891, due in part to the smallpox epidemic of 1885 and the 1887 legislation, local boards of health had been created in more than three hundred Maine towns and plantations. Many members of local boards lacked basic public health knowledge and welcomed assistance from state and national experts, particularly during disease outbreaks. The State Board provided consultation and published *The Sanitary*  

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18 Historians Elizabeth Fee and Dorothy Porter have described early board of health members as “respected local practitioners who might have assumed that their tasks would be undemanding; at least in the nineteenth century, such boards met rarely and were only provoked into sudden activity by the threat of epidemics.” Elizabeth Fee and Dorothy Porter, “Public Health, Preventive Medicine, and Professionalization: Britain and the United States in the Nineteenth Century,” in Elizabeth Fee and Roy M. Acheson, eds., *A History of Education in Public Health* (New York: Oxford University Press, 1991), 22.
Inspector to keep local officials informed of new developments in the field. Each year Young published excerpts from reports of local boards of health as part of the State Board’s annual report; this news highlighted disease control practices as well as changes in disease prevalence.

The Maine State Board of Health recognized that public education formed a key component of disease control and nuisance abatement. In its first years the Board published a variety of pamphlets, called “circulars.” Local boards of health gave them to householders where illness occurred and distributed them to people who asked questions. Many of these appeared in local newspapers statewide. Circulars included such themes as “Hints on Building School-Houses,” “Typhoid Fever: Its Prevention and Restriction,” and “Construction and Management of Earth Closets.” Circulars on disease topics included a description of symptoms, current understanding about the cause and transmission, and instructions for care and prevention. Many of these instructions, such as disinfecting and burying feces of a person with typhoid fever or burning soiled clothing in cholera cases, may have overwhelmed residents coping with illness in the family. For members of local health committees, selectmen or local boards of health, untrained in disease control procedures, the circulars provided straightforward directions about what to do to stop diseases from spreading.

To increase the sanitation knowledge of town officials, the Maine State Board of Health organized statewide conferences for local board members. On October 27, 1891 the State Board hosted a sanitary convention at city hall in Portland. This gathering brought together representatives from local boards from throughout the state to learn the

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latest information about disease control, disinfectants, sanitary law, sewage systems, public nuisances, school sanitation, animal diseases, and water supplies. The State Board published the papers in *The Sanitary Inspector*, ensuring an even larger audience for the information. Young reported the meeting was well attended, evidence both of growing commitments among local boards of health to work collaboratively with the State Board, and possibly their interest in the latest research findings in the field.21 By organizing a statewide educational meeting for local boards of health, the State Board maintained its position as an authority with answers to local officials’ questions.

In addition to working closely with members of local boards, Young corresponded with public health leaders from throughout the United States and several other countries, keeping up to date on the latest disease control methods. Staff at the State Board of Health received and catalogued the annual reports from other state boards and similar documents from numerous other countries in a library at their Augusta headquarters.22 Early State Board of Health reports listed documents Young had received from other jurisdictions and he occasionally mentioned some of these or quoted from them in his reports. When describing the Board’s efforts to protect Maine against the smallpox threat of 1885, Young quoted from an issue of *Public Health in Minnesota*. He described a smallpox epidemic in lumber camps in that state in 1883-4, which killed seventy-eight people.23 Since he faced the threat of a smallpox epidemic in his first year as Secretary, Young probably read all available documents pertaining to smallpox.


control. Given the importance of the lumber industry, Young wanted to get the attention of Maine policy makers and local officials with the Minnesota smallpox example. Regular contacts with colleagues in different parts of the country and in Europe helped ensure Young and the Board of Health a place on the cutting edge of the emerging public health movement, at least at first. These connections further assisted the State Board in responding to local requests for information and in conducting epidemiological investigations.

With the creation of state and local boards of health, Young’s leadership, and the development of health education materials, Maine’s public health administration appeared poised to remedy the state’s sanitation and disease problems. Yet knowledge about contagion among local people grew slowly in Maine, as it did throughout the country.

**Disease Control Efforts**

Taking their jobs of halting disease outbreaks seriously, late nineteenth century public health officials carried out instructions for quarantine and disinfection, believing these practices necessary for successful disease control. They acted in good faith for the wellbeing of the whole community. Despite their good intentions, many doctors, laypersons, and researchers during this period had misconceptions about disease transmission, even after discoveries in bacteriology and epidemiology expanded knowledge about etiology, treatment, and prevention.

Knowledge about stopping the spread of communicable diseases expanded as researchers identified more germs, but at first they assumed pathogens came from filth. In addition to getting rid of garbage, cleaning privies, and moving manure piles, in the
late nineteenth century health officials added disinfection to combat disease, once they knew about the germ theory. Even when researchers discovered new germs and linked them to particular diseases, many doctors still did not fully understand how various germs infected people, an essential component of communicable disease control.

Often relatives or neighbors who nursed a person became ill themselves or unwittingly transmitted the disease to other family members. Those who thought isolation unnecessary, including lay persons, physicians, and nurses, disregarded public health officials’ suggestions for precautions. For instance, Dr. J. S. Moore, of Bar Harbor, reported his experiences in caring for a family that lost three children to diphtheria in 1885. He noted the nurse who cared for the children did not believe the disease was contagious. When she went home to care for her own children, the nurse continued wearing the same clothes she had worn in the sickroom, even though Moore advised her to change them. Within two weeks one of her own children died of diphtheria, which led her to reconsider the contagious nature of the disease.24

Although Moore faulted the nurse for not changing her clothes, her disregard for this instruction may or may not have caused her child’s illness; her hands could have transmitted the infection, or she may have contracted a mild or asymptomatic case of the disease herself and become a carrier, perhaps transmitting the disease by kissing her child. Nineteenth century health reformers touted the importance of personal cleanliness for health, popularizing regular bathing, but in rural working-class households unwashed hands were commonplace. Not until the new public health movement in the early

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twentieth century did health authorities emphasize hand washing as an essential disease prevention practice.\textsuperscript{25}

When physicians like Moore shared their experiences with diseases in reports to State Board Secretary Young, giving him examples of real-life public health work in rural Maine, they helped other physicians and lay people learn about preventing contagion. When those who interacted with an ill person contracted the same disease, physicians and community members alike had more concrete evidence about disease transmission. Experiences of physicians in rural Maine added anecdotal evidence to knowledge gleaned from public health research, but this knowledge evolved over several decades. As new information became available, local and state officials tended to maintain old disease control practices while adding new ones.

The State Board of Health defined “quarantine” as “the enforced isolation of persons and things coming either by sea or by land from places where contagious diseases exist.”\textsuperscript{26} If a disease required quarantine, health officials posted placards with bold print announcing the disease within at all entrances to a residence to alert potential visitors.\textsuperscript{27} At times they also stationed a guard outside the home to make sure members of the household did not leave. Quarantines were intended to ensure that well persons who had been exposed to an illness and might become infected did not mingle with their


\textsuperscript{26} Maine State Board of Health, “Glossary,” \textit{First Report}, 328.

neighbors and that persons not exposed stayed away until the risk of disease transmission had passed.

Over time, through their care giving experiences, physicians’ and the public’s understanding of germ theory and disease control increased. Even though the number of illnesses and deaths prevented justified isolation practices, quarantines of healthy people who had been exposed were problematic for a number of reasons. Many people became exposed before health officials initiated the quarantine or officials may have overlooked persons with mild cases or asymptomatic carriers, allowing them to spread the disease. When those who were exposed to unknown carriers developed an illness, the disease seemed to generate by itself. This supported the old idea of spontaneous generation, which Pasteur’s experiments had disproved. When the source of contagion was unknown, many physicians continued to attribute illness to dampness, bad air, or fomites (contaminated objects in the sick room), particularly before they understood about the carrier state. When new disease cases emerged many health officials blamed poorly-implemented terminal disinfection, what health officials did to the sick room and items in it to prevent spreading the disease after the patient recovered or died, such as fumigation.28 Unidentified cases and carriers limited the effectiveness of quarantine, but overlooking them was only part of what made this practice problematic.

Most people, including families, neighbors, relatives, and health officials found quarantine difficult. The State Board of Health’s circular titled “Diphtheria, Its Prevention and Restriction,” stated that if visitors “needlessly and obstinately persist in

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coming, they should be driven away.” This suggests that neighbors and relatives may have not understood the risks or the rationale for isolation. Needing to remain at home for several weeks disrupted people’s lives and livelihoods. Not until 1909 did Maine law require local boards of health to assist quarantined families by providing food and other necessities. Towns paid for quarantine-related expenses; ensuring compliance with quarantines cost municipalities much time and money and created a burden for the families involved.

Despite the expense for towns and the inconvenience for families, placards and quarantines reassured many in the community that health officials were taking care to prevent more illness. Even those who may have experienced isolation as a burden may also have appreciated assistance from the local board of health. Both state and local health officials noted in annual reports how some householders were grateful for the placards because they saved the family from the “interruption and annoyance” of having to inform visitors about the illness. While householders may have appreciated not having the responsibility of informing all their neighbors about their quarantine, others likely disliked having signs on their homes, announcing the illness within. For some quarantine may have meant going without necessities. Separation from extended family members and friends during illness may also have caused them to disagree with health officials’ belief that placards reassured the community.

Charles V. Chapin, an early leader in the new public health movement from Providence, RI, noted the “disappointing” results of isolation as a disease control method in cities. Urban areas had many unknown disease carriers. This made quarantine in cities problematic in illnesses in which person-to-person contact transmitted disease, as in cases of diphtheria. In rural areas it helped stop epidemics. When implemented early enough and strictly maintained, isolation helped limit exposure of susceptible persons and thereby reduced the number of disease cases, although it did not prevent new cases transmitted by those whose infection was unknown. As Chapin pointed out in a presentation at a meeting of the American Public Health Association in 1911, the most effective disease control method in such cases was a combination of isolation and aseptic nursing, where the nurse diligently used soap, running water, and clean hand towels for thorough hand washing between patients and wore protective gowns during close patient contacts.32

In addition to isolation, consistent with recommendations from the State Board of Health, local health officials believed disinfection would prevent diseases from spreading. When someone recovered or died the local board of health arranged for terminal disinfection, giving the patient a disinfecting bath and disinfecting the person’s home and belongings. When a person was exposed to a disease but had not yet become ill, the local board of health quarantined the person and ordered the exposed person’s body and clothing be disinfected. The State Board described various methods used for disinfection of rooms in cases of cholera in 1885, including stripping and burning

32 Chapin, Papers of Charles V. Chapin, M.D., 96-99.
wallpaper. In some cases, such as scarlet fever, items of “little value” from the sickroom were burned, while “prolonged boiling” was recommended for such items as clothes or bedding that could withstand it. In cases of other diseases washing walls with lime solution (whitewash) or formalin was enough. Fumes killed germs over several hours when books and papers were placed in tightly covered containers with formalin-soaked rags. Fumigation disinfected rooms.

In 1885, the Maine State Board of Health recommended burning sulfur as the method of choice for fumigation. This process involved much work for both health officials and householders. The Board of Health described the process as follows:

Every opening into the room --flues, doors windows, cracks and crevices-- must be closed, except the door by which the disinfecter is to escape. The sulfur is to be burned in an iron kettle or other vessel set in a tub containing a little water to guard against fire. A little alcohol or kerosene must be poured upon the sulfur, by means of which it may be ignited. Leave the room quickly, for the fumes are highly poisonous when breathed, and close the door tightly. Let the room remain closed for twenty-four hours or more. Then air thoroughly for several days.

In addition to the expense and time required, fumigation was hazardous work. In the best situations, householders complained of burning eyes and stained fabrics; health officials often sustained burns during the procedure.

Time and time again, when disease cases appeared following terminal disinfection, health officials assumed the procedures had not been thorough enough. In 1885 two children of Dr. S. J. Wallace, Secretary of the Board of Health in Castine, came

down with scarlet fever. A week prior to their illness Wallace had visited a household where six months earlier he had cared for two children ill with the same disease. In part because there were no other scarlet fever cases in town, Wallace believed he had transmitted scarlet fever to his own children.\(^37\) When additional cases occurred in the same household after terminal disinfection, health officials often used this as justification for more thorough disinfection procedures. The carrier state was not understood in 1885. Rather than an insufficiently thorough disinfection, a person with a mild or asymptomatic case of scarlet fever may have transmitted the disease, leading to the additional cases.

In his 1895 biennial report, Young noted that an average of 167 people had died from diphtheria in each of the previous three years. He cautioned that without prompt action, the number of annual deaths could be much higher. Even though tuberculosis caused many more deaths (about 1,100 each year) Young wanted local boards of health and doctors throughout the state to recognize the “grave danger” that diphtheria posed. Since some cases were mild, he urged physicians to think of diphtheria, even when there were only signs of “a simple sore throat.”\(^38\) Rather than exposing others to the disease, Young recommended isolating all persons with sore throats, until doctors ruled out diphtheria. The discovery of diphtheria antitoxin in 1894 provided a new rationale for diagnosing the disease in time for this treatment and the significance of this discovery did not escape Young.

To illustrate the gravity of the diphtheria problem, Young recounted how he had received a telegram from the local board of health in Rockland in October 1894, asking that he visit to give his opinion about a “disputed diagnosis.” There had already been


three deaths among the twenty-two known diphtheria cases there, the majority of which had occurred among children who attended the McClain School. There had been other milder cases of sore throat among orphans who lived at the House of the Good Shepherd; these children continued attending school, because a local physician did not believe they had diphtheria. When one of the orphans died, the undiagnosed cases came to the attention of the local board of health. The local board closed the Rockland schools for two weeks while it fumigated the schoolrooms with sulfur and scrubbed walls, floors, and desks with disinfectant. With Young’s help, the local board of health succeeded in controlling the epidemic and its description in the State Board’s annual report provided an opportunity to highlight disease control methods for others to follow.

Young investigated the conditions at the House of the Good Shepherd, focusing on the sanitary surroundings of the home. Revealing his belief that environmental conditions played a part in diphtheria contagion, he noted the building was an old tenement house that was “situated on low ground near a brook and presumably on ground, which had been saturated with filth for years.” Also Young described a privy vault that was in “bad condition” with “abundant emanations” that he thought contributed to the disease problem. In addition, he noted the home was overcrowded. By giving a detailed description of his observations, investigation, and recommendations, Young educated his readers about disease control. In this outbreak the increased diphtheria prevalence was due in part to the attending physician’s failure to isolate the milder cases, thereby allowing the disease to spread.39 The death of Dr. Albee, the chairman of the Rockland board of health, who contracted the disease while investigating the outbreak, may have captured other local officials’ attention even more than the death of a few

school children. Young's description of the outbreak alerted local officials statewide about the human and economic costs of lax reporting, inaccurate diagnosis, and failure to isolate disease cases.

The Rockland diphtheria outbreak illustrates how health officials in the late nineteenth century still associated the disease with filth and crowding. Because Young received scientific journals from throughout the United States, Canada, and Europe, he likely had read about Edwin Klebs' discovery of the bacterium in 1883 and how a year later Friedrich Loeffler identified it as the cause of diphtheria. With his Rockland experiences from the fall of 1894 still fresh in his mind, Young probably read with particular interest early articles about Behring's discovery of the antitoxin, widely reported in the news media and medical literature in December 1894. Young's Rockland experience influenced him to talk with the State Board about this and to highlight information about the antitoxin.

In his biennial report for the two years ending in December 1895, Young described the benefits of diphtheria antitoxin, noting that the State Board authorized one of its members to investigate this new treatment. It sent a representative to visit health department laboratories in Boston, New York, and Washington, D.C. to learn about preparation of the new serum, including how Maine could best obtain a supply of it, demonstrating the State Board's promptness in utilizing this discovery for treatment of diphtheria cases in the state. In 1895, at least, Maine was still on the cutting edge of public health practice.

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Despite the availability and widespread use of diphtheria antitoxin, approximately a quarter of a century later this disease resulted in the sudden death of Maine’s governor in 1921. Governor Frederic H. Parkhurst noticed a problem with his tongue on the evening of January 10th, and the infection progressed rapidly. Although his family doctor arrived from Bangor and administered diphtheria antitoxin, Parkhurst remained seriously ill for a couple of weeks. In late January he recovered enough to receive visitors, but then his condition worsened and he died on the morning of January 31st.42

Charles-Edward Amory Winslow had noted in 1920: “Antitoxic serum has placed the control of diphtheria within our grasp and diphtheria persists as a cause of death simply because of the failure to recognize the disease with sufficient promptness and to apply the protective measures at our disposal.”43 Parkhurst’s death illustrated the fallibility of medicine nearly a quarter of a century after the development of the antitoxin. He may have received it too late or in too small a dose to be effective. Although the antitoxin was frequently an effective treatment, not all those who received it survived.

Despite the difficulty of guarding homes day and night, implementing quarantines and disinfecting private homes proved to be a straightforward task compared with the challenges of carrying out these procedures aboard ships or in remote lumber camps. When a member of the crew of the schooner S. P. Blackburn, on its way to Bangor with a load of coal, became ill with smallpox in June 1901, the ship was ordered quarantined at Fort Point before proceeding up the Penobscot River. The local board of health at Stockton Springs worried about the effects of a smallpox outbreak on the summer tourist

trade; because of this, its members decided to keep the crew quarantined on board the ship and to vaccinate and disinfect them there.

In his biennial report in 1901 Young detailed ship disinfection, including what to do with the patient, clothing, bedding, boots, luggage, and all areas of the ship. While the disinfection procedures made more work for the crew, already living under difficult circumstances because of the quarantine, smallpox patients likely found the personal disinfection the most objectionable. Young described the disinfection bath this way:

Bring him to the lee side of the deck, let him remove his clothing and thoroughly scrub his whole body with soap and warm or quite hot water. Wash off with clear water to remove the soap and then have him bathe thoroughly with solution of corrosive sublimate 1:3000 (1 dram to 3 gallons of water). The hair, particularly, should have great care and attention. He should put on his disinfected clothing and go forward and remain there. Neither he nor the men handling the disinfected goods should go into the forecastle until its disinfection is complete.  

Since a person could not be disinfected until the smallpox rash was almost gone, this requirement could delay a ship with its cargo and crew for many days or weeks before disinfection could be completed and the quarantine lifted.

The remoteness of the lumber camps made isolation and disinfection there especially difficult and expensive, which led the State Board of Health to require vaccination for lumbermen before they arrived in the camps. Young noted that disease control in lumber camps often required medical inspectors and nurses to “travel from twenty to seventy-five miles or even farther through the woods to infected camps by tote

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team, or canoe, or on foot.46 The numerous outbreaks in many areas of the state during the smallpox epidemic of 1902-1903 kept Young and other physicians assisting him busy and in great demand. When they responded to outbreaks in remote locations, they were not available to other towns that requested their services. Because the Board of Health’s appropriation was so small and because of the growing number of smallpox cases throughout the state, mandating vaccination of lumbermen before they arrived at the camps became a cost-effective method of curtailing epidemics.

As the number of smallpox cases grew throughout Maine in 1902-1903, disease control in lumber camps became especially challenging, yet state health officials remained undaunted in their efforts to “stamp out outbreaks of smallpox as quickly as possible.” Because of health officials’ increasing frustration over the ongoing prevalence of disease in the lumber camps, they used increasing amounts of disinfectants. Young’s biennial report noted “The efficient and trustworthy disinfection of lumber camps and of the infected articles in them is manifestly a difficult job.”47 Young maintained the State Board of Health tried to make the disease control measures as unobjectionable as possible, yet it is difficult to imagine burly sailors or lumbermen, who hardly bathed at all, submitting to disinfecting baths. Instructions for inspectors, contract physicians or

46 Young, “Smallpox in Maine in 1902-1903,” Thirteenth Report, 15. These “nurses” were men who did disinfection and assisted with maintaining quarantines in various remote locations in addition to providing nursing care. They were also referred to as “assistants,” “inspectors,” or “disinfectors,” but Young usually referred to Barney Fisher of Jackman as a “nurse.” See Young, “Reports of Smallpox in Various Places,” Thirteenth Report, 57.

47 Young, “Smallpox in Maine,” Thirteenth Report, 24, 29. Young was not sure that it was possible to disinfect thoroughly, but he observed that even in a camp that was “badly infected” and where bedding was not efficiently disinfected and left for use by other lumbermen during the following season, no cases occurred during the next year. He concluded the reason was either “a feeble degree of vitality in the infection of smallpox” or the disinfection was more efficient than he had originally thought.
nurses working in northern Maine wilderness regions and along the Canadian border noted:

You will need a good supply of bichloride tablets to use for the disinfection of the men, particularly of convalescents, after the period of desquamation is completed. For the disinfection of the hair and beard of the men have them wash their heads and beard in bichloride solution made with one tablet to the pint. For the disinfection of the whole body one tablet to three pints is about as strong as should be used.

While disinfecting the clothing the men must necessarily be kept under blankets or otherwise kept comfortable, and after the clothing has been aired out, they must take a disinfecting bath, scrubbing the whole body with bichloride solution, and preferably more than once. Clean or disinfected clothing should be given them to put on once they are through with their last disinfecting bath. This work should be done very thoroughly, even if under disadvantageous circumstances, else they will endanger the public when they are allowed to come down.

This recommendation suggests a disinfecting bath with a more concentrated solution than the one advised for use aboard ships only two years earlier. It seems that as the numbers of cases increased the personal disinfection procedures became more rigorous, perhaps due to rising frustration about unsuccessful disease control and discrimination against French Canadian lumbermen. Following the disinfection of rooms and clothing, the disinfecting bath with bichloride of mercury solution, otherwise known as corrosive sublimate, completed the process.48 Poisonous if ingested, this germicidal solution corroded metals and irritated the skin.49 It is not surprising that people sometimes fled to avoid quarantine and disinfection. Despite the difficulties these disease control measures posed, inspectors did their best to carry them out; they perceived that smallpox cases linked to outbreaks in the camps threatened all Maine communities.

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By the first decade of the twentieth century, lay people as well as physicians understood more about disease transmission, and the “new public health” movement emerged. This represented a shift within the public health field, away from sanitation and toward more research-based methods of disease control, where prevention of new cases utilized findings from bacteriology. Scientists became increasingly skeptical about vague references to the danger of “filth.” Instead they focused more attention on opportunities for direct transmission of microbes and on preventing disease transmission through items the person may have recently touched, such as common drinking cups and towels.50 Public spitting worried many concerned about tuberculosis; although the sputum might contain tuberculosis bacteria, spitting into the street was not as likely to transmit the disease as close contact in a poorly ventilated home or workshop. These changes happened slowly and initially the new public health advocates were in the minority, even among health professionals.

Charles V. Chapin, M.D. challenged terminal disinfection practices, including fumigation. Speaking to the American Medical Association meeting in Boston in June 1906, he argued that this practice did not make sense. Chapin, both an administrator and a researcher, served as Superintendent for Health for the City of Providence, Rhode Island from 1884 through 1931. He pointed out that fomites played only minor roles, if any, in disease transmission; from his observations Chapin argued direct human contact caused most cases of disease.51 Since the library at the Maine Board of Health included the Providence Annual Reports of the Superintendent of Health starting in 1891, it is

51 Clarence L. Scamman, ed., Papers of Charles V. Chapin, xiii, 22-23.
likely that Maine health officials knew about Chapin’s views. Health officials continued disinfection, Chapin maintained, “because of precedent and authority.”

Maine health officials, along with the majority of scientists and the general public still believed disinfection controlled the spread of disease, and they disregarded new research evidence like Chapin’s contradicting this view.

The Maine State Board of Health led in disseminating information about fumigation as a method of terminal disinfection and in the development of the use of formaldehyde gas for this purpose. Maine officials first promoted its disinfection properties and then discovered more efficient methods for producing the gas. Franklin C. Robinson, a chemistry professor at Bowdoin College, invented an apparatus for making the gas in 1886. As Robinson began his experiments on formaldehyde, Young searched the late nineteenth century scientific literature and in 1898 published an extensive pamphlet titled Notes on Disinfectants and Disinfection, including Robinson’s early results. The pamphlet illustrated Young’s interest in improving local public health practice by educating lay members of boards of health and providing them with methods of disease control that they could implement effectively. It was likely very helpful to local boards of health in Maine and elsewhere charged with the task of disinfection, particularly for those with little knowledge of chemistry and microbiology, since it

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53 Charles V. Chapin, Papers of Charles V. Chapin, 66.
included specific directions about what solutions to use and how to make them as well as precautions for their use.\textsuperscript{56}

In 1903 Henry D. Evans, staff chemist and eventual director of the State Laboratory of Hygiene, developed a fumigation method that combined formaldehyde with potassium permanganate, a simple technique that required only these two ingredients and a large enough vessel to contain the vigorous chemical reaction.\textsuperscript{57}

Scientists from as far away as Vienna, Austria, tested this procedure and federal health officials dubbed it "the Maine Process."\textsuperscript{58} One disadvantage was the rapidity of the reaction, which posed new hazards for fumigators. Since it was nearly completed within five minutes, once the chemicals were mixed the fumigator needed to run from the room to avoid the fumes. Although Young pointed out numerous times, in correspondence and reports, that health officials from around the country used the procedure, this claim may have been an exaggeration. When local officials complained that the method produced unfavorable results, such as when the addition of potassium permanganate caused the pail to overflow onto the floor, damaging carpets, state officials tended to blame local incompetence.\textsuperscript{59} Unwilling to consider the shortcomings of the procedure, state officials recommended its use long after new public health advocates deemed it unnecessary; the State Board had invested much time and money to study disinfection methods, which may have been one reason Maine officials adhered to them.

\textsuperscript{56} Albion G. Young, \textit{Notes on Disinfectants and Disinfection} (Augusta, ME: Kennebec Journal Press, 1898), iv, 1-3, 218.


\textsuperscript{59} Young, "Questions--Formaldehyde Disinfection," \textit{Fifteenth Report}, 57.
In 1914 terminal disinfection through fumigation with formaldehyde gas was used throughout the country, though research results questioned its efficacy. Rather than addressing the emerging questions about the need for disinfection, William Dreyfus, of the American Public Health Association, argued for improving standards for this practice. This suggests even experts were divided on the subject.

Economic considerations may have influenced Dreyfus’ position on this issue, since the *American Journal of Public Health*, the organ of the APHA, accepted paid advertising from various manufacturers of formaldehyde disinfecting machines and other products needed for fumigation. Many of its members worked for local health departments that regularly fumigated houses; APHA opposition to this procedure might have put some of the public health sanitarians out of a job. Companies advertising in the *American Journal of Public Health* would not have supported practices that decreased demand for their products.

Fumigation continued in some rural Maine communities into the 1930s. In 1916 the local board of health in Madison noted in the annual town report that seven homes had been “fumigated for various reasons, mostly tuberculosis and cancer.” For the year 1930-1931 it reported that it had fumigated five homes. With few available treatments, public health officials did not stop this practice, despite growing scientific evidence of its ineffectiveness; it reassured both them and the lay public that everything possible was

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being done to control disease. After the death of a person with tuberculosis, who had perhaps already exposed family members over several years, this practice made little sense, but health officials still fumigated and householders often requested it.

Even as evidence from both clinical experiences and research supported ending fumigation, health officials in many communities throughout the country continued it. While scrubbing with a germicidal solution or fumigating killed germs in the environment, these practices were ineffective in preventing new disease cases when the source of germs was direct contact with people who were ill or with asymptomatic carriers. The carrier state became understood once doctors knew more about disease transmission. By the turn of the century Maine health officials took pride in their health education and disease control accomplishments, particularly their laboratory research about formaldehyde disinfection, even though it was often unnecessary and ineffective according to cutting edge information.

**Slow Growth of Official Public Health Services**

Despite health officials' pride and enthusiasm for their work, Maine's public health services evolved slowly. During the late 1880s the State Board of Health recognized that pollution posed health risks, but the legislature denied its requests for additional funding for laboratory services until 1903. Privies, barnyards, and sink drains in rural towns often contaminated drinking water. Typhoid outbreaks caused by contaminated river water led some communities to pursue other water sources. Because of consumer demand for clean water, municipal water companies emerged in many

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After 1903 local municipal water companies published results of water tests in newspapers and to a growing number of consumers a good laboratory report meant clean water. The State Laboratory of Hygiene played a role in swaying public opinion about clean water and provided tests to assist physicians in diagnosing disease.

The State Board suggested avoiding rivers as public water sources due to widespread domestic and industrial pollution and advocated testing water to determine its safety for drinking. As early as its second year of operation the Maine State Board of Health expressed concern about maintaining safe water supplies; by September 1887 it had authorized Secretary Young to begin testing water samples, without additional funding.

Between 1887 and 1901 Young reported the analysis results of 1,575 water samples. He noted the chemical composition of each sample, along with bacterial content and the location of each source in relation to possible contaminants. Young’s descriptions of the water contents, juxtaposed with details about sanitary conditions contributing to the problem and notes about previous illness in households using the water, reinforced his message about the need for improved sanitation. In household after household and town after town, descriptions of wells within a few feet of sink drains or privies accompanied water analysis results showing poor water quality, making clear the connections among sanitation problems, pollution, and illness.

Effective disease control required accurate diagnosis; as research identified the etiology of more diseases, and as prevalence of food-borne and water-borne illnesses

increased, the need for a state hygiene laboratory emerged. Board Secretary Young wanted to expand the state’s laboratory services; after several years of hinting about this need, he began to request these resources more explicitly. In an annual report published in 1900, Young noted:

> in the work of water analysis, as well as in many other directions the State Board of Health and the local boards are badly hampered in not having a fully equipped bacteriological and chemical laboratory. The need of such a laboratory is continually felt. The kinds of work, which could be done in it, are many, and would be of the greatest value. The examination of samples of water is incomplete without the bacteriological analysis. The analysis of food supplies is the necessary first step in learning whether they are what they ought to be and in the prevention of adulterations.

Young not only clarified his request, he also educated readers about the value of laboratory services to the state.

In March 1901 the State Board of Health voted to stop providing water testing until the legislature funded the laboratory. Describing this decision in his annual report, Young cited two reasons for it: “the increase in other kinds of work in the office” and “the failure of the legislature to provide for the doing of any kind of chemical or bacteriological laboratory work.” Another factor in this decision, in addition to the increasing demand for water tests, was a rise in smallpox cases, which required extensive investigation and follow-up to prevent expansion of the outbreaks. The Board hoped to pressure the legislature to act, but eliminating the water tests did not have the desired effect, perhaps because the Board allowed Young to continue testing water samples for local boards of health or in situations indicating “a special and urgent need” for

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Because of its interest in disease control, the Board had difficulty denying water testing in situations involving water-borne illness.

With increased water pollution and growing awareness about risks from disease and food contamination, the Board received more requests from rural townspeople, local boards of health, physicians, and municipal water companies, asking for both chemical and bacteriological laboratory tests. Young continued pleading with the legislature for a laboratory, listing again the many reasons to establish such a facility. In his annual report for 1901, rather than focusing on the public health and medical benefits, he took a new tack. Young wrote regarding the need for a laboratory: "this condition of things is not only unsafe, but it is uneconomical, and is not creditable to the State of Maine. It is the sentiment of many private citizens who understand the situation as well as of those classes of persons entrusted with the preservation of the public health and the cure of disease that we must have a laboratory of hygiene." Young believed the laboratory had widespread support among both lay people and professionals; as the only New England state without such a laboratory, the state's public health services were not keeping up with developments in the field.

The Maine legislature established the State Laboratory of Hygiene in 1903, during a typhoid fever epidemic along the Kennebec River from Benton to Richmond, with 612 cases and 53 deaths. The laboratory soon had more work than its staff could handle.

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70 Young, Twelfth Report, xi.
first director, J. P. Russell, summarized the first thirteen months of laboratory tests, noting the numbers of sputum and blood examinations for tuberculosis, diphtheria, and typhoid fever, in addition to tests on water samples for "colon bacilli" to evaluate the safety of water supplies, among others. Pharmacies throughout the state stocked the materials for collecting laboratory specimens, in case physicians ran out of them. The tests aided local physicians and boards of health, since most small rural hospitals lacked laboratory facilities. Establishing the State Laboratory of Hygiene had the potential to improve Maine's water quality and disease rates.

In 1907 the State Board of Health outfitted the laboratory with equipment needed for chemical and bacteriological analysis of milk, but when it invited local boards to send in milk samples for testing, very few did. Since the laboratory had the equipment, in 1908 the Board allowed the State Department of Agriculture to send milk samples; this department wanted to investigate milk supplies statewide.

When the legislature passed a law in 1909 requiring milk producers to adhere to sanitation and production standards to prevent adulteration, the law put the State Department of Agriculture in charge of enforcing these new requirements. The state laboratory assisted with testing milk samples, sharing its staff and equipment to monitor compliance with the new law, even before the Department of Agriculture had received its appropriation for this additional inspection work. This taxed the laboratory's resources,

but when the Department of Agriculture received its appropriation, it placed a chemist in the Laboratory of Hygiene. Laboratory Director Evans further assisted the Department of Agriculture by testifying in court cases against producers of adulterated milk or butter, again demonstrating his willingness to collaborate in the interest of improving public health by enforcing standards for clean milk production.  

In 1913 the legislature changed this collaborative arrangement between the Department of Agriculture and the Laboratory of Hygiene by requiring the Department’s chemist to work out of the Experiment Station in Orono instead of out of the State Laboratory. This action in effect cut the laboratory staff. It is unclear whether or not this law was an effort to relieve the Department of Health of the extra work of testing dairy products by shifting this work to the Experiment Station. Perhaps the Department of Agriculture was tired of subsidizing the Board of Health’s work or dissatisfied about the lack of adequate laboratory facilities in Augusta. Since the two departments had collaborated well for several years and both seemed to appreciate the arrangement, it seems unlikely that this change resulted from a power struggle between them. Instead it may have represented a bureaucratic or an organizational issue. Evans described how the collaboration between the Departments of Health and Agriculture benefited both departments, noting “Any time not needed by the Department of Agriculture was at the

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disposal of the laboratory. As conditions actually worked out this resulted in the gain to the laboratory of about six months service during the year, as the work of the two offices was so dovetailed that the slack periods of one office were brought at the rush periods of the other. This change appears to have been a political whim of the legislature; the staff of the Department of Agriculture found the new arrangement even more unworkable.

State Dairy Inspector, Russell S. Smith, had the additional milk inspection duties of the chemist; when he left his position in October 1914, he criticized “frequent changes of office due to political preference” and offered a candid assessment of how the state might accomplish the milk inspection work:

In January, 1914, samples of milk and cream were required by statute to be analyzed at the Experiment Station, Orono. Owing to increased distance of shipment and to very poor express delivery, the arrangement has hardly been satisfactory to this office. The work could be carried on more conveniently if a laboratory were situated in a more central part of the state where express shipments could be received better. As local inspection in cities and towns is being left to the state, more samples should be taken by more agents and a more complete examination of the milk, as regards the cleanly condition or freedom from disease, should be made. A central laboratory, situated in Augusta, where a chemical and bacteriological examination of the milk supply of each city could be made each month, would result in desirable milk conditions. An alliance with the State Board of Health with regard to a central laboratory has been discussed and it seems advisable.

Although both the State Board of Health and the Department of Agriculture wanted to improve the rural as well as urban milk supply, protecting the milk supply in cities had a potentially larger impact on public health; it made no sense to Smith to locate the milk analysis so far from Maine’s two largest cities. Smith’s recommendation to collaborate

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with the State Board of Health likely gave State Laboratory of Hygiene Director Evans hope that he might at some point again have jurisdiction over the milk inspections.

On March 24, 1915 the legislature required milk inspections by the State Board of Health, leading State Commissioner of Agriculture, William T. Guptill, to complain in 1916 that four separate milk inspectors with different standards created "a chaos of inspection." Guptill’s department had one set of standards with state-wide enforcement authority. In addition to the work of Department of Agriculture milk inspector C. W. Wescott, the 1915 law allowed the State Board of Health to inspect milk anywhere in the state to protect the public from milk-borne illness. Though Maine law had required local milk inspections by cities and towns since 1903, many did not have this third category of milk inspection due to a lack of funds. The fourth category of inspectors had no authority in Maine. They came from Boston, attempting to protect that city’s milk supply by inspecting milk from Maine’s farms and prohibiting its dealers from purchasing dirty milk. Guptill approved of the Board of Health’s inspections, but thought the legislature should ban the Boston inspectors and require improved coordination between the Department of Agriculture and local milk inspectors.

The Legislature resisted giving the Board of Health enough resources to expand the Laboratory of Hygiene, even though the demand for these services had increased and laboratory services had become an essential part of clinical medicine and public health.

In 1913 and again in 1915 the State Board of Health tried to obtain funding for more staff.

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82 Revised Statutes, 1903, Chapter 39, Sections 9, 10.
and space. A 1913 bill in the legislature requested funds to build a new building for the laboratory, but it did not pass. Because the laboratory was too small, Evans pleaded for an increased appropriation so the quality and quantity of work could continue. In 1915 the legislature approved a $1,000 funding increase to allow the Laboratory to hire a chemist, but the bill requesting a new laboratory building again failed to win support.

When Evans realized the Department of Agriculture chemist had been permanently relocated to Orono, he downsized his plans for space and opted to move the laboratory into a new office the city of Augusta offered the Board of Health in the Purington Block on Water Street.

When the State Department of Agriculture had no milk inspector for several months, after Smith’s departure to take a job in Washington, the Laboratory of Hygiene assisted with milk analysis. This continued for several months until, at its first quarterly meeting in 1915, the State Board of Health voted to instruct the laboratory director “to do no more work in the examination of samples of milk for the state commissioner of agriculture” because of a lack of time and facilities. Besides prioritizing the Laboratory’s work and conserving its resources, the Board may have done this in retaliation for losing the assistance of the chemist. Perhaps the Board intended this action as a strategy to pressure the legislature to increase funding for the laboratory, believing that not testing milk would raise an outcry. Or, maybe the Laboratory of Hygiene’s new headquarters on Water Street were simply too small for continuing to assist with the milk

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86 [Albion G. Young], “A Milk Outbreak of Typhoid Fever,” Bulletin of the State Board of Health of Maine 3 (September, 1914): 41-44.
analysis. It is likely several factors influenced the State Board’s decision to stop the milk testing.

The Board of Health’s own investigations of milk-borne illness may have taken up all the time available for milk testing; board secretary Young had been busy in the fall of 1914 testing numerous milk samples from a milk-borne typhoid fever outbreak in the town of York. Although York Harbor had only a few typhoid cases in August 1914, members of the York Village Improvement Society conferred with the local board of health and the town selectmen, urging them to seek expert advice to determine the source of disease. The town officials responded because they worried that typhoid would discourage vacation visitors. They first called State Board of Health Secretary Young; in early September he investigated, spending several days in this coastal village, tracking the source of the cases to a local milk supplier and giving advice to the local board of health. Later he returned to present his findings at a special town meeting.87 Following Young’s report, the town voted to pay Professor Milton J. Rosenau of Harvard University to conduct a sanitary survey. He recommended hiring a qualified health commissioner to oversee the town’s sanitation and provide ongoing surveillance for disease control. As soon as possible, the town hired William Eustis Brown, a well-trained health officer. Leaders of York’s Board of Selectmen, Board of Health and Village Improvement Society co-authored an article published in The American Journal of Public Health reporting on this work, noting how proud they were of the town’s swift action in response to the typhoid fever epidemic.88

By improving its local public health administration in response to the typhoid fever outbreak in 1914, the town of York earned a reputation as a “pioneer” in local public health reform in the state. Later Maine public health officials praised York’s foresight and progressive reform of its public health administration. Five years after York hired its full-time health officer the State Department of Health News Bulletin reported that “at York the people are cheerfully bearing a per capita expense of $1 a year to pay for such an officer’s salary and equipment.”89 The town of York provided a model for the whole state, but few other towns followed its lead.

Young had pointed out in 1909 that ineffective supervision of water supplies contributed to high typhoid fever death rates was; he criticized the state’s “do-nothing” policy regarding water pollution.90 In the years leading up to 1910, an average of 135 people died of typhoid fever in Maine each year and perhaps ten times that number had the disease.91 Despite the availability of the laboratory services, over the next few years worsening water quality in the state demonstrated the need for governmental oversight. Young had been testing water since 1887 and the Maine State Board of Health viewed water surveillance as part of its role, but the legislature had not given it the authority to regulate water supplies. Not long after the legislature transferred milk inspection to the Department of Agriculture, it solved the need for regulation of public water supplies by creating the Public Utilities Commission in 1915.92

92 Secretary of State, “Chapter 129: An Act to Create a Public Utilities Commission, Prescribe its Powers and Duties, and Provide for the Regulation and Control of Public Utilities,”
The Board’s frustration mounted when Young received a request to inspect a situation in Mechanic Falls where waste from a creamery had reportedly polluted the town’s water supply. He discussed this request with the Board and noted in his biennial report: “It is the sentiment of the Board that, in view of the fact that it has presented to three legislatures a bill providing for the supervision of the public water supplies by the State Board of Health and providing a competent engineer to take charge of the greater part of that work, the secretary is under no obligation to do any more of this kind of work than he can do without neglecting the other work of the office.” Although the Board felt Young was not obligated to investigate the problem, it authorized him and the Board president to consult with the creamery representative when it was convenient for them to do so. Even though the legislature had decided not to make the Board of Health responsible for surveillance of water supplies, the Board tried to assist communities concerned about water pollution.

Evans also acknowledged that the Board of Health might never have the authority to protect water supplies and regretted the State Board of Health and the laboratory had “nothing but advisory functions in the matter of water control.” He continued:

They may know that a water is absolutely unfit to use for domestic purposes, and yet all that they can do is to warn the users of the trouble. They can compel no correction of the danger. In addition they are hampered through the lack of an inspector....

While the State Board of Health has no authority in compelling the correction of pollution of the public water supplies of the State, and has never been able to obtain such authority from the legislature, yet the past year has given us a remedy for existing conditions if the people, served by the offending companies, wish to employ it. All of the water companies of the state are public service corporations, and, as such, come under the

Acts and Resolves of the Seventy-Sixth Legislature of the State of Maine, 1913 (Augusta, ME: Kennebec Journal Print, 1913), 133-136. Although this law passed in 1933 the governor suspended it until it was approved by voters in a general election in September 1914.

jurisdiction of the Public Utilities Commission. This Commission can compel correction of existing conditions along the line of polluted water supply, and has twice issued its orders to that effect during this past year.94

Since the Board of Health lacked the authority to regulate public water supplies, Evans recommended local communities take action through the Public Utilities Commission to deal with polluted water.

Despite his lack of jurisdiction over water supplies, Laboratory of Hygiene Director Evans continued reporting results of the laboratory’s water monitoring, noting in December 1915 a 16.9 percent increase in the number of tests over the previous biennium, with most public water companies voluntarily submitting samples. Evans judged this a “very creditable performance” and noted that two men had completed most of the work.95 Like continuing to test milk after the legislature put the Department of Agriculture in charge of milk safety, the Laboratory of Hygiene tested and published water analysis results, regardless of the fact that it could not remedy unsafe water supplies. By continuing the water and milk testing, along with other diagnostic tests, the State Board of Health assisted local citizens, physicians and boards of health, doing all it could to call attention to unsafe water supplies.

Dispersed regulatory authority, a chronic lack of funds, and varying local enthusiasm contributed to the slow growth of official public health services in Maine. Despite these factors, ongoing leadership by the State Board of Health characterized Maine’s public health administration between 1885 and 1916. The state might have given the Board of Health authority for regulating water supplies and food safety, but instead the legislature limited the Board’s role and dispersed authority among other state

departments, including the Department of Agriculture and the Public Utilities Commission. Despite its limited authority and chronic lack of funds, the Board of Health persevered in its efforts to improve public health throughout the state.

Maine State Department of Health

By the mid-1910s communicable disease control duties overwhelmed State Board of Health Secretary Young. Each week he had a full itinerary, traveling to all corners of the state on disease investigation and sanitation missions. It was not unusual for him to work in the field, ranging from northern Maine lumber camps to coastal islands, as many as eighteen days out of twenty. With inadequate facilities for tuberculosis care, meager laboratory funding, and worsening water pollution (often leading to typhoid fever outbreaks), Young needed more resources, both financial and human.

Though educational materials describing tuberculosis prevention had been available since 1889 and deaths from the disease had decreased, tuberculosis remained a significant public health threat that stimulated further reform, including changes in public health administration and regulations aimed at stopping the spread of the disease. Tuberculosis, the number one cause of death in Maine in 1912 and 1913, killed 1,972 people in this two-year period; growing concerns about this disease among both health professionals and the lay public led to reforms in Maine’s public health administration. Unaware of the risks of infecting close contacts, including household members, classmates, and co-workers, people with tuberculosis coughed out germs into the air that others in their surroundings inhaled. Enclosed spaces like homes, workshops, and schools provided opportunities for repeated exposure. Many people remained ignorant about tuberculosis, still believing it hereditary instead of infectious.

96 Young, “Introductory,” Seventeenth Report, xi.
In part because of the ongoing tuberculosis problem, more people in Maine became aware of the need to improve the state’s public health administration. Over time the 1887 law requiring towns to have a local board of health was inadequate. Although supposedly accountable to the State Board of Health, local boards remained autonomous. Many local board of health members still lacked public health expertise and some disregarded the State Board’s recommendations. Governor Carl E. Milliken referred to public health reform in his inaugural address, on January 4, 1917, when he spoke in favor of expanding the powers of the State Board of Health. Milliken noted that “a distinguished authority has estimated the pecuniary loss alone from this waste of life and productive energy at $8,000,000 annually for the State of Maine,” a reference to the work of the Maine Anti-Tuberculosis Association.97 The governor went beyond the need for tuberculosis treatment, advocating stricter prevention measures, including “a State law forbidding the sale of milk from untested cows” that were potentially infected with tuberculosis and a bigger role for state health officials in surveillance of public water supplies.98 Since disease control activities had consumed the Maine State Board of Health for several years, many health officials and reformers believed creating a department within the state government with additional resources and responsibilities would solve the problem.

97 Carl E. Milliken, “Inaugural Address (Jan. 4, 1917),” reprinted in Acts and Resolves as Passed by the Seventy-Eighth Legislature of the State of Maine, 1917 (Lewiston, ME: Lewiston Journal Co., 1817), 870. Milliken was familiar with this work, since he had served on the Association’s board of directors in 1913. See Bulletin of the Maine Anti-Tuberculosis Association 1 (January 1913): 5.

98 Milliken, “Inaugural Address (Jan. 4, 1917),” 871. The Maine Legislature had included oversight of public water supplies in the purview of the newly created Public Utilities Commission a couple of years earlier and many public health officials believed the authority to regulate water supplies belonged to the State Board of Health.
The Maine Medical Association’s legislative committee drafted a bill that proposed to reorganize the State Board of Health; Dr. Sylvester J. Beach, of Augusta, described the bill and its rationale in the February 1917 issue of the *Journal of the Maine Medical Association*. Modeled after recommendations of the American Medical Association and the United States Public Health Service, the bill proposed to restructure the State Board to form a centralized state organization headed by a health commissioner and an advisory Public Health Council. The bill called for specialized divisions within the new state department and divided the state into districts. It required that district health officers be “graduates of an incorporated medical school and admitted to practice medicine in this state, or shall have been certified in public health by a reputable institution of collegiate grade.” The bill also proposed an appropriation of twenty-five cents per capita for public health. Since the state population in 1917 was 788,844, this would have appropriated approximately $197,211. Beach noted the total appropriation prior to that time for public health in Maine was less than two cents per capita, or around $15,000; he emphasized that Young had been doing a good job, but the State Board of Health had inadequate funding and too few staff. Citing various public health deficiencies in the state, Beach acknowledged the noncompliance of many physicians with reporting communicable diseases, as required by law. Because members of local boards of health usually had other jobs in the community, they often found it difficult to enforce regulations when violators were their neighbors. Beach argued the Maine State

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Board of Health needed to be reorganized to allow more time for administrative functions, more field staff to do the work, and more funding for the whole operation.\textsuperscript{101}

Before a version of this bill passed, it faced opposition, perhaps due to local resistance to the expense or because the proposed health district structure meant more limited power for local officials. In the end, members of the House of Representatives split almost evenly on the issue, approving the bill by only two votes on April 5, 1917.\textsuperscript{102}

This legislation increased the authority of state officials and expanded the staff available in the field. Towns still maintained their local boards of health, and after July 1917 three district health officers oversaw public health work in their districts and a statewide health commissioner directed the State Department of Health. This change eliminated the State Board and created the Public Health Council. Many local boards noticed little difference in this new organizational structure, since they were already accustomed to receiving assistance from and reporting to the former State Board.

Including the $4,000 the state appropriated for venereal disease control and $4,000 matching federal funds for this purpose, the per capita public health spending amount for that year totaled 4.8 cents instead of the 25 cents the original bill proposed.\textsuperscript{103}

Although this amount more than doubled the previous funding, it still provided a minimal appropriation, given the department’s goals and needs. The State Department of Health still paid for disease control in all the unorganized territories, which increased its expenses. With meager funding and ongoing opposition evidenced by the close vote for

\begin{footnotes}
\footnote{Beach, “An Act to Create a State Department of Health,” \textit{JMM 7} 240-241.}
\footnote{\textit{Legislative Record of the Seventy-Eighth Legislature of the State of Maine} (Augusta, ME: Kennebec Journal Print, 1916), 1320.}
\footnote{Secretary of State, “Chapter 197,” \textit{Seventy-Eighth Legislature}, 198.}
\end{footnotes}
the measure's approval in the Maine legislature, the new State Department of Health began its work under less than optimal conditions.

Maine's progressive action to reorganize its Board of Health caught the attention of public health professionals in other states. In an article published in the May 1917 issue of the *American Journal of Public Health*, Clair Elsmere Turner shared his views about Maine's achievement. A doctoral student at the Harvard-Technology School of Public Health and an instructor and research associate in the Department of Biology and Public Health at the Massachusetts Institute of Technology, Turner also had ties to Maine; he grew up in Harmony, a small town in Piscataquis County, and graduated in 1912 from Bates College. Turner applauded the state's action to reorganize its Board of Health, noting that concerns about the war, prohibition, and suffrage had overshadowed this important public health news in local Maine newspapers. He credited the legislature and Governor Milliken with "giving the state a form of health organization second to none in the country, one which is sure to place Maine among the leading states in preventing disease and safeguarding the health and welfare of its citizens." Putting Maine in league with New York City and Massachusetts, Turner noted the new law modeled the system of public health administration already in place in those states.105

In July 1917, when Leverett D. Bristol, M.D., Dr.P.H., a former professor of public health from Minnesota, became Maine's new health commissioner, he promptly began reaching out to local communities and collecting data about the state's public health.

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health problems.\textsuperscript{106} Appearing on the program at meetings of county medical societies and voluntary health associations throughout the state, Bristol talked about the new department.\textsuperscript{107}

Bristol arranged for Turner, who had praised Maine’s new public health administrative structure, to work as a special field agent of the State Department of Health to do a comprehensive assessment of the state’s sanitary conditions. Turner began data collection on August 15, 1917, starting with coastal resorts and moving inland toward Moosehead Lake. In addition to looking at water safety and sewerage disposal, he investigated the activities of local boards of health.

In his report, Turner described Bingham, in Somerset County, as a town where the local board of health functioned in name only.

Bingham is not a typical summer resort town but is on the outskirts of a hunting region and within striking distance of several large sporting camps. From the public health viewpoint, it is typical of the majority of small Maine country towns in that it maintains a Board of Health only because there is a legal requirement that this must be done. The members of the Board appear to feel that it is a disgrace to serve on what they call the “Smell Committee” and the chairman of the Board, Mr. Whitney, a local hardware dealer, vigorously denied that he had anything to do with the Board of Health until he was persuaded that the Special Field Agent was really a state official, who knew the names of members of the Board and not a summer visitor who wished to enter a complaint about his neighbor.\textsuperscript{108}

Whitney saw Turner as a threat. Although Turner had grown up not far from Bingham, his university training in bacteriology and sanitation, made him appear to Whitney as a

troublesome visitor from out-of-state. Whitney had no training in public health and needed to fit his investigations of smells around his busy schedule at the hardware store. Whitney likely overlooked some reportable diseases; he may have been reluctant to enforce disease control measures among his customers. Since only two months had passed since the reorganization of the State Board of Health, this example highlights one local situation at the starting point of the new State Department of Health, demonstrating the need for state supervision to stimulate the effective functioning of local boards.

A combination of concerns about maintaining local control and desires to conserve state funds threatened further development of Maine's public health administration in 1919. That year the legislature considered a bill to amend the law that created the State Department of Health two years earlier. The 1919 bill proposed to require local health officers, paid in part by state funds, and to allow towns to create health unions to share a local health officer. It died in the State Senate, but the House resurrected it when an alarmed Representative Barnes of Houlton told his colleagues, "by action of the Senate we have abolished the State Department of Health."\(^{109}\) The fact that the Senate allowed this to happen suggests ongoing ambivalence about the need for a state health department and the low priority of public health among many legislators, or at least their ongoing reluctance to spend more money for it.

In his appeal to reconsider the issue, Barnes noted tensions between urban and rural parts of the state:

> Now this bill will not appeal very strongly to the gentlemen from the cities, who in times of ill health in their families have an abundance from which to draw for assistance. Men never knew until the epidemics of the last twelve months, the smallpox that we had earlier in the summer, and

\(^{109}\) Legislative Record of the Seventy-Ninth Legislature of the State of Maine, 1919 (Augusta, ME: Kennebec Journal Print, 1919), 1176.
the influenza that we had late in the fall, how much it means to the sections of Maine where there are not competent advisors in sufficient number to meet the demands of the people.110

Barnes’ comments reveal the disparity in access to public health services between rural and urban areas, the growing awareness among rural people of the benefits of these services, and that regional interests affected the state’s public health priorities.

In addition to Barnes’ argument that rural areas needed local health officers, another rationale for this bill was the lack of accountability of local boards of health to the State Department of Health. Just as the State Board had difficulty getting cooperation from towns in 1885 without local boards of health, by 1919 the lack of local health officers limited what district health officers could demand of the local boards; the proposed law requiring all municipalities to hire a local health officer sought to remedy this problem.111

When the legislature passed the law in 1919 requiring local health officers only Portland and York employed them and many local boards of health had became inactive. By requiring all towns and cities to employ a health officer, this law ensured there would be local officials to implement state health directives, even in rural areas. By September 1920 four more cities had added full-time health officers.112

110 Record of the Seventy-Ninth Legislature, 1176.
111 Secretary of State, “Chapter 172: An Act Amendatory of and Additional to Chapter One Hundred and Ninety-seven of the Public Laws of Nineteen Hundred and Seventeen and Chapter Three Hundred and One of the Public Laws of Nineteen Hundred and Seventeen, Relating to the State Department of Health,” Acts and Resolves As Passed by the Seventy-Ninth Legislature of the State of Maine, 1919 (Augusta, ME: Kennebec Journal Co., 1919), 179-180.
In addition to increasing the authority of state health officials, the 1919 law increased Maine’s health appropriation.\textsuperscript{113} The new law included three parts. First, it increased funding for the staff, headquarters, health commissioner, and public health council. It also provided state aid to communities for employing qualified local health officers and doubled the previous venereal disease appropriation.\textsuperscript{114} With additional funds and a larger staff, the new State Department of Health showed much promise to improve health in Maine. With the new funding level of $76,000, along with $8,000 in matching federal venereal disease funds, the state’s annual per capita spending for public health approached 11 cents for 1919. By speaking to professional and voluntary groups throughout the state since the beginning of his tenure, Health Commissioner Bristol rallied Department of Health supporters who in turn lobbied legislators to increase the state health appropriation.

Besides requiring local health officers and clarifying the subordinate relationship of local boards to the State Department of Health, this law gave it all the powers previously vested in local boards. Taken together the 1917 and 1919 laws that reformed Maine’s official public health department represented a shift from local power to the state, centralizing the authority of the State Department of Health. By 1920 the health districts had expanded from three to eight; also within the department six divisions, “Administration, Communicable Diseases, Diagnostic Laboratories, Sanitary Engineering, Education and Publicity, and Vital Statistics,” had grown by three more,

\textsuperscript{113} Secretary of State, “Chapter 172,” \textit{Acts and Resolves, 1919}, 179, 181.

\textsuperscript{114} The bill did not mention that Maine was collaborating with the federal government on its venereal disease project, which began during World War I with federal funding to the states through the Chamberlain-Kahn Act of 1918, and that this $8,000 appropriation was required for receiving matching funds. This acceptance of federal funds for state public health work became significant in the 1920s, when Maine rejected the provisions of the federal Sheppard-Towner Act.
each with a full-time director. The health districts functioned much like local health
departments “subject to the supervision and direction” of the Department of Health.\textsuperscript{115}
This structure provided qualified supervision and consultation closer at hand than when
board secretary Young covered the whole state between 1885 and 1917, thereby
improving public health administration at the local level.

Opposition to Bristol’s agenda for expanding the State Department of Health
fueled the ongoing battle with the legislature over health appropriations. In a speech he
delivered in October 1920, Bristol outlined the achievements of the State Department of
Health since its beginning in 1917 and described his plans for the Department’s future.
In 1918 the Department organized the Division of Venereal Diseases (supported in part
by federal funds) and the Division of Hotel Inspection. In 1920 it formed the Division of
Public Health Nursing and Child Hygiene, under the leadership of the first state public
health nursing director, Edith Soule, R.N.; for the first year her salary was paid with
funds from the American Red Cross and Maine Public Health Association.\textsuperscript{116} The future
goals Bristol outlined included obtaining a new building for the department, further
expansion of laboratory services, and increased control of state health authorities over
small communities. Bristol also favored grassroots health education to increase local
support for these changes, expanding the Medical School of Maine to include a school of
public health, annual state-funded continuing education for local health officials, and
state funding to towns for implementing changes in public health administration.\textsuperscript{117} For

\textsuperscript{115} Secretary of State, “Chapter 172,” \textit{Acts and Resolves, 1919}, 180.
\textsuperscript{116} Bristol, “Public Health Accomplishments and Needs in Maine,” 358. Bristol
presented this speech to four different audiences between October and November 1920 and it was
also published elsewhere. See the \textit{Journal of the Maine Medical Association} 11 (March 1921):
243-259.
\textsuperscript{117} Bristol, “Public Health Accomplishments and Needs in Maine,” 369-374.
citizens and legislators concerned about spending money or local townspeople concerned about the loss of their power, Bristol's plans likely appeared too costly, intrusive, and ambitious.

An additional provision of the 1919 law amending the structure of the State Department of Health, allowed municipalities to form combined health districts made up of several adjoining towns, cities, or plantations, if they employed a qualified full-time health officer. Health Commissioner Bristol wanted all Maine towns to become part of a health union and stated publicly on several occasions that the state should have around 100 unions, with several towns sharing one health officer rather than 400 local boards of health. Following the 1919 law allowing health unions, two developed in 1920, including the MOTBOV Union, made up of Milford, Old Town, Bradley, Orono, and Veazie, and another including Waterville, Winslow, and Vassalboro. Since the 1919 law was narrowly accepted, some citizens may have feared further erosion of local control; others may have disagreed with Bristol's plan for creating health districts.

In 1921 the Maine Legislature considered a bill to appropriate still more funds for the state's public health administration. This bill proposed to increase salaries, fund equipment, and provide an extra appropriation for venereal disease work. The ongoing desire to save taxpayers' money doomed the bill. Public health funding increased by only $15,000 in 1921; that year the state lost several key public health professionals.

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121 Secretary of State, "Chapter 162: An Act to Amend Chapter One Hundred and Ninety-seven of the Public Laws of Nineteen Hundred and Seventeen as Amended by Chapter One Hundred and Seventy-two of the Public Laws of Nineteen Hundred and Nineteen and to Amend Chapter Nineteen of the Revised Statutes as Amended, Relating to the State Department of..."
Though the legislature had approved a twenty-five percent salary increase for him, Bristol took a new position in another state.122

The expansion of the Department of Health’s services stopped once Bristol left Maine. Following appointment as his successor, Dr. Clarence F. Kendall noted in a January 1922 letter to the United States Public Health Service that the state had not decided if it “wanted to carry on the work begun by Dr. Bristol.”123 As an administrator, Kendall lacked Bristol’s public health vision and at times appeared more concerned about costs than stopping diseases. During a typhoid fever epidemic in Van Buren in 1927 and against the advice of other Maine State Department of Health staff, he ordered that only indigent residents be offered free typhoid fever vaccine. When the U. S. Public Health Service instructed Kendall that all Van Buren residents should be offered the vaccine, he balked at the expenditure.124 Even though he had worked for many years in public health, Kendall still may have identified more with AMA’s support for private practice doctors, rather than for public health.125 No further structural changes occurred during Kendall’s tenure at the Department of Health between 1921 and 1931; the department continued its collaboration with voluntary health organizations and maintained its health districts.

123 C[larence] F. Kendall to B. S. Warren, 4 January 1922, Records of the United States Public Health Service, Record Group 90, NACP.
124 E. C. Sullivan to W. F. Draper, 28 December 1927, Records of the United States Public Health Service, Record Group 90, NACP.
A second reorganization of the state’s health department came in the early 1930s. Concerns about expansion of state government in Maine led to the Code Act of 1931, which revised laws pertaining to the state’s administrative functions. This law affected public health administration because it combined the departments of health and welfare in order to save money and streamline state government. With the health and welfare departments merged, the law consolidated authority for public health administration at the state level. The former State Board of Health, begun in 1885 and reorganized as the State Department of Health in 1917, became known as the Bureau of Health, one of three bureaus within the new State Department of Health and Welfare.\textsuperscript{126}

In addition to combining state departments, the Code Act of 1931 also granted the commissioner of health and welfare the authority to approve the appointments of all local health officers and to remove them from office if they refused to adhere to state regulations.\textsuperscript{127} By expanding the state’s control over local public health administration the legislature intended to further increase compliance with health regulations. The Code Act also continued state funding, in place since 1919, for those qualified local health officers who worked full-time. In addition it included a provision whereby municipalities could appoint local health officers to act in place of local boards of health.\textsuperscript{128}


\textsuperscript{128} Secretary of State, \textit{Acts and Resolves as Passed by the Eighty-Sixth Legislature of the State of Maine from April 4, 1931, to March 31, 1933} (Augusta, ME: Kennebec Journal Company, 1933), 1, 25.
With its authority over local boards of health expanded through the provisions of the Code Act, the State Bureau of Health's power further increased when a 1935 law disbanded local boards of health.129 The law gave local health officers the responsibilities the local boards previously held.

**Trends in Public Health Administration, 1885-1935**

Between 1885 and 1935 state resources, particularly expert consultants and laboratory services, expanded and local control decreased. Reorganizing the original State Board of Health did not result in the changes many public health officials and reformers had hoped for in 1917. Then some local boards' inaction to remedy sanitation problems and control disease led the legislature to require local health officers in 1919. The ideas of progressive public health administrator Leverett Bristol became too grandiose and expensive for conservative legislators, yet he made a significant impact on Maine's public health administration during his three-and-a-half-year tenure as health commissioner. His leadership developed the health district system, but the reorganization creating this system represented a spurt of Progressive activism that did not last within state government. Later, by consolidating the state departments of health and welfare and disbanding local boards of health, the legislature hoped to save money and improve the efficiency of the state's public health administration. Between 1885 and 1935, Maine presented a combination of progress and ambivalence in regard to public health. Although knowledge about the germ theory and disease causes increased throughout this period, Maine officials continued older disease control practices, like fumigation. Despite emerging research, many local health officials had limited understanding of

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disease transmission and Maine was slow to accept changes in disease control recommendations.
CHAPTER 2
RESPONSES TO PUBLIC HEALTH PROBLEMS

Communicable disease control required knowledge and action of local residents and health officials on many fronts, crossing local, county, state, regional, and national boundaries. While working-class residents in rural towns tended to resist disease control requirements, often the more educated middle-class residents assisted town officials with public health duties. In the late nineteenth and early twentieth centuries, as local, state, and national officials adapted to meet rural Maine’s public health challenges, some local residents accepted and welcomed their expertise, whereas others resented the intrusion. Both Maine’s residents and health officials varied in their acceptance and implementation of practices to protect the public’s health. Inaction and action to obstruct, reverse, or simply not implement health protection policies may have indicated opposition. Factors influencing responses to public health problems included competing political interests, class, language and cultural differences, and a lack of knowledge of what to do to prevent disease.

Late-Nineteenth and Early-Twentieth-Century Epidemiology

Effective disease control measures depended on the disease, and although physicians still understood little about causative organisms and modes of transmission, epidemiologists had made much progress in this area by the turn of the century. During the Spanish-American War early inattention to sanitation in military camps in the United States caused typhoid fever to spread throughout the troops between July and October 1898; the disease infected over 20,738 soldiers and 1,590 died. Vincent J. Cirillo, in Bullets and Bacilli: The Spanish-American War and Military Medicine, reviewed the late
nineteenth century medical literature, noting “by 1898 the causative agent of typhoid fever had been identified, the Widal serodiagnostic test was available, the mode of transmission via infected feces was established, and effective preventive measures (disinfection and scrupulous cleanliness) were known.” Cirillo argued that this knowledge did not prevent the epidemic in part because of problems in military culture. The epidemic showed the importance of preventative medicine and education of military officers in hygiene to safeguard soldiers’ health and readiness. This epidemic led to reforms in military training and in the development of an anti-typhoid vaccine. Cirillo described how this wartime typhoid epidemic led Army medical researchers to discover the importance of direct contact and the carrier state in typhoid transmission, two new critical factors for effective control of the disease.¹

Typhoid fever had long been considered a “filth” disease. Since flies bred in garbage and manure, many public health officials and researchers assumed that they transmitted the disease, but this mode of transmission remained unproven until the investigations of the U.S. Army Typhoid Board during the Spanish-American War. The Typhoid Board found fly transmission partly responsible for transmitting the disease, but wartime encampment conditions skewed this result. Living conditions at the national encampments, located in Georgia, Florida, Virginia and Pennsylvania, were crowded. Typhoid-infected feces overflowed privies and surrounded tents and fly populations multiplied. With unsanitary food preparation and dining facilities, flies from the privies came in contact with both food and with soldiers who were ill with typhoid fever. Under these conditions flies had more opportunities to transmit the bacteria than in the average

urban environment.\textsuperscript{2} After the Typhoid Board reported flies were one mode of typhoid transmission, researchers focused on them as disease carriers; Alice Hamilton’s study of typhoid in 1902 confirmed that flies carried typhoid, but health officials later traced the origin of the typhoid cases in her study to water pollution caused by a broken water pipe.\textsuperscript{3} Despite emerging scientific evidence pointing to other factors in typhoid transmission, public concerns about flies continued well into the twentieth century.

Another medical breakthrough occurred during the Spanish-American War with yellow fever transmission. Many soldiers died of this disease when the United States occupied Cuba and sanitary improvements alone proved unsuccessful in preventing new cases. In 1900 Major Walter Reed and a team of army scientists researched the problem and discovered that the \textit{Aedes aegypti} mosquito transmitted the disease. This discovery led to the combination of sanitation and mosquito control, and yellow fever cases in Cuba decreased. Several years later mosquito control dramatically reduced the number of yellow fever and malaria deaths and allowed for successful completion of the Panama Canal.\textsuperscript{4}

When polio epidemics emerged in the early twentieth century, many people still associated filth with disease. Even though the germ theory was replacing miasma as the

\textsuperscript{2} For a graphic and detailed description of the poor sanitary conditions in the encampments, including the lack of adequate facilities for caring for the typhoid victims, and military officers’ failure to implement known disease control measures to prevent other cases, see Crillo, \textit{Bullets and Bacilli}, 75-82.


accepted explanation, increased attention to cleanliness often reduced the number of illness cases, reinforcing older ideas about the importance of sanitation. Although scientists had identified many germs and their modes of transmission, health officials and the public continued to link sanitary measures with disease control. Historian Naomi Rogers has argued that the emerging field of medical entomology and anti-fly campaigns facilitated the transition from nineteenth century sanitation to new public health “by offering a visible and manageable target.” Anti-fly campaigns of the 1910s represented an opportunity for increased individual involvement in public health, even in areas far from urban epidemics, like rural Maine.

Varying Local Responses to Public Health

Although many rural people were interested in improving public health, policies and practices of Maine communities varied. Members of some communities disagreed about problems and solutions, or avoided disease controls, whereas others appreciated these efforts. Some extended their concerns about disease to neighboring towns. Townspeople’s hostility at times hindered the work of local health officials. Some residents ignored privy maintenance recommendations and drainage from the privies polluted their own water supplies. Residents quarantined due to disease outbreaks at times objected to this restriction and found ways to circumvent health officials. Physicians and local board of health members in some communities ignored regulations

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that required them to report disease cases, making statistics less valid. Many cultural and social factors influenced acceptance of disease control requirements.

In the nineteenth and early twentieth centuries immigrants settled not only in Maine's urban communities, but also in rural areas, making small town populations culturally diverse. Poverty and crowded living conditions that many new immigrants experienced on their way to rural Maine and in tenement houses near factories in small towns made them susceptible to disease. Widespread anti-immigrant sentiment existed throughout the United States; many native-born people as well as public health officials believed that immigrants brought disease with them.

Alan M. Kraut, in *Silent Travelers: Germs, Genes, and the "Immigrant Menace"*, has described how the influx of Irish immigrants into New York City during the cholera pandemic in 1832 led to increasing associations between ancestry and illness. He noted that native-born Americans already disliked the Irish for their intemperance, Catholicism, and poverty, and, in the 1830s, increasingly for cholera. In Maine, native-born citizens developed such an association with French Canadians, since health officials traced the origin of many of the state's late nineteenth century smallpox cases to French Canadian immigrants, visitors, or temporary workers. Kraut suggests that immigrants were not simply passive recipients of the dominant culture. He argues that immigrants at times resisted the intrusion of public health officials into their lives. Rather than willingly accepting public health rules and regulations, many people, particularly immigrants and the working class, resisted the measures that public health physicians and nurses imposed upon their families.  

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Most immigrants experienced public health officials as authority figures. Amy L. Fairchild, author of *Science at the Borders: Immigrant Medical Inspection and the Shaping of the Modern Industrial Labor Force*, argues that medical inspection stations ensured that the new immigrants would become efficient industrial workers who understood their low place in American society. Rather than simply excluding immigrants due to disease, race or class, public health workers at stations like Ellis Island functioned as "part of a process of inclusion." Although the officials did indeed have the authority to deny entrance to the United States, Fairchild points out that annually only one percent was rejected at the medical inspection stations. Health officials were authority figures, just the same. Despite their traumatic experiences of the entrance examination, immigrants resisted the "medical gaze" and often tried to hide ailments they thought might cause them to be excluded. Evidence from rural Maine indicates both cooperation and resistance among local residents, including working-class people and immigrants, in response to disease control measures.

Immigrant families who came to Maine from areas where cholera was prevalent were subjected to ongoing surveillance, because health officials suspected they might carry the disease. In 1911, the Maine State Board of Health published Circular no. 21, "Practical Facts about Cholera," for both local health officials and the lay public. A section of this circular, titled "Suspicious Immigrants," described how the State Board of Health received notification from the U.S. inspection officers at ports of entry, alerting it that a person from a country where cholera was prevalent was coming to Maine. The

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State Board of Health then notified the local board in the community where the person planned to live. The circular advised local health officials to “keep such persons, and those with whom they live and intimately associate, under observation to be assured that they remain well.” The circular also suggested requiring that these persons notify the local board if they were moving, so that health officials could keep them under surveillance, because “bacillus carriers” were known “to harbor and distribute infection for a period of twenty days and exceptionally as long as sixty days.” While immigrants may have felt persecuted by their ongoing contacts with public health officials, who wanted to keep track of their whereabouts, this recommendation indicates a growing understanding of the nature of disease transmission, particularly once symptoms had resolved and a person appeared healthy.

In many communities that initially resisted disease control measures, townspeople complied after intervention from the State Board or their local board of health. Knowing that many people in Dexter did not believe in vaccination in 1885, Joseph Springall, M.D., described how he had vaccinated his own young son and took him along to visit smallpox patients. He wrote, “My son came out invincible, as of course I knew he would. People thought me very risky in taking the boy amongst the smallpox, but I knew what vaccination would do.” By demonstrating the effectiveness of vaccination on his own son, Springall tried to convince reluctant townspeople to listen to his advice.

To gain trust, those promoting disease control measures paid careful attention to public relations. In the town of Industry, board members reported that "The board, by a conservative course, has labored to avoid gaining the ill will of the public."\(^{12}\) This "conservative course" may have involved leniency with quarantine and disinfection in order to foster cooperation with the public.

Frequently conflicts arose when local physicians and board of health members differed in diagnosing the same illness. Townspeople often sided with the physicians against the board of health, particularly if the doctor believed the disease was not communicable and required no precautions. This happened in Guilford in October 1890, when physicians differed in diagnosing cases of what some thought was scarlet fever. When the local board secretary notified the State Board about this conflict, J. O. Webster, a member of the State Board, visited Guilford to investigate and lend support to the local board. Webster's account of his investigation highlighted the onset of each patient's symptoms. He described how he differentiated them from possible cases of German measles and decided that the cases were in fact all scarlet fever.\(^{13}\) Young used this example in his annual report to illustrate the importance of supporting local boards of health. It also emphasized the need to implement disease control measures sooner rather than later, especially in questionable cases, and to differentiate between diseases with similar symptoms.

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Not all towns created local boards of health as required by law in 1887. Eastport had no local board until a diphtheria epidemic in March 1890. An Eastport physician contacted the State Board and informed it that the town’s selectmen were functioning as a health committee, but that they had not paid much attention to the outbreak, even though four townspeople had died. Young wrote back to the doctor and the selectmen, urging the town to appoint a board of health as soon as possible and warning if they did not, the State Board would appoint one for them. The town complied, and because the epidemic had already been ongoing for several weeks, the new local board began with a backlog of work. Because the townspeople were not accustomed to any public health controls up until that point, the new board encountered hostility from those residents who disagreed with its disease control methods, particularly quarantine and placarding of homes, “instead of supporting it in its work for the common good.”14 Although health officials saw their mission as protecting everyone, not all town residents shared this view.

As towns began to organize local boards of health and to take responsibility for disease control, many residents began to worry about threats of disease from nearby towns that were not controlling disease outbreaks, thereby putting their neighbors at risk. Concerned townspeople sometimes took matters into their own hands and directed disease control in neighboring villages. In 1891 the local board of health in the town of Eustis reported to the State Board that townspeople were concerned about a case of diphtheria in a nearby plantation where there was no local board of health. The local board complained: “It alarmed our citizens to such an extent that we visited the place, placarded all the entrances, distributed notices of warning, etc., and by doing so hemmed

the disease in and prevented its further spread." At least some local residents were beginning to understand the rationale behind quarantine, but this understanding was slow in coming to many communities.

Although residents in some local communities still disregarded communicable disease precautions, believing they were unnecessary, by the end of the nineteenth century acceptance of the local boards' authority increased. Cornish board of health secretary Fred C. Small noted that by 1888 many were "beginning to see the good of this work and to appreciate it" and that more people were praising the public health laws. That same year G. Roberts, Jr., secretary of the Litchfield board, noted, "The fact that the board of health was in existence has made many persons more careful than usual in regard to nuisances." Dr. J. L. Wright, board secretary and health officer for the town of Durham, reported in 1891 that although some townspeople thought placarding and nuisance abatement were unnecessary, "the large majority of the citizens, and especially the better class and those better educated, heartily praise the law and show a willingness to cooperate with the board." This shows local health officials believed their efforts were effective, however other evidence suggests opposition disease control measures.

Many of the early local board of health reports and accounts of epidemics include evidence of objections by both residents and physicians to disease control measures and

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how health officials, local and state, coped with this resistance. In 1890 the newly appointed local board of health in Eastport received a report that Mr. K. had diphtheria; the secretary quarantined him and placarded his home, but his brother refused to stay away. Someone, perhaps a neighbor, reported that the brother continued to visit. The local board of health reported: “The Secretary called upon Mr. K., the brother, in relation to the matter and he acknowledged that he was doing so daily and should continue to do so, and a few hours afterwards he went to the infected house, removed the placard from the door, and tore it in pieces.”\(^{19}\) The local board prosecuted the man in court for violating the quarantine and removing the placard, establishing its authority to control townspeople’s actions in disease outbreak situations.

The State Board of Health advised local boards to have townspeople arrested for violating quarantine restrictions or removing placards. In a case where a married couple from Castle Hill were quarantined but went to Mapleton, State Board secretary Young advised the Mapleton board of health to have them arrested. Young first sought an opinion on this issue from the state Attorney General, who stated that arrest warrants were justified under such circumstances and characterized breaking quarantine as “criminal carelessness.” He wrote:

I also have no doubt that it is the duty of the county attorney to investigate and institute prosecutions against any violators of the provisions of the contagious disease law which may occur in his county; and I think it is your duty to call upon the county attorneys to prosecute any such cases. After you have made one or two examples, there will be no trouble about the enforcement of these statutes.\(^{20}\)


The secretary of Mapleton’s board of health “gave the man five minutes to go home or to be arrested, and he went,” so there was no need to arrest the couple.21 The Attorney General requested that Young let him know which county attorneys failed to prosecute those who violated public health laws, so he could follow up himself to influence the results.22 Criminal prosecution, with fines imposed for violations of disease control regulations, was a factor in the growing compliance with disease control measures in local Maine communities in the late nineteenth and early twentieth centuries.

Many people, including local public health officials, physicians, and townspeople, believed that disease control measures were unnecessary and ignored the State Board of Health’s instructions for quarantines. Some residents fled when their homes were placarded, because they did not want to be confined for weeks or to be disinfected; this increased the work for health officials, who still needed to locate them. Young soon learned that having local boards of health in place did not mean they would necessarily comply with State Board directives.

When state officials learned that smallpox had erupted in the French Canadian neighborhoods of Waterville and Winslow in late January 1899 they implemented control measures as swiftly as possible. The quarantine had a late start, though, because local physicians had mis-diagnosed the disease for at least ten days. Dr. F. C. Thayer finally diagnosed one case as smallpox and promptly called in Dr. Charles D. Smith, President

21 Although this report described how a married couple had broken the quarantine together, the local board of health secretary wrote that he instructed the man to leave and threatened him with arrest, rather than both the man and his wife. This may have been because the man was the person with smallpox, and because of this he posed more of a threat to the community.

of the State Board of Health, who confirmed the diagnosis. Smith reported the outbreak right away to Young, who went to Waterville the next day. With urging from Young, the local boards of health in Winslow and Waterville quarantined those with smallpox and their households and began vaccinations.

In his annual report Young referred to the local doctors in Winslow and Waterville as “malcontents” and noted that they had “sent to Montreal for Dr. Louis Laberge, health officer of that city, hoping apparently for a diagnosis in rebuttal of that made by the State Board.”23 Young reported that Laberge came to Waterville and confirmed the smallpox diagnosis. That the health officer of a city the size of Montreal would have had time in winter to travel many hours to Maine to check out possible cases of disease seems incredible. Could Laberge have had relatives among the local French Canadian residents? Was he related to one of the smallpox cases? With the diagnosis again confirmed, Young praised the efficiency of the local boards of health in working to suppress the epidemic.

The physicians who had not recognized the first smallpox cases believed it was chicken pox or “sequel of la grippe.”24 Rather than a situation of medical incompetence, this is evidence of a growing clinical trend of mild smallpox cases (perhaps due to waning immunity in previously vaccinated individuals) that made the diagnosis of smallpox more challenging and contributed to the public’s difficulty in accepting strict

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disease control requirements. The problem of missed diagnoses became so prevalent that Young included an article addressing the issue in his report for 1900-1901.\textsuperscript{25}

Young's summary of the disease control methods used in the Waterville and Winslow smallpox epidemic of 1899 indicated both heavy-handedness and thoroughness. He wrote: "The measures carried out for the suppression of smallpox were quarantine with a guard day and night over every infected house; vaccination very generally done in and around the infected towns; and unusually careful disinfection." The latter included the use of steam disinfection for "clothing, bedding, and everything else possible," "personal disinfection of patients before their discharge," washing floors with disinfectant and fumigation with formaldehyde gas to reach walls and other surfaces.\textsuperscript{26}

This 1899 epidemic, including a total of 157 cases from fifty-nine French Canadian households, turned out to be a mild prelude to smallpox epidemics in the early 1900s; only three children died and most of the cases were mild. Due to widespread discrimination against French Canadian residents, those families may have resented the thoroughness of the health officials' disease control measures; for the same reason the officials likely saw the quarantine and aggressive disinfection practices as justified.

Although Young did not focus on objections to vaccination in his account of this epidemic, the fact that the disease did not spread much beyond the Waterville/Winslow area suggests that residents in the French Canadian community there were perhaps more accepting of smallpox vaccination than were northern Maine communities a decade or


\textsuperscript{26} Young, "Smallpox in Maine in 1899," \textit{Eleventh Report}, 13.
more earlier. Despite initial opposition, the State Board of Health exercised its authority and succeeded in gaining the cooperation of the local boards to control the disease.

Much of the resistance to disease control measures in the late 1880s through the early 1900s had to do with differing beliefs about the urgency and efficacy of quarantine. In 1901 when an unvaccinated French Canadian young man, working as chore boy at a hotel in the town of Dexter, developed a rash, the doctor first misdiagnosed him as having the measles. A couple of days later when he felt better, and the doctor was out of town, the man attended the Catholic church; fortunately the two people he sat next to in the pew had both been vaccinated for smallpox. By the time State Board of Health Secretary Young correctly diagnosed the man as having smallpox and advised the local board of Health to quarantine the Dexter House, the young man had exposed many more townspeople to the disease. When the local board of health quarantined the hotel, Lillian Stover, a cook, escaped, perhaps wanting to avoid the quarantine, vaccination, or disinfection. Health authorities traced Stover to Orono and quarantined her there. Stover did not develop the disease; several towns incurred extra expense in determining her whereabouts, the only apparent consequence of her flight.\textsuperscript{27} Stover questioned the need for the quarantine and the fact that she did not develop smallpox likely strengthened this belief. In the day to day local dynamics of rural public health opposition was not uncommon.

An extreme example of disbelief about the diagnosis of smallpox, endangering local townspeople as well as those from surrounding towns, occurred in Somerset County in 1903. During a visit to Skowhegan in early November to consult with the local board of health on another matter, Young learned about possible unreported smallpox cases in

the town of Athens. One of the two local physicians did not believe the illness was smallpox and convinced the majority of townspeople of this. Young visited the town and examined three residents whom he believed all had the disease. One was a woman who had just returned from shopping, where she had likely exposed shopkeepers and other customers. The smallpox epidemic raged for several months throughout the state.

Although the local board of health in Athens reported only thirty-six cases for 1903, some concerned townspeople estimated that the number of cases there might have been as high as 150. According to Young, this was the first time in the State Board of Health’s eighteen-year history that inaction of local health officials justified quarantining a whole town. The smallpox outbreak in Athens illustrated the challenges the State Board faced in enforcing compliance with public health regulations. Although the legislature granted the Board authority to enforce laws to protect the public’s health, local people did not always accept this authority.

During his first visit to Athens, Young encouraged the town to initiate isolation, vaccination, and disinfection of people who had been exposed to smallpox, but officials did little to implement his directives. After receiving Young’s instructions, Athens officials called Dr. M. W. Bessey, of Waterville, for a second opinion. Bessey confirmed Young’s diagnosis and promptly contacted the State Board. He reported that while he was in Athens he observed the schools remained open and a couple of pupils had symptoms consistent with the infectious stage of smallpox. In his letter, Bessey gave the local board of health in Athens the benefit of the doubt. He reported that because of

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28 Young noted that many people in the town of Athens were "wholly dissatisfied with the do-nothing policy of the local officers" and the resistance of their neighbors. See Young, “Reports of Smallpox in Various Places,” Thirteenth Report, 37.

widespread disbelief among townspeople and a local physician, the local board needed assistance about how to proceed. Bessey believed that the public, rather than the local board of health, was responsible for the town's failure to deal with the smallpox outbreak.

Bessey urged prompt action by the State Board of Health to enforce compliance with disease control recommendations. As far as Bessey was concerned the town simply needed to follow the state's instructions. He understood the need for disease control measures, because of his past experience with smallpox; Bessey felt a responsibility to do his part to control the outbreak before it moved further south to Waterville.

Dissatisfied with Bessey's diagnosis, because residents still believed the illness was not smallpox, Chairman of the Athens Board of Selectmen, J. F. Holman, wrote to the Bangor board of health for a third opinion, causing an even longer delay in implementation of the State Board's instructions. Holman explained: "the disease here is so different from what we have been taught and learned about smallpox, that nine-tenths of our people don't believe it is smallpox; therefore, it is hard to keep anybody quarantined....Thus far the only harm done has been by the doctors who have produced such a scare that it has ruined our business." Like Bessey, the Bangor board forwarded this letter directly to Young, understanding the matter was the jurisdiction of the State Board. The Athens town officials did not understand the risks their town faced because the disease symptoms appeared mild and they thought it was something else besides smallpox; those in Augusta, Waterville and Bangor believed the delay put Athens residents and their neighbors in other towns at risk for developing smallpox.

30 Young, "Reports on Smallpox in Various Places," Thirteenth Report, 34.
31 Young, "Reports on Smallpox in Various Places," Thirteenth Report, 34.
Because of the delay in implementing disease control measures in Athens, the State Board of Health voted to quarantine the town. Young again encouraged town officials to control the outbreak, concluding: “You say that the scare, which the doctors have produced, is ruining your business. I shall deem it fortunate if we can scare you enough so that you can realize the true situation and get down to efficient work.”32 Many of the townspeople and officials were not taking the epidemic seriously, but Young knew from experience that, even amidst many mild cases, more severe ones and deaths could occur.

Before his letter reached the Athens officials Young went back to the town to assess the situation and lend a hand. Young was not pleased to discover the local health officials still had not vaccinated residents or isolated those who had been exposed to or were ill with the disease. Nor had they disinfected the homes of those who had recovered. On this visit Young appointed P. E. Torrey, of Wilton, to stay in Athens as an agent of the State Board. Torrey’s tasks included continuing the investigation of new cases, demonstrating disinfection procedures to town officials, and updating the State Board as needed; with his help, Young was confident the epidemic could be controlled.

Response to the smallpox epidemic in Athens during the winter of 1902-1903 illustrated that local communities did not always welcome direction from state officials. Townspeople went about business as usual, in part because the symptoms of most of their smallpox cases were mild; many remained unconvinced about the diagnosis. Apart from their skepticism about smallpox, their response to public health directives suggests mistrust of state authorities. Had they trusted state officials, townspeople would perhaps

have been more inclined to follow their advice, particularly after two other experts agreed with state health officials' assessments.

Besides mistrust and differing beliefs about a particular diagnosis, many circumstances influenced compliance with public health regulations in rural communities. State law required both physicians and members of a household to report disease cases to the local board of health within twenty-four hours, but this did not always happen. In many communities there was no physician available. At other times members of the household were unaware of the seriousness of symptoms. The local board of health in the town of Turner reported dealing with a diphtheria outbreak involving thirty-one cases in fifteen households in 1890; in this case the disease spread because of lax quarantine due to "a lack of hearty cooperation of the attending physician." Families sometimes requested that the physician not notify health authorities about a diagnosis of a communicable disease to avoid the stigma of having placards placed on their homes and the inconvenience of being quarantined. After one Maine physician complied with such a request, additional typhoid cases appeared among families on the same milk route. The reasons for noncompliance with disease reporting included ignorance, resistance to health officials' authority, and a lack of resources; some people complied with public health directives for economic reasons or because they had less power.

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34 "Notes, Sanitary and Other," *Bulletin of the State Board of Health of Maine* 2 (March 1911): 131. Milk dealers may have spread typhoid germs by dipping into a milk container with a utensil from a household with a case of typhoid fever, or by improperly cleaning milk bottles returned from such a household before the next milk delivery. The practice of dipping into milk containers was a common in the early 1900s. See Judith Walzer Leavitt, *The Healthiest City: Milwaukee and the Politics of Health Reform* (Madison: University of Wisconsin Press, 1996), 158.
Compliance with public health restrictions and advice increased over time and evidence indicates that at least some local residents appreciated the work of state and local health officials. For instance, J. S. Bridges, secretary of the local board in Meddybumps noted in his report to the State Board that residents were “much interested in the health of the town” and that they “cheerfully” complied with the board’s requests. Bridges may have wanted to impress the State Board with his town’s eagerness for health. Although it is unlikely that all the residents responded “cheerfully,” Bridges’ report indicated more compliance than resistance.

In contrast to communities that resisted complying with disease control instructions, some rural communities, perhaps because of fear of disease, accepted these measures. In June 1914, the weekly Eastern Gazette in Dexter included news from North Newport about a case of scarlet fever; eight-year-old Lurena Hilliker had developed symptoms of the disease and North Newport townspeople worried that some of her schoolmates at the Prilay Corner School would develop them too. Fortunately, none did, but the community took precautions just in case. Church was not held the following Sunday, the grange did not meet as scheduled, and the local board of health quarantined the Hilliker family. Although the family may have experienced this as a burden, the news report indicated success in controlling the disease. Public health officials relied on townspeople’s’ compliance to prevent further illness.

Frequent disease outbreaks along with the influx of immigrants led the Maine legislature to pass two school health laws in 1909, one requiring schools to hire physicians to examine pupils for signs of illness and inspect schools to identify

36 “North Newport,” Eastern Gazette (Dexter, Maine), 11 June 1914, 1.
conditions that might interfere with learning and another allowing superintendents to exclude students with lice or contagious diseases. Many towns were slow to hire school physicians and due to changes in town funding were not able to maintain these services consistently from year to year. Despite the enthusiastic support of some women’s club leaders and other organizations, such as local granges, the lack of appropriations for medical inspections in schools indicates that many Maine communities remained ambivalent about public health, or at least about funding it.

Some local health officials’ zeal contributed to this ambivalence, as in the case of school health in Madison. Following the new school health legislation, citizens in that town authorized $150 for school inspection in 1910, and school physician Dr. William H. Kennison followed State Board of Health recommendations for examining the eyes, ears, nose, and throat of each child. Kennison sent notices to parents with instructions about what to do to correct problems. He may have contributed to objections about the school health services when he overstepped the law and directed all teachers to exclude students when they were ill or when “showing any indisposition whatever, at its inception.” Instead of having the school superintendent exclude students whose parents had not complied with instructions about cleanliness or head lice, Kennison excluded students before the parents even knew about the problem or had had a chance to remedy the situation. Kennison reported: “Because of these prompt measures, the schools have been

particularly free from epidemic diseases during the past year.” While Kennison thought having the teachers exclude students was efficient, this practice increased the numbers of excluded students, most likely from poor and immigrant families.

Although the Madison School Committee appreciated Kennison’s work, the local community did not support this program for long, perhaps because of all that it required of parents. Kennison defended requiring a doctor’s certificate from students before they could return to school, noting that “among our foreign population especially, many serious diseases, in their milder forms, are carried through without a physician’s attendance.” He believed that it was important “for some physician to have a chance to pass judgment on such cases, and hold up those who are at all suspicious.” Kennison’s belief that immigrants were less likely to seek medical attention was probably true. Obtaining doctors’ certificates for re-entry into school may have been problematic for many parents. Workers may have had little time to seek out a doctor for their children and may not have thought this was necessary, particularly if the symptoms were minor or just emerging. Many immigrants experienced language barriers and could not afford physicians. Also, some immigrants may have mistrusted physicians because they saw them as authority figures or because they feared being quarantined or having their homes fumigated by the local board of health. Resistance to public health authorities continued after immigrants had settled into new homes in rural Maine.

Kennison’s medical inspection services were intended to improve the health of Madison school children, their families, and neighbors; it is understandable that many

41 See Kraut, Silent Travelers, 108-122 for a discussion of how Italian immigrants mistrusted physicians and public health nurses in the early 1900s.
parents, including the working class, immigrants, and the poor, may have disliked the program. The stigma and inconvenience of quarantine and the indignities of fumigation made their lives difficult. Voter dissatisfaction led the town to discontinue medical inspection in the schools, even though state law mandated these services; also, middle class men may have viewed the school health services as supporting health care for the poor and disagreed with this policy. Medical inspection did not resume in Madison until 1920, even though the School Board recommended it or commented on illness and treatable physical defects among students between 1913 and 1919.42

Over time in the late nineteenth and early twentieth centuries rural Maine communities increasingly accepted health rules, and came to expect health authorities to remedy public health problems. Despite initial resistance to quarantine procedures, many people cooperated with health officials and encouraged town participation in disease control measures, in part because of a growing understanding about germs. The middle class and residents who aspired to the middle class complied with public health rules more willingly than working-class residents. Judith Walzer Leavitt, in Typhoid Mary: Captive to the Public’s Health, has noted that working-class people, particularly immigrants, received harsher treatment by public health officials. Responses to disease control measures in the late nineteenth and early twentieth centuries suggest that such a double standard also existed in Maine. Avoidance of harsh treatment by health authorities may have motivated immigrants and the poor in rural Maine to oppose heavy-handed public health measures. Residents who adhered to middle-class behavioral

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expectations perhaps found compliance with public health directives easier than those health officials judged less respectable.43

**Progressive Concerns About Flies**

Progressive era health publicity highlighted the fly problem; newspaper and magazine advertisements, drawings, and articles described how flies bred in decaying matter and filth, carried bacteria on their hairy appendages, deposited germs in food, and caused illness. This publicity increased the lay public’s understanding of bacteria, in part because flies made germs visible, and understanding of the germ theory of disease became more widespread. Characterizing early twentieth-century portrayals of flies as “germs with legs,” historian Naomi Rogers noted anti-fly campaigns combined earlier popular ideas about filth with new discoveries about insects as carriers of germs.44

Health officials and lay organizations conducted anti-fly campaigns throughout the country. At a time when much was still unknown among members of the lay public about germs and their transmission, killing flies provided reassurance against one possible illness source; dead flies became concrete evidence of campaign efforts against an otherwise invisible foe.

The public’s growing concern about flies in the early decades of the twentieth century highlight this increasing popular understanding of the germ theory. In August 1912 the Seal Harbor Village Improvement Society started a campaign against

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flies “by placing traps in those places where this pest is most annoying and menacing to the health of the community.” They planned to expand the number of trap locations the following year as well as start trapping earlier in the season.

Fearing health risks, hotel guests began to watch out for flies while traveling. During the summer of 1920 Frederick A. Sweet and his family had planned to stay two weeks in Ogunquit, Maine, at the Colonial Inn. However, they left early, breaking their room and board contract, because of flies in the dining room, which the family believed was a sign of unsanitary conditions at the hotel. Whether or not the family knew about germs as disease-causing agents, they connected poor sanitation with sickness. Given the flies and the risk of illness, Sweet felt justified in breaking his contract with the hotel proprietor.

The proprietor, Lucius R. Williams, sued Sweet for the $128.78 he had contracted to pay for the room and board; initially Williams won the case. When Sweet appealed, Justice Spear granted a new trial, saying that the unsanitary conditions at the hotel justified breaking the contract. Justice Spear noted: “It is a matter of common knowledge that the house fly has come to be regarded, by enlightened understanding, not only as one of the most annoying and repulsive of insects, but as one of the most dangerous in its capacity to gather, carry and disseminate the germs of disease.” Spear’s comments indicate that education about flies had reached a wide audience. When he ruled against

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Williams, Spear based his remarks on Maine State Board of Health materials about flies.\textsuperscript{47}

The anti-fly campaigns improved popular awareness of health risks and increased local involvement in community health. The belief that flies were a problem indicates that more people were paying attention to health. Although flies were not the only or the most harmful sanitation problem, from the perspective of Progressive health educators doing something about them was a job for the whole community. A poster included with the Maine State Board of Health’s circular No. 102, “The Danger From Flies,” encouraged people to swat flies, clean up garbage, and screen windows and privy vaults to keep out flies, assuming that any measure to keep flies away from people and their food would help decrease the spread of typhoid fever.\textsuperscript{48}

As understanding about disease transmission increased, researchers slowly understood that, while mosquitoes were vectors in malaria and yellow fever, flies played a small role in comparison to more direct bacterial contamination of water or food supplies. The public’s continued focus on insect vectors was understandable, though, since germs remained invisible.

Once the public joined in the anti-fly campaigns, these efforts overshadowed laboratory work for tracing bacterial causes of illness. Charles F. Bolduan, Assistant to the General Medical Officer at the New York City Department of Health, questioned the role of fly transmission and analyzed stool specimen data from known typhoid carriers to


develop standards for diagnosis of the carrier state through laboratory tests.49 He published his findings in the July 1912 issue of the *American Journal of Public Health*, noting that three percent of typhoid convalescents became carriers of the bacillus. With New York's milk supply coming from 40,000 farms and an estimated 200,000 persons handling milk during its journey from the cow to the dinner table, Bolduan speculated about 115 typhoid carriers were in direct contact with the New York City milk supply in 1912. He described the laboratory methods of testing feces and urine of milk handlers suspected of being typhoid carriers. Bolduan advocated increased monitoring of food handlers using these techniques. His argument about the risks of typhoid carriers provides evidence of a growing focus on science. By 1912 concerns about sanitation had changed and health officials were focusing more on laboratory tests for diagnosis and disease monitoring rather than on poor sanitary conditions that led to flies.50

In part due to community health education offered by state and local health officials as well as voluntary health associations, more people learned that improperly handling bacteria-contaminated domestic wastes from households with typhoid fever, rather than the presence of too many flies, caused additional cases of the disease. Cases of known fly contamination were rarer than the Progressive Era health publicity indicated.51 Rather than encouraging people to swat or catch flies, rural residents and public health officials began to value water test results, laboratory services, and home hygiene instruction.

50 For analysis of the early twentieth century debate among public health experts regarding the ineffectiveness of isolation in dealing with healthy typhoid carriers, see Leavitt, *Typhoid Mary*, 39-50.
Increasing Compliance with Public Health Directives

The local dynamics of rural public health involved both conflict and cooperation among health officials from different levels of government and rural town residents. Differing beliefs and priorities or a lack of understanding about disease and how to prevent it led people to resist state public health directives. Economic interests also influenced compliance. Prejudice against French Canadian and other immigrants contributed to health officials’ aggressive disease control measures in some communities. Despite resistance, people eventually accepted disease control measures, or at least submitted to public health authorities. As individuals resisting public health directives put others at risk, officials enforced regulations through imposing fines; compliance increased in many towns when those who had ignored public health directives were subject to prosecution. A combination of education, direct assistance, and use of police power, helped state and local levels of government increase compliance with public health directives.
CHAPTER 3

VOLUNTARY ORGANIZATIONAL SUPPORT

FOR RURAL PUBLIC HEALTH

At an invitational meeting at the State House in Augusta in December 1900, the State Board of Health facilitated formation of the Maine State Sanatorium Association, which opened a 15-bed tuberculosis sanatorium in Hebron on December 9, 1904.¹ This was a small start to a big problem; the number of sanatorium beds in the state remained inadequate, as many people needed tuberculosis care. The State Board of Health encouraged creation of the voluntary health organization that started this sanatorium, illustrating its close relationship with private organizations. This relationship between public and private health services became characteristic of Maine’s approach to public health throughout the first half of the twentieth century.

Prominent players in the development of Maine’s public health awareness and services included several state and national voluntary organizations. Among them were the Maine Anti-Tuberculosis Association, affiliated with the National Tuberculosis Association and later known as the Maine Public Health Association (MPHA); the American National Red Cross (ARC); the Maine Federation of Women’s Clubs (MFWC), affiliated with the national General Federation of Women’s Clubs (GFWC); and the Maine Medical Association (MMA). During the early twentieth century, voluntary health organizations, women’s clubs and professional associations generated much public interest in health through educational programs. Private voluntary groups remained a vital part of Maine’s public health system, especially between 1900 and 1930,

though various factors strained this collaboration. In addition to its support of the Maine State Sanatorium Association, the Board of Health encouraged the development of and maintained close ties with both the ARC and MPHA, organizations that developed early local health services in Maine, beginning with public health nursing.

At the local level widespread involvement in both personal and public hygiene activities stimulated by the voluntary associations improved community health. The purposes of these activities were many: to improve social hygiene and prevent venereal disease, cure and prevent tuberculosis, reduce infant mortality, educate both children and adults about health habits, and expand the availability of public health nursing services, among others. Without popular support and collaboration of citizens and voluntary organizations, governmental public health services would have cost more and developed more slowly.

Instead of local health departments throughout the state, Maine developed a centralized official state health department, a small number of mostly urban local health departments, and strong voluntary health organizations. The State Department of Health directed the work of local boards of health through its district health officers, but from its beginning it relied on assistance from voluntary organizations to augment its work. Both collaboration and conflict among various agencies characterized public health in Maine in the early twentieth century. The MPHA agreed to collaborate with the ARC, which had numerous local chapters in Maine. Nevertheless, these organizations competed locally to raise funds and provide public health nursing services. Residents in rural Maine demonstrated enthusiasm for the public health nursing services of both MPHA and the ARC. These organizations collaborated with the Maine State Department of Health to
create the Division of Public Health Nursing and Child Hygiene, donating money in 1920 to pay the director of the new division for one year.\(^2\) This occurred after both organizations had begun promoting public health nursing services and shows their intention to collaborate.

**Collaboration Among Public Health Players**

With support from umbrella organizations at the state and national levels, voluntary health groups organized in communities throughout Maine. They provided presentations to the public on topics ranging from venereal disease to flies and wrote articles for local newspapers and organizational journals. While membership was mostly limited to the middle and upper classes, this advice reached mass audiences, including the working class. Health promotion messages in newspapers, workplace newsletters, and leaflets in paychecks, etc., reinforced ideas about disease prevention and promoted services of local boards of health and public health nurses. Such publicity gave most of the community access to information about health; this in turn increased support for public health activities of voluntary and professional organizations. Often utilizing posters, pamphlets, films, and other materials developed by their national organizations, these groups reached out to educate rural people about a variety of health issues.

On June 28, 1910, after delivering a paper about venereal disease at the annual meeting of the Maine Medical Association (MMA) in Bar Harbor, Dr. George A. Phillips suggested that the Association's president appoint a committee to fight this problem in

\(^2\) Memorandum of an Affiliation Between the State Department of Health of Maine, Maine Public Health Association, and the American Red Cross, 25 August 1920, Public Health Nursing, Maine State Archives, Augusta, ME.
The physicians adopted Phillips' proposal. Members of the committee wrote letters to local YMCAs, churches, and school superintendents to reach local men and their sons.4

Late nineteenth-century scientific research had demonstrated that venereal diseases, which physicians had long considered to be minor ailments, were responsible for serious illnesses involving multiple organs or the whole body. Allan M. Brandt, author of *No Magic Bullet: A Social History of Venereal Disease in the United States Since 1880*, noted that “physicians devoted to the venereal problem became an influential force in Progressive reform.”5 Brandt described how illnesses formerly viewed as men’s punishment for immoral sexual behavior became redefined as harmful to the middle-class family. Progressive physicians, like the members of the Maine Medical Association’s venereal disease committee, needed to reach men and boys in order to protect innocent women, children, and American family life.

Participating in MMA’s venereal disease education effort, a minister in Vinalhaven invited some men from his community to hear a talk on this topic. Reverend William Maywood later wrote to the Association to describe the success of the gathering. He reported he “called a meeting of the fathers of the community, having boys over 14 years old, at the church one Sunday afternoon.”6 Maywood distributed copies of the American Medical Association pamphlet, *The Boy’s Venereal Menace*, and answered

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4 Maine Medical Association, “Correspondence,” *JMM A* 7 (September 1916): 64. The Maine Medical Association began this sex education program eight years before Congress appropriated federal funds for this purpose with the Chamberlain-Kahn Act during World War I.
questions. Maywood commented that not only was this sex hygiene information important for the young men, but he believed it was also new and useful information for the fathers as well.

In addition to appealing directly to fathers to educate their sons about venereal disease, the physicians sent information to teachers, superintendents of schools, clergy, businessmen, lawyers, and YMCA and Grange officials. In 1917, the MMA announced at its annual meeting that the sex hygiene education program had distributed forty-six hundred copies of *The Boy's Venereal Menace* since its beginning in 1910, either with correspondence or at community education sessions. MMA members, or at least those who served on its Committee on Venereal Diseases, assumed a leadership role in educating the public before the State Board of Health or the federal government identified this problem.

Due in part to the efforts of MMA's Committee on Venereal Diseases, by 1917 Maine legislators were already quite aware of the need to prevent and control such diseases. For instance, Representative W.G. Sawyer of Madison endorsed social hygiene work and pledged his “support in the passage of any law regarding any condition

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7 Sometimes the title was listed as *The Boy's Venereal Peril.*

8 This open dialogue about venereal disease contrasted with health education offered several years later with support from the United States Public Health Service. Alexandra Lord has described how the “Keeping Fit” program of the U.S. Public Health Service and the Young Men's Christian Association maintained silence about sexuality and venereal disease by having participants read exhibit posters or view slides without discussion. Due to many communities’ needs for discretion, the program's organizers believed that talking openly about sexuality would decrease community support for their health education efforts. See Alexandra M. Lord, “Models of Masculinity: Sex Education, the United States Public Health Service, and the YMCA, 1919-1924,” *Journal of the History of Medicine* 58 (April 2003): 133.


10 Maine Medical Association, “Report of the Committee on Venereal Diseases and Their Prevention,” *JMMA* 2 (September 1920): 35-43. By the time the United States Public Health Service began promoting health education to prevent venereal disease after passage of the Chamberlain-Kahn Act in 1918, many Maine people had already welcomed or at least received this information.
so far reaching in its results on the health of our people."¹¹ During the legislative session in the spring of 1917, the legislature passed an amendment to the communicable disease laws, which provided for reporting and treatment of venereal diseases and appropriated four thousand dollars for this work.¹² MMA Committee on Venereal Diseases volunteer educational activities contributed to widespread support for expanding the work of the state health department to include venereal disease control.

While the male public learned about venereal disease risks, many Maine residents were dying of tuberculosis; this disease too became a target of Progressive health reformers' attention. Tuberculosis had long been the leading cause of death in the state, but beliefs about its origin as hereditary rather than infectious persisted. As voluntary health associations like the Maine Anti-Tuberculosis Association formed in the early twentieth century, understanding about tuberculosis as a contagious and preventable disease increased. In order to obtain money for tuberculosis care, the American Red Cross collaborated with women's clubs in local communities to assist with the first nationwide Christmas Seal sale in 1908.¹³ Christmas Seals became a joint fundraiser for the Red Cross and the National Association for the Study and Prevention of Tuberculosis in 1910.¹⁴ Local newspapers printed descriptions of this collaboration, which the

¹⁴ The fundraiser was known as the “Red Cross Christmas Seal Sale.” See Knopf, National Tuberculosis Association, 35-36.
organizations' publicity offices had distributed, predicting widespread local participation in the sale throughout the country.\textsuperscript{15}

In 1910, the MFWC agreed to sell Christmas seals through local clubs statewide.\textsuperscript{16} Women who served as town chairmen of the sales helped spread the word about preventing tuberculosis among their friends and neighbors. Club women who sold Christmas Seals may have had direct experiences with caring for family members who had been ill with tuberculosis or some other communicable disease. The Progressive reform enthusiasm combined with direct knowledge of the urgent need to prevent disease spurred their activism. Children sold the seals as volunteers with the Modern Health Crusade, a school health education program sponsored by the National Tuberculosis Association, or as members of local Junior Red Cross groups.\textsuperscript{17} What began with women's club assistance for tuberculosis fundraising broadened into support for improving public health.

Less involved in leadership, other citizens contributed to the anti-tuberculosis cause just the same. They participated in smaller ways such as purchasing a Christmas Seal or attending church on Tuberculosis Sunday. The National Association for the Study and Prevention of Tuberculosis declared April 24, 1910 as “Tuberculosis Sunday.” On this day participating clergy either gave a sermon, using information that the Association sent about tuberculosis, or invited a physician to make a presentation. The clergy’s letters to the State Board of Health after this event indicated many parishioners’

\textsuperscript{15} "Millions for Tuberculosis From Red Cross Stamps in 1910," \textit{Madison (Maine) Bulletin}, 15 September 1910, 3.
\textsuperscript{16} Edith McAlpine, “Report of Health Committee,” \textit{Maine Federation of Women’s Clubs Year Book} (Portland, ME: Smith & Sale, 1910), 38, Records of Maine Federation of Women’s Clubs, Box 1742, Maine Federation of Women’s Clubs--Directories, 1901-1914, Special Collections, Raymond H. Fogler Library, University of Maine, Orono, ME.
\textsuperscript{17} Knopf, \textit{National Tuberculosis Association}, 43.
desire to hear more on the subject and that they were attentive listeners. These smaller activities provided grassroots support for public health reform, demonstrating that local people were enthusiastic about health.

The MFWC, following the suggestion of the national GFWC, directed its local chapters to create public health committees. The Public Health Committee at the state level suggested each Maine women’s club host at least one meeting per year on a health theme. Not all clubs complied, but many did. MFWC included articles about public health activities in the organization’s News Journal. Even clubs that focused primarily on literature or science still spent time raising money for tuberculosis care or hosting meetings about public health. Members of women’s clubs gave talks in schools and conducted an anti-fly campaign. The women’s club public health program filtered from the national GFWC to the MFWC, and from there down to the local clubs.

In developing programs about health issues, women’s club members utilized resources available from the Maine State Board of Health. In November 1910 the theme for the Dexter Women’s Literary Club’s meeting was “Ring out old shapes of foul disease.” Four members presented papers that evening about health topics, including

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19 By mid-1920s this publication became the Maine Federation News.
20 Minutes of the Woman's Literary Club, February 22, 1909, April 1 and March 8, 1909, Book 1, 43-44, Northeast Harbor Library Archives, Mount Desert, ME, hereafter cited as NEHL.
23 This was a quote from Alfred Lord Tennyson’s poem, “Ring Out Wild Bells.” See Alfred Tennyson, In Memoriam, Shatto and Shaw, eds. (Oxford: Clarendon Press, 1982), 123-124.
one titled "Cold Weather Diseases." Mrs. McCrillis, the author of that paper, likely relied on a leaflet from the Maine State Board of Health as her source.

Part the Health of Home & School health education series, these leaflets’ topics included prevention of various communicable diseases, treatment of common ailments, and methods of sanitation. Schools often used the pamphlets as texts for health lessons and then students took them home to their parents, thereby spreading the information throughout the community. In addition to health publicity in newspapers, the Health of Home and School leaflet series provided much information to local people.

In December 1910, with the program theme “Inventions and discoveries,” the Madison Sorosis Club members presented papers on a variety of topics ranging from vacuum cleaners to “Madame Curie’s Isolation of Pure Radium.” Mrs. Kennison, married to Dr. Kennison of Madison’s local board of health, presented a paper titled, “The Principle of the New Vaccine Treatment for Typhoid.” Since Madison had experienced numerous typhoid fever cases, the potential benefits of typhoid vaccine were perhaps a conversation topic at the Kennison household. Given her husband’s role in infectious disease control for the town, Mrs. Kennison had access to the latest information about the vaccine. Maine women’s clubs’ attention to health topics indicated local people’s increasing understanding of public health issues and emerging scientific advances in the field.

Recognizing the connection between public health and economic development, and following the example of MPHA, the MFWC endorsed the public health

24 Calendars 1910-1911, Women’s Literary Club, Dexter Historical Society, Dexter, ME.
association's efforts “to make Maine the healthiest state.” In 1920 the Milo New Idea Club helped make Baby Week a success; the next year, in Dover, the Cosmopolitan Club sponsored this extended well-baby clinic. In September of 1924 the Health Committee of the MFWC appealed to the membership to become more involved in public health work.

Just now we hear so much about “Booming Maine.” While we are all proud of our wonderful scenery, natural resources and advantages, we must not forget that Public Health is a job for all. Do not think that the question can be solved alone by these various agencies rendering, as they do, valuable service to our state. Boom Health!

Maine clubwomen connected economics to health. The plan to make Maine the healthiest state involved improving child health and expanding public health nursing services in communities throughout the state.

The Maine Society for the Study and Prevention of Tuberculosis organized in 1908 after representatives of the Maine State Board of Health and others attended the International Congress on Tuberculosis in Washington, D.C. This led to the formation of the Maine Anti-Tuberculosis Association in November 1911 as an educational organization. Affiliated with the National Association for the Study and Prevention of Tuberculosis (known after 1918 as the National Tuberculosis Association), the organization also provided diagnosis and treatment, since few other services existed in most communities.

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27 Maine Federation News 1 (September 1924): 5.
29 Maine Federation News 1 (September 1924): 5.
30 Knopf, National Tuberculosis Association, 99, 29.
To improve tuberculosis services in Maine voluntary associations increased their publicity about the problem. The October 1916 Bulletin of the Maine Anti-Tuberculosis Association included two cartoons that illustrated the need for Maine to do more for victims of the disease. The front cover of this issue pictured a man in a bed labeled “Maine” waking up to the alarm of a concerned-faced clock labeled “tuberculosis.” A second cartoon, with the couch also labeled “Maine,” pictured a napper waking from a dream where he had seen crowds of sickly tuberculosis sufferers. His discarded Daily News carried the headline “What Other States Are Doing For Tuberculosis” and the caption read, “Yes, yes! I have ‘napped’ too long. Your appeal shall not be in vain.”

These cartoons illustrated the scope of the tuberculosis problem and the Association’s belief that Maine had fallen behind on the tuberculosis front.

The Association criticized the state and the legislature for allowing so many to die, even though the disease was preventable. It initiated many tuberculosis education and direct care services. The tuberculosis problem became so urgent that the Anti-Tuberculosis Association began setting up local dispensaries and recruiting nurses to visit patients in their homes, since the state had so few institutional beds for tuberculosis treatment.

Maine Anti-Tuberculosis Association educational efforts reached a variety of audiences and utilized up-to-date educational tools, such as motion pictures. For three months in 1913 the Maine Anti-Tuberculosis Association rented the educational motion picture “Hope,” sharing it with theaters throughout the state. This film portrayed the dilemma of young Edith who had tuberculosis. She did not disclose this diagnosis to her

\[31\] Bulletin of the Maine Anti-Tuberculosis Association, 3 (October 1916): 1, 8.
father, and because she was to be married, she decided not to follow her doctor's advice to enter the sanatorium for treatment. Then, during the annual Christmas Seal Sale, she discovered some National Tuberculosis Association literature in her father's pocket. This material described the risk of transmitting tuberculosis to others and how sanatorium treatment might cure the disease. She said goodbye to her father and fiancée in notes, without telling them where she was going, and secretly traveled to New York City and checked herself into the Bellevue Hospital Tuberculosis Clinic. Meanwhile her father and fiancée learned that tuberculosis affected those who lived in rural areas as well as cities and they rallied local support to build a sanatorium in their community. They hunted for Edith, found her, and brought her home to recover at the new sanatorium in their town. After her recovery, Edith married and, in the final scene of the film, opened the windows to let in fresh air.33

The Maine Anti-Tuberculosis Association promoted this film at a time when the state needed additional sanatorium beds. In addition to reinforcing the health education message of tuberculosis as contagious, preventable, and curable, this film also helped boost public opinion in favor of spending for tuberculosis care, since the legislature passed a bill in 1915 to establish a state sanatorium for the care and treatment of persons with tuberculosis.34 The positive ending may have led some tuberculosis patients to reconsider sanatorium treatment. After viewing the film, those not yet involved in the anti-tuberculosis movement may have joined in the effort to fight the disease, or at least purchased Christmas Seals. The film reminded others, who may not yet have established

the habit of sleeping with their windows open, about the importance of fresh air in tuberculosis prevention and treatment.\footnote{This practice was recommended even during winter in Maine. The cold air was believed to have a therapeutic effect. Also increased ventilation decreased the risk of tuberculosis contagion. In the early decades of the twentieth century many people took sleeping with the windows open very seriously because they believed this helped prevent tuberculosis; many homes even had sleeping porches to enable people to sleep outdoors.} Tuberculosis was a leading cause of death in the 1910s; many people found it worrisome and paid attention to these messages.

In part due to the Maine Anti-Tuberculosis Association’s community education, changes in public opinion about the disease and health services led to increased funding. Over time more people understood that tuberculosis was preventable and not the result of genes or poverty. Members and others came to believe people with tuberculosis needed compassion and care, but also that expanding public health services would be cost effective. The Association published a pamphlet titled \textit{How We May Save a Million Dollars in the State of Maine Every Year}, catching the attention of not only Maine people, but also the National Tuberculosis Association and the editors of the \textit{Journal of Outdoor Life}.\footnote{“Field Notes,” \textit{Bulletin of the Maine Anti-Tuberculosis Association} 1 (January 1913): 9.} Understanding Maine legislators’ conservative attitudes about spending money, and emphasizing the economic toll that tuberculosis took on the entire state, the Association tried to convince lawmakers that it made economic sense to fight the disease.

The Maine legislature again responded slowly, but the Maine Anti-Tuberculosis Association, along with local affiliates, kept organizing direct services and agitating for more state support. Each issue of the Association’s \textit{Bulletin} stated, “Wanted—A special tuberculosis dispensary and nurse in every town or union of ten thousand population.”\footnote{\textit{Bulletin of the Maine Anti-Tuberculosis Association} 1 (January 1913): inside cover.} Beginning in 1913, the publication listed the growing number of tuberculosis dispensaries
and nurses at various locations throughout the state. A major part of the local associations’ work in Maine included providing public health nursing services; these preceded similar state services by at least a decade. In 1915 the Maine Legislature passed a law establishing state sanatoria to care for Maine residents with tuberculosis, regardless of ability to pay, but the number of beds remained inadequate.

Other organizations also collaborated with the Maine State Board of Health in its education work and reached out to rural communities. State Grange lecturer Kate Ellis spoke regularly on behalf of the Board of Health at local Grange meetings. Beginning around 1912 Ellis gave talks on topics such as “Health of Rural Homes.” State Board of Health Secretary Albion Young described Ellis as “a pleasing and effective speaker” and noted the Board received “almost constant calls for her educative work.” Another speaker who assisted the State Board with health education was Rev. Alexander MacDonald, pastor of the Maine Seacoast Mission, who traveled along the coast and gave frequent talks about tuberculosis, illustrating his presentations with lantern slides. Both Ellis and MacDonald extended the State Board of Health’s education work and reached rural constituencies it would not have reached without their assistance. Through health education campaigns and collaboration with the State Board voluntary health associations encouraged widespread participation in public health throughout rural Maine.

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Local Public Health Nursing Services

Between the mid-1910s and early 1920s overlapping public health nursing services and competing agencies set the stage for conflict as well as collaboration. MPHA's tuberculosis care preceded other such services in homes and community clinics, but once the American Red Cross established its peacetime public health nursing program its services became more popular than those of MPHA in some Maine communities. Although ARC and MPHA intended to cooperate, once more ARC chapters formed, turf battles emerged. As public support for these services increased, some communities supported the services of both organizations, whereas others chose one, or switched providers from one year to the next. In addition to conflicts about which agency would provide public health nursing services, opposition to them among the working class and physicians also existed, at least at first.

When the Maine Anti-Tuberculosis Association opened a dispensary in Milo in 1915, the local Dexter and Piscataquis District Anti-Tuberculosis Association formed a committee to hire a public health nurse to staff it, visit patients in their homes, and promote public health.41 At the end of May that year the committee hired Clarissa O. Johnson, a graduate of Presbyterian Hospital in New York City, who had just finished six months of training in settlement work in Boston.42 In addition to Milo, Johnson's district included the towns of Guilford, Sangerville, Dover, and Foxcroft, in Piscataquis County, and Dexter in Penobscot County.43

41 "Meeting of District Anti-Tuberculosis Association," Piscataquis Observer (Dover, Maine), 15 April 1915, 1.
42 "District Nurse Chosen," Piscataquis Observer (Dover, Maine), 27 May 1915, 1.
43 Dexter only remained in this district for one year before forming its own branch of the Anti-Tuberculosis Association. The composition of this district became significant several years
Many citizens in Dexter, particularly middle class clubwomen and business people, welcomed their “tuberculosis nurse,” so-called because the Anti-Tuberculosis Association hired her. Also known as the “district nurse” because she covered a particular geographic area, she called herself a “public health nurse,” a broader term indicating she was interested in promoting the health of the entire community, rather than just caring for those with tuberculosis. The Woman’s Literary Club in Dexter supported Johnson by offering her housing when she was in town.44 Later the Eastern Trust & Banking Company allowed the Anti-Tuberculosis Association to use a heated room in its building, and Johnson saw patients there.45 By 1915 Dexter’s middle class community leaders supported the public health nursing services and accepted the need to care for people with tuberculosis.

Johnson quickly established herself as a health expert. She published articles in the Piscataquis Observer on health topics and spoke often to community groups. One of her earliest articles described the role of the public health nurse. Johnson identified close contact with families as the reason for the nurse’s success and conveyed her own expectations about the job she had undertaken.

The only reason that the nurse’s work has developed into such broad lines of social service is the fact that she has the privilege of entering the homes. She comes in working dress and is very willing to give a bath, make a bed, change a dressing, or render some other service, which can be interpreted in terms of friendliness. This service is actual to the patient and family. Other problems besides sickness meet her on every threshold—lack of employment, delinquency in children or adults, bad sanitation, poverty and ignorance in every form. The public health nurse cannot help being a social service worker, for in recognizing her

later in the early 1920s, when local chapters of the ARC competed with the MPHA to provide public health nursing services.

44 “Dexter Local News,” Eastern Gazette (Dexter, Maine), 28 October 1915, 5. Also see The Maine Federation of Women’s Clubs 1913-1914 (Biddeford, ME: Journal Print, 1914), 87.

responsibility toward the family health [sic] she must also regard the family as a part of the community, and therefore sees the civic aspect of her work and becomes a social part of the health campaign.46

Having completed a postgraduate course in public health nursing as well as practice in the field, Johnson presumed she would be successful.

Johnson claimed the privilege of visiting families, a privilege community residents granted her by raising the necessary funds for the position. By visiting people in their homes, rather than simply staffing the newly opened tuberculosis dispensary, Johnson established relationships with families in the district. With her willingness to provide concrete health assistance to those in need, Johnson demonstrated the benefits of having a public health nurse. It appears that the community residents agreed. Although the poor and working class people may have opened their doors to the nurse less willingly, many people purchased Christmas Seals and supported appropriating public funds for this purpose at annual town meetings.

Johnson’s newspaper articles and letters to the editor not only educated the public about health issues but also demonstrated how public health nurses advocated for health reform. An example of this was her letter, published under the headline “Our Schools and Public Health.” In this piece Johnson spoke to all citizens, especially the parents of school-aged children. She argued that conditions in both the rural and village schools were contributing to tuberculosis deaths. Johnson cited vital statistics indicating that in the three years prior to 1915 the death rate among the youngest school children, ages five to nine years old, had increased thirty percent.47 Although the overall tuberculosis death

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rate had been decreasing since 1892, these statistics pointed to the need for better disease prevention among children. Since disease reporting between 1892 and 1915 was inconsistent in many communities, the numbers were probably lower than the actual disease rates. By pointing out the rising deaths among young children Johnson identified areas for additional work.

Johnson also discussed cooperation in public health. She wrote:

The cooperation of the health officers and the physicians is quite necessary for the complete success of the public health service. A good public health nurse in no way interferes with the doctor's practice. On the contrary, she helps him with his patients and sends new cases to him; for it is not her province to diagnose diseases or to recommend treatment medicines. Her nursing work is always under the physician's directions, and if on her rounds she finds a sick person or a child abnormal in any way her first care is to learn who the family doctor is and send the patient to him.48

The fact that Johnson felt the need to clarify her position in terms of the physicians in the community is telling. It indicates some opposition to her work among physicians, at least at the outset.

Public health nurses reached out to local people and offered concrete assistance, but sometimes they disregarded cultural and class differences. Although not all town residents followed their advice, nurses helped families accept and implement health authorities' disease control instructions. Public health nurses at times criticized parents for putting their children at risk for disease. Nurses differed in their sensitivity and some included statements in reports indicating their negative opinions about parents' behaviors. Mabelle Arbuckle, the Piscatquis County public health nurse who followed Johnson, described her frustration in attempting to promote child health in a household where the

mother, dying of tuberculosis, did not comply with recommendations to stop the spread of the disease. In her annual report to the Town of Milo in 1917 she wrote:

The nurse has found instances of much carelessness in Tuberculosis families: in one case a child of five years with diseased tonsils and adenoids occupying the same bed with a mother in the last stages of consumption. This condition existed even after the danger of infection was explained to the patient and family and only a threat to remove the child from the house brought the desired results. In this home there was plenty of room but only carelessness permitted the condition to exist.\(^4^9\)

Arbuckle hoped to prevent tuberculosis in this child, but for whatever reason the mother did not follow the nurse’s instructions. When faced with the threat of having a child removed from the home, it is understandable why some families experienced public health nurses’ approaches as heavy-handed. The nurses at times held punitive attitudes, particularly regarding immigrant families or with those who did not follow their instructions, and they used their power to control how families behaved in order to maintain health and prevent illness. Although some families experienced the public health nurse’s visits as unwelcome intrusions, these services enjoyed increasing support from middle class voters and public health reformers. In some cases, especially when communicable diseases threatened the whole community or when adults exposed helpless children, heavy-handed approaches may have been justified.

At first some physicians resisted the work of public health nurses. During the 1910s the public and most physicians were unaware of their contributions in tuberculosis prevention and treatment and of the growing importance of prevention in medical practice. Physicians already contended with a variety of medical practitioners from eclectics and osteopaths to electrotherapists, and many regular physicians protected their

turf. Despite the growing literature on preventive medicine, some physicians still focused on heredity as a cause of tuberculosis and neglected opportunities for prevention. While nurses’ training programs in hospitals throughout Maine provided an ever-increasing number of nurses for private duty care in people’s homes, the concept of a public health nurse was new to most physicians and rural townspeople. Not only did many physicians believe that prevention of tuberculosis was not possible, some did not view prevention as part of the nurse’s role; also some physicians may have viewed nurses who visited homes as competitors.

The Maine Anti-Tuberculosis Association highlighted these issues and emphasized the need for cooperation between the doctor and nurse in tuberculosis care in the January 1917 issue of its monthly Bulletin, with an article titled “Doctor vs. Nurse or Doctor and Nurse.” In this article a cartoon depicted a physician and a nurse tied together with a rope, moving in opposite directions, the nurse toward the home and the doctor toward the sanatorium. The cartoon depicted conflict between the two as they each pulled against the rope. The cartoon asked “How?” as the rope became tight and “When?” as each struggled to go in the direction he or she wanted. Finally they faced each other and said, “Let’s pull together.” The next view, labeled “teamwork,” showed the doctor and nurse entering the sanatorium together and in the final view, labeled “success,” they made a home visit together. While the article acknowledged collaboration did not always happen, the cartoon expressed optimism about the potential for curing and preventing tuberculosis if the doctor and the public health nurse worked

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This article also demonstrated the Maine Anti-Tuberculosis Association’s belief in the crucial role of the public health nurse, not only in case-finding and education, but as an equal collaborator in preventive medicine. The association included physicians, though many lay persons also joined. The fact that each issue of the Maine Anti-Tuberculosis Association Bulletin called for public health nurses in every community, and later the Maine Public Health Association’s letterhead listed all the MPHA public health nurses by name and location, speaks to the importance of public health nurses to this organization. Due to the anti-tuberculosis campaign of the 1910s and early 1920s more Maine citizens, including physicians and members of women’s clubs came to recognize the value of the public health nurse.

Nurse Arbuckle commented in the town report for Milo in 1918: “In homes where known tuberculosis exists the nurse has found easy access, if not at first, at least after a short time, proving that these patients are glad to have someone take an interest in their welfare.” This indicated both initial mistrust and eventual acceptance of public health nursing services, at least by some. The reasons Milo residents may have welcomed their public health nurse, as Arbuckle claimed they did, include the shortage of sanatoria beds, high number of deaths due to tuberculosis (despite the declining death rate), and increased publicity about tuberculosis prevention. Arbuckle admitted some people with tuberculosis rejected her visits at first, but her report to the town suggests they accepted her services more willingly over time.

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Although the Maine Anti-Tuberculosis Association led efforts to establish local public health nursing services in Maine, at the national level the ARC also participated in this effort. ARC nursing services began in many Maine communities in the early 1920s, leading to conflict at times between the two organizations. The American National Red Cross (reorganized in 1905 after providing nurses during the Spanish-American War) formalized its nursing services, developing a mechanism for enrolling nurses, responding to disasters, and preparing for future war needs. Affiliating with the Associated Alumnae (later known as the American Nurses’ Association) the ARC formed a National Committee on Red Cross Nursing Service in 1909; similar committees developed to recruit nurses at the local level and state committees increased awareness about ARC within state nurses’ associations.53

Discussions about the ARC’s peacetime role led to development of a nursing course for homemakers offered first in 1908 as a series of six lectures. By 1912 a plan evolved from this program for “Women’s First Aid Detachments” trained in first aid and home nursing, a precursor of ARC’s public health nursing initiative. In 1912 ARC began its rural nursing program by placing nurses in agencies where they could obtain public health nursing experience and then placing them in local communities in affiliation with local boards of health or voluntary organizations. Between 1913 and 1917 the ARC Town and Country Nursing Service grew, with affiliations at eighty-five agencies nationwide and ninety-seven nurses.54

54 Kernodle, *Red Cross Nurse*, 60-77.
During World War I women in rural towns throughout Maine produced items for the war effort at community houses and local Red Cross chapters, providing a ready-made structure to support public health nursing. After the war the ARC changed the name of the Town and Country Nursing Service to the Bureau of Public Health Nursing. ARC intended to demonstrate the need for public health nursing services nationwide, planning to turn over services to other organizations once local communities understood their benefit. Portia B. Kernodle, author of *The Red Cross Nurse in Action, 1882-1948*, referred to the early years of the ARC’s peacetime public health nursing program as “The Great Boom” because the service grew so quickly between January 1919 and December 1920. Many local ARC chapters formed throughout the country, because communities wanted a public health nursing service.55

Since the Piscataquis County Red Cross chapter relief activities received strong community support during and after World War I, it is likely at least the chapter leaders knew about the national organization’s plans to expand local public health nursing services. Representatives of the local Red Cross chapter attended regional meetings in other parts of the state. At a meeting in Dover in 1919 the executive committee discussed “the matter of health organization,” indicating the chapter planned to participate in the new peacetime public health program.56

When the ARC launched its program, it sent Red Cross nurses out on the Chautauqua circuit “to preach the gospel of public health.”57 Because the itineraries of

56 “Red Cross Public Health Activities--Post WWI,” *Piscataquis Observer* (Dover, Maine), 23 January 1919, 1.
Chautauqua speakers included communities with populations between five and fifteen thousand, the ARC seized this opportunity to promote its public health work in areas it perceived had the greatest health needs. For Chautauqua speakers, the Red Cross recruited World War I nurses, who told audiences about their experiences caring for wounded soldiers and described the nationwide peacetime public health program.

Between August 29th and September 5th, 1919 Chicago Red Cross nurse Kelly S. Bree toured in Maine, speaking in seven communities, including Farmington and Skowhegan. During the war popular Red Cross nurses inspired donations for relief efforts and numerous hit songs from Tin Pan Alley lauded their contributions; they received cheers at parades and patriotic events. Linking the positive emotion associated with the nurses to the peacetime public health activities increased local interest in the new program.

Growing demand for its Home Health and Hygiene course contributed to the expansion of public health nursing by local Red Cross chapters. Initially developed prior to WWI to teach lay women about disease prevention and home care of the sick, this course became more popular in rural areas during wartime shortages of physicians and nurses. Whether in the schools or at other community settings, such as churches or grange halls, Red Cross nurses and others taught the course over several weeks' time, providing lectures and demonstrations of techniques for caring for the sick at home. In addition to nursing care, this course included details about bacteria and the connections between sanitation and disease, providing useful information to help rural people

maintain health. Pictures and descriptions of these classes in rural communities appeared in local newspapers, industrial newsletters, and Red Cross publications. Articles about the course gave examples of its usefulness, such as the story of a young girl who found her younger sister acutely ill when their mother was not home. She determined that her sister had a fever. The diagnosis turned out to be appendicitis; the girl's quick action in treating the fever and calling the doctor saved her sister's life.60 Besides increasing local residents' knowledge about disease prevention and treatment, publicity about these courses helped to advertise the ARC.

With the expansion of MPHA's public health nursing services and the ARC's peacetime public health program in local communities throughout Maine, more people became aware of these services. Encouragement of public health officials at the Maine State Department of Health and women's club support in addition to various forms of publicity helped these services grow.

**Cooperation and Conflict in Local Public Health**

Health Commissioner Leverett D. Bristol noted in his third annual report that the State Department of Health needed a public health nursing and a child hygiene division. Although he believed these should be separate divisions, by 1920 he thought that they should be combined at first to save money. Bristol reported meeting with "Red Cross representatives, relative to the possible co-operation of the Red Cross in this important program."61 In addition to sharing payment of the nursing director's salary with the ARC, MPHA housed the director's office at its headquarters on Water Street in Augusta,

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because the Department of Health's offices at the State House could not accommodate her, again illustrating how private voluntary agencies supported Maine's official public health services.62

Over time tension developed among the three organizations, particularly between MPHA and ARC. Despite cooperation in many areas, MPHA and ARC competed on the local level. Through their local affiliates both the National Tuberculosis Association and the American National Red Cross provided public health nursing services in rural Maine by the early 1920s. As noted above, public health nursing services had existed as part of anti-tuberculosis work in the state for more than a decade prior to Red Cross involvement.

In the years following WWI, many local communities had difficulty sustaining local Red Cross chapters, including the new public health nursing services. According to Portia Kernodle, nationally the ARC public health nursing services reached its peak in 1922 and declined every year thereafter.63 In Maine some Red Cross public health nursing services lasted until the late 1940s, but many of those struggled from year to year due to a lack of funds. In at least two Piscataquis County communities where the MPHA provided public health nursing services, townspeople switched their support to the Red Cross and then back again to MPHA within a few years; because funding requests increased each year the appeal of the new ARC peacetime program did not last. People appreciated public health nursing services, though towns, like Maine legislators, remained conservative about spending.

63 Kernodle, Red Cross Nurse, 282-283.
At a special meeting in April 1920 the Maine Anti-Tuberculosis Association voted to change its name to the Maine Public Health Association. The organization wanted a name more congruent with the service that it had offered for nearly a decade. The membership thought some people would feel more comfortable receiving services from an organization with a general name, due to the ongoing stigma attached to tuberculosis. The Association also hoped to lessen confusion and decrease gaps in services by having a unified private organization engaged in "the promotion of non-governmental features of the entire public health program." The Association had discussed a name change for several years; the issue became urgent and required a special meeting in April 1920 because the American Red Cross was promoting its new peacetime public health program. The MPHA (and the physicians in the Maine Medical Association who backed it) wanted to ensure that they did not lose control of public health to the American National Red Cross, whose administrative headquarters was outside Maine.

Between June 28th and July 5th 1920 the Maine Centennial Exposition in Portland provided an excellent media opportunity for the ARC to promote its new health program. The exhibit highlighted public health nursing services and a "model health

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64 W. A. Harris, "Special Meeting: Maine Anti-Tuberculosis Association," 12 March 1920, Records of the Bangor-Brewer Tuberculosis and Health Association, Box 722, Raymond H. Fogler Library, University of Maine, Orono, ME. According to S. Adolphus Knopf in A History of the National Tuberculosis Association, the Maine Anti-Tuberculosis Association changed its name to the Maine Public Health Association in 1918, p. 99. Perhaps the new name had already been in use for a couple of years prior to the vote in April 1920.
center of 'Red Cross Town, Maine.' Since the *Piscataquis Observer* printed a large advertisement, encouraging attendance at the Centennial, it is possible that at least some Piscataquis County residents visited the Red Cross exhibit and became interested in developing such a service.66

After the Maine Centennial, many local communities that had been part of a county or regional Red Cross chapter during WWI organized their own chapters. The regional *New England Division Bulletin* included numerous articles during 1920 promoting the peacetime public health program. By the mid-1920s twenty-nine Maine communities had established local Red Cross chapters and many had begun or were considering developing public health nursing services.67 Some of these communities were already receiving services from MPHA and others had no previous public health nursing services.

Although the ARC reached out to state and local health officials, some physicians feared losing control of public health practice to less-qualified lay people; the American Medical Association (AMA) opposed the ARC peacetime public health program. At the Maine Medical Association (MMA) annual meeting in Portland in June 1922, the secretary, Dr. Bertram L. Bryant, of Bangor, read an AMA resolution encouraging state constituents to convince local and state health authorities that ARC public health activities were “no longer necessary” and would be “likely to promote community

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irresponsibility and helplessness in regard to its own welfare." The AMA intended for the MMA to pass a similar resolution opposing development of the Red Cross public health program in Maine. Rather than suggesting an explicit anti-Red Cross resolution, Bryant moved that MMA adopt one expressing approval of "properly regulated public health nursing, controlled within the state, preferably under the charge of the Division of Nursing of the State Board of Health." This wording complied with the spirit of the AMA concerns about physician authority, while avoiding offense to local Red Cross supporters. This opposition to the ARC public health program provided some back-handed support for the newly formed nursing division within the State Department of Health. Only three years after the Maine Anti-Tuberculosis Association's article about physician and public health nurse collaboration, such explicit support for public health nursing seems remarkable.

What MMA's 1922 resolution proposed already existed at that time, since the 1920 agreement among the ARC, MPHA and the Department of Health made the Director of Public Health Nursing and Child Hygiene, Edith Soule, supervisor of all public health nurses in the state. In 1919, ARC field supervisor Mary Van Zile spent all her time organizing new nursing services in Maine and supervising the nurses working for local chapters. Zile and another ARC official from the New England Division office in Boston spoke at the second annual Conference of Local Health Officers, hosted at the

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State House in Augusta in April 1919.\textsuperscript{70} Reports published in the \textit{New England Division Bulletin} indicated Zile's success, noting that by June 1919 several Maine towns had established public health nursing services.\textsuperscript{71} Some MMA members opposed the ARC public health program and others supported it. Many Maine physicians were more open to lay participation in public health than their counterparts in other states because of the shortage of physicians in rural communities.\textsuperscript{72}

As the American Red Cross launched its public health program, the organization turned over the long-time joint Christmas Seal Sale to the National Tuberculosis Association (NTA) in 1920, resulting in some confusion among health workers and the public. Since its beginning the annual fund raiser had been known to many as the “Red Cross” Seal Sale. A 1923 agreement between the two national organizations suggests that misunderstandings about the change in the sale lasted several years after it ceased to be a joint endeavor. The agreement, published in the \textit{Boston Medical & Surgical Journal}, clarified that the Red Cross annual Roll Call and National Tuberculosis Association’s Christmas Seal Sale were separate and listed the dates for each. The National Tuberculosis Association agreed to orient its volunteers, as well as newspaper reporters and photographers, about the two fundraisers and to instruct them to refer to the seal only as the “Tuberculosis Christmas Seal,” not a “Red Cross” seal. The American Red Cross agreed to conduct its membership campaign in November and not to request

\begin{itemize}
\item \textsuperscript{70} Bristol, “Commissioner of Health,” \textit{Third Annual Report of the State Department of Health}, 22.
\item \textsuperscript{71} \cite{71} “Public Health Work Well Started: Encouraging Interest Shown in New England Division—State and Local Agencies Cooperate,” \textit{New England Division Bulletin} 3 (June 7, 1919): 2.
\item \textsuperscript{72} For analysis of the American Medical Association’s response to public health, see Paul Starr, \textit{The Social Transformation of American Medicine} (New York: Basic Books, 1982), 180-197.
\end{itemize}
donations in December; the Christmas Seal sale would begin after Thanksgiving. By reprinting the agreement in a medical journal, the National Tuberculosis Association hoped to straighten out the confusion before the next sale. Since both organizations asked communities for financial support annually, it was important that the two campaigns not overlap. Confusion about the Christmas Seal Sale contributed to conflicts between ARC and MPHA.

Although the ARC and NTA tried to keep their annual fundraising campaigns separate, there is evidence of competition in fundraising between MPHA and the ARC at the local level. Mount Desert summer resident Mary Dows Dunham remained loyal to the American Red Cross in part because her husband helped start the Mount Desert Chapter’s nursing service and she was committed to carrying on his work. When Alice McGouldrick of the Hancock County MPHA sent the annual membership appeal to Dows Dunham, asking for a donation to help support public health nursing services in Hancock County, Dows Dunham declined to make a donation. She returned the postage paid envelope and said that she supported the nursing service at the Mount Desert chapter of the American Red Cross. Because Dows Dunham favored the ARC and wanted her donations to be used solely for Mount Desert, she chose not to donate to MPHA. This is an example of competition in fund raising between the ARC and MPHA.

While both ARC and MPHA operated in some communities, often towns supported one or the other. In some communities the ARC focused on school and industrial health services, whereas in others it provided generalized services, including

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73 [National Tuberculosis Association], “Red Cross and National Association Agree on Seal Sale,” Boston Medical & Surgical Journal 189 (October 18, 1923): 575.
74 Alice McGouldrick to Mary Dows Dunham, 27 July 1928 and Mary Dows Dunham to Alice H. McGouldrick, 3 August 1928, Dunham Family Collection, Northeast Harbor Library, Mount Desert, ME.
maternal and child health and communicable disease control. MPHA began providing services for tuberculosis but expanded them to include maternal and child health and other services by 1920. Between 1920 and 1925 the tensions between MPHA and ARC, brewing since the latter launched its public health program, played out in Piscataquis County, with at least a couple of towns choosing Red Cross services over those provided by MPHA.

The experiences of MPHA public health nurse Nina Fogarty highlight these tensions. Early in her tenure Fogarty established good working relationships, particularly with physicians. Dr. A. H. Stanhope of Foxcroft wrote to his friend Dr. Pettingill, at the Western Maine Sanatorium in December 1918 and commented that “Miss Fogarty, the district nurse, is very pleasant and she turns many a patient my way.” Of course, by referring patients to Stanhope, Fogarty increased his income, and this may have influenced his positive opinion of her as much as her pleasant personality. Stanhope’s willingness to work with Fogarty, though, suggests she had good rapport with physicians and did her job well.

The Guilford town report for 1921 included Fogarty’s account of her public health nursing activities for the previous year; it also included an item in the warrant asking if the town would appropriate $200 for a Red Cross nurse. Although the report gave no information about dissatisfaction with Fogarty’s work, townspeople approved funding for

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75 A. H. Stanhope to [Olin S.] Pettingill, 10 December 1918, Records of the Western Maine Sanatorium, Box 17, Maine State Archives, Augusta, ME.
the Red Cross nurse and Fogarty's tenure there ended.\textsuperscript{76} With its affirmative vote for the
Red Cross appropriation, Guilford left the MPHA-affiliated Piscataquis County District
Anti-Tuberculosis Association in March 1920 and sought a new public health nurse
through the local ARC Chapter.

Although the town replaced the MPHA-affiliated program when it supported the
American Red Cross, the ARC program lasted only two years in Guilford. Nesta C.
Medhurst began working in Guilford in October 1920.\textsuperscript{77} Evidence from articles in the
\textit{Piscataquis Observer} and town reports show Medhurst established a popular, successful
program including maternal and child health and school health services that expanded
from Guilford to Sangerville the next year.\textsuperscript{78} The following year Guilford increased its
appropriation, but when the ARC asked for still more money in 1922 the town rejected
this request, ending the public health nursing services. After a year's hiatus, the town
appropriated funds to reinstate the MPHA public health nurse.\textsuperscript{79}

In 1923 Dover-Foxcroft, like Guilford, swayed by the publicity about the ARC
peacetime public health program, ousted Fogerty when it voted to approve funds for an


\textsuperscript{77} Medhurst, “Public Health Nurse,” \textit{Guilford for the Year Ending March 1, 1921}, 33-34.

\textsuperscript{78} [Red Cross Nursing Committee,] “Sangerville,” \textit{Piscataquis Observer} (Dover, Maine), 3 February 1921, 7.

ARC public health nurse, separating from the MPHA-affiliated district. This service lasted only about a year, before the nurse left and the ARC could not find a replacement for her, leaving another gap in services. By March 1924, after having no public health nursing services for about a year, the town again approved funding to restore MPHA services. Since MPHA advocated providing services for those who could not afford to pay, the Red Cross services may have appealed more to the middle-class voters who attended town meeting. During the early 1920s hundreds of ARC public health nursing services nationally opened and closed again within several months or a couple of years' time, in some areas because official health services took over the work and in other areas like Maine because fundraising and staffing issues made providing the services difficult.

In September 1924, when Fogarty had Dover-Foxcroft back in the district, the school superintendent in Milo would not allow her to go into the schools. The superintendent assigned the physical education teacher to teach about health instead. In an emphatic and candid report to the citizens of Milo the following spring, Fogarty described her disappointment about this interruption in her school nursing work. After asserting the value of public health nursing services in the schools Fogarty expressed approval of Milo having a physical education director, but defensively reiterated her opinion that this should not displace the school nurse.

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82 Nina Fogarty, “To the Citizens of Milo,” Annual Report of the Municipal Officers of the Town of Milo for the Year Ending February 1, 1925 (Dover-Foxcroft, ME: F. D. Barrows, 1925), 101.
Although the physical education teacher did not report to Milo citizens in the 1925 annual Town Report, her report for Lake View Plantation gives information about this work. Helen G. Sawyer noted, “My first duty as physical education director of the public schools of Milo, Brownville and Lake View, was to weigh, measure and give general physical examinations to the fifteen hundred children of school age in these towns.” Sawyer described how she recorded her results on “medical inspection cards,” introduced the “Health Crusade” program in various grades and presented “health pins” to pupils who successfully completed the health chores, evidence that she had duties much like Fogarty’s.83

Fogarty’s report reminded townspeople about her accomplishments since the services began in May 1918, including a detailed description of her activities through December 1924. Fogarty’s synopsis of these services indicates her frustration about the community’s lack of understanding of her work. There may have been personality differences between the superintendent or the physical education teacher and Fogarty, and she may have worried about the security of her job, especially after she had been ousted from Guilford and Dover-Foxcroft. This evidence validates some physicians’ and public health officials’ original fears about the ARC’s plans to take over local public health services. It also provides local evidence of competition between the ARC and MPHA, identified as an issue by organizational representatives at the national and state levels.84

84 Kernodle, Red Cross Nurse, 259.
Because of nationwide conflicts between the American Red Cross and other organizations providing public health nursing services, both official and voluntary, the ARC developed a model cooperation agreement that it used in developing its work in the states. The Red Cross negotiated a cooperative agreement with the MPHA in 1927. Correspondence between Red Cross headquarters staff and the national field representative in Maine indicates that numerous times this agreement smoothed over conflicts that arose when one party did not adhere to it.\textsuperscript{85}

**Improved Relations between ARC and MPHA**

Both cooperation and conflict characterized the relationship among voluntary health services between 1910 and 1930. Turf battles and competition for scarce financial resources strained cooperation of Maine’s Red Cross chapters and local anti-tuberculosis associations. Services varied from year to year in some communities, depending on annual fundraising campaigns and organizational priorities. Interruptions in services resulted from townspeople’s reluctance to increase funding. After promising an ambitious peacetime public health program, the American Red Cross faced both opposition and enthusiasm; inconsistent funding for the program helped boost support for competing services offered by local anti-tuberculosis associations. The MPHA established public health nursing services in Maine first, and despite its stated intentions to cooperate, local staff as well as the National Tuberculosis Association resented the American Red Cross for moving in on the Association’s territory. As interest in public health nursing services grew throughout the 1920s, the ARC began these services in some

towns and briefly took over providing them in others. When ARC could not deliver the promised services at reasonable cost, MPHA resumed providing them.
CHAPTER 4

BUSINESS AND HEALTH

Health increased productivity, a top priority in industry. By the late-1910s to the mid-1920s some industries had initiated employee health services; industrial health became a sub-specialty within public health and epidemiology. The context for this growing connection between business and health included Progressive era concerns about working conditions and industrial accidents, food safety, and increasing industrial pollution; these problems led to numerous federal and state laws regulating many aspects of business to protect employee, consumer, and community health. Frederick Taylor's scientific management stimulated the entire culture to value efficiency; though his principles did not refer to health, the emerging field of health promotion coincided with "the development of each man to his greatest efficiency and prosperity." The increased focus on preventive medicine, including publicity about early periodic health examinations, also contributed to the development of industrial health services.

Economic goals of businesses led to collaboration among official health agencies and voluntary organizations, fostering expansion of public health services as well as struggles among competing interests. Profit motives influenced further development of public health services and regulations at the local, state, and national levels. Official health agencies relied on citizen support for policies and backing for health appropriations; programs that put health officials in touch with workers helped them expand this support and promote awareness of official health priorities. In addition to

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spreading health messages, voluntary organizations wanted more members and financial
donations; business connections helped them increase their ranks and funds. Public
health services provided in industrial settings had benefits for the entire community,
region, and state, not simply for the economic success of the individual business
involved. A lack of health care providers in rural Maine communities made it even more
important to keep workers healthy.²

An article in the October 1916 Bulletin of the Maine Anti-Tuberculosis
Association described employee health examinations at Eastern Manufacturing
Company’s Paper and Pulp Mills in South Brewer. Jean Hoskins, the “service secretary”
whose job it was to oversee the health of 700 employees, noticed that several workers
were quite ill. Two Bangor physicians examined them all and found that sixty-seven had
tuberculosis. The doctors divided those workers into three groups. Hoskins explained
that two men were “dangerous to others,” because they were so ill. Twenty-four were
“losing ground under present conditions of living and working” and another forty-one
were “incipient cases” whose disease might be cured, or at least controlled, with care.
Hoskins reported several of the workers in the second group had “gone to the woods” to
work after being “advised to stop work in the mills entirely or to seek suitable out-of-
doors employment.”³ Working in a lumber camp, rather than in a crowded, poorly-

² A poor rating in the Flexner Report in 1910 led to the closing of the Medical School of
Maine at Bowdoin College in 1921, threatening to worsen the shortage of physicians that already
existed in rural Maine. See “Editorial Comment: Maine Medical School,” JMMA 11 (January
1921): 199.
³ Maine Anti-Tuberculosis Association, “Manufacturer and Employee,” Bulletin of the
ventilated mill, would have afforded plenty of therapeutic fresh air for workers with tuberculosis. Though the company protected the 633 workers who did not have tuberculosis by suggesting that those who were "losing ground" find work outdoors, this could have led to higher rates of it among lumber camp workers than in the general population.

While the Maine Anti-Tuberculosis Association and the Maine State Board of Health increased awareness about tuberculosis, publicity about the disease at times came from unexpected sources, further reaching those still unaware about risks and care. In 1917 William T. Rowe, M.D., of Rumford wrote to Dr. Olin S. Pettingill at the Western Maine Sanatorium in Hebron for information about tuberculosis treatment in Maine. He explained that he was gathering data to assist P. E. McCarthy, head of the International Paper mill to write "a paper on the tuberculosis question in Maine."4 Pettingill answered that 934 Maine deaths in 1915 had been attributed to tuberculosis and that the total number of sanatorium beds statewide in 1917 was only about 182. The number depended on the season of the year, since some facilities could accommodate more patients during the warmer months. He mentioned that the state had assumed responsibility for running the sanatoria in Fairfield and Hebron, and at the time of his writing Maine had sixty-one patients on its waiting list for admission. Pettingill told Rowe:

You had better urge Mr. McCarthy to make his paper on tuberculosis in Maine as strong as possible because we want the people in Maine to take an interest and realize the dangers....The working, careless, positive sputum cases are the ones which are keeping up the tremendous death rate. These should be compelled by law to take care of their sputum and are the ones to receive sanatorium instruction and care.5

4 William T. Rowe to Olin S. Pettingill, 23 January 1917, Western Maine Sanatorium, Box 13, Maine State Archives, Augusta, ME (hereafter cited as MSA).
5 Olin S. Pettingill to William T. Rowe, 27 January 1917, Western Maine Sanatorium, Box 13, MSA.
Despite the fact that the state had appropriated funds for taking over the sanatoria in 1915, they needed still more funding. Since this mill official wanted to keep his work force on the job, Pettingill took the opportunity to highlight the risks of contagion. By enlisting employers in the fight against tuberculosis, he hoped to decrease the need for sanatorium beds.

Once state health officials connected disease outbreaks to financial success and provided businesses with direction for disease prevention, many Maine lumber companies and factories implemented health regulations for employees or took action to protect their customers. Managers at some businesses supported sanitation improvements, vaccination requirements, and health education campaigns, and some even hired physicians and nurses. Others disregarded health regulations, potentially putting their employees, businesses and communities at risk, and creating more challenges for state public health officials.

Before Maine law mandated local health officers in all towns, employee health staff at some factories and businesses functioned as informal public health overseers for their employees. Factory managers, who recognized the connection between employee health and financial success, also helped improve public health in the community at large by supporting health education campaigns and voluntary health organizations. Better communicable disease control among workers also improved health for their families and neighborhoods, making "health for all" a possibility.

Business, Communicable Disease, and Public Health, 1885-1910

When Board of Health Secretary Albion G. Young wrote to the state's lumbermen in September 1885 to warn them about the smallpox epidemic in Montreal, he did not
mince words. Young noted the effect of the epidemic on business. Because of the economic depression, he expected more Canadians would seek employment that winter in the Maine woods. Young warned about the risks of men becoming ill in the camps and of smallpox spreading to Maine communities. A smallpox epidemic among men employed in the woods, Young predicted, "would mean the speedy leaving of many of the men and the impossibility of getting other hands to take their places. This would mean the failure of the lumber operation for the season." To deal with this threat, Young recommended the lumber companies hire only men who had recently been vaccinated. Appealing to the lumber operators for assistance, he invited suggestions from them about how best to make this happen.

Several days later Young received a supportive letter from the municipal officers of Greenville and several area lumber operators. They proposed the following:

We would suggest, in connection with the methods named in your circular, that a physician be employed to visit the several lumbering camps in this section at about the time the majority of them get to work, and again two or three weeks later, vaccinating all employees not recently vaccinated, and that the lumbermen agree to dismiss any man refusing to be so vaccinated.

Young appreciated the cooperation of these local officials and businessmen. The majority of lumber operators agreed to this plan and some posted notices in both French and English, alerting potential workers that they needed recent vaccination. Thus, long before the first case of smallpox appeared in the state, Young had made significant

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7 Lindley H. Folsom et al., to the State Board of Health, 3 October 1885, in Young, "Secretary's Report," First Report, 61-62.
progress in reducing the spread of the disease in Maine by gaining the cooperation of businesses to increase vaccination among lumbermen.

In addition to his correspondence with the lumber operators, Young reached out to manufacturers, railroad managers, and other employers, especially those in communities with large French Canadian populations. The fact that there were only three cases of smallpox in Maine in 1885 suggests that these business people heeded Young's warning. As he described in his annual report, many employers in the state approved of the suggestion to vaccinate all employees both to protect public health and their businesses.\(^8\) The railroads also responded favorably and vaccinated their employees.

In late May 1901 Young learned of cases of smallpox near Lowelltown, on the Canadian border in northwestern Aroostook County. He wrote to William Cowie, the physician at the Moose River Lumber Company, urging him to vaccinate the 150 men at the company's camp as soon as possible. On June 8\(^{th}\) Young received a letter from Cowie, reporting nine cases of smallpox across the border in Agnes and noting most of the Lowelltown workers refused vaccination.\(^9\) Whereas businessmen were receptive to Young's disease control instructions, their employees did not always comply.

Cowie provided information about the outbreak, which he received from railway conductors who came to Lowelltown from Canada, on their way east to other northern Maine destinations.\(^{10}\) About the situation in Agnes he wrote:

> There are in all about 9 cases. A girl was first taken. Her brother moved over to an hotel. He was taken sick on Thursday 30 ult. Only declared to

\(^8\) Young, "Secretary's Report," First Report, 62, 70.
\(^{10}\) Located seventy-five miles northwest of Farmington, on the Canadian Pacific Railway, Lowelltown had a population of ninety in 1900.
Because the initial smallpox case was not quarantined after her exposure to the disease, her brother and seven others also became ill. Cowie was concerned because close to Lowelltown, on the Canadian side of the border, the conductors reported evidence of inadequate control of the outbreak. Since the trainmen characterized the quarantine as "lax," Cowie feared he would be seeing smallpox cases in Lowelltown soon. Although he offered to vaccinate them at ten cents a vaccination, which Cowie claimed was at cost, he may have thought his contract did not include prevention; he reported to Young that it required him to treat workers "during sickness and injury, etc." Cowie recommended asking the Canadian Pacific Railway to stop selling tickets from Megantic, the railway stop closest to Agnes, to all points in Maine. He believed these measures were necessary because of his "thorough knowledge of the carelessness of the average French Canadian concerning all infectious diseases."  

Cowie recognized the gravity of the situation and appreciated the assistance of the Maine State Board of Health, but he had no control over the situation in Agnes.

Young too realized the need for quick action and appointed Cowie as an inspector for the Maine State Board of Health. While making arrangements from Augusta to control the outbreak, Young received an urgent telegram from a lumber company near Lowelltown. It read: "If you don’t come here and keep people from coming and going to Megantic smallpox will be all over the county. Don’t make the serious mistake of

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delaying." Young telegraphed back: "Would be serious mistake to go to Lowelltown. Can do much more for you right here now."\(^{13}\) Worried about the consequences of smallpox in Lowelltown, this lumber operator panicked. The fact that he demanded Young's immediate presence suggests that lumber industry operatives feared a smallpox outbreak might ruin their business.

Young meanwhile wrote to an official of the Canadian Pacific Railway in Montreal and requested they stop selling tickets at their end. They initially agreed to do so, but later telegraphed saying this was not legal. Instead they suggested having health officials from Maine inspect passengers on the trains in Megantic to identify those who needed to be quarantined upon arrival in the state.\(^{14}\) This may have meant the railroad company wanted to save money, but did not mind if Maine officials wanted to quarantine their passengers once they crossed the boarder. Passengers would have found it inconvenient to be quarantined on the Maine side of the border if they lived in Canada.

While awaiting a reply from the railway, Young had signs printed to notify Canadian residents they would need permits from Cowie to enter Maine and those without permits would be quarantined. Young sent these signs to Cowie, along with special permits for business people from across the border with business in Lowelltown. Soon thereafter Young received another letter from the same lumber company that had earlier demanded his presence, expressing pleasure at his handling of the smallpox situation. The letter also reported the signs worked well, keeping Canadians from coming to Lowelltown.


Cooperation between the State Board and industries facilitated community development in rural Maine in the early twentieth century. In his letter noting the success of the smallpox control in Lowelltown, the lumber company manager also included his thoughts about the ongoing need for a sheriff in the region.\(^{15}\) Even though Young probably did not help Lowelltown find a sheriff, his work to control smallpox in 1901 strengthened relations between business and public health officials and highlighted how industrial health staff assisted in disease control efforts. The smallpox epidemic demonstrated the efficiency of coordination of disease control in Augusta, rather than having the State Board of Health Secretary visit each outbreak location in person.

**Business and Public Health in the Progressive Era**

During the Progressive Era industrial hygiene became a specialty within the broader field of public health. Alice Hamilton, M.D. explored the effects of lead and other poisons on industrial workers in Illinois in 1910, leading to the development of industrial medicine in the United States.\(^{16}\) A 1911 Maine law required reporting and investigation of industrial accidents, and another in 1913 required industries to notify the State Board of Health of cases of occupational diseases.\(^{17}\) Publicity about unhealthy Maine military recruits during World War I both strengthened business support for

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occupational health services and highlighted the need for prevention among school children, the future workers. By the 1920s the new field of industrial hygiene branched out beyond hazardous trades to include even large department stores; experts in "mercantile hygiene" argued stores with many employees were workplaces, making them logical places for health promotion among adults.

In the 1926 textbook, *Health Control in Mercantile Life: A Problem of Conserving Human Energy*, Harvard School of Public Health instructor of industrial hygiene, Arthur Brewster Emmons, described how some large department stores, including Jordan Marsh and R. H. Stearns, developed health services including on-site clinics, infirmary beds, and even dental care. These services further enhanced the idea that public health work in industry would strengthen the workforce. Efforts to improve worker health became attractive to many industries because of desires to conserve resources and improve profits.

Another factor that may have influenced awareness about the connections between public health and business included a modification of Taylor's concept of efficiency; health educators and physicians spoke of the human body's need for regular check-ups and fine-tuning in order to improve functioning and promote health. The Maine State Board of Health recommended physical examinations at least annually, following American Medical Association and National Health Council recommendations.

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The film "Check Your Engine" promoted this practice at community presentations.\textsuperscript{20} In keeping with public health specialists' adaptation of Taylor's principles of scientific management to the emerging field of occupational health, pre-employment physical examination became a common practice, and researchers like Emmons measured the economic results of reducing employee absenteeism due to illness. Healthy workers would make more profits for the company; desires for optimal efficiency increased the importance of employee health.

\textit{The Northern}, a newsletter published by the Spruce Wood Department of the Great Northern Paper Company, used the machinery metaphor in a May 1921 article about the importance of maintaining health. The article advocated getting adequate sleep, chewing food properly, bathing, and seeing a doctor for symptoms such as pain.

> The most important thing about a man who doesn't bathe himself often enough is that he is getting his machinery all "gummed up" and that is a bad thing for machinery as most everybody knows.... None of us have to bother with the little aches and pains we have, but when it lasts for days, which run into weeks it is a sure sign we've got some sand in our gear box, or that we've thrown a monkey wrench into our machinery and we cannot any of us afford to monkey with our mechanism.\textsuperscript{21}

Since promotion of regular medical check ups for healthy people began in the early 1920s, this practice had not yet become routine. These health education messages helped further public health by raising awareness about the importance of early medical care. The metaphor they used suggests the company thought of workers' bodies as part of its machinery and that managers connected employee health to business success. Since the


\textsuperscript{21} Harrie B. Coe, "Would You Whittle Your own Finger--On Purpose?" \textit{The Northern} 1 (May 1921): 7.
newsletters included articles on health topics by the Maine State Department of Health and voluntary organizations like the Maine Public Health Association, these messages are evidence of cooperation among employers, MPHA and the Maine State Department of Health.

Businesses supported voluntary health organizations with donations and publicity. During the early 1920s, *The Northern* kept employees updated on health issues, including how to obtain educational materials. An article in the November 1923 issue included extensive quotations from MPHA’s booklet called “The Ten Book” or “How to Keep Well” describing the early signs of cancer, ways to prevent tooth decay, tuberculosis prevention and treatment, and child hygiene, among other topics.\(^{22}\)

In addition to education about personal hygiene and disease prevention, some employers encouraged women employees to take the ARC course Home Hygiene and Care of the Sick. In 1927 the telephone company in Skowhegan offered this course to female operators at twenty-seven evening sessions in its recreation room. At the end of the course the company’s top management traveled from Rumford to attend the home hygiene demonstrations by class participants, giving each a copy of the New England Telephone Company’s “illustrated health manual” in appreciation for her efforts.\(^{23}\) By supporting the home hygiene class, company executives showed their interest in the welfare of both employees and their families. While Great Northern Paper Company’s metaphor stressed health promotion to keep men’s bodies in good working order, the telephone company focused on information its women employees needed to improve their families’ healthy.

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\(^{22}\) “A Lesson We Need to Remember,” *The Northern* 3 (November 1923): 4-5.

Besides the factory contributions, a variety of industries, ranging from insurance companies to soap manufacturers influenced public health services. Between 1909 and 1953 the Metropolitan Life Insurance Company sold policies to industrial workers whose benefits included visiting nurse services.\(^{24}\) The company’s insurance agents delivered health education materials to policy holders when they visited weekly to collect premiums. If needed the agents made referrals to the nurses. In his 1947 history of the Metropolitan Life Insurance Company Marquis James described how agents and nurses worked together to extend policy holders’ lives.

In the fight to lower death rates agents and nurses have remained first-line troops. Agents carry health and welfare literature into homes where it is most needed; they are also the liaison officers between the policyholders and the nursing service. With 500 nurses of its own and affiliations with nearly 809 local visiting nurse associations, the nursing staff in 1946 served 7,703 communities throughout the United States and Canada. In addition to bedside care of the sick, more and more educational work is being done by the nurses. They instruct policyholders on general health questions, maternal and child care, nutrition, and the removal of accident hazards in the home.

By the end of 1945 over a billion and a third copies of the welfare division’s booklets had been distributed. They had been translated into German, Italian, French, Spanish, Polish, and Yiddish. Movies on such subjects as street safety, pneumonia, nutrition, and rheumatic fever had been shown to a total reported attendance of 134,000,000. Radio, too, had been used.\(^{25}\)

Reimbursement for the cost of these public health nursing services provided additional revenue for many voluntary health agencies in Maine and several communities in the state also had Metropolitan Health Insurance nursing services.\(^{26}\)


\(^{26}\) Roster of Official and Non-Official Public Health Nursing Staff by Location, May 5, 1936, Public Health Nursing Historical File 10-144A, Maine State Archives, Augusta, ME.
Historian Suellen Hoy described how the profit motive contributed to public health when the soap industry collaborated with progressive reformers to form the "Cleanliness Institute." This health education program popularized hand washing, personal hygiene, and clean clothes with advertising campaigns in the 1920s. The advertisements included messages like "Shake Hands Often with Soap" and encouraged social workers to suggest Fels-Naptha Soap to immigrant women whose housekeeping they thought needed improvement. Hoy noted that the Metropolitan Life Insurance Company's promotion of public health nursing services raised awareness about public health nurses as "messengers of care, cleanliness, and character" to the working class.27 New legal requirements for reporting occupational accidents and diseases, workplace health promotion programs, advertising of products for improving personal hygiene, and increasing insurance benefits for industrial policy holders helped increase connections between public health and business during the Progressive Era.

**Business Collaboration with Health Officials**

Because of the increasing problem of "vacation typhoid," so called because the illness followed summer vacations to rural areas where sanitation was poor, Maine health officials regularly received requests from tourists asking about the safety of hotel water supplies. Their colleagues in other states, where the tourists lived, also pressured Maine health officials to do more prevention.28 Tourists wanted sanitary accommodations that would not make them ill.

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Serious sanitation problems existed even at established vacation resorts. Maine’s hotel operators formed a powerful lobby that protected their interests in Augusta; between 1910 and 1918, there had been three attempts to enact hotel sanitation legislation, two proposed by the former Maine State Board of Health and another by the Traveling Men’s Association. The hotel operators believed that these proposals would have unfairly interfered with their business. This may have been true in some cases, such as the proposed regulation that would have mandated a particular sized sheet on hotel beds and dictated the length of table cloths in dining rooms. When the legislature reorganized the Maine State Board of Health in 1917, the new health commissioner’s priorities included improving hotel sanitation. Dr. Bristol hired Clair Elsmere Turner to investigate sanitary conditions at hotels and resorts. Turner, an astute practitioner of public health investigation, dealt effectively with the opponents of hotel inspection.

When the news media inaccurately reported the health department intended to begin inspecting hotels, rather than simply conducting a sanitation study, Turner responded quickly to gain the hotel operators’ support. He met with Wilbur T. Emerson, secretary of the Hotel Men’s Association, a trade organization of hotel owners and

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managers. Turner convinced Emerson, manager of the Augusta House, that complying with sanitary regulations would result in positive advertising for the hotels. Emerson might have figured this out for himself without Turner’s help, but the Hotel Men’s Association’s opposition to previous attempts to legislate improvements in hotel sanitation led it to continue its defensive posture. Once Emerson understood there would be benefits to the hotel industry, including improved customer satisfaction and higher profits, he agreed to help Turner by encouraging others in the Association to participate in the study.  

Turner inspected one hundred and fifty hotels and found many with untested water supplies, unsanitary toilet facilities, and unsuitable food storage and preparation areas. Some neglected to change the sheets between guests. He concluded that health regulations and routine hotel inspections were needed to protect guests from health risks. While this may have been a forgone conclusion, Turner’s investigation led directly to the development of sanitary rules and regulations for hotels and to routine hotel inspections.

The State Department of Health sent a message to both hotel operators and patrons in the August 1920 issue of its Health News Bulletin, blocked off in a dark bold letters, “IF NOT, WHY NOT? Has YOUR Hotel Been Inspected?” This headline suggests not only that the Division of Education and Publicity may have added the members of the Hotel Men’s Association to their News Bulletin distribution list, but also that it may have been targeting those who patronized hotels, a much larger group. By suggesting hotel operators request an inspection, rather than waiting for the inspector to

30 Turner, A Sanitary Reconnaissance, 4.
31 Turner, A Sanitary Reconnaissance, 56.
arrive, the Department of Health encouraged the industry to value inspections while also increasing demand for its services, which may have helped the department increase its appropriation by the legislature. By promoting “A Clean Bill of Health” for hotels, the State Department of Health supported hotels’ business success while making its own work easier and improving public health.\textsuperscript{32} Health regulations and inspections became a trend that both business people and consumers expected.

In the early twentieth century, health consciousness increased among Maine tourists. Although the state’s tourism industry had long promoted the state as a health resort, travelers found many opportunities to encounter germs on vacation, particularly at hotels with untested water supplies.\textsuperscript{33} Newspaper articles by the State Department of Health’s Division of Education and Publicity cautioned vacationers in 1925 not to drink water from brooks and streams without boiling it first and to consider receiving typhoid immunizations before leaving home.\textsuperscript{34} This suggests that while the sparsely populated rural countryside and coastal regions may have had fewer epidemics than crowded urban areas in other states, poor rural sanitation often could lead to outbreaks of communicable diseases and jeopardized tourist industry claims about Maine’s healthful environment.

Although Turner set out to study hotel sanitation, two other problem areas, trains and lumber camps, came to his attention as he traveled around the state. Most passenger trains neglected proper sanitation in smoking cars, lavatories, and toilets. Turner described the appearance of the smoking cars as follows:

\begin{itemize}
\item[\textsuperscript{32}] Maine State Department of Health, Division of Education and Publicity, \textit{Health News Bulletin} 2 (August 1920), 1.
\item[\textsuperscript{33}] Turner, \textit{A Sanitary Reconnaissance}, 1.
\item[\textsuperscript{34}] Maine State Department of Health, “Advice to Vacationists,” \textit{Piscataquis Observer} (Dover-Foxcroft, Maine), 13 August 1925, 2.
\end{itemize}
The floor was invariably dirty from the continuous spitting and scattering of tobacco ashes by the passengers. It was evident from the appearance of the floor that there were frequent discharges of sputum from men having lung or throat infections.\textsuperscript{35}

It is likely that passengers with tuberculosis and other communicable diseases left behind germs that could have caused illness in other passengers. So Turner expanded his investigation to include passenger trains and camps that housed lumber workers.

Improving sanitation, as discussed in Chapter 1, offered a method of preventing illness in the lumber camps, and recruiting practices complicated these efforts. Turner noted that approximately 3,000 lumbermen worked in one region of Piscataquis County. Because of the need for workers, employment agencies in Boston, Bangor and Portland recruited men to work for the lumber companies. Turner described how the lumber industry work force continuously cycled through the general population, divided into three groups. These included workers in the lumber camps, those who were newly recruited and on their way to the camps, and those who had recently left the camps to spend time elsewhere.\textsuperscript{36} Many of the recruits were new immigrants or other laborers who may have been exposed to diseases in crowded urban settings before coming to the camps.

Lumbermen's mobility increased health risks to others. If diseases were not identified and treated in time, these workers could spread illness in lumber camps and communities throughout the northeast region when they left for recreation or to return home. Turner noted that lumbermen were known to consume a lot of alcohol and to spend time with prostitutes when they had free time and could travel to Bangor for a few days.

\textsuperscript{35} Turner, \textit{Sanitary Reconnaissance}, 62.
\textsuperscript{36} Turner, \textit{Sanitary Reconnaissance}, 85.
days, which he thought further lowered their resistance to pathogens and increased their risks for disease.\footnote{Turner, \textit{Sanitary Reconnaissance}, 85.} This is an example of class and ethnic stereotyping by public health officials, since when they could, many lumbermen returned to their home communities to spend time with their families, rather than carousing in Bangor.

Early occupational health services in rural Maine utilized two different models of service delivery. The American Thread Company built state-of-the-art clinic facilities on the grounds of its spool factory in Milo, including a microscope, surgical equipment, and hospital beds. The American Thread Company was a conglomerate of thirteen yarn and thread factories using wooden spools in manufacturing their products. Between 1901 and 1902 it constructed a spool mill in Milo, because of the abundant supply of birch wood there.\footnote{Russell Carey, “3,750,000,000 Perfect Wooden Spools,” (master’s thesis, University of Maine, August 1994), 7.} In addition to the mill, the American Thread Company built sanitary worker housing, camps, and medical facilities, including amenities and entertainment unavailable in many rural Maine communities. Turner wrote a news article published in Bangor and Boston newspapers describing the company’s impressive sanitation and health services.\footnote{Turner, \textit{Sanitary Reconnaissance}, 88. Turner noted this article appeared in the \textit{Bangor Daily Commercial} and in the \textit{Boston Sunday Post} on November 19, 1917.}

By publicizing the pioneering work of the American Thread Company, the State Department of Health hoped to influence the health practices of other companies.

In contrast to the on-site industrial health services of the American Thread Company, Great Northern Paper Company hired a prominent Bangor physician, Eugene B. Sanger, as its medical director in July 1917. Sanger supervised the part-time physicians and nurses who provided occupational health services in the mills and
oversaw the care of accident victims who needed treatment in Bangor. After the Madison-Anson Chapter of the American Red Cross was organized, Great Northern contracted with it to provide industrial nursing for a couple of hours each day at its Madison factory. By arranging for a nurse to give first aid and to see employees who were ill during office hours, Great Northern supported the local public health nursing services as well as the health of its own employees. Having the contract helped the Chapter pay the public health nurse's salary, although when the nurse was doing occupational health she was not available for other work. The nurses screened workers for signs of illness, monitored living and working conditions, administered first aid when accidents occurred, and cared for workers when they were ill.

Both Great Northern Paper Company and the American Thread Company augmented their health services by collaborating with the Maine State Department of Health to provide health education at the lumber camps. Dr. George H. Coombs traveled to several Great Northern lumber camps in January 1922, showing health movies after supper in the camp cook house by connecting the movie projector to storage batteries. Coombs also gave a lecture and showed movies to a “mixed audience” of townspeople and lumbermen in Monticello. Passing through Greenville he spoke twice on a Sunday evening, first showing a film about the Modern Health Crusade at a church and then addressing a group of lumbermen at the YMCA. The next day he spoke to high school students about “the handicaps in life because of unnecessary contagious diseases,” likely a euphemism for prevention of venereal disease. Coombs continued for ten more days,

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40 John E. McLeod, “Yesterday III” Chapter XII in “The Great Northern Paper Company” (Unpublished, Great Northern Paper Company, 1978), 89, Special Collections, Raymond H. Fogler Library, University of Maine, Orono, ME.
visiting four other remote lumber camps and showing movies and lecturing at each stop. After describing his trip to the lumber camps in an article in *The Northern*, Coombs listed the many services and activities of the State Department of Health, including encouraging birth registration, drinking water testing, and communicable disease reporting. He described the Department as the workers' "great and good friend." While workers may not have considered the Department a "friend" or agreed with the health advice, they may have found the presentations and films provided a welcomed diversion from boredom in the wilderness camps. By reaching workers in remote lumber camps, health officials hoped to educate them about health habits and to build broader support for health department programs.

Positive Business Influences on Public Health Services

Because of their primary profit motive, some businesses in Maine made significant contributions to the public's health by controlling and preventing illness in workers. Businesses improved the health of workers and the community at large by providing occupational health services to employees and by increasing publicity about health issues. Some businesses recognized that a strong State Department of Health would assist them in maintaining employee health and thereby accomplishing their business goals. Compared with the potential costs of paying for industrial health services or with the costs of lost productivity during epidemics, maintaining a relationship with state health officials cost less.

Maine's desire to maintain its image as a healthful vacation destination provided an added economic impetus to improve public health in rural Maine. By collaborating with health officials, business managers, who were in charge of worker health and safety,

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41 "From the State Health Department," *The Northern* 2 (May 1922): 6.
sometimes denied worker rights, as in cases of quarantine. Officials of Great Northern’s Spruce Wood Department also encouraged activism by workers to improve health services, such as supporting increased funding of the State Department of Health. Because disease control measures and increased regulations bred resentment at times, these employee health efforts illustrate the limited reach of the “All for Health for All” message. In the early twentieth century some businesses complied with public health regulations because they wanted more profits and others resisted them for the same reason.
CHAPTER 5
SUMMER RESIDENTS AND PUBLIC HEALTH

Wealthy summer residents brought their enthusiasm for improving sanitation and preventing illness when they came to Maine in the early decades of the twentieth century. They contributed to a variety of health-related philanthropic projects, including helping individuals in need and supporting community welfare activities, such as garbage collection and dairy inspections. Between 1903 and 1950 summer residents of Mount Desert and Bar Harbor (on Mount Desert Island) expanded local public health services, through their involvement in village improvement societies and the American Red Cross. The town of Mount Desert included the communities of Seal Harbor, Northeast Harbor, Otter Creek, Beech Hill, Hall Quarry, Pretty Marsh, Somesville, and Somes Sound. Besides Bar Harbor and Mount Desert, the island had two other towns, Southwest Harbor and Tremont. The public health nursing services of the American Red Cross began in Mount Desert and Bar Harbor in the early 1920s; by the end of the decade the communities of Mount Desert Island each received services from voluntary health organizations, either the ARC or the Maine Public Health Association. The MPHA started a nursing service in Southwest Harbor and Tremont in September 1928.¹ Summer residents’ interests in public health in these communities at first centered on keeping their families healthy; over time this self interest changed and they became more community-focused.

The summer residents came to Maine because they wanted to enjoy the state’s beautiful scenery and the outdoors. In 1910 John D. Rockefeller, Jr. of New York City purchased a large cottage in Seal Harbor. Wealthy enough to buy much of the real estate in the village, Rockefeller then controlled which families moved there.\(^2\) The summer residents built exclusive social venues, such as the Seal Harbor Club, recruited swimming and tennis instructors, and limited membership to upper-class Protestant families of unblemished reputation.\(^3\) They sought peaceful surroundings in an environment with clean water and safe food, including milk pure enough not to require pasteurization. Despite their enjoyment of Maine’s natural resources, summer residents’ desires for comfortable recreational facilities at times threatened public health.

While vacationing on the Maine coast, summer residents’ goal to maintain their families’ health combined self-interest with class and gender politics. Not all summer residents agreed about health. Whereas most Seal Harbor summer residents opposed milk pasteurization, many in Bar Harbor supported this practice. Many saw water chlorination as necessary, but others objected to the idea of having a chemical added to their water in order to purify it. Some wanted to share and consolidate island health services, whereas others supported maintaining separate services within each town. Summer residents’ supervision of milk handling practices and support for public health nursing services represent two examples of their public health activities that endured and

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\(^2\) H. L. Martin to Charles O. Heydt, 21 June 1932, Friends and Neighbors Mount Desert, Box 77, Folder 785, Rockefeller Family Archives, Record Group 2, Homes Series, Seal Harbor, Rockefeller Archive Center, Sleepy Hollow, NY (hereafter cited as RAC).

\(^3\) The membership committee of the Seal Harbor Club excluded Jewish summer residents and divorced persons among others. See Amy Montague to Abby Rockefeller, 21 June [1928], Amy Montague to [John D.] Rockefeller, Jr., 19 June 1931, and Amy Montague to [John D.] Rockefeller, Jr., 20 June 1933. Seal Harbor Club, RAC.
expanded during this period. Resistance from a variety of sources sometimes prevented summer residents from accomplishing their objectives, such as in the case of a plan for an island health district. Although Bar Harbor year-round and summer residents initially opposed water chlorination, the ongoing advocacy of one summer resident for this measure ensured a safe drinking water supply. Self interest among Mount Desert Island summer residents made public health a less important goal for some, despite many community improvement efforts. Divided about self interest and uplift and conflicted by class and gender politics, powerful summer residents lost some battles and won others.

**Improving Milk Safety**

Summer residents used their professional expertise and connections to raise the standards of milk sanitation and ensure a safe milk supply for their own families during their stay on Mount Desert Island. Between 1903 and 1922 summer resident Edward K. Dunham, a bacteriologist from New York City, served as chairman of the Seal Harbor Village Improvement Society’s Sanitary Committee. Having built a lab at his summer home, Dunham inspected farms, tested milk for bacteria, and prompted the Sanitary Committee to adopt the New York County Medical Society’s milk certification guidelines.4 Some summer residents who served on the Sanitary Committee had connections to universities, research organizations, or urban public health services and like Dunham were nationally-known health experts.

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4 *Fourth Annual Report of the Seal Harbor Village Improvement Society*, April 1904, 14 and *Twenty-Second Annual Report of the Seal Harbor Village Improvement Society*, April 1922, 21-22, Seal Harbor Library, Mount Desert, ME. In the early twentieth century in some Maine communities, including Bar Harbor and Mount Desert, voluntary village improvement societies augmented the official health services of town boards of health in addition to creating walking paths and community restrooms and organizing other village beautification projects. The names varied from place to place; in Bar Harbor the organization was known as the Bar Harbor Village Improvement Association, whereas Seal Harbor’s organization was called the Seal Harbor Village Improvement Society.
After successfully following Dunham’s instructions and producing clean milk for many years, Vesta Clement died suddenly in 1919; Dunham, his brother-in-law, and Rockefeller helped Pearl S. Richardson, a man who had worked for Clement, develop a farm, starting with only a run-down house, some rocky land, and part of Clement’s herd. They loaned him money for farm improvements, secured with interest-bearing notes, and had him sign a contract requiring sanitary supervision. Dunham directed Richardson about all aspects of his operation, including placement of his well and construction of the barn. In addition to loaning money, Dunham spent many hours inspecting Richardson’s dairy, checking the bacterial content of the milk, and making suggestions for improvements.

Following Dunham’s sudden death in 1922, his widow, Mary Dows Dunham, began testing milk in her husband’s laboratory. The Seal Harbor Village Improvement Society had designated James B. Murphy, another Seal Harbor summer resident from New York City and a nationally-known pathologist and cancer specialist, as Dunham’s replacement, but Murphy had little time to devote to the milk inspections. Familiar with milk inspection because she had assisted her husband in the laboratory, Dows Dunham knew how to prepare cultures and count bacteria under the microscope. When necessary...
she sought advice and assistance from experts, such as Dr. William H. Park, Director of
the Bureau of Laboratories of the New York City Department of Health.\textsuperscript{10} Dows Dunham
knew Park because he and her husband had taught bacteriology together at Bellevue
Medical College of New York University. Despite her busy schedule of village
improvement projects and frequent lameness from having had polio as a child, Dows
Dunham worked to ensure a safe milk supply for Seal Harbor summer residents.

Gender differences among Dows Dunham and the male milk supply financiers led to
different approaches to assisting Richardson. Dows Dunham and her sister both
inherited investments in Richardson's farm when their husbands died, but they viewed
the investment as a better way to care with their families. As a woman who had personal
experience with illness, having had polio as a child and frequently caring for ill relatives,
Dows Dunham believed a clean milk supply essential to her family's health, particularly
for the well being of her grandchildren.\textsuperscript{11} For the men who had invested in Richardson's
operation, clean milk production represented primarily a business deal. More interested
in efficiency, the men had difficulty tolerating Richardson's shortcomings; women
investors were more compassionate and less concerned about financial loss.

Dows Dunham became a strong advocate for Richardson and his family,
especially when he expressed discouragement about farming difficulties and ongoing
debts.\textsuperscript{12} Although at times very critical of him, Dows Dunham formed a relationship with
Richardson and his wife and believed in their ability to produce clean milk. Following

\textsuperscript{10} Mary Dows Dunham to John D. Rockefeller, Jr., 28 June 1929, Richardson Farm 1919-
1931, RAC.
\textsuperscript{11} Mary Dows Dunham to John D. Rockefeller, Jr., 17 September 1934, Richardson Farm
1934, RAC.
\textsuperscript{12} Mary Dows Dunham to John D. Rockefeller, Jr., 9 April 1928, Richardson Farm 1919-
1931, RAC.
the fire that destroyed his milk house in 1926, Dows Dunham responded immediately, sending a man to collect bottles and bring them to the farm so Richardson could deliver milk the next day. Even though the farm looked “in a hopeless state of devastation” shortly after the fire, she remained confident that it could be “pulled together in time.” Through many challenges, Richardson wanted to quit the milk business, but Dows Dunham continued to support him and arranged for further assistance from Rockefeller and others to help him rebuild his milk house. She and her sister, Mrs. Richard (Annie) Hoe, canceled Richardson’s notes to them, hoping to lessen the burden on him. When Rockefeller was slow to pay the milk house reconstruction bills (in part because the local workmen had inflated their prices), Dows Dunham empathized with Richardson’s feelings of discouragement about his increasing debts. Although she believed he needed supervision, Dows Dunham remained loyal to him because she thought his milk was best for her family.

Richardson struggled financially in part because he failed to collect from all his milk customers, even from some year-round residents who could afford to pay. Rockefeller’s cottage caretaker, Frank Ralston, tried to get Richardson to implement a ticket system to solve this problem, but he did not follow this suggestion. The milk financiers considered Richardson’s lack of an efficient collection system as further evidence of his inadequate business skills. Dows Dunham considered Richardson the

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13 Mary Dows Dunham to John D. Rockefeller, Jr., 5 and 16 September 1926, Richardson Farm 1919-1931, RAC.
14 J. M. Porter to Robert W. Gumbel, 19 December 1927, Richardson Farm 1919-1931, RAC.
15 Mary Dows Dunham to John D. Rockefeller, Jr., 9 April 1928, Richardson Farm 1919-1931, RAC.
16 S. [Frank] Ralston to Robert W. Gumbel, 9 January 1928, Richardson Farm 1919-1931, RAC.
best choice for Seal Harbor summer residents' milk supplier; with her encouragement he chose to focus on providing milk to the summer colony. He gave up supplying his year-round customers in the spring of 1928 and supplied only the summer residents thereafter, becoming even more dependent upon help from his financiers.17

While the milk house fire spurred Dows Dunham to increase her advocacy for Richardson, his misfortune led D. Hunter McAlpin and Rockefeller to consider other milk supply options. McAlpin, a summer resident, physician, and an expert in modern farming techniques, became involved in obtaining clean milk for Seal Harbor summer residents after the fire.18 Reviewing detailed memos enumerating Richardson's various notes and interest rates between 1920 and 1927, Rockefeller, his staff, and McAlpin considered whether or not to continue investing in the farm, when Richardson had difficulty paying even the interest on the notes.19 Less sympathetic to Richardson's situation than Dows Dunham, McAlpin preferred to find a more "intelligent" farmer. He wanted someone who knew about modern farming methods to supply clean raw milk to Seal Harbor summer residents.

Dows Dunham's milk tests demonstrated that Richardson's milk compared favorably to the milk from other Mount Desert Island farms. Otter Creek antique dealer Albert Stanley delivered milk to some summer residents. Herbert Salisbury, a farmer

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17 Pearl S. Richardson to Mary Dows Dunham, 12 April 1928, Richardson Farm 1919-1931, RAC.
18 Dows Dunham to Rockefeller, 5 September 1926.
19 See 1927 correspondence of John D. Rockefeller, Jr. and Robert W. Gumbel, S. Frank Ralston, and D. Hunter McAlpin, Richardson Farm 1919-1931, RAC.
who lived on the Bar Harbor Road in Hulls Cove, delivered milk to year-round residents
after Richardson gave up the local trade. According to Dows Dunham, many of the
local residents did not like the quality of Salisbury’s milk in comparison to Richardson’s,
because it spoiled too quickly. In a letter to Rockefeller, Dows Dunham quoted the
bacterial counts in Richardson’s, Stanley’s and Salisbury’s milk. On June 30, 1928 she
wrote:

I was in my laboratory at half past seven Sunday morning, counting the
milk cultures I had put in the incubator on Friday. Richardson’s milk was
not above 3000, and Stanley’s was 5000. This very low count is largely
due to the cold weather, constant rain and so, lack of dust. I also
examined Salisbury’s milk, just for my own interest. He is the man who is
delivering milk now to the natives; his ran about 25,000, just under
certified milk. I was surprised to find it as good as it was, for the man has
had no instructions as yet in caring for the milk. I think that with a little
help and a few suggestions, his milk can be kept reasonably clean.

According to Dows Dunham’s data, Richardson produced the cleanest milk, and she
therefore continued to view him as the best choice for the summer residents’ milk
supplier.

McAlpin saw Dows Dunham as too sentimental and became impatient with her
ongoing support for Richardson. During the summer of 1928 McAlpin and his wife
visited twelve farms on Mount Desert Island, trying to find a farm that would meet his
standards. None, including Richardson’s, measured up. Dissatisfied with sanitary
conditions on Richardson’s farm, McAlpin began buying milk from Stanley instead. This
angered Dows Dunham, because she thought it added to Richardson’s discouragement.

20 Directory of Bar Harbor, Cranberry Isles, Ellsworth, Mount Desert, and Southwest
Harbor, Maine (Portland, ME: Fred L. Tower Companies, 1928), 113, 297.
21 Mary Dows Dunham to John D. Rockefeller, Jr., 15 June 1928, Seal Harbor Village
Improvement Society, Box 129, Folder 1280, RAC.
22 Mary Dows Dunham to John D. Rockefeller, Jr., 30 June 1928, SHVIS, RAC.
23 D. Hunter McAlpin to John D. Rockefeller, Jr., 11 October 1928, Richardson Farm
1919-1931, RAC.
However, because she had her own farm in Otter Creek, Dows Dunham also did not buy his milk.\textsuperscript{24} Despite Richardson's shortcomings, Dows Dunham continued to advocate for him.

In pursuit of a better milk supply, McAlpin talked and corresponded with representatives of the Bar Harbor Village Improvement Association (BHVIA); summer residents associated with BHVIA in turn lobbied the Mount Desert summer residents, encouraging them to cooperate in a milk sanitation plan for the whole island. Rockefeller deferred to McAlpin's expertise regarding questions about sanitation and farming, but he stayed connected to the issue, responding to various options McAlpin presented. In October 1928, in a letter to McAlpin, Rockefeller quoted a Bar Harbor summer resident, Gist Blair, of Washington, D.C. Blair explained how he persuaded the BHVIA to adopt a resolution promoting sanitary inspection for the whole island, noting he had discussed this plan with two Mount Desert summer resident physicians, Dr. Murphy of Seal Harbor and Dr. Fraley of Northeast Harbor, and that Dr. Ludwig Kast, a Bar Harbor summer resident from New York City, had agreed to champion the proposal. Blair's letter to Rockefeller noted that dealers of milk, fish, and meat opposed sanitary inspection, but characterized the "natives" as "intelligent" and said he believed once they understood how inspections might benefit them personally and in business, they would respond.\textsuperscript{25} Rather than collaborating with "native" neighbors, summer residents sought assistance

\textsuperscript{24} Dows Dunham to Rockefeller, 15 June 1928. In another letter to Rockefeller, dated 21 November 1929, Dows Dunham stated, "When I gave up my farm in Otter Creek and let Stanley go into the milk business," indicating that she no longer had her farm by the time McAlpin began purchasing milk from Stanley. See Seal Harbor Misc. 1910-1930, Box 77, Folder 783, RAC. Dows Dunham may have bought milk from Richardson once she no longer had her farm.

\textsuperscript{25} John D. Rockefeller, Jr. to D. Hunter McAlpin, 18 October 1928, Richardson Farm 1919-1931, RAC.
from one another; perhaps the summer residents from Bar Harbor and Seal Harbor believed other summer residents would share their interests.

Although Bar Harbor summer residents also wanted to improve their milk supply, McAlpin did not view partnering with them as the best option for Seal Harbor; he considered it a disadvantage that the Bar Harbor Board of Health and BHVIA supported pasteurization. Most members of the Seal Harbor summer colony continued to want clean raw milk, because they thought it was healthier than pasteurized milk.26 Perhaps after nearly three decades of close supervision of the Seal Harbor milk supply, first by Edward Dunham and then after his death by Mary Dows Dunham, the Seal Harbor summer residents believed clean milk was possible to achieve without pasteurization. They may also have associated pasteurization with dirty milk that was dangerous if not pasteurized. The rationale for pasteurizing milk in the early twentieth century may have influenced the Seal Harbor summer residents’ preference for clean raw milk and their opposition to pasteurization.

Perhaps Bar Harbor summer residents preferred pasteurization because many of the milk suppliers on Mount Desert Island did not practice good sanitation and the milk dealers did not have as much supervision and financial assistance as Richardson had. Due to the need for a clean water supply, a milk room, refrigeration, and protection of the milk from contamination during its transportation to customers, producing clean raw milk was expensive; this made it affordable only to the upper class. Bar Harbor had wealthy summer residents; in relation to Seal Harbor, though, it was less exclusive. The BHVIA supported pasteurization to improve the safety of the milk supply for all its residents, not just the summer colony.

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26 McAlpin to Rockefeller 11 October 1928, 2.
The main advantage for Seal Harbor's cooperation with BHVIA was to secure a qualified person to do the milk inspections. Besides cooperating with Bar Harbor, McAlpin proposed three other options, including organizing a "small syndicate" to develop a demonstration farm that would operate only in the summer, getting the University of Maine to develop such a farm, or helping Richardson to borrow more secured loans from a bank to build a new barn according to the summer residents' specifications. While discussions of these options continued, Dows Dunham kept on testing the milk.

In June 1929 McAlpin challenged Dows Dunham's milk inspection expertise when he complained to Rockefeller that she used improper techniques, examining milk from a single cow and using samples for bacterial testing that the farmers had prepared for her. These statements insulted Dows Dunham; she maintained she followed the same procedures her husband had used. In response to McAlpin's criticism, Dows Dunham again talked with Dr. Park and visited the public health laboratory at the New York City Department of Health, confirming her procedures were correct. Despite her many years experience in this work, McAlpin may have viewed her as unqualified to test the bacterial content of milk because she lacked formal training, or his assumptions about gender led him to assume she was not qualified.

Dows Dunham had changed her earlier position by 1929, agreeing with the other milk financiers that Richardson was not their best milk supplier. That year the Seal Harbor Village Improvement Society's Sanitary Committee created a special

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27 D. Hunter McAlpin to John D. Rockefeller, Jr., 12 November 1928, Richardson Farm 1919-1931, RAC.
28 Mary Dows Dunham to John D. Rockefeller, Jr., 22 June 1929, Richardson Farm 1919-1931, RAC.
29 Dows Dunham to Rockefeller, 22 June 1929.
subcommittee to study the situation and possible solutions. Dows Dunham's son, Edward K. Dunham, Jr., author of the committee's report, gave Richardson's farm an unfavorable rating, despite its clean milk. Richardson still owed his financiers $5,000, even though Dows Dunham and her sister had canceled his debt to them.30 Perhaps because of McAlpin's influence, Dunham judged Richardson's barn too small and thought its poor drainage created unsanitary conditions. In order to supply more summer residents with milk, Richardson had started buying milk from other farmers to deliver to his customers, leading to the need for supervision of those farmers, too. The report argued for "simplification of sanitary supervision" and suggested hiring Harry Bickford, a college-educated farmer who had demonstrated his "intelligence" and "initiative" by staying out of debt. However, since Bickford had sold his farm, making him unavailable to supply their milk, Richardson remained the top choice "by default."31 The report supported summer residents' financial interests and the consensus that Dunham, McAlpin, Rockefeller, and Dows Dunham had reached after much consideration of their various options.32

The SHVIS Milk Committee chose Bickford as its best milk supplier, and he turned out to be a savvy negotiator. The men admired Bickford for his intelligence and for paying his debts, but they still expected to get a favorable deal at the farmer's expense. Although they wanted clean milk, they liked a bargain; they also intended to avoid lending money directly to a farmer as they had done with Richardson. Bickford

30 Edward K. Dunham, Jr., Report to the Milk Committee of the Seal Harbor Village Improvement Society, November 1929, 7, Milk Committee, RAC.
31 Dunham, Report to the Milk Committee, 11-13.
32 John D. Rockefeller, Jr. to Mrs. E[ward] K. [Mary Dows] Dunham, 29 July 1929, Richardson Farm 1919-1931, RAC.
hoped the summer residents would offer to help expand his milk operation. Instead they offered to loan a bank money to secure a loan to Bickford. After corresponding for several months with McAlpin and Dows Dunham and visiting McAlpin’s model farm in Connecticut at his own expense, Bickford remained unsatisfied with the terms McAlpin proposed. Although Bickford had the training and expertise to produce clean milk, the summer residents may have thought he was too assertive. Like local workmen who marked up their prices for wealthy summer people, Bickford aimed to profit from his dealings with the Seal Harbor summer residents.

After Bar Harbor citizens voted in 1930 to employ a full-time health officer, the Seal Harbor summer residents had yet another avenue for ensuring a clean milk supply. In 1931 the SHVIS collaborated with Bar Harbor for milk inspection services, despite differences over pasteurization. Bar Harbor employed Alexander A. Robertson, who trained at Harvard and Massachusetts Institute of Technology and worked in public health for nine years during the 1920s in Quincy, Massachusetts.

Dows Dunham had hoped to be rid of her milk inspection duties long before 1930, but she agreed to remain chairman of the SHVIS Sanitary Committee through the following year in order to make arrangements to transfer these duties to Robertson. During that year she met with him several times and collected signatures from Mount Desert town selectmen indicating their agreement to contract with Bar Harbor’s health officer for milk inspection. In a letter to Rockefeller in September 1930, Dows Dunham

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33 Harry E. Bickford to Mrs. Edward K. [Mary Dows] Dunham, 8 July 1929, copy, Richardson Farm 1919-1931, RAC.
34 Harry E. Bickford to D. H[unter] McAlpin, 9 March 1930, McAlpin to Bickford, 12 March 1930, and McAlpin to Rockefeller, 17 March 1930, Milk Committee, RAC.
35 A[lexander] A. Robertson to Mary Dows Dunham, 16 May 1931, Milk Committee, RAC.
looked forward to relief from the milk inspections, commenting “At least I can resign next summer with a feeling that the matter has been put on a permanent basis.”

Robertson began inspecting milk for the town of Mount Desert in 1931, and although she had turned over the inspection duties she remained active in promoting clean milk.36

When Robertson’s tenure with Bar Harbor ended in 1933, the SHVIS resumed responsibility for the milk inspections, perhaps because of differences over pasteurization. The SHVIS re-instituted its high milk inspection standards by contracting with civil engineer Alfred Mullikin, who continued to keep Dows Dunham informed about the outcomes of his inspections.37 Dows Dunham’s correspondence from one farmer indicated objections to Mullikin’s findings and resistance to implementing the milk handling practices that the SHVIS expected.38 Sanitation at most of the island farms was not optimal, but over time the SHVIS’ milk inspection services improved dairy sanitation, at least in the town of Mount Desert. The Seal Harbor summer residents wanted clean raw milk and that was expensive to produce. Their high expectations for farm sanitation and control over the milk handling practices highlight their upper-class privilege in relation to their local island neighbors.

Support for Public Health Nursing

After World War I, Dr. Edward K. Dunham facilitated the organization of a Mount Desert chapter of the American Red Cross, which engaged a public health nurse

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37 Alfred Mullikin to Mary Dows Dunham, 22 July 1933, DFC.
38 Harry M. Woods to Mary Dows Dunham, 24 July 1933, DFC.
for the town. C. Charlotte Nelson, the chapter's first public health nurse, endeared herself to the summer residents. In letters during the winter months she reported on the status of various projects, giving details about the lives of local residents. Nelson at times functioned as an agent of the summer people, updating them on needs of the poor and about local attitudes. By beginning a public health nursing service and building an attractive permanent home for the ARC chapter in Mount Desert, summer residents imposed their upper class standards. Many local residents expressed appreciation for the summer residents' contributions. Although summer residents still valued self-interest, as in their efforts to obtain clean milk, they became more community-focused by the early 1930s and improved the lives of members of the local community.

Despite growing local support for Nelson's work, evidenced by annual town appropriations that augmented private Red Cross donations, some residents resisted her public health nursing services. When she made home visits to ensure that school children received the recommended treatment for health problems, parents did not always cooperate. When Dr. Grindle, the school physician, went on vacation in November 1927, impetigo and scabies broke out in the schools. In a letter to Dows Dunham, the nurse described the additional work of examining the children and taking them to a physician in Bar Harbor when she suspected they needed treatment. She sent one Seal Harbor girl with impetigo home from school and later visited to instruct the mother about the treatment. Although Nelson described the mother as "nice" to her (probably meaning that she invited Nelson in, listened to the instructions, and acted as if she would comply) the mother did not answer the door on subsequent visits. Not only did she avoid Nelson,

she sent her daughter to an aunt’s house in another village on the island to avoid Nelson’s scrutiny.40 Although the child’s mother did not appear to object to Nelson’s first visit, she may have disliked the nurse’s meddling. Readmission into school required a note from the attending physician or Nelson, and the mother may not have had money for the doctor’s visit or treatment. She may have held Nelson responsible for this hardship. While summer residents’ perceived their support for these services as helpful, parents probably viewed this as intrusive.

Sometimes the public health nurse’s work involved imposing summer residents’ upper-class values and morality on working-class women. One example of this was the summer residents’ and Nelson’s efforts to change the living situation of Vivian Reed, a young woman who became pregnant at thirteen. The Mount Desert Chapter of the ARC placed Reed at the Temporary Home for Women and Girls in Portland, probably during her pregnancy and confinement. The staff there took a special interest in her and offered her housing with a wealthy family in New Hampshire, perhaps in exchange for her working as a domestic servant. Nelson updated Dows Dunham about Reed’s progress, noting that she had left this family about a year later to live with a man in Rockland and work in a fish factory. When Nelson attempted to rescue Reed, the man with whom she lived did not want her to leave; Nelson eventually succeeded by enlisting the help of the Rockland public health nurse and the police. Reed stayed briefly with Nelson in Northeast Harbor and then went traveling with Mrs. Merritt, a wealthy summer resident who agreed to take her in. Nelson hoped that after seeing “the finer things of life” with Merritt, Reed’s life would change. The summer residents sometimes tried to impose their

40 C. Charlotte Nelson to Mary Dows Dunham, 28 November 1927, Box 24, Folder 8, Dunham Family Papers, Sophia Smith Collection, College Archives, Smith College, Northampton, MA (hereafter cited as SSC).
values on the local residents of Mount Desert, but they did not always succeed.

Accustomed to her independence, Reed had already left one affluent home. She may not have welcomed the upper-class expectations of her rescuers, even after traveling and seeing “finer things.”

Nelson knew that although many summer residents valued her services, not all local residents felt this way. During most of the 1920s before town meetings she worried that the voters would oppose funding for her job. Each year, the Board of Directors of the chapter appointed a committee of townspeople active in the Red Cross to rally support for maintaining town funding, which augmented funds raised during the canvass of summer residents each August and the Red Cross membership Roll Call each November. By 1929, Nelson felt more confident and the Board did not appoint a committee to rally support that year. Nelson wrote to Dows Dunham that Otis Ober stood up at the town meeting and moved to indefinitely postpone the article, saying that the town did not need a public health nurse. According to Nelson, a long pause followed his motion and no one seconded it, although others may have shared Ober’s negative sentiments.

Ober’s objection aside, citizens attending the town meeting supported the public health nursing service in Mount Desert. Mrs. Knowles, the wife of Jerome H. Knowles, a local attorney who moderated the meeting, moved that the article funding the public health nurse be adopted and the motion received a prompt second. Nelson wrote:

When asked for an approval there was a shout “yes” so loud that I thought the roof would come off. Although I would rather not have had any question, it was really a good test, for as Mr. Candage and Mr. Joy [two local residents who were involved in the Mount Desert American Red

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41 C. Charlotte Nelson to Mary Dows Dunham, 7 April 1929, Box 24, Folder 8, SSC.
42 Nelson to Dows Dunham, 7 April 1929.
Cross chapter] said afterward, one out of perhaps 2 or 3 hundred was rather a tribute to our work.\textsuperscript{43}

Mrs. Knowles’ advocacy represented an alliance between middle-class local residents and wealthy summer visitors, who joined together to reduce risks of disease and to promote community health. By insisting that the working class conform to practices that would cure or minimize risks of disease, whether minor problems like impetigo or more serious illnesses such as diphtheria, these middle and upper class residents protected themselves against contagion.

While some townspeople resisted the public health nurse’s intrusion into their lives, others, particularly women, welcomed her presence in the community. In one letter to Dows Dunham, Nelson described the home nursing classes she gave in remote villages and Northeast Harbor in the evening.

I look forward to these meetings each week, for the people are very sincere in their appreciation and interest. As there are no lights in the school house, some of the women volunteered to contribute lamps. Extra wood is put on the fire at the close of school in the afternoon, which furnishes enough heat for our class at 6:30. One Monday it started to rain very hard in the afternoon. There was no way of telephoning, as the telephones are not connected through Pretty Marsh. The nearest telephone in the winter is Indian Point or Seal Cove. I thought I would go, in case someone might possibly venture out. At the appointed time for class, I could see lights from lanterns slowly moving towards the school, coming from different directions; every member was there in time for class. Do you wonder why I love to go? Two of the women have to walk from way down on the point opposite Bartlett’s Island. At Northeast I have a class for young mothers. We meet at my office or apartment each Wednesday evening. After class is completed, we spend the remainder of the evening sewing, or sometimes I read to them from some of my books on child-rearing.\textsuperscript{44}

In addition to providing information about the nurse’s working conditions, this account suggests the community’s enthusiasm for the information Nelson provided, or at least the

\textsuperscript{43} Nelson to Dows Dunham, 7 April 1929.
\textsuperscript{44} C. Charlotte Nelson to Mary Dows Dunham, 26 February 1930, DFC.
social contact the gatherings afforded. With encouragement and ongoing financial support from summer residents and from the town, Nelson taught the island women helpful skills in home care of the sick and provided a much-welcomed social outlet.

One of the participants in Nelson's home hygiene class, Mrs. Nathan Smallidge of Pretty Marsh, spoke at the tenth annual meeting of the Mount Desert Chapter of the American Red Cross on August 5, 1930 about her positive experiences in the class. Smallidge described the lessons as "particularly interesting and vital" since most participants lived "so far away from a doctor." Smallidge expressed her gratitude for the American Red Cross and what she and other local women had learned from the public health nurse.

Gender experiences influenced local women's acceptance of Nelson's work. Because of their lives as rural women, the young wives and mothers of Mount Desert welcomed Nelson more than they rejected her. They might have ignored her, but instead they attended her classes and accepted her invitations to gatherings. Isolated in their rural communities, these women found Nelson's information useful rather than intrusive. Despite some resistance to the public health nurse among year-round residents, most welcomed her by 1929.

Summer residents who had donated money over the years to support the public health nursing services felt ownership over them. In correspondence with other summer residents Dows Dunham referred to the public health nursing services at the Mount Desert ARC chapter as "our public health nursing service." Summer residents who received letters from Nelson during the winter frequently forwarded copies to others. To

45 Mrs. Nathan Smallidge, "Report at the Tenth Annual Meeting of the Public Health Nursing Service, Mount Desert Chapter, American Red Cross," 5 August 1930, DFC.
46 Dows Dunham to Rockefeller, 30 June 1928.
Dows Dunham, Rockefeller wrote: “It was good of you to send me the two letters from Miss Nelson about the work on Mount Desert Island. What a thoroughly valuable work Miss Nelson is doing there, and how indispensable she has made herself.”47 Summer residents were pleased that the public health nursing service was operating so smoothly and that their public health nurse was carrying on the work in their absence. Because of their upper-class status, Dows Dunham and her friends believed they knew what was best for the program.

Because of her husband’s involvement in founding the nursing service, Dows Dunham participated in running the chapter until her death in 1936. Edward Kellogg Dunham, Jr. assisted his mother and served on the chapter’s board of directors after she died. The Dunham family participated in several philanthropic endeavors in Mount Desert. Building and maintaining the chapter house represented one of its most enduring contributions.

During the late 1920s Dows Dunham wrote to other summer residents, expressing her concern about Nelson’s housing situation.48 The Mount Desert Red Cross Chapter rented an apartment over the A & P store in Northeast Harbor for Nelson and her assistant nurse, but the water pipes froze during the winter months in the drafty building. Rockefeller offered to pay half of the expenses to build a house for the chapter for office and clinic space as well as housing for the staff, and in 1928 the Board of Directors

47 John D. Rockefeller, Jr. to Mary Dows Dunham, 18 April 1929, DFC.
48 Mary Dows Dunham to John D. Rockefeller, Jr., 9 September 1928, DFC.
accepted his offer. The building committee acquired land on Summit Road in Northeast Harbor, hired an architect, and began fundraising for the new house.

Activities associated with building the chapter house consumed Dows Dunham throughout 1931. In all, eighteen summer residents donated money to build it with John D. Rockefeller, Jr. matching the donations of seventeen others. Summer residents disagreed over the appearance of the house, some arguing in favor of brick veneer on the outside. Initial construction slowed when Rockefeller insisted that the planners seek new bids after local workmen inflated their prices. While construction began, Dows Dunham shopped for fixtures and furnishings in New York; taking advantage of depressed prices, she did her best to ensure that the place would be a comfortable, attractive home. The one and a half story cape with an attached two-car garage (by this time the chapter had two nurses and two automobiles) cost just under $22,000 to construct when it was finished in the fall of 1931. The house became a model for other chapters and was pictured in The Red Cross Courier, a national publication of the American Red Cross.

In the 1940s, when the Chapter had difficulty finding a public health nurse during a nursing shortage, the house became a recruiting tool. Board members described its facilities to potential applicants in hopes of enticing them to accept its position.

The Chapter House was built to serve as headquarters for the Service with living quarters for the nurse. There is a well-equipped kitchen for the use of the nurse. The expenses of the house including electricity for cooking, etc. are paid by the Chapter. The nurse has her food to buy, laundry--and that is about all. The kitchen has an electric stove, electric icebox--is a

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49 John D. Rockefeller, Jr. to Mary Dows Dunham, 13 September 1928 and 28 April 1930, DFC.
50 Mary Dows Dunham to Samuel W. Candage, 8 January 1931, DFC.
51 See receipts to Mary Dows Dunham for furniture, fixtures, and household goods, John Wanamaker New York and others, June-September 1931, DFC.
52 "Chapter House the Gift of 18 Donors," Red Cross Courier 11 (January 1932): 603.
very pleasant room. The nurse has a very attractive bedroom--with fireplace.53

No ordinary position, this post was an exclusive appointment offering the best housing situation for its nurse. It contrasted sharply to the nurses’ prior living situation and to amenities offered public health nurses in other rural Maine communities. Dows Dunham’s careful landscaping and choice of furniture provided a pleasant gathering place for the nurse to host mothers’ groups and classes in home care of the sick, but this also meant that she had no private space. The wealthy summer residents wanted to improve the Mount Desert community; the chapter house was part of their goal to uplift their local neighbors, at least the public health nurse and those who would attend clinics or classes there. The house became not only an asset of the chapter, but a part of the Northeast Harbor neighborhood.

From the outset board members had fears about the national organization in regard to local control of the chapter house.54 Ownership of the house became an issue when the American National Red Cross directed the local chapter to stop or transfer its nursing service in the 1940s. In 1949 the chapter board resolved not to turn over the nursing service without assurance that the new organization would continue to have use of the house.55 The board believed the eighteen summer residents who had donated to the Red Cross chapter house did not want it to become property of the American National Red Cross. The summer residents had the power to impose their will. They complied with the ARC national directive to form a new agency to provide public health nursing

54 Mary Dows Dunham to Samuel W. Candage, 13 October 1930, DFC.
55 Minutes of Executive Committee of Mount Desert Chapter, 22 August, 3 September 1947, MDNA.
services, but they kept the chapter house for the new service. In this situation Mount Desert summer residents looked after not only their own self interests, but the future interests of the Mount Desert community and the interests of the new voluntary public health nursing association.

Water Pollution & Chlorination

In addition to Rockefeller’s support for the ARC chapter house he built roads on Mount Desert Island and was involved in various development projects; in the early 1930s class politics influenced summer and year-round residents’ support for and opposition to a proposed “tea house” that would likely have polluted Bar Harbor’s water supply. Not only a gathering place for drinking tea, plans for the Eagle Lake Lodge included a dining room and thirty-four bedrooms; the stable was expected to have eighteen stalls. It is not surprising that plans to build such a facility so close to Bar Harbor’s water supply raised some public health concerns. Those who supported Rockefeller’s plans for the project overlooked pollution threats because they thought purifying the water through chlorination would solve the problem and they believed the facility would add to social life on the island. Some opponents worried about water pollution and others thought it would raise opposition to Rockefeller’s “road scheme” mostly among summer residents who disliked change.

56 The American National Red Cross transferred the property to the Mount Desert Public Health Nursing Association on March 24, 1950 for consideration of one dollar to hold as long as it exists as an agency.
57 Charles W. Sherman, “Report to John D. Rockefeller, Jr. Upon Sanitary Conditions at the Proposed Eagle Lake Lodge, Bar Harbor, Maine,” 7 November 1930, Sanitation Reports & Restrictions, Box 85, Folder 842, RAC.
58 R. B. F. [Raymond B. Fosdick] to [John D.] Rockefeller, Jr., Dr. Kast Correspondence 1931, Box 85, Folder 843, RAC. There was also great opposition by some Mount Desert summer residents to the use of cars on the island; permitting them took an act of the Maine Legislature in 1915. See Secretary of State, “Chapter 151: An Act Permitting the Use of Automobiles in the Town of Mount Desert,” and “Chapter 208: An Act Relating to the Use of Automobiles in the
Because drainage from the stable or lodge might pollute Eagle Lake, Rockefeller understood possible opposition to his plan. He consulted experts from two sanitary engineering firms, who discounted the pollution risk and rationalized that picnics and native water fowl probably already posed equal risks. Rockefeller knew why residents might be concerned about the safety of their water supply; he filtered the water at his Seal Harbor cottage, which came from Jordan Pond, indicating his awareness of potential water pollution in Mount Desert. Before building the tea house at the proposed site, he needed to quell citizen opposition and obtain Water Company approval. Rockefeller intended to subvert opposition to his development plans by ensuring chlorination of the Bar Harbor water supply; he thought this would make arguments about pollution moot, assuming opponents were concerned about water contamination.

Rockefeller identified the tea house opponents with the assistance of Dr. Ludwig Kast and worked to persuade them to support his plan. Kast was a physician from Vienna, Austria, who came to the United States in 1906 to do research at the Rockefeller Institute; he later became a professor of clinical medicine at the New York Post Graduate Medical School. Opinions about the proposed tea house varied, but most local residents supported the plan; the majority of its opponents were summer residents who owned cottages in Bar Harbor and worried about their water supply. Bar Harbor's health officer, Alexander A. Robertson, who worked closely with the Bar Harbor Village Improvement Society, was also concerned about the safety of the water supply. Robertson knew that the water supply was vulnerable to pollution from the nearby stable and lodge, and he worked to ensure that it was protected. During the construction of the tea house, he consulted with Rockefeller and his team to ensure that adequate safeguards were put in place to prevent any contamination. Overall, Rockefeller was committed to protecting the quality of the water supply and ensuring that it was safe for all residents to use.
Association, objected to the project because it would bring more people to the area near the water company's intake pipe, increasing the risks of impurity. Though Rockefeller had supported Robertson's appointment to ensure a safe milk supply, he circumvented the health officer's authority when Robertson did not favor the tea house proposal.

Kast's and Rockefeller's correspondence between May and September 1931 reveals a series of behind-the-scenes maneuvers to gain community acceptance of the chlorination of Bar Harbor's water supply and written statements of support for building the tea house. Kast believed that Robertson would change his mind and support the tea house and stable, if the Water Company chlorinated the water from Eagle Lake. Since several opponents suggested that the project might harm the water supply, Kast discussed with the water company president all the possible ways that the lake could become contaminated. He wrote to Rockefeller:

I raised the question whether the present protection of the lake and watershed are such as to justify such ultraconservative misgivings about remote possibilities of pollution. This question once raised led to a survey of the existing sanitary controls and I had no difficulty in convincing, for example, Mr. Fred C. Lyman of the Bar Harbor Water Company that boating, fishing, occasional picnicking on or near the shore during the summer and the presence of horses and men on the ice for the ice cutting and ice fishing in the winter constitute very real possibilities of pollution of the lake water.

Kast lobbied the Bar Harbor Water Company and convinced it that chlorination of the water supply was a good idea, regardless of the tea house plan.

62 Fred C. Lynam to John D. Rockefeller, Jr., 23 September 1930, Sanitation Reports & Restrictions, RAC. Lynam attached a partial copy of the Bar Harbor Water Company's minutes, including a written statement by Robertson regarding his opposition to Rockefeller's plans.
63 Ludwig Kast to John D. Rockefeller, Jr., 22 June 1931, Dr. Kast Correspondence 1931, RAC.
64 Kast to Rockefeller, 22 June 1931.
Knowing that chlorination of the Bar Harbor water supply would help Rockefeller, Kast decided to implement a plan to investigate public health conditions throughout Mount Desert Island. Kast thought this investigation would help in meeting both their goals, facilitating chlorination of Eagle Lake in order to obtain approval of the tea house plan and establishing an island health district. Kast invited Dr. Carl E. Buck, Field Director of the American Public Health Association, to survey the public health services and needs of the communities on the island. As Kast explained to Rockefeller, the survey would prepare plans which may lead to the cooperation of the different communities on this Island in the establishment of a Health District in which public health matters and sanitation of the Island will be in charge of one central Health Department with a fulltime, trained health officer. The question of the Bar Harbor water supply will be one of the main problems on which his opinion will be requested.65

Kast wanted to develop public health administration on the island and his plan included protection of drinking water.

Buck completed his assessment during the summer of 1931; his report contained the two findings Kast wanted, support for chlorination and encouragement to form an island health district. Buck noted increased recreational use of the surrounding land made Bar Harbor’s water supply at risk for contamination.66 With the documents Rockefeller had provided and Buck’s expert opinion, Kast lobbied the Water Company board of directors for chlorination.

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65 Kast to Rockefeller, 22 June 1931.
Because of the widespread community opposition to chlorination, Rockefeller chose to discontinue the tea house project, even though some residents, including Kast and the president of the Bar Harbor Water Company, supported it. At the 1932 annual town meeting Bar Harbor residents had defeated the question about chlorination of the town's drinking water and there was ongoing opposition to construction of the "Eagle Lake highway" north of the tea house site.\(^6^7\) Kast received the news of Rockefeller's decision to abandon the tea house project shortly after he had sent him a letter with hopeful news about chlorination, informing Rockefeller he planned to talk more with the Water Company about this issue. Rockefeller replied to Kast's letter:

> Having spent so much time and effort in striving to gain permission to carry out this important public improvement and having met such complete and unyielding opposition, ... I have not felt disposed to make any further effort to force on the people something which they are opposed to. If, therefore, the matter ever should be revived, the initiative would have to be on the other side. The necessary consents would have to be secured and subsequent thereto a request made of me to reconsider the matter.\(^6^8\)

By discontinuing the project he hoped to avoid further opposition among townspeople and summer residents, because he wanted support for building roads on the island. Some summer residents opposed the roads because they thought they interfered with the remoteness of the island.

By August 1932 Kast convinced the Water Company to chlorinate the water from Eagle Lake because of the risks to public health and because of liability concerns. The

\(^6^7\) John D. Rockefeller, Jr. to [Ludwig] Kast, 27 July 1932, Sanitation Reports & Restrictions, RAC.

\(^6^8\) Rockefeller to Kast, 27 July 1932.
Water Company chlorinated the water supply and granted permission for construction of the tea house, but Rockefeller focused his attention on road construction instead.69

**Proposed Island Health District**

Rockefeller received Kast’s assistance with the tea house project but did not reciprocate when Kast had a similar need for help with organizing an island health district. From previous discussions Rockefeller knew about some Bar Harbor residents’ ideas for improving sanitation throughout Mount Desert Island. Also Buck’s survey suggested combining all public health services on the island.70 Kast later stated that Buck’s report “pointed out the real need for cooperation of the four townships on Mount Desert Island to secure adequate health protection which is at present lacking.”71 Kast embellished Buck’s recommendation, since the report did not address the need for cooperation or even interaction among the island towns. Kast interpreted Buck’s report this way because he wanted that cooperation to happen. Because he had guided Rockefeller in his dealings with the Bar Harbor Water Company for the tea house project, Kast expected him to lend support to the island health district proposal.

Following Buck’s study of the health conditions and resources of Mount Desert Island, Kast developed a proposal for creating a united island health district, claiming the plan had the support of the state health commissioner and “a large number of local inhabitants and summer residents of different communities” on the island. Kast listed five public health problems requiring urgent attention. These included island-wide

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69 Ludwig Kast to Fred C. Lynam, 4 August 1932, copy, Fred C. Lynam to Ludwig Kast, 10 August 1932, copy, Ludwig Kast to John D. Rockefeller, Jr., 27 September 1932, and John D. Rockefeller, Jr. to Ludwig Kast, 3 October 1932, Sanitation Reports & Restrictions, RAC.
70 Buck, “Health Facilities and Problems of Bar Harbor,” 34.
71 Ludwig Kast, “Bar Harbor Village Improvement Association Memorandum on the Advisability of Creating a Single Health District on Mount Desert Island,” 1, Dr. Kast Correspondence 1931, RAC.
supervision of milk; monitoring private water sources; up-to-date communicable disease follow-up, reporting, and treatment; "supervision over the food supply"; and a "need for health education." Kast proposed to unite the local boards of health in the four towns into a single combined health district.

Anxious for Rockefeller's support for his health district plan, Kast wrote to him in early September 1931, asking to meet "for ten minutes," so he could discuss the public health needs of the island. It seems residents of Northeast Harbor and Seal Harbor had made public statements against the health district proposal, some attributed to Rockefeller. Instead of meeting with Kast Rockefeller left Seal Harbor and returned to New York.

In a letter Rockefeller did not commit himself for or against the proposal:

While it may not be that other residence centers on the island will find themselves ready to join with Bar Harbor this year in this cooperative health enterprise. I feel sure that all the work that you and others are doing is helping to educate the public to the importance of the situation and the advantages of cooperative effort, and that ultimately something in the interest of all will result. Time and patience are elements in this situation that are essential to its satisfactory ultimate outcome.

While Rockefeller's response did not explicitly oppose Kast's plan, it hinted that he and other residents in Mount Desert did not support it. Kast and Rockefeller favored different approaches to promoting public health; Kast supported centrally administered expert public health services that served a wide geographic area, including poorer regions of the island, and Rockefeller supported ongoing voluntary public health services that reserved resources within the boundaries of the towns where the program's benefactors lived.

Perhaps Rockefeller's longstanding investment of money in the private services led him

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73 Ludwig Kast to John D. Rockefeller, 6 September 1931, RAC.
74 John D. Rockefeller, Jr. to Ludwig Kast, 8 September 1931, RAC.
to continue donating to the Mount Desert Red Cross Chapter; Kast's role as a physician and medical school professor may have led him to support official public health services rather than voluntary agencies.

Several Maine towns had already combined to form joint health districts, including the MOTBOV union and Waterville, Winslow, and Vassalboro, but competition between Mount Desert Island towns and townspeople's desires to keep tax dollars of wealthy summer residents in their own towns led them to maintain separate health services. Within the town of Mount Desert, and Mount Desert Island as a whole, the villages and towns maintained separate identities, particularly those with more affluent summer residents, like Seal Harbor and Northeast Harbor.

Besides objections to sharing services with neighboring communities in a health union, other class interests influenced Mount Desert residents' lack of enthusiasm for Kast's proposal. During the summer of 1931 workmen finished the new house for the Mount Desert ARC chapter in Northeast Harbor. Sharing this elegant new facility with people from the rest of the island might have been difficult for residents of the town of Mount Desert, since they viewed their community as separate from the rest of the island. Rather than simply supporting the American Red Cross, the eighteen summer residents who contributed to the chapter house improved the amenities available at their summer home. When the Chapter decided to form a new agency to continue its public health nursing services, its leaders wanted to maintain the house for the Mount Desert community, including themselves, rather than for the benefit of ARC. Year-round residents may have cared less about the house at that point, but did not want to share the property tax money from wealthy summer residents with the island's poorer
communities. The island health district plan would have shared the public health resources and made services more uniform throughout these four towns; it also may have put the voluntary agencies, already providing services, out of business. Since they had invested so much money and effort into developing their Red Cross chapter, Mount Desert residents wanted to maintain control over their investment.

Between 1931 and the late 1940s the health district proposal received mixed support from both summer and year-round residents. After many years of private fund raising, Gertrude Peabody, a summer resident and leader in the Mount Desert ARC chapter, believed supporting health services with public funds from property taxes a more efficient method than annual fund drives. Growth in voluntary public health services, such as the construction of the Red Cross Chapter House in Northeast Harbor in 1931, lessened acceptance among both summer and year-round Mount Desert residents for local governmental public health services, such as the island health district.

For some, sharing tax revenue or other resources posed less of a problem than overcoming their local community’s separate identity on the island. In her correspondence with American Red Cross officials, Ruth Jordan, executive secretary of the Mount Desert ARC Chapter, asserted Mount Desert’s separateness from the other towns on Mount Desert Island and Hancock County. With the exception of Mount Desert’s shared milk inspection services for a couple of years in the early 1930s, the public health services the town’s residents organized remained theirs alone. At the national level the ARC supported creation of an island health district, because it fit well

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75 Gertrude Peabody to Ruth Jordan, 30 December [1945?], MDNA.
76 Georgianna Glen to Ruth Jordan, 17 November 1944, MDNA.
with the organization’s plan to turn over all its public health nursing services to other voluntary health agencies or local governmental health departments before 1950.\textsuperscript{77}

While more efficient, the proposed island health district did not guarantee better public health services than those of the voluntary health organizations and village improvement societies. The proposal had advantages for both summer and year-round residents, but they chose to continue the successful services already in place. The annual fundraising campaigns involving local people in every village on the island perhaps increased their loyalty to the American Red Cross and the Maine Public Health Association, making them less interested in forming an island-wide district.

**Differences Among Summer Residents Regarding Public Health**

Although some summer residents of Mount Desert and Bar Harbor, like Kast, wanted to improve public health throughout the island, most summer residents focused on self interest and maintaining local control. Although gender differences existed between Dows Dunham and some of the male Seal Harbor summer residents, class interests trumped gender in influencing decisions about their milk supply. Summer residents had more access to clean milk than their local working-class or middle-class neighbors, especially after Richardson supplied milk only to summer customers. However, differing opinions about science and public health divided summer residents from the towns of Mount Desert and Bar Harbor most often.

By maintaining private public health nursing services instead of supporting an island health district, wealthy summer residents in Mount Desert improved public health at the most local level while holding on to their class privileges. Summer and year-round

residents alike tried to get a better deal from each other. Local residents understood the benefits they received and often catered to summer residents' interests. Advocacy for improving milk sanitation, water safety, and public health nursing services improved health for many, although this was not the summer residents' intent. The proposal for an island health district might have further enhanced health for all by providing a more uniform public health administration for the whole island, but class interests led residents from the town of Mount Desert to resist this plan and maintain the status quo.
CHAPTER 6
MATERNAL AND CHILD HEALTH

In the early twentieth century developments in public health and a nationwide child welfare movement expanded maternal and child health services, both public and private. With growing interest in health education and a new focus on early diagnosis of medical problems, prevention of illness and death became increasingly possible, even for infants. Advances in nutrition, increased acceptance of pediatrics as a medical specialty, improvements in vital statistics data collection, and association of infant deaths with feeding practices focused new attention on infant mortality and the need to improve the health of mothers and babies. Historian Richard A. Meckel has noted that the baby saving movement, intended to reduce infant mortality by focusing first on environmental remedies, then on feeding, and finally on motherhood, spanned from the mid-nineteenth century through the first three decades of the twentieth century; rural public health nursing services developed in the latter three decades of this period. From the early 1920s through expansion of state maternal and child health services made possible by funding from the federal Social Security Act in 1935, public health nursing services became an important part of the effort to decrease infant mortality. With increased acceptance of governmental responsibility for maternal and child health, along with women’s club and voluntary health association support, these services became more available in rural Maine.

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The presence of more women in the legislature and reports of increasing popularity and effectiveness of public health nursing prompted Maine legislators to appropriate money for adding public health nurses to the Maine Department of Health staff and eventually to accept federal funds. Public health nurses, working for private voluntary health agencies (including ARC, MPHA and others) as well as the State Department of Health, sought to improve women’s health during pregnancy and childbirth and to increase proper infant care through home visits, clinics, and educational activities.

After 1920, starting with a single nursing director and no staff, the services of the state Division of Public Health Nursing and Child Hygiene developed slowly. State-funded services, augmented by the work of voluntary organizations, developed when the state rejected federal Sheppard-Towner funding. Voluntary agencies either specialized in promotion of maternal and child health or included it in a generalized public health nursing program. However, by 1935 most rural Maine communities still lacked public health nursing services and in many of these areas maternal and infant death rates remained high. Despite state health officials’ resistance to federal oversight in the late 1930s, maternal and child health services funded through the Social Security Act grew statewide. By 1950 federal funding made these services even more available throughout Maine.

**Federal, State and Local Efforts to Reduce Infant Mortality**

Growing concerns about child welfare led to the national White House Conference on the Care of Dependent Children in 1909; after much lobbying over several years and the conference’s recommendation, Congress created the U.S. Children’s
Bureau in 1912. The new bureau became part of the Department of Labor and focused first on gathering data about maternal and infant mortality. Since analysis of death rates required accurate birth registration data, the Bureau recognized the need to improve birth registration nationwide. It conducted research that led to establishment in 1915 of a "birth registration area" consisting of the first ten states that registered births (including Maine) and the District of Columbia; by 1933 the registration area included the whole country. During nationwide observances of Baby Week in 1916 and 1917, the Children's Bureau educated parents and communities about infant care. In 1918, the Bureau encouraged communities to observe the year-long child health campaign known as "Children's Year." This involved weighing and measuring children and resulted in new height and weight standards. It also sought to reduce child labor by returning children to school. At the conclusion of the Children's Year, the Bureau staff planned the second White House Conference, which convened in 1919 and focused on childcare standards. In 1921 Congress passed the Maternity and Infancy Hygiene Act, otherwise known as Sheppard-Towner, the first federal funding for improving maternal and infant welfare; the Children's Bureau administered it. With federal assistance services for promoting maternal and infant health increased at the state and local levels.

Prior to the Sheppard-Towner Act the State Board of Health promoted maternal and infant health by publishing educational materials. The Board developed numerous pamphlets and generated newspaper articles to teach the public about infant care and feeding. In 1914 the Maine Federation of Women's Clubs' Health Committee members

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Marietta Parker and Anna Mayo suggested that club members obtain copies of the following leaflets: “Care of the Baby,” “Why the Baby Should Not Be Bottle-Fed,” and “Guideboards to Infant Welfare.” The latter leaflet described normal infant growth and development and discussed assessment of respiration, temperature and closure of the fontanelles in relation to health and illness. With assistance from lay clubwomen to disseminate this information, the Maine State Board of Health reached many women during the 1910s.

The State Board assembled lecture notes and lantern slides that were available to speakers from community organizations. Infant health topics included “Milk for the Baby, Safe and Unsafe,” “Saving the Babies” and “Child Welfare—General Care of the Baby.” The Board of Health made public speaking on health topics easier by providing up-to-date information and illustrations; this in turn expanded the audience for its health education messages.

In order to improve the health of mothers and babies, both doctors and the public needed advice about pregnancy, childbirth, child development, infant feeding and childcare. In 1918, a State Department of Health Bulletin article, “Advice to Prospective Mothers,” gave detailed information about pregnancy and prenatal care. The topics covered included “calculating the date of confinement” and methods of preparing and sterilizing materials needed for home delivery. The article described the proper diet during pregnancy and emphasized the importance of regular exercise. In addition, it gave

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specific advice about preparation of the breasts and dealing with dental and bowel problems. The article instructed women to make and sterilize the cotton pads that would help reduce the chance of infection after childbirth. Many women received information about preparing for childbirth from their doctors or midwives, or from written materials like the State Department of Health’s Bulletin, but some learned what to do from other sources.

Women who assisted family members or neighbors in childbirth may have already known about these practices. Doris Porter, of Vassalboro, who became a lay nurse and childbirth attendant, described how her mother had instructed her to prepare a large pad to prevent infection, protect the bed, and facilitate cleaning up after the birth. Porter said her mother had told her to make the pad by covering a three-inch thick stack of newspapers with a sheet, sewing it together to secure the papers inside, and sterilizing it by baking it in the oven. She described how baking it caused the edges to turn brown. Porter’s mother also taught her how to clean the perineum to prevent infection following childbirth. Porter believed that the techniques her mother had passed on to her helped to prevent “childbed fever.” Porter’s descriptions of these procedures resembled the methods described in the article “Advice to Prospective Mothers.” The fact that Porter knew these techniques indicates that not all lay nurses, attendants or neighbors who helped during childbirth were ignorant about preventing infection. Women obtained this information from a variety of sources, including family members, friends, doctors, doctors.

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6 Doris Gilbert Porter, interview by Martha Eastman, 17 October 1993, Accession Number 2316, transcript, 56-58, Maine Folklife Center, Orono, ME.
7 Maine State Department of Health, “Prospective Mothers,” 183-185.
nurses, midwives, public health officials, and publications. Though Porter's experiences show that some women had this knowledge, the pamphlets were likely useful for those who did not already have it.

A private voluntary organization, known as the Maine Baby Saving Society (MBSS), worked closely with public health nurses and local physicians to improve infant health. Rev. A. J. Torsleff of Bangor, formerly with the Maine Anti-Tuberculosis Association, organized the MBSS on January 15, 1920. This voluntary organization sought to prevent infant deaths by improving the public's knowledge about infant care and feeding, setting up clinics and infant hygiene stations, and improving prenatal care through health education and the provision of nursing services throughout the state. On September 1, 1921 the MBSS hired a field nurse, who coordinated clinics for weighing and monitoring the health of infants with additional help from public health nurses, physicians, and women's club volunteers. Local newspapers frequently published announcements of upcoming well baby clinics and reported on clinic findings and attendance. In addition to services provided at clinics, health education during pregnancy and postpartum home visits to mothers led more people to view public health nurses as knowledgeable care providers in rural communities.

The MBSS focused on providing clinics in towns that lacked a public health nurse, but it also brought them to communities that already had nurses, such as Dexter. In 1923 MFWC president, Mrs. John H. Huddilston, encouraged women's clubs to

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9 "Life and Health for the Babies: What has been Accomplished by the State Society," *Bangor (Maine) Daily News*, 7 January 1922, Newspaper Index vol. 64, p.108, BPL.

support the MBSS and noted the U.S. "Bureau of Statistics shows that Maine has the highest death rate of white babies in this whole United States." The organization lasted until 1937, when private donations could no longer sustain it.

The Sheppard-Towner Act aimed to decrease infant deaths by increasing mothers' knowledge about infant care and hygiene. Using these funds, many health departments across the country hired public health nurses to visit mothers and babies. The law required that states submit plans to the Children's Bureau; once those plans were approved, the state received the Sheppard-Towner money. Most states responded quickly and accepted these funds; many appropriated matching funds that allowed them to receive larger grants. Maine's congressional delegation had supported the Sheppard-Towner bill in 1921, expecting the federal funds to enhance the state's meager public health budget.

Minutes of the Maine Public Health Council and correspondence between the staff of the State Department of Health and the Children's Bureau indicates Maine health officials were interested in participating in the Sheppard-Towner program.


12 "Maine Baby Saving Society Ends Activity; Worthy 17-Year Record," *Bangor (Maine) Daily Commercial*, 15 January 1937, *Newspaper Index* vol.115, p.1, BPL. By the time the MBSS folded, the Division of Public Health Nursing and Child Hygiene at the State Department of Health and Welfare was already expanding maternal and child health services with federal Social Security Act funds.


15 Maine Public Health Council Minutes, 30 March 1922, 79, Maine Bureau of Health, Maine State Archives, Augusta, ME (hereafter cited as MSA); Clarence F. Kendall to Anna E. Rude, 12 December 1921, RG 102 Children's Bureau, Box 247, NACP.
Despite this support by Maine health officials and congressmen, Governor Percival Baxter questioned the constitutionality of the bill; he strongly opposed federal involvement in state business.\(^\text{16}\)

The Sheppard-Towner Act had other opponents and Baxter called a special hearing in Augusta to discuss the issue on June 23, 1922. Those who spoke in opposition on that day included Portland physician Dr. James A. Spalding, Franklin C. Payson of the Children’s Hospital in Portland, Bishop Walsh, and a member of the Business and Professional Women’s Club (BPW), Mrs. Jennie Kreger, of Fairfield.\(^\text{17}\) One possible reason for opposition on the part of physicians or hospitals was fear of losing business if public health nursing services became more available. The reason for Kreger’s opposition to the bill is unclear, especially since BPW supported the Sheppard-Towner funding; in addition to her BPW involvement Kreger was well known because of her frequent public speaking in support of suffrage.\(^\text{18}\) This seems contradictory, but just as there were women on both sides of the suffrage issue, a faction within BPW opposed adopting the provisions of the Sheppard-Towner Act.\(^\text{19}\)


\(^{17}\) Legislative Record of the Eighty-Second Legislature of the State of Maine (Augusta, ME: Kennebec Journal Company, 1925), 999.

\(^{18}\) Lillian Mills Durost and Grace E. Fitz, History: Federation of Business and Professional Women’s Clubs of Maine, 1921-1953, 73, [loose leaf] Maine State Library safe, Augusta, ME. Kreger became town chairman of the Fairfield Women’s Suffrage Committee in 1920 and was one of the first women to serve on the Maine Republican State Committee.

\(^{19}\) This group also included Senator Katharine Allen of Hampden in 1925 and 1927.
The Maine Medical Association (MMA) followed the American Medical Association’s lead and passed a resolution at its 1922 annual meeting, declaring its “opposition to all forms of ‘state medicine.’”20 Before the MMA delegates voted on the resolution they heard presentations about the Sheppard-Towner Act, Spalding spoke first about fear of the federal government supervising medical practice. Although he affirmed the state needed to do more to prevent maternal and infant deaths, Spalding opposed accepting the federal funds.21 As a member of MMA, Spaulding and other Maine physicians may have opposed Sheppard-Towner because they associated it with socialized medicine and feared loss of their authority.

Despite MMA’s resolution in opposition to federal funding to improve maternal and infant hygiene, it is likely that many physicians favored accepting the funds. Following Spalding’s presentation, two other physicians rebutted his argument. Not only did they speak in favor of the law, they also supported an increased federal role in promoting health beyond the Sheppard-Towner provisions.22 The medical profession in Maine had had a long and close association with public health officials, beginning with MMA’s support for organizing the Maine State Board of Health in 1885 and continuing throughout the early 1900s and 1910s when MMA frequently collaborated with the State Board to support expanding health education and laboratory services. MMA members participated on Board of Health committees and many were also active in MPHA. Because of this cooperation, public health officials’ support for Sheppard-Towner may have swayed some physicians’ opinions on this issue; it is likely that the public health

22 Dr. Whittier and Dr. [Sylvester] Beach, “Sheppard-Towner Bill,” JMMA, 13 (September 1922): 60-64.
officials’ support for Sheppard-Towner led some MMA members and other physicians to support it too, even though MMA went on record opposing the measure.

In July 1922, Baxter issued a proclamation affirming a consensus from the June hearing “that maternity and child welfare work is of great importance and more of it should be done within the State.” The governor added there was “a difference of opinion as to how and by whom it should be carried on.” Baxter proclaimed that he would decline the Sheppard-Towner funds. He outlined what Maine was already doing and used this opportunity to clarify his opposition to “federal encroachment.” Describing what Maine was already doing, Baxter cited Health Commissioner Kendall’s remarks at the June 23rd hearing.

Dr. Kendall explained that his Department is making a careful study of local health conditions that affect children, especially in reference to milk, water and food supplies, and sanitary conditions in the public schools; that pre-natal work is done under the guidance of the Department of Health by doctors and public health nurses; that frequent inspections of maternity homes are made, and it is planned to have midwives regularly licensed; that helpful literature is sent to expectant mothers, as well as to every home from which the record of a birth is received; that a special effort is made to keep accurate vital statistics, a work of great importance; that better nursing in maternity cases is encouraged, with marked improvement resulting there from; that baby-saving campaigns are inaugurated in different communities; and that in order to protect mothers and children careful reports are made as to all communicable diseases.23

Taking this testimony out of context, since Kendall supported accepting the Sheppard-Towner funds, Baxter made it sound as though the state were already doing quite a lot to promote maternal and child health. This was not true, since many of the activities Kendall described were being accomplished in collaboration with voluntary health organizations with private funds. Although the State Department of Health had made

plans for expanding maternal and infant health services, it lacked the resources to do so. As a state health official Kendall portrayed his department as involved in maternal and child health work, but Baxter used Kendall’s remarks to support his own opinion that Maine did not need help from Washington.

In his proclamation, Baxter also listed the various groups of public health nurses who were working for voluntary health organizations and industries in communities throughout the state, making it appear as though the state already had enough of them. Again, Baxter used Kendall’s data about the effectiveness of the Department of Health’s work, citing the decrease in infant deaths and stillbirths between 1920 and 1921, and attributing this “to the increased activity of the nurses under Miss Soule’s supervision.”

In fact, Soule was the only nurse working for the State Department of Health at this point, and the nurses under her “supervision” were those affiliated with the ARC and the MPHA. Because Baxter was adamant that Maine would not accept federal funds, he did not consider how, as one person, Soule might accomplish such a large task. Baxter ignored the advice of public health officials who believed improving the maternal and infant death rates would require all the resources the state could muster, including federal aid, even though working-class women in most rural Maine communities lacked adequate prenatal care.

Baxter’s proclamation asserted Maine women’s clubs’ support of the Sheppard-Towner Act was misguided. He wrote: “The earnest, public-spirited women of the clubs

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24 Baxter, “Proclamation on Sheppard-Towner,” 894.
25 The American Red Cross likely took some credit for this, since the organization appointed its own statewide nursing supervisor in July 1921. ARC relieved Soule of supervisory responsibility, even though it had contracted with the State Department of Health for this in 1920 and contributed money toward Soule’s salary. See New England Division American Red Cross, “Miss Simon to Direct Red Cross Nursing in Maine,” Bulletin 5 (July, 1921): 3.
and other organizations in the State who have endorsed the Sheppard-Towner Bill sincerely desire to promote maternity and child welfare work. Had they understood the far-reaching consequences of the bill and the principle of federal control that underlies it, many of them probably would not have given it their endorsement. Baxter did not say many men also misunderstood the ramifications of accepting federal assistance. His comments suggest the women's lobbying efforts were strong and Baxter found women's political participation threatening.

Baxter believed the federal Constitution gave the state both rights and responsibilities; despite his enumeration of what was already being done, which implied no need for further funding, he agreed the state needed to do more to promote maternal and infant health. In consultation with his Executive Council, Baxter concluded, "the figures given us on the mortality of mothers and infants in Maine show that an emergency exists." With the Council's agreement, he sent $5,000 from the State Contingent Fund to Dr. Kendall for the Department of Health's maternal and child welfare work, the same amount that the Sheppard-Towner program would have granted the state. With this money Baxter intended to allow the work to begin before the Maine Legislature had an opportunity to consider a bill to accept or reject the Sheppard-Towner funds. By appropriating the contingent funds, Baxter may have hoped to prevent legislators from introducing such a bill.

After his re-election, in his inaugural address on January 4, 1923, Baxter included some comments about public health and made specific references to federal funding for maternal and infant health. He noted: "It is gratifying to Maine people, in view of the

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26 Baxter, "Proclamation on Sheppard-Towner," 897.
27 Baxter, "Proclamation on Sheppard-Towner," 897.
recent discussion of the Sheppard-Towner maternity bill, to know that of the twenty-seven states reporting their efforts to save the lives of babies, Maine ranks fifth among those that have shown a decrease in infant mortality during the past two years.\textsuperscript{28} Baxter meant Maine was ahead of most states in preventing infant mortality, even without federal funds. He wanted the state to reject federal aid for maternal and infant health and he knew there soon would be a bill in the Maine legislature dealing with this issue.

Thus, before the legislature considered accepting the provisions of the Sheppard-Towner Act for the first time in 1923, Baxter had stated his opposition to it and appropriated funds from his contingent fund for maternal and infant hygiene work. Debate about whether or not to accept Sheppard-Towner funds, which most other states had received by the end of 1923, highlighted Maine legislators' fears about federal interference and socialism and their attitudes about men's roles in providing for women and children.\textsuperscript{29} It also demonstrated some men's fears about women's increasing political power in the early 1920s. Despite disagreements about acceptance of federal aid, there was consensus regarding the importance of improving maternal and infant health in the state.

On February 2, 1923, Dora Pinkham of Fort Kent, the first woman member of the Maine House of Representatives, introduced a bill to accept the provisions of the Sheppard-Towner Act. The debate focused on men's proper roles as protectors of women and


children and arguments for states’ rights. Some male legislators responded defensively to the idea that Maine needed federal help to improve maternal and infant health. Opponents quoted the governor’s proclamation, saying that Maine had to guard against the federal government’s “further encroachment” and urged instead appropriating additional state funds. They scrutinized the wording of the federal law, section by section, and objected to “spinsters” from the United States Children’s Bureau supervising maternal and child health in Maine. They quoted the governor’s words about taking a stand against federal aid, his complaint about the discrepancy between what the state paid in federal taxes and what it received back in aid, and his suspicion that Sheppard-Towner would be “an entering wedge for more radical legislation,” eroding Maine’s sovereignty. They said the bill was connected with “Socialism and Paternalism and Bolshevism” and that it involved too much bureaucratic regulation from Washington. Opponents also mentioned women who were against the bill and claimed that most physicians opposed it too.30

Contrary to this claim, many physicians joined public health officials, clubwomen and baby saving reformers to support Maine’s acceptance of the Sheppard-Towner funds. Other physicians did oppose it, but during testimony in favor of the bill, Pinkham quoted a prominent Maine physician who believed many of them had not taken the time to study the issue and accepted misleading information about it. This physician supported accepting the provisions of the Sheppard-Towner Act and thought most of his colleagues who understood its proposed educational services supported the measure as well.31

Proponents argued that the state was already accepting federal funds and that Sheppard-Towner would enhance Maine’s public health services. Representative John A.

30 Record of the Eighty-First Legislature, 263-267.
31 Record of the Eighty-First Legislature, 274.
McDonald, a practicing physician from East Machias, supported the bill because he thought it would improve prenatal care for the working class. Although his testimony did not mention experiences working with public health nurses, it is possible McDonald had encountered them in Washington County. Referrals from public health nurses likely made him more aware of working-class mothers' and babies' health needs. Proponents rejected the notion of interference with Maine parents' childrearing, arguing the nurses would be local women. Rebutting the point about encroachment as a reason for rejecting the Sheppard-Towner funds, Pinkham noted that in 1922 departments of state government received federal funds for venereal disease, agriculture, and roads.32 The majority of Maine legislators voted to accept the Sheppard-Towner funds in late March 1923, but Baxter vetoed the bill. Despite Pinkham's efforts to convince enough of her male colleagues, the legislature failed to override the veto.33 One legislator commented in the next session that while many liked Pinkham, they did not care enough about the issue to save the bill.34 After the legislature upheld the veto it accepted the Public Health Committee's minority report with an amendment appropriating $10,000 a year for two years. This funding continued the same maternal and infant health services that started the previous year and that the Sheppard-Towner Act would have funded.35

Although opponents of accepting the federal funds argued for states' rights, some of the objections to the Sheppard-Towner bill may have been a reaction to women getting the right to vote and to the presence of a woman in the legislature. Speaking in favor of

32 Record of the Eighty-First Legislature, 276-278. For analysis of the Sheppard-Towner debate in Illinois, see Curry, Modern Mothers, 120-148.
33 Record of the Eighty-First Legislature, 525, 554, 638-639, 756.
34 Record of the Eighty-Second Legislature, 1000.
35 Record of the Eighty-First Legislature, 1118, 1131, and 1133.
the bill, Representative Benedict F. Maher of Augusta argued while all women may not have supported the Sheppard-Towner funding, those who did represented “an active, vigorous, militant force.” Following Maher’s testimony, Representative Herbert E. Holmes of Lewiston spoke in opposition, delivering a long rambling speech that critiqued the motives of the Sheppard-Towner proponents and the Children’s Bureau; Holmes noted that he based his objections “upon social and moral grounds.” Holmes claimed he had “the profoundest respect for the lady [Pinkham] and especially for the Federation of Women’s Clubs.” Then he told about legislation supported by the New York Federation of Women’s Clubs that he characterized as “dangerous,” perhaps trying to discredit Pinkham and other women supporting the Sheppard-Towner funding.

Describing in detail an image of a working-class home in Maine, Holmes spoke about a typical evening at such a household, where four or five children had just returned from school and the man had come home from work. Holmes continued:

> You can smell in that house a smell perhaps of corned beef and cabbage and yellow soap.... You go into the kitchen and you sit down and talk with the mother, the lady of the house....You find that the poor mother is tired; she is cross; but she gets the supper ready for the man and the children, she puts the children to bed after they are washed...and sits down to patch and mend...and tired as she may be, there is a song in the heart of that woman—the song of the ages, the song of motherhood....If we officials here in this State want to enter that house, let us step softly; we are treading on hallowed ground. The mothers of this State have been doing their duty and bringing children into this world...for four generations. They will continue to do it without a Sheppard-Towner act, and they will do it successfully.

With his rhetoric Holmes combined an image of republican motherhood while hinting that women supporters of the Sheppard-Towner funding did not work as hard as the mother he described. Holmes’ comments suggest he found the activism of the women’s

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36 Record of the Eighty-First Legislature, 270.
37 Record of the Eighty-First Legislature, 272-273.
clubs unsettling; he worried that women’s participation in the legislature and the proposed federal funding would undermine both the family and the state.

Even with the appropriation of additional state funds the Sheppard-Towner issue did not die. Women’s clubs discussed the need for public health nursing services; the MFWC encouraged local clubs to find out what was available in their communities and how their clubs could support this work. In her annual report for 1924-1925, Public Health Committee Chairman Mrs. Edwin M. Foster wrote that women’s clubs needed “to help create a better understanding of the value of public health nursing in every community.”38 The General Federation of Women’s Clubs at the national level encouraged state federations to discuss the Sheppard-Towner act at their conventions and to lobby state legislators for acceptance of the bill’s provisions. Many MFWC clubs hosted meetings with speakers who discussed its benefits and ongoing legislative efforts in this area. Evidence of clubwomen’s lobbying on this issue, when speaking in favor of the bill in 1925 Representative Charles S. Pierce of Sanford noted that the measure had MFWC’s endorsement.39

When the legislature debated Sheppard-Towner funding again in 1925, several legislators commented on the public’s positive reactions to public health nurses’ work in their districts. Senator Paul H. Powers of Houlton testified that he had heard “nothing but

38 Mrs. Edwin M. Foster, “Public Welfare: Health,” Maine Federation of Women’s Clubs Year Book, 1924-1925 (Lewiston, ME: Journal Printshop, 1925), 44.
the highest praise” for the work of the state public health nurse in Aroostook County, adding that he had received many letters from women who supported her.40 Speaking about the nurse in Belfast, Representative Orlando E. Frost said: “no more welcome visitor ever enters the homes, any of the homes, in their hour of need, than this woman who is working for, with and under the auspices of the Red Cross.” Although legislators shared favorable reports about Red Cross nurses, they also praised MPHA nurses and the state public health nurses; by 1925 more members of the general public recognized these nurses as helpful, regardless of their affiliation. This suggests that despite competition between voluntary agencies in some communities, local understanding and appreciation for public health nursing services had increased, even since 1923.

Representative Burleigh Martin, a lawyer from Augusta, emphasized that all five of the legislators who were practicing physicians supported accepting the Sheppard-Towner funds in 1925. Since the state had been providing some maternal and infant health services since 1922, Martin said the physicians “have seen the workings of it and they know that it is for the good of the community.” Representative Clarence A. Peaslee, a Bath physician, who served as a member of the Public Health Committee, described the care the Red Cross and Metropolitan Life Insurance nurses gave to poor women during and after childbirth in his district. He characterized the work as “splendid” and testified the nurses visited poor women two to three times a day during their confinement. In his 1925 testimony in support of the federal funding, Dr. McDonald, representing East Machias, was more specific in his rationale than he had been in 1923. He described the

40 Record of the Eighty-Second Legislature, 703. Pinkham was not in the legislature during this session, but she was elected to the State Senate in November 1926.
special maternal and infant health work that the State Department of Health had begun in Washington County in 1922 and noted public health nurses had been “recommended very strongly by the physicians in these rural districts.” He was especially appreciative of the state public health nurse assigned to his district and gave examples of her skills.

In my own locality we have had the services of a very, very efficient nurse. She has accomplished a great deal, and I did not realize until I sent her out on a case where I was having a great deal of trouble in getting appropriate food for a child about three months of age, I did not realize how little I knew about preparing diets for children. This young lady was certainly very, very efficient in her work. At any time that any physician in the community needed her services, she was always ready to go and do everything she could, and I feel that she accomplished a great deal in that community because we certainly had a great scarcity of physicians there.41

McDonald’s reference to the shortage of physicians combined with his praise for the public health nurse indicates that he may have felt overworked and welcomed the nurse as a colleague.42 Physician legislators’ own observations of the benefits of public health nursing services, combined with demands from constituents, increased their support for the bill. Women had different opinions about Sheppard-Towner, some supporting and others opposed. Katharine G. Allen, Representative from Hampden and the only woman in the Maine legislature in 1925, spoke against the bill and in favor of the minority report, because she objected to “federal interference” with motherhood. In addition to hearing from constituents who supported the bill, Senator Paul H. Powers reported hearing from numerous women who shared Allen’s view.43

Senator Frederick W. Hinckley, of South Portland, argued in favor of Sheppard-Towner in 1925 and thought the Legislature should “stand by” the “women all over the

41 Record of the Eighty-Second Legislature, 1004-1009.
42 After the closure of the state’s only medical school in July 1921 the shortage of physicians in rural Maine worsened.
43 Record of the Eighty-Second Legislature, 701, 1002.
state,” who he said supported the bill.\textsuperscript{44} Since the chairman of the MFWC Legislation Committee, Hilda Ives, lived in Hinckley’s district and spoke frequently at women’s club meetings, encouraging members to contact their legislators, it is understandable why he believed in women’s widespread support for the issue. Women’s club members who heard Ives speak encouraged Hinckley to support the Sheppard-Towner Act.

Senator Powers of Aroostook rebutted Hinckley’s point about where women stood on the Sheppard-Towner issue and refocused the debate on Maine’s ability to provide maternal and infant health services without federal funds. Reporting that he had heard from many women who opposed the measure, Powers spoke in favor of tabling the bill in order to maintain state control.\textsuperscript{45} Powers thought the state-funded maternal and infant health services yielded the same results federal funding might have, without interference from Washington. He valued the services but valued state control too, and succeeded in convincing other legislators to stay the course and maintain services with state rather than federal funding. Although Hinckley and Powers were on opposite sides of the Sheppard-Towner issue, they both listened to the opinions and needs of women constituents, or at least used them to support their arguments. After women’s suffrage male legislators understood that listening to women was crucial.

Although the majority of Maine legislators favored accepting federal funds in 1923, the issue again divided the legislature in 1925, in part because of the increased availability of public health nursing services. Testimony that year included much local appreciation for the maternal and infant hygiene work the state began in 1922, as well as the ongoing work of the ARC and the MPHA nurses. Many people still mistrusted the

\textsuperscript{44} Record of the Eighty-Second Legislature, 700.
\textsuperscript{45} Record of the Eighty-Second Legislature, 701.
federal government, though, and feared what the services would be like if the state lost control of the program. Again the majority of legislators serving on the Public Health Committee thought the state should accept the Sheppard-Towner funds. The House of Representatives’ rejection of this funding in 1925 negated the Senate’s support and the bill died between the two houses.46 Although most legislators agreed about the need to improve maternal and infant health, many thought Maine was doing a good job by itself and accepting assistance from the federal government might change that. State funding continued in 1925.47

Gender figured prominently in Maine’s eventual acceptance of the Sheppard-Towner funds. By 1927 increasing support for public health nursing services counteracted Maine’s former states’ rights objections and the election of more women to the legislature also made a difference. Between 1922 and 1927, several opponents changed their position because of constituents’ support of the program. Maine finally accepted the Sheppard-Towner funds in 1927, two years before the program was de-funded at the federal level.48 The number of women in the legislature increased, from one in 1923 (Pinkham), to six in 1927.49 Whereas this number may not have made a significant difference in the number of votes for Sheppard-Towner, women’s voices changed the debate by explaining the rationale for improving maternal and child health services and challenging the arguments against the federal funding. Once the men

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46 Legislative Record of the Eighty-Second Legislature, 1030-1034.
48 In 1923 Representatives Brewster, Littlefield, and Storm all voted not to override Baxter’s veto, but in 1927 all three voted in favor of accepting the Sheppard-Towner Act provisions.
understood that more women supported the Sheppard-Towner funding, more of them supported it too. At the same time the ongoing visibility of public health nurses changed local attitudes about these services. Since women working as public health nurses in Maine communities were improving maternal and child health, fears about control from Washington lessened.

Women's voices in the legislature added concrete examples of the helpfulness of maternal and infant health services. When Pinkham, then in the Senate, argued in favor of the Sheppard-Towner funding in 1927 she reiterated Aroostook County constituents' praise for the state public health nurse. She described how quickly attendance had increased at health clinics the public health nurse organized; attendance doubled from forty to eighty patients in three weeks. Pinkham valued these services and wanted to expand them. Testifying in favor of the bill, Representative Maude Clark Gay, of Waldoboro, said:

It seems to me that the gentlemen who are opposed to this maternity bill have never given this side of the question serious consideration—that it has been especially framed to help mothers and babies... If you could see, as I have, mothers brought in from the islands in the dead of winter...brought to the doctors in the eleventh hour, you would be willing to favor any measure that would contribute to their aid. We must remember that in keeping the knowledge of proper hygiene from mothers, we are denying those children their birthright of care in childhood, and denying the need of the mothers' relief from agony and suffering... As a woman and a mother, I have been, for years, interested in the maternity bill....I hope this legislature will insure this bill a safe passage.

Following Gay's appeal for consideration of the mothers' suffering, Gail Laughlin, of Portland, offered a clear presentation of the bill's provisions. Single and an attorney, Laughlin had lived in California; sharing her knowledge of that state's use of Sheppard-

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51 Record of the Eighty-Third Legislature, 648.
Towner funds, she refuted the notion that accepting the bill meant “interference” by the federal Children’s Bureau. Representative Maybelle P. Chaney, of Lisbon, along with Pinkham, signed the majority report on the Sheppard-Towner bill, saying it ought to pass.  

Not only were there more women in the Maine legislature in 1927, with the exception of Senator Katharine Allen, of Hampden, they were unified.

Allen again opposed the bill, quoting the AMA resolution against Sheppard-Towner. In 1925 Allen opposed federal assistance and in 1927 her opposition intensified. Allen believed the measure would “oust the state from authority over the public health department,” a concern not shared by the State Department of Health which supported the bill. She also asserted “the real mothers of Maine” had not fought for the bill, perhaps indicating personal conflicts with Laughlin and Pinkham, who supported the bill and did not have children.  

While Allen shared membership in the Business and Professional Women’s Club with supporters of the bill, she disregarded the organization’s endorsement of Sheppard-Towner; Allen minimized the potential health benefits of federal aid and reiterated her position against all federal funding, even for roads.  

Whereas in 1925 Allen wanted the maternal and child health work to continue with state funding, she did not testify in support of this in 1927. As the sole woman legislator who opposed Sheppard-Towner, Allen was outspoken and contrary. 

Despite the ongoing fears of some legislators about federal aid, both male and female legislators who supported the federal funding touted the success of public health nurses in their districts and amplified the voices of women constituents, increasing men’s

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52 Record of the Eighty-Third Legislature, 649, 673. 
54 Record of the Eighty-Third Legislature, 896-898. 
55 Phyllis von Herrlich has observed that in her testimony on various issues Allen frequently contradicted her own remarks. See von Herrlich, “Maine Women Legislators,” 22.
willingness to make concerns about maternal and infant mortality a higher priority. The issue of whether or not to accept the federal funding from the Sheppard-Towner Act highlighted Maine’s independence. Although it took Maine five years to accept the funds, this represented a turning point, paving the way in the late 1930s for the state’s further development of maternal and child health services through the Social Security Act.

**Maine’s Expansion of Maternal and Infant Services**

When Baxter proclaimed his opposition to accepting the Sheppard-Towner funds and appropriated money from his contingent fund in 1922 these services began slowly, mostly due to a shortage of qualified nursing staff. The State Department of Health began its maternal and infant hygiene services in the fall of 1922, and Edith Soule, Director of the Division of Nursing and Child Hygiene, found few nurses had training and experience necessary for the job. Because of this the work did not begin until October in Washington County and much later in Aroostook County, due to the need to recruit a French-speaking nurse who had completed post-graduate training in public health. The State Department of Health decided the maternal and child welfare work should begin in Washington and Aroostook Counties, because they had the highest infant mortality rates. For the Washington County position, Soule felt fortunate to find Nora Rowell, a graduate of both Central Maine General Hospital School of Nursing and the Simmons College post-graduate public health nursing course. She noted Rowell had “excellent experience in organization work and all types of public health nursing, which
has fitted her admirably for the work she is undertaking.” Soule needed a well-qualified public health nurse for this assignment; she would be working alone in Washington County, far from Soule’s supervision in Augusta. The success of the Department of Public Health Nursing and Child Hygiene depended on the experience and skills of the first nurse Soule hired.

After a brief orientation, getting acquainted with Department of Health resources, visiting communities with the District Health Officer, and meeting the MPHA Washington County nurse, Rowell began an intensive survey of maternal and child health in thirteen towns. She investigated water and milk supplies and the working conditions at factories employing women, as well as general sanitation and health. Rowell spoke to groups of mothers about infant care, visited homes, held clinics for infants and pre-school children in collaboration with local physicians, and inquired about the circumstances surrounding all infant and maternal deaths during the previous two years. Besides earlier infectious disease investigations, Rowell’s work was the first outreach of the State Department of Health, bringing health education and nursing services directly to rural families in their homes. Soon after Rowell began her work in Washington County, Maine voters re-elected Percival Baxter governor and the debate continued over whether or not the state would accept federal funds to expand these services.


57 The Maine Anti-Tuberculosis Association had begun rural public health nursing services in Washington County in 1913 and those MPHA services were ongoing when the state maternal and child health services began in 1922. See A. A. Downs, “Report of the Secretary,” Bulletin of the Maine Anti-Tuberculosis Association 1 (April 1913): 6.

Soule wrote a report describing Rowell’s activities in early February 1923. After introducing herself, explaining her job to officials and physicians in a town, and studying health conditions there, Rowell made copies of the town clerk’s birth and maternal and infant death records. Using the birth registration data she created health records for the mothers and infants she visited and sent them to the Department of Health. This clerical task documented important data about maternal and infant health in rural Washington County, providing a baseline essential for measuring progress. Rowell also assessed health services in the towns. There were eight physicians in the first six towns she visited; additional doctors lived in surrounding towns. Soule summarized Rowell’s assessment of medical care as follows:

There is no hospital accommodation nearer than Calais or Bangor. There are few midwives and only an occasional nurse employed. More than three fourths of the births were at home with physicians in attendance. Very few patients are having any prenatal care and the average number of visits after confinement is only two or three. The nursing attendance during and after confinement is usually some neighbor or some member of the family. No clinics are available for mothers or babies for examination or advice.59

By enumerating the health care needs of the Washington County towns Rowell visited, Soule highlighted the rationale for expanding public health nursing services there. Though many mothers delivered babies at home in the early decades of the twentieth century, hospital deliveries increased.60 Doris Porter of Vassalboro described how, even though her family was poor, her mother and sister both delivered babies within a few days of each other in October 1918 at Augusta General Hospital. Normally they would have delivered at home, she explained, but her sister Claire’s husband was in the military.

overseas, so they decided going to the hospital would be safer.\textsuperscript{61} Also during this time sixteen-year-old Doris was caring for the household and her younger brother who had influenza. Because of the war and the influenza epidemic, there were few neighbors available to help during the births. The two women knew they would not be able to help one another at home; rather than a simple choice of where to deliver, this decision represented how vulnerable they felt. These two women from Vassalboro were fortunate to live only several miles from a general hospital in Augusta, another factor that likely influenced their decision. Most women in Washington County did not have the option of delivering in a hospital, because they lived too far away—further evidence that starting Maine’s maternal and infant health program in Washington County made sense.

Soule concluded her report on the maternal and child welfare work by summarizing the health strengths and needs of Washington County and by recommending health practices for local residents. The milk and water supplies were “adequate,” meaning relatively sanitary, given the rural setting and poverty. Many residents in the county worked at seasonal jobs in factories canning fish or blueberries and lived in small, crowded, poorly ventilated homes. Soule thought the biggest problems were child nutrition and a need for education about ways to stay healthy. She believed full-time public health nurses in the towns would help. Since Soule’s job included developing the state’s public health nursing work force, she would have recommended full-time public health nursing services and viewed consulting health professionals more beneficial than listening to neighbors. Soule did not address the contradiction of recommending these services when it was so hard to attract or retain nurses. The prenatal and well-child clinics she recommended would likely have improved the infant mortality rate. Since there were so

\textsuperscript{61} Doris Gilbert Porter, interview by Martha Eastman, 17 October 1993, transcript, 52.
few doctors, residents might have had difficulty implementing all her recommendations, such as getting proper medical care.  

Staffing problems continued, so by September 1923, when Soule still had not recruited a qualified public health nurse for Aroostook County, she considered sending a French-speaking nurse to a post-graduate course for this training. Rowell had also left Washington County, making both positions vacant. When a candidate in Boston with previous rural experience asked if the state would furnish a car for her use in visiting the towns, Soule wrote to Baxter and requested cars for the field staff. Anxious have the work underway, she also requested permission to hire another nurse to work in any county.  

Soule’s later correspondence indicates that Baxter approved employment of an itinerant nurse, but did not mention the car request. The governor’s failure to respond to the car question stymied Soule’s efforts to fill the position at that time.  

Several months later Baxter asked for clarification about the request for two automobiles, asking what transportation the nurses were using and what they had done in the past. Soule explained how in larger towns or cities the nurse could walk to make home visits or take a taxi. For rural work in Washington and Aroostook Counties, she

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63 Edith L. Soule to Percival P. Baxter, 10 September 1923, Maine Bureau of Health, Public Health Nursing Historical File, 10-144A Box 1, MSA.
64 Edith L. Soule to Percival P. Baxter, 15 September 1923, Maine Bureau of Health, Public Health Nursing Historical File, 10-144A Box 1, MSA.
65 Percival P. Baxter to Edith L. Soule, 1 April 1924, Bureau of Health, Public Health Nursing Historical File, 10-144A Box 1, MSA.
noted: “it will be impossible for the nurses to accomplish much by depending on the trains, and to use hired cars will make the expense almost prohibitive.” Soule understood how time-consuming and expensive it would be to make home visits in rural areas if the nurses did not have their own transportation. At the same time, rural women’s isolation increased their needs for prenatal and postpartum care, since most lacked access to ongoing medical care by physicians. Soule convinced Baxter that the cars were needed; the governor and Executive Council approved the purchase of “two Ford automobiles” so that the work could be “carried on in the most efficient manner.” Members of the Council and Baxter began to understand the nature of the public health nurses’ work; when Soule made her initial request it had not occurred to them how the nurses would travel from place to place. Baxter’s approval of the automobile purchases suggests he remained committed to this state-funded project because he wanted to maintain state control and avoid the need for federal assistance.

While public health nursing services for maternal and child health expanded, many voluntary associations continued focusing on child health and the Department of Health facilitated collaboration among all these groups. The American Child Health Association encouraged development of state and local child health organizations; in 1928 State Health Commissioner Kendall sought to organize such an association in Maine. After a pre-organizational meeting in January 1928, delegates from most of the

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66 Edith L. Soule to Percival P. Baxter, 2 April 1924, Bureau of Health, Public Health Nursing Historical File, 10-144A Box 1, MSA.
67 Percival P. Baxter to Edith L. Soule, 17 April 1924, Bureau of Health, Public Health Nursing Historical File, 10-144A Box 1, MSA.
68 Thomas A. Foster, “Address by Chairman of Maine Children’s Council, January 27, 1938,” 1, Maine State Child Health Council, Bureau of Health, Public Health Nursing Historical File, 10-144A Box 1, MSA.
state’s organizations interested in children met in Augusta to organize the Maine Child Health Council.

Awareness of child health issues had been increasing in Maine over the previous two decades. The purpose of the Maine Child Health Council was to develop a collaborative, ongoing, statewide child health program. At the organizational meeting Dr. Augustus O. Thomas, of the State Department of Education, outlined how schools already promoted child health in the areas of fitness, nutrition, vision and hearing screening, and health inspection. He emphasized the importance of cooperation among child advocacy groups, since they needed to accomplish so much. Although they were doing a lot to promote health, Thomas noted that about twelve thousand school children had uncorrected defects in their vision or other health problems affecting their learning. Despite efforts to improve the health of mothers and babies, remedying health problems among preschool and school-aged children needed much attention in the late 1920s.

Child Health Council members included representatives from a variety of groups: voluntary health organizations, civic clubs, fraternal organizations and departments of state government. At meetings, members (mostly women) reported about their work, heard educational programs, and planned child health activities, such as the annual Child Health Day.69 The Maine Child Health Council (renamed the Maine Children’s Council

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69 In 1916, Julia Lathrop, the first chief of the U.S. Children’s Bureau, suggested May Day as an appropriate time to celebrate accomplishments in child health. With the approval of President Coolidge, American Child Health Association president Herbert Hoover established May 1, 1924 as “a day for community action for the American child.” See Bradbury and Oettinger, A History of the Children’s Bureau, 11-13. On April 28, 1928, President Coolidge proclaimed May Day as Child Health Day, and a few weeks later Congress passed a joint resolution to this effect.
in 1934) promoted public awareness about the need for child health services and encouraged cooperation among organizations providing them.⁷⁰

One step toward improving maternal and infant health was Maine’s increasing acceptance of federal assistance during the Depression. In June 1934, at the sixth annual meeting of the Maine Children’s Council, Dr. Martha M. Eliot, Director of the Division of Child and Maternal Health at the Children’s Bureau, spoke about the National Child Health Recovery Program. Eliot explained that it provided medical care and milk to children and gave statistics for those receiving help in Maine. “We know that more than 19,000 children have been given medical examinations; approximately 25,000 children in 350 towns have been given milk regularly...[and when needed] medical care has been given.”⁷¹ Eliot said that throughout the country an estimated 2,000 nurses in forty states were employed in child health services during the winter of 1934 and that this Civil Works Administration program had resulted in ongoing child health services in at least fifteen states. Ahead of many states in this regard, Maine had already inaugurated its child hygiene and public health nursing services back in 1920, by hiring Soule. This relief program provided an important boost during the hard economic times of the mid-1930s. The fact that 25,000 children received aid and that the Maine Children’s Council invited Eliot to speak to its annual meeting suggests increased acceptance of federal assistance.

Although Maine continued to provide state funding for maternal and child health services after Congress cut the Sheppard-Towner funds, the state needed federal aid by

⁷¹ [Martha M. Eliot], “Abstracts from Talks at the Annual Meeting of Maine Children’s Council, July 25, 1934,” 2-3, Maine State Child Health Council, MSA.
1935 because of the Depression. When Congress passed the Social Security Act that August Health Commissioner George H. Coombs sent a telegram to the surgeon general of the U.S. Public Health Service, asking for assistance as soon as possible in obtaining the new grants this legislation included. Coombs may have thought the USPHS would be administering these funds, but the Children’s Bureau continued to administer the maternal and child health programs. The fact that Coombs sent a telegram, rather than a letter, suggests how anxious he was to obtain this money. His request was premature, though, since it did not become available for several months. Coombs’ eagerness to obtain the Social Security Act funding was similar to the Department of Health’s interest in obtaining Sheppard-Towner funds more than a decade earlier; this time, though the governor supported seeking federal assistance.

Voluntary health associations involved with child welfare supported public funding for maternal and child health services. At the seventh annual meeting of the Maine Children’s Council in 1935, federal Children’s Bureau official Doris A. Murray

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73 Politics at the 1930 national White House Conference may explain why Coombs thought the USPHS would administer federal funds for maternal and child health. In the months preceding the conference, several committees worked to gather information and recommendations about child health from throughout the country. Lela B. Costin has described how the conference erupted in controversy when physicians on the Conference Section Committee on Public Health Service and Administration accepted a recommendation to transfer the Children’s Bureau maternity and infant programs to the Public Health Service. Disagreement about control of this work had long fueled the Public Health Service’s opposition to the Sheppard-Towner Act. Once supporters of the Children’s Bureau understood how the White House Conference planners intended to move responsibility for maternal and infant health, they protested and succeeded in maintaining its responsibility for these programs. See Lela B. Costin, “Women and Physicians: The 1930 White House Conference on Children,” Social Work 28 (March-April 1983): 108.
spoke about the grants available through the new Social Security Act. The Children’s Council likely invited Murray to speak to encourage the state to obtain the federal funds; after the controversy about participating in the Sheppard-Towner program, the Council did not want the state to miss this opportunity.

In contrast to Percival Baxter’s rejection of federal assistance through the Sheppard-Towner Act, Governor Louis J. Brann and the Executive Council allowed Maine to accept the Social Security Act grants for maternal and child health, crippled children’s services, and child welfare programs in December 1935. In 1937 the legislature considered three bills to finalize this acceptance and authorized the state to apply for the federal funds. Although Governor Baxter wanted Maine to set an example for the nation as a state that accepted responsibility for the health and welfare of its own mothers and babies, support for federal funding grew in Maine between 1922 and 1935; this funding stimulated expansion of tax-supported public health nursing services. Unlike the legislature’s contentious earlier consideration of the Sheppard-Towner Act, legislators on both sides worked out a compromise, amending the bills in consultation with federal officials. One amendment struck the phrase, “to comply with such conditions as may be required for such aid.” As Cumberland County Senator Gail Laughlin explained, this amendment permitted rather than mandated the state to collaborate with the U. S. Children’s Bureau in administering the child health and welfare

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programs. Legislative debate at this time foreshadowed Maine's difficulties complying with federal oversight. Despite some lingering opposition, legislators found a way to make the language palatable and they approved the Social Security Act funding for maternal and child health.77

Social Security Act Expansion of Maternal and Child Health

Title V of the federal Social Security Act (administered by the Children's Bureau) granted funds to the states for maternal and child health and Title VI (administered by the U. S. Public Health Service) provided funds to improve public health facilities, staff, and training.78 As it did throughout the country, this funding assisted Maine to improve its formal public health infrastructure. With these funds the Maine Department of Health and Welfare established a Division of Maternal and Child Health and a Division of Crippled Children Services; also the Bureau of Health improved its district health centers and employed public health nurses in each district.79 The nurses eventually covered towns and regions of the state where no voluntary organizations had nursing services. They provided generalized public health nursing, including maternal and child health, communicable disease, and school health services. This federal funding held much promise for improving the health of mothers and babies, but mismanagement slowed its progress. Some state health officials resisted oversight by Children's Bureau consultants monitoring the program. Maine wanted the money, but opposed the federal

76 Record of the Eighty-Eighth Legislature, 543-544, 568, 578.
79 “Brief History of Health Work in Maine,” [1940] Public Health Nursing 10-144A, Box 2, Bureau of Health, MSA.
government’s direction regarding its use. Despite these difficulties, the Social Security Act funding assisted the state to improve access to maternal and child health services and death rates decreased for both mothers and infants.  

Between 1936 and 1945, the State Bureau of Health operated a Maternity Demonstration Area, including nine towns around the city of Waterville. Public health nurse-midwife, Hope Perry, described the plans for the project and its rationale in her 1937 annual report. She explained that state health officials wanted to show that adequate prenatal, delivery, and postpartum care would improve the outcomes for mothers and babies. The Bureau of Health chose this location because the nine towns near Waterville represented a cross-section of the state’s rural farming communities and poor immigrant neighborhoods. Also the homes there were accessible year round and the hospitals in Waterville could provide emergency care, if needed. Aiming to reduce maternal deaths by improving physicians’ use of aseptic technique, the program provided qualified public health nurses who assisted during home deliveries. Prenatal visits ensured that even poor families were better prepared for childbirth and postpartum home visits further decreased complications for mothers and improved infant care.

Despite Perry’s enthusiasm, several factors impaired the demonstration area’s effectiveness, including a lack of leadership, its location, and its low status among multiple program priorities. In its first couple of years the project had two part-time

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81 Herbert R. Kobes to Helen Dunn, 20 December 1944, Maine Bureau of Health, Public Health Nursing, 10-144A Box 1, MSA.
82 Hope I. Perry, “Maternity Service in Generalized Program of Public Health Nursing in Rural Areas,” 2, [1937], Maine Bureau of Health, Box 1, MSA.
83 Perry, “Maternity Service,” 1.
Directors, each of whom had full-time commitments with other Bureau of Health programs. The demonstration area's location within the so-called "headquarters district," was problematic. Since this district included the central office in Augusta, the administration of the district and the whole Bureau of Health overlapped. Administrators with multiple program responsibilities neglected the district or maternal and child health concerns, sometimes because of a lack of expertise and at other times because statewide issues needed attention. These divided priorities hindered the development of the demonstration area in its first years.

When the director of the Bureau of Health became convinced, with urging from federal consultants, that Maine needed a qualified head of maternal and child health, gender politics and provincialism influenced the choice of this administrator. Medical consultant Doris A. Murray, M.D., reported to the Children's Bureau that Maine sought a full-time maternal and child health director. Murray noted Maine officials had indicated that the ideal candidate would be "a physician, either born in New England or who has had affiliations in New England," and also that they preferred a male physician. Since many of the maternal and child health physicians at the Children's Bureau were women, this observation suggests friction between the federal consultants and Maine health officials. Dr. Robert E. Jewett, an obstetrician, became the full-time maternal and child health director in November, 1938.

While other program priorities diverted administrators, the public health nurses also focused on activities besides maternal and infant health. Because so many towns

85 Doris A. Murray, "Report of Field Trip: Maine Maternal and Child Health Services, August 22-26, 1938," 2, Children's Bureau Agents Maine, RG 102, NACP.
appropriated funds for school health services, in some communities this activity took up most of the state public health nurses’ time. Maternity Demonstration Area nurse Philomene M. Cummings’ first annual report in 1936 focused mainly on school health instead of on maternity care. The Children’s Bureau consultants encouraged the state health officials to begin early in the year, well before town meetings, to sell the idea of a generalized nursing program in hopes that the town warrants would not limit the public health nurses’ work to school health.

Generalized services meant those that focused on a broad range of problems and populations instead of on a single disease, such as tuberculosis, or age category, such as infants or school-aged children. The Children’s Bureau consultants supported a generalized program and did not oppose providing school health services, but when fulfilling commitments for school health took up so much time that it prevented adequate maternity care, they worried that a true demonstration would not be possible. Although the Maternity Demonstration Area project initially sought to demonstrate the effectiveness of maternal and infant services, after the first year the project nurses provided all types of public health nursing to all ages while also providing specialized maternity care.

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86 Philomene M. Cummings, “Demonstration Area: Winslow, Clinton, and Burnham,” [1936 ?], 1-2, Maine Bureau of Health, Box 1, MSA.

87 In a chapter titled “Specialized Visiting Nursing” in the textbook, The Evolution of Public Health Nursing (Philadelphia: Saunders, 1922), Annie Brainard included rural nursing as a specialty, along with school, tuberculosis, baby welfare, industrial, and “metropolitan” (Metropolitan Life Insurance Company) nursing, among others. Brainard argued that rural visiting nursing was “a combination of all the specialties,” p. 303. In the mid-to-late 1920s the debate among public health nurses over specialization vs. generalization continued. Some nursing leaders argued that too much specialization led to duplication of work, because several different nurses, each with a different specialty, might visit one family. Also see Mary Sewall Gardner, Public Health Nursing (New York: MacMillan Company, 1928), 74. Also see Jessica M. Robbins, “Class Struggles in the Tubercular World: Nurses, Patients, and Physicians, 1903-1915,” Bulletin of the History of Medicine 71 (1997): 433.
By supporting generalized services, Maine followed a national trend.\textsuperscript{88} Offering home delivery services along with a generalized public health nursing program, the Maine Bureau of Health and the Children's Bureau hoped to demonstrate that it could provide specialized maternity services within a generalized program. Due to a variety of factors, Maine had difficulty maintaining a generalized program; staff turnover and vacant positions often hampered the work.

Besides poor management, some nurses’ growing expertise contributed to conflicts with public health administrators; administrators’ lack of support for the nurses compromised the Maternity Demonstration Area program. After Perry returned from a course in public health nursing supervision at Columbia University, in May 1938, she experienced difficulties in her relationships with several Bureau of Health and Welfare administrators, including her supervisor, Edith Soule; state Health Commissioner, Dr. George H. Coombs; and acting Director of Maternal and Child Health, Dr. Roscoe L. Mitchell. Children’s Bureau nursing consultant Hortense Hilbert noted Soule did not accept Perry and had unrealistic expectations. Often expressing displeasure about Perry, Soule wanted her to do statewide maternal and child health consultation while continuing to assist with deliveries in the demonstration area. Coombs thought Perry knew too much.\textsuperscript{89} Knowing the great need for preventing maternal and infant mortality, Soule might have welcomed such a qualified nurse as Perry on her staff, and Coombs might also have praised Perry’s skills, but both these state administrators resented Perry’s expertise.

\textsuperscript{89} Hortense Hilbert, “Report of Field Visit, MCH Services, August 2-6, 1938, Maine,” 3, 6, Children’s Bureau Agents, Maine.
With her additional training, Perry objected to changes in home delivery procedures; Hilbert described her as “troubled over certain technical points which have arisen since her return.”\(^90\) Not all the physicians in the demonstration area wore surgical gowns during home deliveries and the nurses had stopped wearing their caps. Without wearing gowns the physicians risked transmitting infection to mothers and babies.

Hilbert explained that the caps made some of the doctors feel uncomfortable, suggesting friction between the physicians and nurses over procedural issues. Nurses’ caps indicated their training and symbolized their authority. The physicians who participated in this program welcomed the nurses’ assistance with managing the deliveries and post partum care, but they objected to the nurses’ authority in infection control matters.

Hilbert believed Soule was out of touch with the job of directing Maine’s public health nursing services and staffing problems persisted. In 1938 she noted that Soule continued “to have a hard time in getting and keeping the public health nursing positions in the State Board [sic] of Health filled.” Soule spent more time in the office and less time with her staff in the field; in 1938 she had not visited Aroostook County in six or seven years, even though the federal consultants had done so. In addition to these observations, Maine’s reports of maternal and child health activities between 1937 and 1939 displeased the Children’s Bureau consultants.\(^91\) Combined with Soule’s declining leadership, the initial problems of multiple program priorities and the lack of a qualified director added to the federal concerns about Maine’s services for mothers and children. Ongoing staff shortages, as well as conflicts among physicians, continued to hamper these services.

\(^{90}\) Hilbert, Field Visit August 2-6, 1928, 5.

Hilbert spent time with public health nurses in rural areas during her visits to oversee Maine’s maternal and child health program, taking on some of the tasks Soule should have done to support the staff. Speaking of the highly skilled French-Canadian nurse in Aroostook County Lucy Levesque, Hilbert noted, “because of the extensive area and large number of families under her care, [Levesque] can only touch the high spots, and give a most superficial service to those people who need her services so badly.” After Hilbert accompanied Levesque the consultant described the territory and how the public health nurse dealt with multiple family needs encountered in one home visit:

Her area is so zoned as to spend a certain number of weeks in each of 8 districts each year. We visited a zone of “back road” settlements which she had not visited since last year and on one road found that 3 infants under 1 year had died of cholera since she had been there last. They had had neither medical or nursing care during their illness and in each case the mother was again pregnant.

[In one household] practically every member of the family presented health problems and although one could not help but be impressed with the painstaking intelligent instructions given by Miss Levesque (all in French), neither could one help but be impressed with the futility of a nursing service spread so thinly in a community where every 100 families could well utilize the services of a public health nurse in order to have their needs for care of the sick and instructive services fully met.92

Hilbert admired Levesque’s French language skills, though she may not have understood what the nurse or the families said. It is possible that families found the information Hilbert described as “intelligent instructions” not helpful. Levesque had a larger caseload than one nurse could handle and Hilbert may have been more experienced in urban, rather than rural, public health nursing; she may have felt more overwhelmed by Levesque’s situation than Levesque herself. As a federal official from Washington,

92 Hilbert, “Field Visit, MCH Services, August 2-6, 1938,” 7.
Hilbert may have made inaccurate assumptions about the needs of poor families in Aroostook County.

In lengthy reports to their superiors in Washington, D.C., the Children’s Bureau field consultants enumerated their complaints about the situation in Maine. Around 1940, the Maternity Demonstration Area became part of District II, evidence of the state’s attempts to remedy the problem of overlapping responsibilities and the program’s location in the headquarters district. Numerous other problems overshadowed this small accomplishment. After this change, Hilbert noted that Dr. Stanhope, the District II health officer, had not yet visited the Demonstration Area and remained “completely uninformed in regard to the program, personnel, and activities carried on there.” Hilbert summarized: “Apparently no one in the State Health Department (sic) [by this time known as the Bureau of Health] actually considers seriously that he has or will have responsibility for the service.”

By rearranging the district boundaries to put the demonstration area within District II, Maine health officials tried to appease the federal officials. Stanhope was an experienced district health officer, having spent much of his career focusing on tuberculosis control. Besides lacking credentials in maternal and infant health, Stanhope’s full-time duties in the health district in Dover-Foxcroft would have made it difficult to oversee maternity services more than fifty miles away in the nine towns around Waterville. By assigning Stanhope these two major job responsibilities, the Maine Bureau of Health demonstrated the ongoing low priority of maternal and infant health in the state.

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Despite evidence that state health officials sought advice from federal consultants, the state followed federal directives in its own way and the Children’s Bureau remained critical of Maine’s efforts to improve maternal and infant health. Sometimes federal consultants’ and state officials’ perspectives about problems and their solutions differed; federal consultants expressed frustration about this in their reports. Even though Stanhope said his district needed a supervisory nurse to respond to the field nurses’ questions, Roscoe L. Mitchell, by this time Director of the Bureau of Health, proposed decreasing the number of district supervisors from five to three. This recommendation shocked the federal consultants. One noted:

We were flabbergasted by this suggestion (it was new to Miss Soule also) and showed it. There are thirty-three field nurses employed by the State Bureau of Health, working under unusual conditions of isolation without any support, leadership, or professional or technical assistance from the State Bureau of Health. Many of these are young, inexperienced public health nurses with good potentialities for development. The distances are great and travel, even on a district basis, is time-consuming.\(^{94}\)

It seems that Maine Bureau of Health administrators ignored advice from federal consultants and at times failed to communicate with each other, or at least with Soule. Federal officials thought Maine’s rural public health nursing staff could make more of a difference if they had the support and guidance they needed, but it is unlikely that the federal officials understood the rural challenges Maine faced.

Hilbert criticized Mitchell’s priorities, noting that “his one idea seems to be to appease the governor and council and he seems to be willing to make any compromise whatever to that end.” Hilbert responded to Mitchell’s suggestion about decreasing the supervisory positions by enumerating three major problems in the staffing of Maine’s public health nursing program. These included the lack of an assistant for Soule, the lack

\(^{94}\) Hilbert, “Field Visit, Maine, January 8-12, 1940,” 2.
of a nursing consultant for both the maternal and child health and crippled children’s
programs, and the lack of supervisory staff for the Demonstration Area and four out of
six health districts in the state.95

Although the Children’s Bureau officials’ expectations may have been unrealistic,
Maine officials shared responsibility for some of their difficulties. Soule’s leadership
style contributed to the number of vacant positions; she had severely criticized her
previous assistant, Helen Kienzle, and made it difficult for her to do her job.96 Facts
about the maternity services’ effectiveness might have been useful to legislators, but
although state officials collected detailed data from the demonstration area, no one
analyzed the data to evaluate the program.97

Given the chronic staffing problems and lack of leadership, Hilbert doubted
“whether a public health nursing service of good quality could be given under those
conditions.” Children’s Bureau officials believed Maine had not adhered to the provisions
in its written proposal for the Social Security Act funds. In reports to other federal
officials the consultants considered de-funding the program because of the state’s failure
to meet federal expectations.98 Despite their harsh criticism, they were lenient with the
state in meeting program requirements and did not de-fund the program.

The root of Maine’s difficulties in implementing its maternal and child health
program went beyond bureaucratic stubbornness; resentment about federal control and
fiscal conservatism played a part. Competition between the Children’s Bureau and U.S.
Public Health Service also influenced decisions of Maine health officials. The governor

95 Hilbert, “Field Visit, Maine, January 8-12, 1940,” 2-3.
96 Hortense Hilbert, “Report of Field Trip, Maternal and Child Health Services, Portland,
97 Hilbert, “Field Visit, Maine, January 8-12, 1940,” 4-5.
98 Hilbert, “Field Visit, Maine, January 8-12, 1940,” 2-3.
and Executive Council wanted to decrease the state’s administrative costs and they did
not see a need to fill all the public health nursing positions. The USPHS pressured the
Bureau of Health to hire a director for the Division of Communicable Diseases who
would also oversee the venereal disease program. Director Mitchell wanted Dr. Jewett to
take this job instead of continuing as Director of Maternal and Child Health; the USPHS
approved of this, even though Jewett had expertise in obstetrics, not disease control.99
Thus, federal and state officials contributed to the appointments of unqualified people to
fill positions and undermined one program to support another, further hindering Maine’s
maternal and child health services.

Federal consultants became frustrated with Mitchell because of his lack of
initiative and unwillingness to convince the governor and Executive Council of the
importance of supervision for the field nurses. Hilbert commented in her January 1940
field report that attitudes in Maine about federal participation in state public health
activities remained unchanged. She reported about articles in the local press objecting to
“the unreasonable demands made by the federal agencies in regard to welfare and health
services administered by the State.”100 Since Children’s Bureau field consultants visited
for several days at a time, they had opportunities to read local newspapers and to visit
informally with local public health staff. This contact enabled them to understand local
attitudes from direct observations, rather than from simply the information state health
officials wanted them to have.

Children’s Bureau medical consultant, Doris Murray, reported in August 1940
that Helen F. Dunn, the newly appointed Assistant Director of the Division of Public

100 Hilbert, “Field Visit, Maine, January 8-12, 1940,” 2-4.
Health Nursing, felt "very much discouraged" because Soule had yet to give her any responsibility. Although Dunn came to the Bureau of Health from Washington, D.C., she hailed originally from Augusta, Maine. She left the American National Red Cross, where she worked for several years as a national field representative in the South; the ARC promoted Dunn to Director of Public Health Nursing for its national organization just prior to her move back to Maine. Returning to her home state after working in a prominent national position, Dunn had excellent credentials to take over her new boss's job, and Soule understood this. After all the difficulties with vacancies and the lack of support for local field staff, the federal consultants wanted Soule to retire and Dunn to take over as head of the state public health nursing division.  

In addition to their support for staff changes, the Children's Bureau consultants instigated local services or at least tried to motivate state officials to organize services to meet local needs. They observed that many women in Waterville delivered their babies at home because they could not afford to go to the hospital and their physicians requested public health nursing assistance with those deliveries. Since the Demonstration Area included towns around Waterville, but not the city itself, many of the physicians practicing there were familiar with the public health nurses' home delivery services. The consultants hoped a city public health nursing service might be organized, since the only community nursing services available in January 1940 were school nursing and services for industrial policy holders of the Metropolitan Life Insurance Company. Hilbert noted that such a plan would likely have the support of the local school board, since the board had employed several minimally qualified school nurses and their nurse had again

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resigned. She thought the insurance company would also support a generalized city public health nursing program, because she understood both the company and the community were dissatisfied with the Metropolitan Life Insurance Company's nurse.\textsuperscript{102}

Although they visited Maine only once or twice annually, the federal consultants paid close attention to the various players in the state's communities and to local needs, noting opportunities to expand maternal and child health services.

By the early 1940s Maine's death rates for mothers and infants decreased. *Health and Welfare Trends* noted the infant death rate had decreased from 71.7 deaths per 1,000 live births in 1931 to 51.2 in 1941 and the maternal deaths during this same period decreased from 7.9 to 4.1 per 1,000 live births.\textsuperscript{103} Combined support from community organizations like members of the Maine Children's Council, federal funding, and expansion of official public health services made the difference.

**Women's Roles in Expanding Official Public Health Services**

Political support for federal funding for public health increased in Maine in the first half of the twentieth century. Because of suffrage and women's lobbying in favor of Sheppard-Towner, in the early 1920s some male legislators worried about women's increasing political influence; however Maine women's support for this legislation included more than voting or lobbying. By promoting public health nursing services in their communities, club women and health reformers changed local attitudes about these services. Once more local women accepted public health nursing services and their attendance at clinics increased, Maine's acceptance of the Sheppard-Towner program followed in 1927. Local women, including clubwomen, public health nurses, and

\textsuperscript{102} Hortense Hilbert, January 8-12, 1940, pages 4-5.
housewives, who welcomed the nurses into their homes and attended health clinics, played a major role in this change. However, despite women's central role in this political shift, they did not act alone. The support of public health officials, male legislators, and women reformers together changed Maine's states' rights position, allowing the state to accept the federal money. Acceptance of federal funding for maternal and child health services led Maine's public health services to become more public and less private, yet the state's expansion of these official services developed with strong ongoing connections to community organizations and lay volunteers through the Maine Children's Council.
CHAPTER 7
COLLABORATION AND LAY INVOLVEMENT

Public health in Maine changed in the 1940s due to technological advances, increases in federal funding, and priority shifts by voluntary organizations. From the 1920s through the 1940s more vaccines and drugs became available for disease prevention and treatment, lowering the numbers of illness cases and decreasing death rates. Increased emphasis on early periodic health screening by physicians improved health outcomes, but contributed to consumers and doctors valuing private medical care over public health programs. The Social Security Act provided increased public funding for health programs. Insurance companies like Metropolitan Life, which had paid for nursing services for industrial policy holders for decades, prepared to discontinue this practice, since the cost at that point outweighed the benefits. As voluntary health organizations changed their priorities and as leadership at the State Bureau of Health encouraged development of town health councils, new enthusiasm for lay involvement in public health emerged. Although conflicts and competition existed at times among various service providers and organizations, collaboration predominated. Despite changes in services and funding, lay involvement in public health continued, as Maine's official health organization expanded.

The context of public health in Maine in 1950 also included interest in improving health. Access to hospital care in rural areas improved after WWII when Congress enacted the Hill-Burton Act in 1946, increasing hospital beds with some free care for

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those unable to pay. On January 30, 1948 President Harry Truman requested that his federal security administrator, Oscar R. Ewing, study how to improve health of citizens throughout the country. Truman noted

The health of our people is of such importance to our national welfare and security that I wish to make certain that we are taking all possible steps to contribute to its improvement. I have, as you know, repeatedly requested the Congress to enact legislation designed to expand basic health services and to bring them within the reach of all the people. While such legislation is of primary importance, its enactment alone will not assure that we shall reach the highest possible levels of health. The attainment of such a goal requires the cooperation of state and local governments, voluntary organizations, the medical and health professions, as well as all of our citizens working together.\(^3\)

Truman’s assessment of the importance of collaboration in public health fit well with Maine’s work in this area.

State health officials participated in tuberculosis control beginning in the 1890s; they included surveillance of it within the state’s communicable disease program, while encouraging voluntary anti-tuberculosis activities. By 1938 tuberculosis control had become a joint effort, with the state assuming responsibility for it in collaboration with Maine Public Health Association (MPHA).\(^4\) Increased access to diagnostic services, such as the use of portable x-ray machines, improved early diagnosis and treatment. Although research on sulfonamides began in the early 1940s, medications for the disease were not widely available until the 1950s.\(^5\) Tuberculosis remained a problem throughout the


1940s, leading the MPHA to re-focus its efforts on the disease, rather than on a
generalized public health program.

As the Maine Bureau of Health expanded its nursing workforce, voluntary
organizations still provided public health nursing in many communities. Services varied
from year to year due to difficulties in fundraising and staffing. With publicly-funded
nursing positions spread out in rural districts and an ongoing nursing shortage after
World War II, an uneven array of services existed in Maine between 1935 and 1950.
Many non-official health services operated through the late 1940s, until the growth in
state services made them less necessary. Changing organizational priorities led the ARC
to end its public health nursing program and the MPHA to refocus on tuberculosis
control. Mid-century developments in local ARC chapters, MPHA, and Maine Bureau of
Health highlight these changes; ongoing cooperation and lay involvement characterized
rural public health in Maine by 1950.

**Refocusing Voluntary Association Priorities**

Several factors contributed to voluntary health organizations' priority changes in
the middle of the twentieth century. By the late 1930s organizational conflicts at the
national ARC led to staff changes and restructuring. MPHA had begun its anti-
tuberculosis work in the early twentieth century in part because Maine's official health
department was not providing adequate care. MPHA supported growth of official state
services in this area. As these services developed, the Bureau of Health gradually
assumed more responsibility for tuberculosis control in collaboration with MPHA.
Between 1920 and 1950 non-official health services of the ARC, MPHA, and other
voluntary groups frequently overlapped with official services and with each other.
Although by 1950 their individual roles were more distinct with less duplication of services, the state and MPHA still shared tuberculosis control activities. Refocused voluntary health association priorities led to discontinuing some services and new opportunities for expanding Maine’s official health department.

In 1928 Elizabeth Fox, national director of the ARC Public Health Nursing Service during its boom in the 1920s, reinterpreted the policy of demonstrating the value of public health nursing services and then turning them over to other agencies. ARC originally intended to have official health departments or other voluntary health associations provide these services once it had demonstrated their value. Fox’s interpretation of this policy held that ARC’s responsibility for these services should instead be permanent. Some ARC administrators argued that providing an ongoing peacetime public health program was inconsistent with ARC’s mission. Since many of the chapter nursing services lasted only a short time, Fox’s plan for a permanent service seemed doomed from the start.6

Nationwide a total of 2,723 chapters had established public health nursing services but only 580 remained active in July 1932. Fox, by that time Executive Director of the Visiting Nurse Association in New Haven, Connecticut, commented on the progress of the ARC Public Health Nursing Service on its twentieth anniversary. She credited the ARC with boosting rural health, despite “many mistakes and imperfections.” The organization’s support for training helped establish rural public health nursing, but Fox characterized the ARC’s requirements for the nurses’ qualifications as “almost utopian” because so few had completed post-graduate training in public health. She

conceded that when many local chapters began public health nursing services after World War I, "Chapters and nurses alike were ill-prepared for these pioneer undertakings." Although Fox predicted another twenty years of success, this was perhaps an unrealistic goal, as the number of chapters offering nursing services had decreased steadily since 1922. Even before the 1930s many local chapters had difficulty meeting communities' needs due to a lack of funds and problems finding qualified nurses.

During the Depression the ARC experienced many challenges as well as opportunities. Kernodle divided 1929-1936 into three phases to describe the Depression's impact on the ARC, both locally and at the national level. First, between 1929 and 1931 poverty decreased donations to local chapters and increased demand for services, especially free services. Malinde Havey, the national ARC Director of Public Health Nursing, noted during this period that because of widespread unemployment, "it looks as if we are doing more relief work than actual nursing." The local chapters needed help in meeting these demands. Because fewer families could afford medical care and hospitalization, local chapters reported increases in home visits for maternity cases and bedside care of the sick. In addition to their lack of income, many of the unemployed lost benefits, such as payment for home nursing services through the Metropolitan Life Insurance Company. Also town and state public health appropriations decreased during this period, affecting those ARC chapters that operated jointly with official agencies. These extra needs and decreased income began to take their toll on the organization; between 1931 and 1933, Kernodle's second phase, financial problems led the national

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7 Elizabeth Gordon Fox, "Twenty Years of Red Cross Public Health Nursing," *The Red Cross Currier* 12 (December 1932): 173-174. For a breakdown by year of ARC nursing services (newly established, transferred, or discontinued) between 1919 and 1930 see Kernodle, *Red Cross Nurse*, 302-303.
ARC to reduce staff and salaries. Following staff reductions increasing demands for ARC services led staff to feel overburdened. ⁸

The ARC's decline continued until New Deal relief programs and charitable donations gave the organization a boost. Kernodle's third phase began in 1933 when the Federal Emergency Relief Administration (FERA) began paying unemployed nurses to assist local Red Cross chapters' public health nursing programs. In 1934 the Civil Works Administration (CWA) supported home hygiene instruction through adult education classes, increasing the numbers of instructors and participants. ⁹ A couple of years later the National Youth Administration provided still more support by supplying additional participants for the classes, further increasing the numbers completing the course. In addition to this federal assistance, the ARC received $45,000 in donations to support public health nursing and home hygiene instruction between 1933 and 1934; this additional help enabled the ARC to continue its rural health work during the Depression. ¹⁰

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⁹ Intended as a short-term program to help the unemployed make it through the winter, President Roosevelt created the CWA in November 1933 by executive order. Instead of providing relief in the form of money or food, the CWA gave the unemployed temporary jobs. See Harry L. Hopkins, *Spending to Save: The Complete Story of Relief* (New York: W. W. Norton, 1936), 116. In response to criticism of inattention to women's employment needs the CWA created a Women's Division. Also within the CWA, the Civil Works Service (CWS) developed white collar relief jobs, including many for nurses. For a discussion of the implementation of the CWA program in Maine see Lawrence G. Lashbrook, "Work Relief in Maine: The Administration and Programs of the WPA" Ph.D. diss., University of Maine, August 1977), 199. For analysis of gender in relation to the CWA, see Bonnie Fox Schwartz, *The Civil Works Administration, 1933-1934: The Business of Emergency Employment in the New Deal," (Princeton, NJ: Princeton University Press, 156-180.
¹⁰ The Scottish Rite Masons of the Northern Jurisdiction and popular movie actor and newspaper columnist Will Rogers donated these funds. See Kernodle, 365-369.
While several Maine ARC chapters benefited from relief programs during the 1930s, the success of Red Cross public health nursing services in the state varied. As previously described, the Mount Desert chapter had wealthy benefactors and one nurse (C. Charlotte Nelson) in continuous service during its first two decades; however, most chapters experienced interruptions in services due to financial difficulties and frequent staff turnover. Some chapters failed to recruit a replacement after the first nurse left. Although the ARC did not always succeed in delivering the services it promised, many communities in Maine remained loyal to their local chapters, perhaps because of their involvement in annual membership campaigns and other chapter activities or because of the ongoing popularity of the ARC in general.

The Madison/Anson Chapter of the ARC was typical of many Maine chapters that began in the early 1920s and endured through the late 1940s. After providing generalized public health nursing services for almost two decades Madison’s ARC chapter’s services became more specialized in the 1940s. Mary Herd became the public health nurse there in July 1939; she identified “industrial nursing, school nursing, and community nursing” as her three major areas of service. The latter category included services to people of all ages with differing health needs, including bedside care of the sick, maternal and child health, communicable disease control, and immunizations. Funding sources likely influenced this increased specialization of services; Great Northern Paper Company paid

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12 The Script Exchange of the Public Information Service at the ARC national office in Washington, D.C. provided numerous “playlet” and radio play scripts to assist local chapters in publicizing the organization’s programs and activities. Also ARC publications and advertisements frequently featured popular movie and cartoon personalities, such as Shirley Temple and Mickey Mouse. See Radio Script Exchange, “The Chairman Visits the Red Cross Nurse: A Play for Radio,” No. 31 in Script Exchange Catalogue, 1935, Public Health Nursing Service, Box 37, Records of the American National Red Cross, NACP.
the ARC chapter for industrial nursing services, town appropriations supported school nursing, and fees augmented funds raised from annual membership drives to pay for the community nursing services.  

The Maine Bureau of Health took over providing many of the services no longer offered by the Madison/Anson ARC Chapter. Katherine Gay, a Bureau of Health nurse, conducted tuberculosis screening among Madison school children in 1939. In 1942 a state nurse from the Crippled Children’s Program offered an exercise clinic every three to four months and Herd referred children with orthopedic and posture problems to her. This illustrates increasing state involvement at the local level and shows a voluntary agency turning over part of its service to an official health agency. This trend soon put the town’s maternal and child health and other services under the jurisdiction of the Bureau of Health while the Madison/Anson ARC Chapter continued its more specialized nursing program.

The Madison/Anson ARC nursing service continued through 1949 with few changes, except for staff turnover and increasing specialization in industrial nursing. In 1948 public health nurse Hazel M. Huggins reported that free chest x-rays were available through the Bureau of Health and arranged for the mobile x-ray machine to come to Madison from Augusta. Huggins noted that “87% of the employees of the Great

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Northern Paper Company were x-rayed." By the late 1940s industrial health dominated the nursing service; Huggins reported visiting only two pregnant women that year (a total of six visits), indicating a decrease in maternal and child health services relative to the industrial work.\(^{15}\)

In 1943, due to the shortage of physicians because of World War II, the legislature approved financial assistance for public health nursing services in towns with populations less than 6,000. The funds added services in towns that did not yet have a public health nurse, as long as the nurse’s work and qualifications matched requirements of the State Bureau of Health.\(^{16}\) For towns that chose to participate, this created a public health nursing service supported by local and state public funds. By dictating the nurse’s qualifications and other program requirements, state officials tried to establish more uniform nursing services throughout the state. Because of the nursing shortage that continued throughout the 1940s, only a few towns developed new public health nursing services; when the national ARC directed local chapters to close or transfer their nursing services before 1950 some towns used this state assistance to continue their public health nursing programs.

The number of ARC nursing services decreased throughout the 1940s; nationwide only 124 ARC chapters were providing public health nursing services on June 30, 1947.\(^{17}\) Public health nursing services in Maine ARC chapters were among the last in the country to close; they stopped or transferred the services to other private or to public agencies.

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\(^{16}\) Secretary of State, Acts and Resolves as Passed by the Ninetieth and Ninety-first Legislatures of the State of Maine, From April 26, 1941 to April 9, 1943, and Miscellaneous State Papers (Augusta, ME: Kennebec Journal, 1943), 151-152.

\(^{17}\) Kernodle, Red Cross Nurse, 470.
only because administrators in the national office directed them to do so.\(^{18}\) In her report to Madison in 1949 Hazel M. Huggins noted that the service had been transferred to the Madison Public Health Council on July 1, 1949.\(^{19}\) Marion Lowe, the town’s public health nurse in 1950, noted in her report to the town for that year:

> For the benefit of those who do not already know, the Nursing Service is no longer under the direction of the Red Cross. When the Red Cross withdrew all nursing service in July 1949, interested citizens wished to continue the Public Health Program. They formed the Madison Public Health Council (a lay group, composed of Town officials, Superintendent of Schools, businessmen, teachers, members of organized groups, and others representative of the town) and applied to the State for aid for Public Health Nursing Service under the Enabling Act. They now receive this aid. This means that the town, through the local council, administers the service; the state and town participate financially; and the nurse functions under the policies set up by the State.\(^{20}\)

Huggins’ and Lowe’s reports suggest that the town’s ARC chapter continued as long as possible, until the national ARC “withdrew,” and that townspeople remained supportive of public health nursing services in their community. These changes created new opportunities for the Bureau of Health and for local agencies that emerged to continue the services.

Like the ARC, MPHA too had a boom in the 1920s and a slow decline over the 1930s and 1940s; the organization reprioritized its goals in the late 1940s. Despite its affiliation with the National Tuberculosis Association, MPHA often provided generalized services and reached many different groups in need of health promotion. Many public health issues of the 1920s resolved or at least improved over time, but because new cases


of tuberculosis continued to occur, the public still needed education about the disease and its prevention, outreach, and home follow-up.

Over time the growing influence of the State Bureau of Health changed MPHA’s leadership position in public health as a whole in Maine. During the mid-to-late 1940s MPHA re-focused its efforts on tuberculosis case finding and prevention. Meanwhile, the Bureau of Health expanded its maternal and child health, venereal disease, and tuberculosis control services. Because of MPHA’s primary focus on tuberculosis, it changed its name to the Maine Tuberculosis Association in 1950. Maine had a long history of collaboration among MPHA, ARC, and the Maine Bureau of Health. By the late 1940s, although non-official health associations remained important providers of public health services, the official health department had expanded and taken over many services previously offered by voluntary organizations.

Lay Involvement

Lay involvement in public health grew throughout the first half of the twentieth century. Women’s club activities promoting public health in the 1910s increased women’s awareness about health issues; in addition to providing education on various topics, clubs raised money to support services for tuberculosis, prevent infant mortality, and organize local public health nursing services. Maine’s official public health services welcomed lay involvement, especially after formation of the State Department of Health in 1917. Health officials encouraged women’s involvement and collaborated with educators from the Maine State Grange as well as voluntary health organizations like MPHA and MMA that assisted with disseminating pamphlets about health topics to the public.

In addition to its popularity with business and its success as a program of ARC chapters, the ARC’s Home Hygiene and Care of the Sick course became part of the approved curriculum of the Maine State Department of Education for all high school sophomore girls in 1921, expanding the influence of these classes taught by local public health nurses throughout the state.

Lay participation in activities organized by parent teacher associations improved health among children. At its annual convention in 1925, the Maine Teacher’s Association endorsed cooperation among the Maine State Department of Health, MPHA, and teachers in the Modern Health Crusade, a school health education program.\textsuperscript{22} The Dexter Parent Teacher Association organized annual health meetings and appointed a health committee to work with the local public health nurse on summer kindergarten “roundups” and to provide community information sessions for parents. At health clinics preschool and school aged children received immunizations and had health problems addressed prior to entering school. Other Dexter PTA health initiatives in the 1930s included community lectures and support for a tuberculosis clinic. These articles document both parental involvement in child health promotion and the PTA’s interest in health legislation, such as the bills to accept the Social Security Act funding for maternal and child health and crippled children’s services. Community organizations with a broader focus than health, like the PTA, offered the public opportunities to become informed about issues.\textsuperscript{23}


\textsuperscript{23} Dexter Parent Teacher Association Scrapbook, Dexter Historical Society, Dexter, ME.
Education officials cooperated with both official public health programs and non-official organizations and lay members of voluntary associations played an important role in the success of public health services. While voluntary health associations had members who were trained professionals, many organizations actively recruited lay members for committee work and to serve on boards of directors. For example, Gertrude Peabody, a summer resident of Seal Harbor, was chairman of the board of directors of the Mount Desert Chapter of the American Red Cross. The ARC understood the usefulness of its “Home Hygiene and Care of the Sick” course to increase its volunteer workforce. Women who took the course frequently became committee or board members of local chapters. When the North Atlantic Region held its annual Maine Home Hygiene Institute in Saco in 1937, Charlotte M. Heilman, the representative from the national headquarters, was especially pleased to see a good number of lay visitors in attendance. This likely pleased her because she knew the involvement of lay men and women was essential for maintaining the organization’s ongoing programs.

The County Extension Service developed neighborhood groups, committees, classes, and clinics that contributed much to public health from the 1920s through the 1940s; home demonstration agents also collaborated with local ARC chapters and affiliates of MPHA to offer lessons in home care. Extension service activities helped

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24 In 1925 the Maine Public Health Association’s individual members included at least twenty-six women and thirty-nine physicians. See Working For Health, 54-55.
meet health needs in rural areas in part because many towns had no physician. What began around 1929 as nutrition lessons progressed in the early 1930s to preschool child health clinics. County home demonstration agents taught rural women how to maintain their families’ health; women studied “child feeding” with lessons emphasizing the importance of adequate food to prevent illness. Through the Cooperative Extension’s “Happy Healthy Growing Children” program, demonstration agents focused on what foods to eat. Sometimes a nurse also attended to weigh and measure the children and talk with the mothers about health concerns. Home demonstration agents encouraged mothers attending the meetings or clinics who were not already doing so to “enroll” in the program and agree to adopt recommended health practices, such as serving fruits and vegetables to their children and giving them regular doses of cod liver oil during the winter months.

Throughout the 1930s and early 1940s the Cooperative Extension continued to sponsor child health clinics, utilizing local Farm Bureau women as volunteers. Home demonstration agents Evelyn M. Lyman and Jeanette Linton described how committees of rural women helped them to identify and contact Kennebec County mothers with young children to invite to the clinics. The committees of women in each town also arranged for publicity and completed a variety of tasks to ensure the smooth operation of

29 Farm Bureaus, membership organizations of local farmers, hosted educational meetings, participated in activities to support farm families, and worked closely with the Cooperative Extension.
the clinics; in addition to finding a location, the women made sure both a public health nurse and a physician were available. “At the clinics the community committee women welcomed the mothers, amused the children while they waited, weighed and measured, helped dress and undress the children and generally assisted the doctors and nurses.”

With their help, “Happy Healthy Growing Children Clinics” gave instruction to sixty-nine mothers and examined one hundred and six pre-school children from four Kennebec County towns in 1938. In addition to making the clinic easier for the professional staff, these women likely made the local mothers more willing to bring their children to be examined, since their neighbors were involved, and they received friendly support. With the farm women working at the clinics the Cooperative Extension helped the Bureau of Health reach and gain the confidence of rural people who needed health services.

The Cooperative Extension Service continued to sponsor child health clinics for several years; after the state received federal funds through the Social Security Act these clinics expanded. The Division of Public Health Nursing at the Bureau of Health cooperated with many of the clinics by arranging for doctors to examine the children, assigning public health nurses to assist them, and paying the doctors. Since the Cooperative Extension demonstration agents were trained in home economics and had nutrition expertise, they usually conducted nutritional assessments at the clinics. Occasionally clinics also included dental hygiene examinations. Medical records documented data from each clinic visit, allowing physicians and nurses at subsequent

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visits to track children’s health progress over time. Children’s Bureau consultant, Doris A. Murray, M.D. noted in 1937 that the health districts of the Bureau of Health planned to take over responsibility for the child health clinics sponsored by the Cooperative Extension, and that the Farm Bureau would continue to participate “in a lay capacity.” Between 1937 and 1943 the Cooperative Extension’s role in the clinics decreased and it facilitated increasing lay involvement of local farm women volunteers.

As the Bureau of Health assumed more responsibility for the child health clinics the Cooperative Extension focused more attention on training local women in home care of the sick, another health need World War II exacerbated. George E. Lord, Assistant Director of the Cooperative Extension in Orono, outlined the growing problem of caring for the sick in rural areas; he attributed this in part to the shortage of rural physicians and the distances to health services in more urban areas. In a report sent to ARC officials at the national headquarters Lord noted that the Cooperative Extension in Maine received requests from rural residents, asking for instruction in home care of the sick, and he described the Extension’s efforts to provide this education to farm women. The ARC accommodated the Extension’s needs for a shorter home hygiene course, making this information even more accessible to rural farm families.

A pamphlet published in 1945 on the twenty-fifth anniversary of the State Bureau of Health’s Public Health Nursing Division explained its activities, demonstrated its

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33 Doris A. Murray, Report of August 28, 1937, RG 102, Records of the Children’s Bureau, Central Files 1937-1940, NACP.
connections to other Bureau of Health programs, and outlined its agenda for working with communities and other agencies. It noted milestones in the Division's history, showing how the programs and staff had grown between 1920 and 1945. Besides public health nurses' work to promote mental and physical health, the pamphlet stated that they also assisted with "organization of Town Health Councils." The pamphlet defined a health council as "an organization to study community health needs to coordinate health activities and suggest programs to meet these needs." In addition to development and public relations functions, the health council promoted "a cooperative program with all health agencies in the community." 35 Public health nurses were instrumental in forming town health councils in each Maine county. Assistance from lay volunteers extended public health nursing services of the Bureau of Health, while it positioned itself as coordinator of these services among all agencies. The success of many town health councils during the 1940s suggests that local people valued health and wanted to do what they could to improve the health of their communities.

**Public Health in Maine in 1950**

Between 1920 and 1950 lay involvement in public health education and in the delivery of rural public health services expanded in Maine; much of this growth can be attributed to women's support for public health nursing. Expansion in home hygiene classes through relief programs during the Depression and through the Cooperative Extension in the 1940s increased local women's awareness of and openness to public health nursing services. These classes reached local women, changing their ideas about

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about public health, and teaching them how individuals could prevent illness and care for the sick at home.

Official public health staff grew in number after 1935, thanks to increased local appropriations as well as to state and federal funding. Voluntary health associations remained important and with lay assistance the Bureau of Health became Maine’s most prominent public health agency. With less program overlap and more financial resources, access to public health services became more uniform in all areas of the state.
CONCLUSION

Rural public health in Maine between 1885 and 1950 showed how individuals at the local level influenced change. Responsibility for improving public health rested on all Maine residents, not just trained health professionals. Through countless everyday activities local people had an impact on the health of their families and communities. Home hygiene classes increased lay women’s knowledge of home sanitation and disease prevention as well as care of the sick. From its beginning, Maine’s official health department facilitated voluntary involvement in public health activities. The local dynamics of rural public health in Maine highlight the importance of women in public health—particularly as public health nurses, mothers, family caregivers, and local volunteers.

These dynamics also downplayed the necessity of formal local health departments. In a rural and fiscally conservative state like Maine a strong central administration made more sense than local health departments. Despite resistance to early disease control rules, over time more people accepted that the state had a role in safeguarding public health.

Between 1885 and 1950 rural public health in Maine involved interaction among local, state, and national officials and organizations. Voluntary health services augmented Maine’s official health infrastructure, blending private and public resources. Voluntary organizations delivering health education to wide audiences improved the health of communities in the first half of the twentieth century. Together with voluntary associations rural communities relied on the state for assistance in protecting public health, further blurring boundaries between local and state jurisdictions. Federal funding
for health changed Maine’s relationship to the federal government. Even though the goal of “All for HEALTH for All” remained unmet in 1950, Maine had developed a viable public health system.
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Martha Anne Eastman was born in Augusta, Maine and graduated from Cony High School in 1973. She attended Eastern Maine Medical Center School of Nursing and graduated with a diploma in nursing arts in 1976. She worked as a registered nurse in Bangor before enrolling in Boston University School of Nursing in the fall of 1977. Eastman graduated from Boston University with a B.S. in nursing in January 1981 and with a M.S. degree in Community Health Nursing in May 1983. She worked as a staff public health nurse in Bangor, Maine from 1983-1986 and as a public health nursing consultant for the Ohio Department of Health, 1986-1990. Between 1990 and 2003 she worked at the University of Maine, as Clinical Coordinator of Nursing at Student Health Services from 1990-1996, in Student Affairs from 1996-2001, and as a program coordinator at the University of Maine Center on Aging between 2001 and 2003. She also has worked per diem as a staff nurse in long-term care and is certified as a professional geriatric care manager.

After receiving her degree, Eastman plans to combine teaching and historical research with care management and consultation in gerontology. She is a member of Sigma Theta Tau International, Phi Alpha Theta, and Phi Kappa Phi honor societies. Eastman is a candidate for the Doctor of Philosophy degree in History from The University of Maine in May, 2006.