In January 1921, a young woman sat in a hotel room and wrote to Montana Governor Joseph M. Dixon. "I, a tubercular sufferer," the letter began, "am really in need of treatment." In clear handwriting on plain lined paper she described to the governor how she had been "put out" of the local hospital because she had repeatedly coughed up blood. "Ordinary hospitals" were reluctant to take her, and she had moved into a hotel only to have "overly officious persons" attempt to have her "ejected." "Not satisfied with humiliating me this way," she continued, a nurse threatened to arrest the owner of a restaurant for serving meals to her, although "I always waited until the place was nearly empty before I went in to eat." She had waited six weeks with no word from the state's crowded sanitarium. "Procrastination," she wrote, "means that it will take longer to cure this trouble, if it can be cured at all." The letter ended: "kindly tell me what [I] can do."

Twentieth-century tubercular patients carried a stigma that caused as much suffering as the disease itself. The experience of the woman who wrote to Governor Dixon reflected the treatment many tuberculars received. Her story had become sadly familiar to the governor, but if her letter had arrived twenty years earlier, only the physical suffering caused by the disease itself would have sounded familiar. Not only was the stigma surrounding tuberculosis (TB) not entrenched at the turn of the century, Montanans did not accept the fact that tuberculosis was prevalent in certain pockets of the state's population. Changing people's minds required understanding the disease, what caused it, and how it spread.

When the public understood that tubercular people harbored a contagious, potentially deadly disease, they grew alarmed and fearful. Their fear, coupled with concern for the infected person, prompted national and state health officials and the lay public to organize a formidable antituberculosis campaign. The campaign had two aims: to educate and safeguard the public; and to treat the tubercular. By 1921, when the woman with TB wrote to Governor Dixon, a sanitarium had been built in Montana to isolate those with tuberculosis, reduce the risk of public infection, and provide treatment for tuberculars. When a bed became available, the woman had somewhere to go to receive the care she needed. Her experience represented a change in the way tubercular people were treated, a change that came as a result of the fear of the contagion held by public health officials and the public at large.
Limitations and Possibilities in the Early Treatment of Tuberculosis in Montana
Part I

by Connie Staudohar

Cupidors or spittoons, such as that at the foot of the man seated at far right, became the order of the day in Montana to help curb contagious diseases such as tuberculosis. Efforts to improve sanitation included a ban on spitting on the floors of establishments like Augusta's barber shop-pool hall (above, circa 1910). Several decades later routine x-rays would screen healthy lungs like those above from lungs infected with the microscopic, rod-shaped TB bacterium (above left), shown in a scanning electron micrograph.
Insidiously spread, tuberculosis can establish itself without the sufferer’s recognizing or admitting that he or she has a disease. As with individuals, Montana harbored tuberculosis within its borders long before officials admitted that TB deaths were increasing steadily in the state. Tuberculosis was no newcomer to Montana or to the West generally. Before it was officially recognized in Montana in 1913, the disease had invaded and settled into the state’s few crowded areas. Just as the telltale coughed-up blood eventually forced the individual to recognize the disease, consistently high TB death rates among Butte quartz miners and Native Americans on reservations finally convinced Montanans of its presence. By 1930 the average annual death rate from tuberculosis among Butte underground miners was 661 deaths per 100,000 population. At 660 per 100,000, Native Americans suffered nearly the same rates—and both were roughly ten times greater than those of the state and the nation as a whole.2 TB deaths also occurred in other groups, notably among women and children.

Tuberculosis was the leading cause of death in America throughout the nineteenth century and remained so at the turn of the century. Known by other names—consumption or the Greek term phthisis—TB was indiscriminate, claiming the lives of rich and poor, young and old, and country as well as city dwellers. Consumption was viewed as a hereditary disease, noncontagious but presumed to run in families. Although it often rattled its way through generations of a single family, the disease also struck randomly, and just as easily, at a healthy-appearing person. Those people afflicted were considered “invalids” and led a life that catered to their hopes of a cure. Consumptives were frequently cared for at home, and in their final stages, were often surrounded by caring family and friends. All this changed when it was found that a bacteria, not a constitutional weakness or heredity, caused consumption.3

Consumption became known as tuberculosis with Robert Koch’s discovery in 1882 of the tubercle bacillus, the bacterial cause of the disease. Koch’s work showed that TB was infectious and that the route of transmission was from person to person. Working in a laboratory in his living room, Koch, a meticulous small-town German doctor, developed a method to stain the TB bacterium and grow them. He then infected animals through inoculation with the bacillus to show how tuberculosis was transmitted. Clinical diagnosis of tuberculosis now depended on the presence of these microscopic, rod-shaped bacterium in the sputum, and not merely the symptoms of fever, coughing, and weight loss.4 With the name change came a fundamental shift in attitudes and perceptions toward the disease itself and those suffering from it. Consumptives were considered frail, sickly persons who sought out individual cures. By contrast, tuberculars were seen as infectious disease carriers who required surveillance along with treatment. In cities and towns across America, a struggle

---

1. Letter to Governor Dixon, January 8, 1921, folder 5, box 34, MC 35, Montana Governors Papers, Montana Historical Society Archives, Helena (hereafter MHS).
7. Ibid., 180.
8. Rothman, Living in the Shadow, 14, 132. Rothman has a chapter on health seekers in the West and wrote that “by 1900 fully one-quarter of the migrants to CA [California] and one-third of the newcomers to Colorado had come in search of health. . . . Indeed, every western state owed some degree of its growth to these itinerant health seekers.” Garey and Hotz, People’s Plague, Bates, Bargaining for Life, 27.
ensued between the needs and rights of the tubercular sick and the organizations and institutions charged with protecting public health and safety.

The truth about tuberculosis astounded and alarmed people. Facts about TB were written up in pamphlets and articles that health officials then distributed. Among the facts were the following. Tuberculosis bacteria were tiny; it would take as many as ten thousand of them—laid end to end—to extend across the typed word, tuberculosis. People become infected with the TB germ when they breathe in air exhaled by someone with the disease. When tubercular persons cough, or even when they talk or sneeze, they may spread bacilli-laden droplets into the air. The contaminated droplets can survive in the air and then fall to the ground where the germs can lodge in house dust. Unventilated rooms without sunlight can therefore harbor the disease, although lingering germs seldom infect anyone. A related organism infects cattle, and ingestion of contaminated cow’s milk causes tuberculosis of the bones, joints, and lymph nodes of the neck in some cases. The majority of people, however, contract tuberculosis only after prolonged and close contact with a tubercular person. The contagious nature, viewed through nineteenth-century eyes as intelligent and spiritual, began to be seen as ignorant and immoral.

The contagious nature of TB and the fact that it was largely confined to the poor seemed to call for new strategies to prevent its spread and to respond to individuals. There were two separate but overlapping responses. First came the development of city and state boards of health, and second the formation of sanitariums. Both of these “camps” sought to establish authority over the tubercular, and, according to medical historian Sheila Rothman, “they imposed an unprecedented degree of regulation on the lives of Americans who had contracted the disease.”

Consumption, which had been known in the United States since colonial times and became widespread by the beginning of the nineteenth century, had figured in the westward movement. An estimated 25 percent of the entire West was settled by health seekers, largely those with consumption. Certain areas, such as Colorado and California, attracted particularly large numbers of consumptives thanks to vociferous advertising from real estate developers, railroad agents, physicians, and other health seekers. In 1900, for instance, so many consumptives flooded California that the state board of health attempted to ban tuberculars from entering the state.

At the turn of the century, Montana had neither a sizable influx of health seekers nor a desire for them. The first state board of health report published in 1902 noted that consumptives had already proven a “menace and a detriment” in those western states where they

By the early 1900s, public health officials used photographs to document unsanitary conditions, such as these backyards among Butte’s tenements on Lee Avenue (1908–1912), and educate the public on the need for cleanliness.
migrated. What Montana did have in common—not with other western states but with the crowded, industrial cities of the East—was Butte, a large pocket of industrialization that held the state’s only tenement housing. Men came to Butte in the last quarter of the nineteenth century not as health seekers but as underground miners. The dry silicate dust present in the Butte mines left miners’ lungs scarred and susceptible to tubercular infection. The condition of scarred and damaged lungs, known locally as “miner’s con,” became one of the focal points for Montana’s emerging, enthusiastic public health movement in the early 1900s.

An exception to the fervor for public health that spread across most of the country early in the century involved Native Americans. Indians living on Montana’s reservations suffered high tubercular death rates but did not receive the attention or intervention other tuberculosis groups received until much later, even though their housing created living conditions similar to the crowded, unventilated, and dark quarters found in urban tenements. Early tables listing state death rates from tuberculosis were “exclusive of Indians.” Indeed, it was not until 1954, forty years after its founding, that the state sanitarium opened a separate hospital wing for Native American patients. Not enough research has been done to draw conclusions except to state the obvious: Native Americans represent a significant part of Montana’s tuberculosis story.

The deferred attention given to tubercular Native Americans was not typical. The public health move-

11. Separate analyses are needed for both Native Americans and African Americans, according to Rothman, Living in the Shadow of Death, 9.
17. Price, Fighting Tuberculosis, 22-23.

Native Americans living on Montana’s Indian reservations suffered death rates from TB as high as those among Butte miners, but it was not until 1954 that a hospital wing for them was opened (left) at the state sanitarium in Galen.

ment gained momentum nationally and statewide much earlier, at the turn of the century. In 1901 the Montana legislature passed House Bill 104 to establish the Montana State Board of Health. Specifically, the board was to “make inquiries and investigations of diseases and their causes, and to suppress nuisances and the spread of disease.” Montana health officials, sitting on these early boards, maintained that clean, fresh air—in and of itself—was both healthful and healing. Therefore, even with a wider understanding of the germ theory, “air remained the first cause usually invoked to explain the spread of disease.”

Montana health officials pointed to the benefits of the state’s “invigorating atmosphere” and warned that a change in the outdoor life-style could spread tuberculosis “like fire in tinder.” A 1902 public health report expressed officials’ fear that “the boys will come in off the ranges and take positions in offices and stores, where the air is vitiated, and will sleep in rooms that never have a ray of sunshine in them and rarely a breath of fresh air. These young men,” the report continued, “will soon show the effects of this confinement and our death rate from [TB] will rise.”

The emerging public awareness that air and dust could harbor invisible but deadly germs created feelings of both amazement and fear. Discovery of the TB bacillus inspired tremendous respect for the medical and public health profession, but the lack of a cure and the realization that the disease was contagious alarmed people more than it comforted them. Tuberculosis became a disease to conceal, not discuss.

Dr. Thomas D. Tuttle, a pioneering health officer for the Montana State Board of Health, attempted to
arouse public concern. He talked about TB whenever he could find an audience, but Montanans in the first decades of the twentieth century were reluctant to discuss the problem. Frustrated with low turnouts at his public lectures, Dr. Tuttle sought advice from a colleague, who assured him that he could provide an audience if Tuttle would agree to let him go about it in his own way. One reliable source described Dr. Tuttle's chagrin when he saw a poster advertising that he would give a public health talk on "sex hygiene." Dr. Tuttle's colleague guaranteed that a discussion of sex would draw an audience and that Tuttle could then talk about TB. The plan worked, and the Livingston group was said to have been the first large Montana audience to hear an appeal for battling tuberculosis.

If reticence about TB characterized most of Montana, it was particularly so in Butte. Throughout the pre-World War I period, writes David Emmons, "Butte's death rate for all forms of TB was more than twice the national average. Butte was a deadlier place than Bethlehem, Carlisle and Carnegie, Pennsylvania; Newark and Paterson, New Jersey; New York City and, [certainly] residence in no other Montana town was remotely as lethal." Fear of tuberculosis among Butte's mining population created a virtual taboo on discussing symptoms and seeking treatment. Summarizing the sense of finality accompanying diagnosis of TB, one Butte expression had it: "Only one more clean shirt," meaning the shirt in which the victim would be buried.

Nationally, Progressive Era reformers were setting an optimistic and sweeping political agenda for early twentieth-century America. Concerned with problems spawned by an increasingly urban-industrial society, they sought to improve social conditions through reforms aimed at enhancing the physical and moral environment and promoting efficient government, clean cities, and better work places. On a national level they sponsored legislation that focused on the sources of social problems—laws to inspect tenement and factory conditions, to provide compensation for industrial accident victims, to eliminate child labor, and to establish parks and playgrounds. For their part, states established boards of health to educate the public about personal hygiene and to serve as watchdogs against the spread of disease. Progressive state legislators fought for workmen's compensation laws, pure food and drug legislation, and child protective agencies. Local governments passed ordinances to clean up city streets and alleys, and city health inspectors examined and reported on boardinghouse conditions.

Montana Progressives cared particularly about children and their well-being. In 1903 the state legislature created the Bureau of Child and Animal Protection. The agency had evolved from the Humane Society and incorporated the same basic goals: prevention of cruelty and promotion of education favorable to the protection of "children and dumb animals." Through the efforts of this bureau, voters approved an amendment that forbade child labor and established sixteen as the minimum age for working in the mines. Such legislation aimed at preventing the spread of "vice" and "crime" by protecting the health and welfare of children.

Similarly, Progressives planned to prevent the spread of disease through housing and tenement reforms. If people were products of their environment, it followed that to better people's lives the environment had to be improved. Urban tenement houses were notoriously crowded, dirty, and lacking in air and light. Such miserable conditions were thought to foster personal degradation such as drinking and gambling. Who could blame a person for escaping such squalor by going to the saloon or beer hall? Awareness that the spread of tuberculosis stemmed from tenement house conditions caused a shift in public sentiment, however—from feelings of concern for the so-called innocent victims of poverty to fear that the disease would spread to the larger community.

The link between tuberculosis and tenement housing posed a serious threat to the wider community, and public health officials responded with an onslaught of

Striving to educate with humor, the Montana State Board of Health published cartoons such as the one at right to encourage clean up. This particular cartoon is from the American Medical Association Prize Series of 1912.
surveys, reports, and studies. The New York State Tenement House Commission Report of 1900 superimposed “poverty maps” to mark the buildings in which families had applied for charity with “disease maps” that had black dots indicating buildings with high numbers of cases of tuberculosis. “It was appalling,” the commission reported, “to note the extent of this disease [in] nearly every tenement house.”

Montana Progressives voiced similar concerns. Butte had Montana’s only tenement housing, and in 1910 the first state board of health reports noted that nearly 50 percent of the deaths statewide attributed to tuberculosis came from Silver Bow County, where Butte was located. The tenement-like housing situation in Butte, coupled with high death rates from TB, prompted a detailed study that investigated the “sanitary conditions in mines, and the conditions under which the miners live[d] in Silver Bow County.” Investigators wanted to find the source of TB and determine whether the mines or the residences were to blame. Nationally and locally, underlying social conditions and personal moral failings were targeted to explain why the immigrant population was most prone to tuberculosis.

Silver Bow County health officials conducted the study between 1908 and 1912, before the state listed TB as either “communicable” or “reportable.” From a review of death records, officials developed a detailed map (much like the New York disease maps) to show where the tubercular person had lived. Investigators learned that of the 465 Butte deaths from tuberculosis whose residence could be located, more than 70 percent clustered in a confined area known as “old Butte.” Finding that two other Silver Bow localities populated heavily by miners showed “remarkably” little evidence of tuberculosis, they concluded that the houses in the older Butte area were “infected with disease” and constituted a “fruitful source” for transmission of tuberculosis.

Satisfied that at least one source of TB had been determined, the Butte investigators turned to conditions in the mines. They found the mines humid, hot, and filled with rock dust. “This dust,” they reported, “necessarily irritates the air passages of those working and places such air passages in fit condition to make an ideal culture ground for disease germs.” Along with dust, disease germs were found in the mines as well. Investigators collected air samples that upon inspection by the state bacteriologist revealed both tuberculosis and typhoid bacilli. Despite these findings, the study concluded that the mining conditions were largely “unavoidable,” unremediable, and “incidental to the avocation of mining.”

The report concluded that conditions in the mines together with living conditions caused Butte’s high rates of tuberculosis. But that was not their last word. An addendum effectively shifted the blame to the miners.
themselves and to their places of residence. "We are inclined to believe," the investigators said, "that the [insanitary and crowded] conditions under which we found the miners living are more conducive to the introduction of disease germs into the system than are the conditions that we found to exist in the mines." Thus, even as they recommended housing reforms—adequate air space and ventilation, for example—local health officials said individual behavior was responsible for the spread of TB. "The miners," the investigators said, must be educated "relative to the dangers of spitting promiscuously in the mines, remembering always that a consumptive is not dangerous except when he expectorates." Increasingly, individuals were to blame for TB's spread. Moreover, like their Progressive counterparts nationally, local health officials used such survey data to champion new public health laws, specifically to have TB listed as a reportable disease and to impose penalties on officials failing to do so. 23

Intending to protect the public, health authorities also initiated a widespread, fear-based educational campaign against tuberculosis. Montana health officials had begun their own educational program on new rules of hygiene in the early 1900s. "Tuberculosis germs come from one source and one only, some person who is suffering from tuberculosis," wrote the outspoken Dr. Tuttle. "They grow in men, and men spit them out on the streets, on the floors, on the carpets. When these men (and women and children) learn to spit only in proper places this source of the disease will be eradicated." 24 Termed the "cuspidor remedy," this early form of public education was followed by teaching schoolchildren that "spit is death." 25 Spitting on the floor was prohibited and proper spitoons were placed in railroads, theaters, schools, and hotel lobbies.

Whereas education and preventive health measures raised public awareness of TB, they also reinforced the dangers of associating with tubercular people. The fear of contagion haunted the public and public health officers alike. Speaking on behalf of Montana health officials, Dr. Tuttle lobbied for laws requiring physicians to report all cases of tuberculosis. Reporting tuberculars was necessary "that they may be told how to avoid giving the disease to others, and in order that they may be kept under observation," he said in the state board's first report, adding: "if they refuse to take the necessary steps to avoid giving the disease to others, they [must] be required to take these precautions." Non-compliance had its consequences. In New York City, for example, inspectors could initiate formal procedures to take away the children and institutionalize the sick among uncooperative families. 26 Montana health officials lobbied for compulsory segregation of advanced tubercular patients and "parole to their homes" for moderately advanced cases. 27 Such action was based on the popular idea—still debated today—that the welfare of the healthy majority superseded the rights of the sick.

Reportable disease laws ultimately served to ostracize and restrict individuals diagnosed with active TB cases. What Montana identified as "reportable" disease laws other states termed "registration" laws. Eighty-four cities had "registration laws" on the books by 1908, and in 1913 Montana legislators passed their own version by officially adding TB to the list of communicable diseases requiring report. 28 Laws for the tubercular did not stop with registration. In 1906 foreign immigrants with tubercular symptoms were barred from entering the country, and the same year the Colorado legislature reviewed a bill that would have required tuberculars to wear bells around their necks. 29 The Colorado bill did not pass, but the fact that such a bill was submitted and seriously discussed reflects the general hysteria that surrounded TB.

Even as the Montana legislature passed laws to mandate reporting of TB, the Montana State Board of Health passed its own regulations "relative to tuberculosis," regulations that created much extra work for institutions and businesses serving the tubercular. In the hospital, separate rooms were required along with separate bedding and dishes. Sputum cups and surgical dressings were to be burned immediately after use or changing. Disinfection of rooms with formaldehyde

22. Ibid., 15-17, 19.
23. Ibid., 16-17, 22.
27. Montana State Board of Health, Tuberculosis, Special Bulletin no. 3 (Helena, Mont., 1915), 12.
Two Progressive reformers who worked zealously on behalf of Montana’s antituberculosis campaign were Mrs. Elinor Walsh (left) and Dr. Mary Atwater (immediately below).

(Below) Esther G. Price, Fighting Tuberculosis in the Rockies (Helena, 1945)

After seeing his brother die of tuberculosis in a New York sanitarium, Butte legislator Jim McNally (below, 1913) sponsored legislation to establish a TB sanitarium in Montana.

based on health legislation pushed forward—in part—by women’s clubs seeking to address social problems on a broader scale than just charity work, and confining the tubercular in a facility became the next step in the broad-based antituberculosis campaign.

Montana club women worked to gain prominence in the state’s public affairs and used this visibility to network for their causes. Mrs. Elinor Walsh and Dr. Mary Moore Atwater were two particularly prominent Progressive reformers interested in health care. Mrs. Walsh—married to Montana Senator Thomas J. Walsh—served as first president of the Montana State Federation of Women's Clubs. Referred to by Thomas Walsh's biographer as “a brilliant, progressive woman,” Mrs. Walsh organized antituberculosis work locally in the Helena women's club and statewide through the federated clubs. Dr. Atwater, pioneer Helena physician and early doctor in the state's mining camps, carried two banners: suffrage and treatment for the tubercular. She believed in women’s rights, even their right to have “pockets in their dresses and to have a career,” and in the rights of the tubercular sick.31 Both women campaigned actively for a state tuberculosis sanitarium.

Montana women, with the moral authority to speak and the collective clout to be heard, gained visibility

---


in the 1911 Montana state legislative session. On February 4, 1911, Jeannette Rankin spoke to the state house of representatives about voting rights for women. Miss Rankin, the first woman elected to Congress, represented the Helena women’s club, whose members included Mrs. Walsh and Dr. Atwater. Along with suffrage, the Helena club focused on the antituberculosis campaign. Later in the 1911 legislative session, Butte representative Jim McNally introduced a bill to establish a state sanitarium for Montana patients. In his efforts to gain support for the bill, McNally leaned heavily on the “nucleus of friendly sentiment” generated by the women’s clubs. Although the suffrage bill did not pass in 1911, the founding of a sanitarium received unanimous approval. Montana club women rightly believed they had been essential to the bill’s success.

A year earlier, McNally, a carpenter and five-term state representative, had seen his brother, Arthur, die from tuberculosis at the Adirondack Cottage Sanatorium in Saranac, New York, and he had taken to heart Arthur’s dying words: “For God’s sake, Jim, do something about it when you go home.” Saranac was widely recognized both for establishing America’s first sanitarium and for effectively beginning the “American War on Consumption.” With Saranac as a model and his brother’s death plea as an incentive, Jim McNally launched his own war on consumption in Montana. Butte miners and Helena politicians thought there was no cure for the “con,” but Jim McNally was convinced otherwise, and he believed his brother would have lived longer had he gone to Saranac earlier. Saranac converted his sense of hopelessness to a belief that something could and should be done besides “sending the poor devils to the graveyard.”

Jim McNally’s campaign for a sanitarium focused even more attention on Butte’s silicotic, tubercular miners and the working conditions in which they labored. His efforts also mirrored the larger national movement that sought to build facilities to contain tubercular patients and the disease they harbored. McNally studied the New York law that established the Saranac sanitarium and collected material on prevention and cure. With his reelection in 1910, he began conferring with other state legislators about “miner’s con” and the New York facility he had visited. With the years of educational efforts by the state board of health and the Federation of Women’s Clubs behind it, McNally’s bill to establish a state sanitarium passed in spring 1911 “with no dissenting vote.”

Jim McNally’s bill sponsoring the Montana State Tuberculosis Sanitarium passed the state legislature in 1911. The sign for the facility, known as Galen (right), became a familiar landmark on Highway 273, the old route between Anaconda and Deer Lodge.

From its beginning in 1913, and throughout the first half of the twentieth century, the Montana State Tuberculosis Sanitarium’s staff and facilities at Galen attempted to meet the “hopes and needs of the sick and assuage the fears of the healthy.” Silicotic, tubercular miners from Butte made up a disproportionate percentage of the “sick,” but TB had spread from the range to the office, and from the mines to the kitchens necessitating additional beds and separate buildings for women and children. Patients at Galen traded their clothes for hospital gowns, and their freedom for medical treatment. This treatment imposed a strict regimen on every aspect of a patient’s life, which in turn prompted a type of sanitarium subculture that fostered a sense of camaraderie among patients. All the while, Galen’s officials struggled to make the sanitarium a “place to cure,” and not just a “place to die.” The story of Galen the institution and the “tubercular sufferers” who found their way there in search of a cure is the subject of the second part of this article, to appear in the Spring issue.

CONNIE STAUDOHAAR is a Bozeman, Montana, independent scholar who holds a bachelor’s degree in nursing from the University of Washington and a master’s degree in history from Montana State University, Bozeman. She has written a self-guided tour booklet on Bozeman women’s history and has received a fellowship from the Montana Committee for the Humanities to write a juvenile biography of Dr. Caroline McGill. This article is based on research she did at the Montana Historical Society as a Bradley fellow in 1995.