

THE SANATORIUM AGE
PENNSYLVANIA AND ARGENTINA,
1900-1945

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Armando Droz arrived 2 February 1924 at Sanatorio Nacional de Tuberculosis Santa María in Córdoba, Argentina, at the age of 19 from the Province of Buenos Aires. His brother had recently died, and he was certain he had the same disease, so his cousin, who was secretary to the Inspector of Agriculture at the Sanatorium, arranged for him to travel by train to Córdoba. Family and friends cried as they said good-bye to him at the railroad station; they were certain he was dying. Yet Armando lived past the age of 96 and spent 36 years working in the sanatorium machine shop repairing automobiles and apparatuses used in the clinic, including parts for the pneumothorax.¹

Marie K. Matteucci arrived at the South Mountain Sanatorium in Mont Alto in early 1955 at the age of 18. Since her father died of tuberculosis and black lung disease in the 1940s, she was required to regularly visit a tubercular clinic to be x-rayed and have sputum checked. When a lesion was found on her lung, Marie first went to the state sanatorium in Hamburg, which was

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closer to her home town of Tunkhannock, near Scranton. She intensely disliked this sanatorium because of its large patient wards and frigid rooms which required a hat and gloves even in bed. After four months, she transferred to Mont Alto. Here she first shared a room with five others of similar age before eventually receiving her own room in one of the Dixon cottages. When her health improved, Marie began working for two hours a day as a hospital photographer taking pictures of newly arrived patients as well as autopsies. Eventually working eight hours a day, this job also gave her freedom of movement throughout the grounds. After eighteen months new medications, including para-aminosalicylic acid (PAS) and isoniazid (INH), and pneumo-peritoneum treatments cured Marie and she left in 1956 to attend college, although she continued treatments. The Department of Vocational Rehabilitation provided a scholarship which paid for her books, tuition and housing; Marie graduated from Shippensburg State College in 1960.²

During the late nineteenth century attitudes and policies toward tuberculosis³ in Argentina, the United States, Western European nations, and western influenced nations converged. During the 1870s health professionals and the elite classes in the United States, Argentina and Europe had associated tuberculosis with moral degradation caused by the new urban social order. For example, Gabriela de Laperrière de Coni, an Argentine social worker who was concerned with how the life and work of women and children influenced their health, emphasized six contributors to pulmonary tuberculosis: alcoholism, unhealthy housing, deficient alimentation, excessive physical labor, poor hygiene, and moral and intellectual degradation.⁴ During the 1880s the work of Louis Pasteur, Robert Koch, and Joseph Lister contributed to a modern definition of infection, and the conflict over causes of tuberculosis were no longer along national lines but among specialists. Although Robert Koch provided proof in 1882 of the bacterial nature of tuberculosis,⁵ many physicians, hygienists, and practitioners continued to debate the degree of contagiousness and the proper treatment.⁶ By the 1890s physicians were hopeful for a cure to tuberculosis, but efforts were limited by ignorance of the presence of the disease, and the general population often was unsure as to the cause of tuberculosis. Although debates continued into the twentieth century over the role of heredity, health and medical professionals worldwide increasingly agreed that tuberculosis was contagious. A growing international consensus also developed on the character and treatment. International conferences held between 1880 and 1912, the creation of national tuberculosis associations, the growing influence of western models of medical

education, and the conclusion that the poor “spread” the illness laid the basis of national and regional policies toward tuberculosis. Government policies from the United States to Argentina and from Great Britain to Japan exhibited many similarities.⁷

Physicians had a greater understanding of tuberculosis by the 1920s, but an effective cure remained elusive. Although physicians often disagreed among themselves about treatment, there was commonality in their discourses. Treatments fell into two broad categories: medications/surgical procedures and fresh-air/climate living conditions. Physicians who experimented with various types of surgery and medications reported on their results at national and international conferences. Governments and entrepreneurs built class specific sanatoriums in the mountains and by the seashore to treat patients.⁸

Public policies directed at preventing tuberculosis were not enough to stop the spread of the disease. Once individuals contracted tuberculosis, public health officials in many countries encouraged the afflicted to enter sanatoriums, particularly if they were in the early stages of the disease. Hermann Brehmer, a German physician, began treating tuberculosis in 1854 and established in 1856 in the village of Göbersdorf in the Prussian province of Silesia the first sanatorium for the treatment of tuberculosis. His program of daily walks in the clear mountain air coupled with periods of rest and a nutritious diet sought to create strong bodies that could resist the disease, and this regimen became the basis of treatment for many sanatoriums that were established in the Americas, Europe, Australia and Asia.⁹

Two types of sanatoriums emerged worldwide. One model, designed typically as a privately operated resort similar to German health spas, appealed to middle and upper-class patients who sought a cure in rural areas. Governments built and operated a second type to serve the poor and those in the early stages of consumption. The government-run sanatoriums of Mont Alto in Pennsylvania, and Santa María in Córdoba, Argentina, were two among thousands of institutions worldwide that sought to control and cure tuberculosis as physicians and governments responded to contagion between 1900–1945.

Edward Livingston Trudeau, a consumptive physician who extended his life by living in the Adirondacks, established in 1884 at Saranac Lake, New York, the first major private United States tuberculosis sanatorium. By 1901 it appeared as a fine summer hotel with outlying cottages that wealthy persons

financed as memorials.¹⁰ The Commonwealth of Massachusetts at Rutland in October 1898 opened the first state sanatorium for its citizens. The Rutland facility had a capacity of 400 patients who were charged \$4.00 per week. Other states soon followed with Pennsylvania opening Mont Alto in 1908.¹¹ States followed one of two plans: Massachusetts placed the burden of managing sanatoriums on local agents, while Pennsylvania undertook to build and financially support sanatoriums and dispensaries.

Pennsylvania's decision to direct tuberculosis policy through the expansion of Mont Alto, the building of sanatoriums at Cresson and Hamburg, and the operation of local tuberculosis dispensaries involved political debate in both the legislature and among private physicians. Lawrence Flick, a Philadelphia physician, was instrumental in founding the Pennsylvania Society for the Prevention of Tuberculosis, the United States National Association for the Study and Prevention of Tuberculosis, and White Haven, an early private sanatorium which had state funding.¹² Flick was a major critic of the state's tuberculosis policy. He thought the dispensaries were of little value because patients failed to follow the physician's advice. He argued that Mont Alto was too large to effectively prepare patients to return home (300 being the most efficient number) and that the uninformed were developing state tuberculosis policy. Flick believed that the private sector should operate sanatoriums with state funding. As Pennsylvania directed funding to the state institutions, it cut back its support of private institutions. Private sanatoriums continued to operate but costs for private patients increased, and state policies regulated all sanatoriums.¹³

Increasingly, the U.S. treatment of the poor changed from general hospital care funded by private charities and local governments to state-financed sanatoriums. The number of establishments in the United States grew from 12 privately run sanatoriums in 1894, to 34 private and state sanatoriums with 4,485 beds in 1900, to 536 diverse institutions in 1925 with 673,338 beds. Although the sanatoriums often successfully cured individuals in the beginning stages of tuberculosis and isolated infected individuals from the community, the cost of building sanatoriums meant that beds were available for less than two percent of those who had tuberculosis.¹⁴

Mont Alto became the largest public tubercular sanatorium in the United States. It began in the early twentieth century as a small private camp at South Mountain near Waynesboro in the heart of a fifty-five thousand acre forestry reservation.¹⁵ Dr. J. T. Rothrock opened the camp in 1902 for tubercular patients in the early stages of the diseases. Initially everyone lived in tents and

provided their own board in a community that supported each other with no medical supervision. Those interested were allotted plots to raise vegetables. Eventually, Rothrock sought private funding to build cottages and support the camp. The first cabins, ten feet square, were built in the autumn of 1902.



FIGURE 1: View of cabins built at Mont Alto, Pennsylvania [1902–1908]. Chester County Historical Society, West Chester PA., Photo Album #109, p 1.



FIGURE 2: Camp supper at Mont Alto, Pennsylvania [1902–1908]. Chester County Historical Society, West Chester PA., Photo Album #109, p 2.

An assembly building was erected in the summer of 1903. Women's clubs, such as the Phoenixville Club, helped to pay for cottages and their furnishings, sent gifts and warm clothing at Christmas and encouraged those from

their community to go to Mont Alto to be cured. In 1904 eight thousand dollars in state monies helped enlarge the camp with an office, spring houses and more cottages. A physician took up residence in the camp to treat the patients. Fifteen thousand dollars from the Pennsylvania legislature in 1905 led to the building of a kitchen and a dining room. For one dollar a week patients received room and board and all necessities except individuals had to pay for laundry services and paper sputum cups in which they spit saliva and respiratory matter which were sold at cost.¹⁶

In 1907 the legislature provided \$27,500 to purchase the Mont Alto camp from Rothrock. With \$600,000 from the state legislature, Dr. Samuel G. Dixon, Commissioner of Health, began efforts to expand. He tested the water supply and had a sewer and water system built and provided temporary accommodations for 140 patients. Dixon designed cottages and furniture, started a laboratory and began construction of a hospital to treat seriously ill patients. By 1912 the South Mountain Sanatorium at Mont Alto was providing free care for tuberculosis patients, having grown from 26 patients in 1907, to 140 in 1908, to 753 in 1910, and 960 in 1912. It expanded to 1,130 patients in 1916, and 1,700 by 1946.¹⁷

Built on six hundred acres, the complex at its height included a dining room which served 600 patients daily, an infirmary with 200 beds which received advanced cases of tuberculosis, a general hospital, an administration building, a children's preventorium, seventy cottages, sixteen pavilions, fifteen tents, four bath houses, a chapel, a laundry, a power house, nurses' and doctors' accommodations and a medical director's house.



FIGURE 3: Building showing porches, Mont Alto, Pennsylvania. Photo by author, July 1999.

The seventy cottages, designed by Samuel Dixon, were 27 feet square, with four rooms each and with large windows kept open day and night; the hall in the center of the cottage contained a radiator and water heater. Two occupants lived in the 11 by 13 foot rooms furnished with iron beds, writing tables, mirrors, clothes chests, washstands and lanterns. Adjacent to the cottages were bathhouses with showers and tubs.¹⁸ The state was still expanding facilities at Mont Alto in the 1940s with the adult hospital building opening in 1938.

Tubercular indigent Pennsylvania residents desiring sanatorium treatment applied to one of the 116 state dispensaries. The clinic doctor filled out an application and sent it to Harrisburg. Patients were admitted to one of the three state sanatoriums in the order in which their name appeared on the waiting list with preference given to U.S. citizens. By 1924 Pennsylvania operated three tuberculosis sanatoriums: Mont Alto, Cresson with a capacity of 475 adults and 225 children and Hamburg with space for 480 adults.¹⁹

Food and shelter were free, but patients had to bring their own clothing and to pay for laundry and incidentals. Regulations specified summer and winter clothes that certainly strained some household budgets. For the winter women were to have two or more suits of underclothing, four or more nightgowns or pajamas, warm outside clothing, one pair of heavy shoes and overshoes, a hat, mittens, hairbrush, comb, toothbrush, slippers and bathrobe. The summer required lighter clothes including nonwhite washable skirts. Those who missed the designated train had to provide their own transport. The dispensary provided travelers with sputum cups, a drinking cup, and paper handkerchiefs. The state also required either a certificate of vaccination or a smallpox vaccination at the dispensary.²⁰

More men than women came to Mont Alto. Of 399 patients from Philadelphia who were discharged in 1909, 264 (66.16%) were male and 135 (33.83%) were female. Seven years later, when 986 patients were being treated, 640 or two-thirds were men and 346 or one-third were female. In the period 1907 through 1914, Mont Alto treated 7,540 men (62%) and 4,534 (38%) women. This compares with other studies that suggest that physicians encouraged women to remain at home while men were advised to travel. Between 1907 and 1914 slightly over 50% of the population at Mont Alto was single.²¹

Not surprisingly less than 4% of the Mont Alto population was African-American, most of whom came from Philadelphia. By 1920 7.4% of Philadelphia's population was African-American and represented the largest

minority population in the seven largest U.S. cities. The general public believed that race rather than social factors made African-Americans more susceptible to disease. The Henry Phipps Institute of Philadelphia countered racism by reducing tuberculosis in the black community. Black nurses and doctors instructed African-Americans about tuberculosis and how they could prevent contagion. By effectively identifying the tubercular at earlier stages the potential number of infected was reduced. As a result of a visiting nurse program, the Philadelphia black community in 1915 sent five patients to state sanatoriums and placed three on the waiting list for Mont Alto. The wait of two to five months to enter a state sanatorium probably discouraged black patients.²² Between 1907 and 1914, Mont Alto treated 445 blacks and other minorities, fairly evenly divided between men and women. Although no minorities who were in the early stages of tuberculosis died, the 88% who were considered to be moderate or advanced cases died at twice the average of other patients.²³ However, increasingly, African-Americans had access to public health facilities and state sanatoriums in Pennsylvania.

Given the variety of options of private or public sanatoriums, travel to a hot dry climate, and home treatment, those going to Mont Alto would most definitely have been in the lower classes. Nevertheless, families needed to be financially stable enough to lose the labor of an individual and provide the necessary clothing and incidental expenses. The average family monthly income of 1,699 Philadelphia families living in 3.5 rooms in 1916 was \$48.10. In December 1914, the six month tuberculosis bill for a father of a family with three children was estimated to be \$874: \$250 for treatment in a sanatorium; \$192 for the expenses for a family of four at approximately \$8 a week; and \$432 for the loss of wages, earning \$3 per day for six months (a little less than twice as much as the average of a Mont Alto patient).²⁴

Patients arriving at Mont Alto received a physical exam to decide the proper assignment to a cottage or ward. The healthiest were allowed to go to the dining room for all their meals, the moderately ill could go only for breakfast, while the seriously ill were required to stay in bed and received all meals in their room. In 1915 physicians considered 126 (12.8%) patients incipiently ill, 458 (46.4%) patients moderately ill and 402 (40.8%) advanced. Physicians made their decisions based on the invalids' answers to various questions: "How long have you been ill? Did you ever spit blood? Have you lost weight? Are you able to do light work? Do you cough or expectorate much? Are you feverish and how often?"²⁵

The tuberculosis stories of many patients in the early part of the twentieth century were similar and grim. An individual felt depressed and had no ambition. The clinic or family doctor who had suggested that the patient had a cold or bronchitis provided pills, saying call again next week. When the individual sought advise from a lung specialist or tuberculosis dispensary, the physical exam revealed a small spot on the lung. The invalid then entered a private or public sanatorium expecting to stay three to four months. The rest, food and exercise program did not help, and pain developed in a lung. After two or three years the patient became discouraged and returned home to die.²⁶

Diagnosis at all levels was based on patients showing significant symptoms which meant that either mistakes in diagnosis were made or the disease was not far along. By the time patients spit blood or a doctor, using a stethoscope, detected cavities in the lungs, the disease was far advanced. The sanatorium received patients at all stages of tuberculosis, but 40.8% of the patients in January 1916 were considered advanced and the number in the late stages of tuberculosis continued to increase. The development of a tuberculin skin test in 1907 and the use of lung x-rays allowed physicians to diagnose the onset of pulmonary tuberculosis much earlier and to begin treatment promptly. Table 1 reveals the treatment of 12,974 patients at Mont Alto between 1907 and 1914. Treatment was more successful with those at the incipient stage than those with advanced illness.²⁷

TABLE 1. Summary Results of the Treatment of 12,074 Patients at Mont Alto State Sanatorium, 1907-1914

Status	1,564 (13%) incipient		4,711 (39%) moderate		5,796 (48%) advanced	
Apparently cured	261	16.6%	213	4.5%	19	.3
Arrested	588	37.5	1,428	30.3	586	10.1
Improved	595	38.0	2,078	44.1	1,902	32.8
Progressive	120	7.7	908	19.3	2,241	38.7
Dead	3	.2	84	1.8	1,048	18.1

Source: Fred C. Johnson, "Pennsylvania State Sanatorium for Tuberculosis No. 1, Mont Alto," *Eleventh Annual Report of the Commissioner of Health for the Commonwealth of Pennsylvania*, 1916 (Harrisburg, Pa.: J.L.L., 1920), 912-913.

As at all sanatoriums, Mont Alto regulated every aspect of life: meals, rest, treatment, medicine, exercise, personal actions and social activities. Dispensaries provided the debilitated with rules for sanatorium living before they arrived. Once in residence patients followed rules that governed actions from the serious to the mundane. They were not to remove blankets or furnishings from cottages or wash clothes or take baths in cottages, although their clothing was to be changed and washed regularly; warm baths were to be taken once or twice a week. Patients were not to regulate heating systems and were required to sleep with the cottage windows open in rooms so cold in winter that they often placed newspapers between mattresses and springs to stay warm. Chewing gum was prohibited, and sudden illness or bloody sputum had to be reported to the nurse immediately. Packages sent to patients were subject to inspection, while cards and letters mailed from Mont Alto were disinfected with formaldehyde, chorine gas or sulfur. Firearms were prohibited; the use of obscene language or alcohol were grounds for dismissal. The Medical Director granted patients leaves of absence from the sanatorium only when their physical condition permitted and for the most urgent of reasons. Patients had few visitors and those who did come to Mont Alto had to call at the sanatorium office and obtain permission before visiting patients.²⁸

Patients' days followed a regular daily schedule beginning at 6:30 with the morning bell. They ate breakfast at 7:00, cleaned their quarters and took temperatures between 7:30 and 9:30, consumed milk and eggs at 9:30, rested in the pavilion from 10:00 to 11:30, dinner at noon, rested in a reclining position from 1:00 to 2:30, and again consumed milk and eggs at 2:30, rested in a pavilion from 3:00 to 4:30, ate supper at five, received mail at 5:30, took milk and eggs at 7:30, and retired at 8:30 with lights out at 9:00. The residents consumed milk and eggs three times a day and looked forward to ice cream on Sundays.²⁹

The Mont Alto Sanatorium treatment compared favorably with sanatoriums worldwide with its regimen of a healthy plentiful diet, bed rest, heliotherapy and eventually surgery to remove diseased parts. Treatment did change over time. Initially emphasis was on rest, nutritious food and use of heliotherapy. In between meals and snacks men and women rested in separate camps on steamer chairs in the open air.

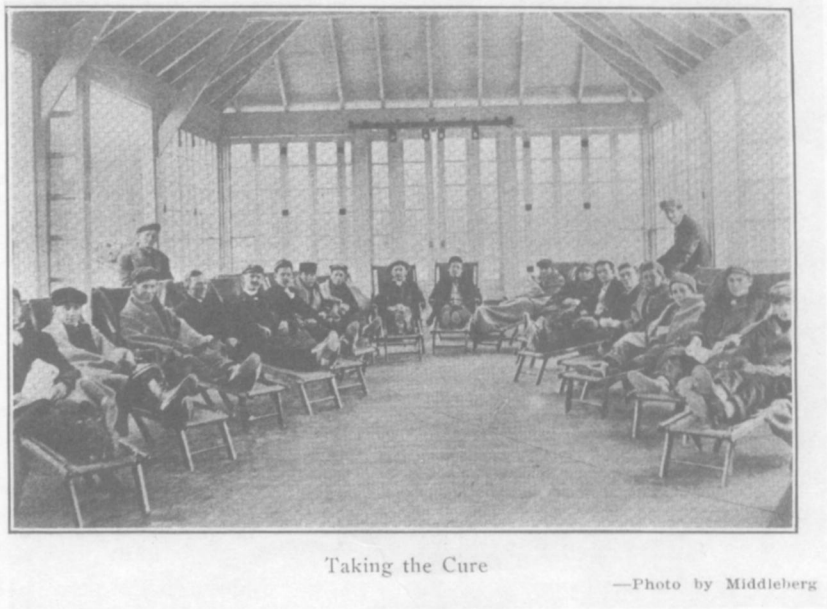


FIGURE 4: "Taking the Cure," *Spunk* 5:9 (December 1913).

Exercise was done in moderation. Physicians soon began experiments with tuberculin in advanced cases on the assumption that it stimulated the immune system to enhance recovery. Alcohol and ether were used to try to destroy tubercle bacilli. Although both medical treatments were touted as cures, neither proved effective in the long run, but tuberculin eventually helped in early diagnosis. A Chambersburg physician took the first x-ray at Mont Alto in 1920 and eventually the use of x-rays and fluoroscopic machines became common. In the 1920s the pneumothorax process was used which involved injecting air between two layers of a diseased lung to collapse it so it could rest. Physicians also used surgery to remove diseased tissues. In spite of efforts to find a cure for tuberculosis, success came only with the use of streptomycin in 1947.³⁰

After three months in the sanatorium, patients who had improved were encouraged to engage in light work under medical supervision for honoraria. Patients were asked the type of job they preferred and such activities included caring for the several thousand poultry, the weeding of flower and vegetable gardens, whitewashing and painting, caring for lawns and tennis courts, working in the carpenter shop, and serving as orderlies and ward maids. They also numbered the sputum cups and napkins used by patients. Juvenile patients contributed in 1916 to planting potatoes and sweet corn and harvesting oats,

hay and field corn. Patients also planted sixty-five white pine trees around the reservoir and two hundred blackberry bushes behind the cottages. In effect the physicians of Mont Alto agreed with the proposition that light work contributed to the improvement of health. Convalescent patients ably performed the greater part of the light work around the sanatorium. Of course, the more work patients did, the fewer staff were needed.³¹

Mont Alto was unique in its patient publication of a monthly magazine, *Spunk*, begun in April 1909 at a subscription of five cents a copy or fifty cents a year and continued for 54 years until 1963. Reporters described special events such as Halloween parties with patients parading around the camp dressed as clowns, Indians, farmers, Uncle Sam and Mother Goose, and the Fourth of July celebrations with picnicking, games, and cottages decorated with flags and the participation of the American Legion band of Harrisburg. Thanksgiving was celebrated with a special service in the chapel and one Thanksgiving dinner with "stewed chicken, mashed potatoes, cranberries, lima beans, celery, bread, butter, tea cake, and ice cream." The Christmas issue provided greetings and messages, described the special dinner and decorated halls, reported on plays performed by the children, caroling by outside groups and gifts from the surrounding communities of Waynesboro, Chambersburg, and Gettysburg. Residents commissioned educational articles by specialists on subjects such as contagion of tuberculosis, proper diets, dangers of spitting, tuberculosis in early childhood and tuberculin. *Spunk* included biographical sketches of some who died, noted marriages, and contained general camp chat. The tubercular described their experiences through essays, short stories, poems and cartoons. There was a children's page as well as occasional black and white photos of the state sanatoriums and activities.³²

Spunk served the three Pennsylvania state sanatoriums at Mont Alto, Cresson and Hamburg. Patients at Mont Alto, the largest of the three, gathered material and did the editing. By 1917 the section of Hamburg items and "chat" might include seven pages and Cresson twelve in a magazine of sixty pages. However, there were articles of general interest for all the "lungers." This monthly served several functions. While it superficially united the Pennsylvania sanatoriums, it more importantly helped to develop a sense of community at Mont Alto through its reports on celebrations and its "Camp Chat"-jokes and gossip. Working on *Spunk* also provided distractions for some patients and opportunities to take part in amusing activities.³³

In their free time women and men were encouraged to engage in a variety of activities. Women might crochet and men read while resting. By 1926 the

library had 2861 donated books. A chapel was built in 1911 for Episcopal services that were held twice monthly, Catholic Mass every Sunday, and prayer meetings for Protestants on Wednesdays. In addition services and Sunday school were also held on alternate Sundays in the dining room. Some patients, including Marie Matteucci, enjoyed photography, perhaps to prepare postcards. Residents took short walks with nurses in the mountains, participated in the resident orchestra or attended weekly motion pictures. They might also play sports, join music groups or present musicals and plays. A baseball game on 4 July 1914 between doctors and employees and the "Mont Alto boys" led to the victory of the Mont Alto team 14 to 6. The presentation of the One Lung Minstrel Company was particularly popular in July 1914 with its humor. Magic shows were well attended. The Mont Alto administration was aware that the holiday celebrations and various group activities contributed to the sense of community and broke the routine of the day to day enforced schedule. It promoted holiday celebrations, including Washington's Birthday, St. Patrick's Day, and of course Christmas.³⁴



FIGURE 5: Halloween Party, October 27, 1955. Photo by Marie Matteucci.

The close proximity of the children's preventorium provided another distraction for the tubercular. The state built a frame building for children in 1910 and replaced it with a brick one only in 1940. Between 1907 and 1914 children represented less than five percent of the population of Mont Alto. The sanatorium could care for up to 150 children of both sexes between the

ages of six and twelve. Many of the children, often quite apprehensive, who came to Mont Alto did not have tuberculosis but their parents did. It was hoped that if Philadelphia or Pittsburgh children spent time in the country, particularly during the summer, they would improve their health and resist a tubercular infection. Between 1907 and 1914 fewer than eight percent of the children were listed as advanced cases.³⁵

Children were divided into four groups according to age and gender with a fresh-air school providing education for some ages. Life for the children, some as young as three, was regulated with military precision with specific meal and activity times. The day began at 7:30 with breakfast by 8:30. After breakfast children were to make their beds and play quietly in their rooms. Reports indicated that the boys' beds were more untidy than those of the girls and the boys were more boisterous. After lunch the children dressed in diaper like pants with waist draw strings and rested outdoors in the sun on blankets, with no talking or movement. If chilly, they were wrapped in blankets. In addition to daily showers, children received weekly head lice treatment with their hair combed with kerosene before washing. Children saluted doctors and nurses at the bedtime check before turning in at 8:00 P.M. Children had picnics and sports events and did handwork that was exhibited to the Mont Alto community. Nurses had more difficulty enforcing the strict routine on the older boys to the entertainment of residents. Children's stays at Mont Alto were shorter than those of adults and hopes for a normal life more certain, although they too often had lives shortened by tuberculosis.³⁶

Patients were encouraged to believe that they would be cured and many *Spunk* articles were published with an optimistic viewpoint and positive descriptions of life at Mont Alto. Humor was also used as in a poem written by a former patient.

Many men magnificently masticating much macaroni
Others obliterating oatmeal or odoriferous onions
No nicotine nor noxious narcotics
Trying tobacco tantamount to transportation

Adults anxiously await added avoirdupois
Laughing lads—lovely lasses linger long
Timorous twain try telepathic thought transference
Outwitting official ordains omnifarious osculation.³⁷

Spunk less frequently reflected the grim reality; for example, the program of the One Lung Minstrel Company noted that the program was subject to change because of physical conditions. A Memorial Day service was held annually at the small cemetery on the grounds, which by 17 May 1931 contained 308 graves of unclaimed bodies of individuals of diverse ethnicity.³⁸ The analysis of mortality rates indicates that tuberculosis was more inclined to end in death than a lasting cure. A report on Philadelphia patients discharged from Mont Alto in 1909 stated that 44 percent (176 out of 399) had died by 1913. 69.66 percent of the far advanced cases died, while only 3.7 percent of the incipient cases perished (See Table 2)³⁹

TABLE 2. Results of Philadelphia Patients Discharged from Mont Alto in 1909

Status	54	incipient	167	moderate	178	far advanced
Apparently cured	43	79.63%	70	41.92%	19	10.67%
Arrested	2	3.70	5	2.99	4	2.25
Apparently Arrested	3	5.56	19	11.38	2	1.12
Quiescent	3	5.56	9	5.39	7	3.93
Unimproved	1	1.85	14	8.38	22	12.36
Dead	2	3.70	50	29.94	124	69.66

Source: Albert Philip Francine, "Results on January 1, 1913 in Philadelphia Patients Discharged from Mont Alto in 1909" *Transactions of the National Association for the Study of Prevention of Tuberculosis Ninth Annual Meeting*, Washington D.C., May 8-9, 1913. Philadelphia: Wm F. Fell company, 1913, 285.

The Department of Health required a minimum of a four months stay at the institution, although it encouraged patients to remain at the sanatorium until the disease was "arrested." The patient's disease was considered arrested when tubercular bacilli were absent from sputum for three months. A patient who remained free of the tubercular bacilli for two years was considered cured. In 1909 the average stay of incipient patients from Philadelphia was six and one-half months, moderately advanced patients eight months, and far advanced patients seven and one-half months. Once patients left the sanatorium they were required to report promptly to the local dispensary near their homes so that their progress could be tracked. Patients returning home were encouraged to continue to be careful: work outdoors, get fresh air, stay away from crowds and dusty places, work at sunny and airy places, keep regular hours, rest after eating and not get too tired. In advanced cases patients returned home to die.

THE SANATORIUM AGE

One of the challenges for patients whose tuberculosis was “arrested” was to find a job, particularly light outdoor employment with time for rest. Mont Alto and other sanatoriums established a two-year course of study for former patients. In 1926 five graduated from the Mont Alto Training School, three were former patients at Hamburg and two at South Mountain. The school was not accredited and did not prepare students for general hospital work, but it did provide training for jobs in sanatoriums. There were jobs for graduates and the salary of \$65 to \$85 per month was considered good pay in 1926. At the same time some jobs might be too physically demanding for former patients and provided indoor rather than outdoor work. Some recovered patients took jobs at Mont Alto.⁴⁰

The state continued to expand the facilities of Mont Alto even as new treatments suggested an eventual cure of tuberculosis. In 1938 the state began building a 780 bed hospital, a preventorium for children of 336 beds, a 65-room nurses’ residence, new male and female staff dorms, and a new dining room, kitchen, butcher shop and bakery as well as a sewage disposal and water plant.⁴¹



FIGURE 6: The main hospital building constructed in 1938. Presently, the major building of the South Mountain Restoration Center, a mental health facility. Photo by author in July 1999.

Life at Mont Alto seemed to change little during the first half of the twentieth century. In the 1940s strict regulations were still followed. Men were not to have beards or mustaches. Patients had to take daily baths, brush their teeth twice a day and "sleep between the sheets." Rather than characterizing the advance of tuberculosis, patients were classified as Class I: those required to stay in bed twenty-four hours, Class II: patients allowed some movement in wheelchairs, Class III: limited only by restriction of the doctor. Class IV patients followed a regular schedule that required rising between 7 and 8, breakfast at 8:30 and rest and medication between 10 and 11:30 before the main meal of the day. They attended classes in the afternoon, some of which were devoted to providing patients with skills to use when they left the sanatorium such as shorthand; patients who could not read or write English attended language classes. *Spunk* continued to note various Mont Alto celebrations of holidays and a variety of sports and amusements.⁴²

In 1914 Samuel G. Dixon described Mont Alto as "A village with a census all told of thirteen hundred inhabitants fighting pulmonary tuberculosis."⁴³ There is no question that the state tried to create an atmosphere of community and *Spunk* contributed to this effort. But Mont Alto was a highly regulated community of changing membership in which the patients had limited options of defining the rules. At the same time, the growth of state sanatoriums attests to the state's commitment to its needy citizens. The popularity of sanatoriums until the 1940s testifies to the limited options the tubercular had for cures in the first half of the twentieth century.

Sanatoriums were a preferred treatment for poor and rich in Argentina. By the 1860s tubercular patients preferred the hot, dry climate of the interior provinces, particularly Córdoba. Patients from Buenos Aires with sufficient financial resources made the 24 hour train trip to the hills of Córdoba. Here the ill found a variety of accommodations, including hotels, boarding houses, private homes, small houses and a private sanatorium, with the opening of Santa María on 6 June 1900.⁴⁴

The first public sanatorium in Latin America, Sanatorium and Hospital Municipal Doctor Tornú on the outskirts of Buenos Aires began accepting patients on 13 October 1904, and within a year cared for 200 men and women. The four pavilions, oriented from northeast to southeast so galleries were bathed in sun and protected from strong wind, had large halls, broad doorways that opened on the garden and wide windows that allowed for superior ventilation. Situated two-and-one-half leagues from Buenos Aires on the

electric tram, the sanatorium served both those who could not afford to travel to Córdoba, while allowing families to visit twice weekly with ease, and those who had no family to care for them. Private and dispensary physicians recommended patients at the beginning of consumption who were likely to benefit from the regime of a balanced diet, rest and fresh air. The physicians at the Tornú Sanatorium believed that their medical success proved that regimen and not climate contributed to a cure; thus it was not necessary for the poor to go north to the dry climate of Córdoba. By 1940, the sanatorium had a capacity of 900 beds.⁴⁵

At the Sanatorium and Hospital Municipal Doctor Tornú physicians examined entering patients, took their medical histories and sent their salivas to the laboratory for analysis. Patients learned the rules of the sanatorium and that consumption was curable if they followed the prescribed routine. After being given a warm bath, patients received items of daily hygiene such as spittoons, soap, tooth brushes, mouth disinfectant, combs, table utensils, metal drinking cups, napkins, a napkin ring, and items needed for living in the fresh air including three sheets and three wool blankets for room use and a rug to be used when seated on the lounge chair along with a cape to keep off the rain, and summer and winter hats.⁴⁶

The patients followed a strict schedule of diet, rest, and fresh air and a regimen similar to the best organized sanatoriums in Europe. Weight was taken each Saturday and temperature was taken morning and night; urine was analyzed regularly and saliva was sent to the laboratory twice a month; showers and dry or wet rubs were given as prescribed by the doctor while warm baths were taken periodically. Patients were to wash their mouths and brush their teeth after every meal. Food was varied and abundant and included beef, lamb, fish twice a week, rice, beans, string beans, lima beans, bread, potatoes, eggs, sugar and coffee. Each patient received two liters of pasteurized milk a day that was to be consumed six times: at breakfast, in mid morning, at lunch, middle of the afternoon, at dinner and at night before going to bed. Not surprisingly, the patients were prohibited from spitting on the floor and received three types of spittoons: a bag, one for the table at night, and one for the floor. They were also prohibited from smoking and were advised to cough only when necessary. Coughing was a problem and patients were told to drink water or milk when their throats were irritated. Little medication was used for a cough as codeine and morphine had a bad effect on the stomach. Patients were taught to put a handkerchief to the mouth each time they coughed so as not to spread bacteria. In cases where

patients had excessive coughing they might receive injections of sterilized water in the region of the sub-clavicle or cervical.⁴⁷

Patients remained in bed if they had a high temperature; otherwise they were required to rest in the gallery lounge chairs that were inclined to a forty-five degree angle. Each patient spent approximately four hours of rest in the galleries three times a day: 8:30 to 10 A.M.; 1 to 2:30 and 3:30 to 5 P.M. Each period was interrupted by five minutes of walking or exercise after each half hour. Physicians directed patients in daily breathing exercises. They were excused if they had a tendency toward bloody coughing or a temperature. Those who completed the number of hours of fresh air in comfortable lounge chairs could then read, play games, or pass time in the garden. The library had more than 250 books as well as newspapers and magazines. Dominoes, cards and croquet were available and patients who knew musical instruments such as the guitar, mandolin, and violin were encouraged to play. Patients received visits from family and friends on Thursdays and Sundays from the middle of the day until 5 P.M. Discussions of politics or religion that upset the patients were prohibited as was noisy conversation, singing, shouting, tobacco and alcohol except as medicine. Primary school instruction was offered for illiterates. Some patients resented the daily discipline and prohibition of tobacco and alcohol and left the sanatorium.⁴⁸

From the 1880s public health officials in Buenos Aires had an interest in the establishment of a tuberculosis hospital in the mountains of Córdoba. In 1894 Samuel Gache, secretary of the National Department of Public Assistance and a tuberculosis expert, appointed a commission to study the need for a tuberculosis sanatorium. This special committee concluded that tuberculosis was contagious and caused by bacteria in the saliva of the ill and meat and milk of tubercular animals. The commission, recognizing the need to educate individuals and the necessity of removing the contagious from urban slums, recommended the construction of various hospitals for tuberculosis in the vicinity of Buenos Aires and the construction of a national sanatorium in the Córdoba region. Five years later, 22 September 1899, the Argentine National Congress provided a subsidy of 200,000 pesos (\$84,602.37)⁴⁹ to help in the construction of a private institution at 700 meters above sea level in Santa María, Department Punilla, Córdoba. When this sanatorium failed as a business and proved medically ineffective, Dr. Emilio Coni, public health physician and liberal reformer who was instrumental in organizing the Buenos Aires public health services in 1892 and was a founding member of the Argentine Anti-Tuberculosis League, providing

leadership in Buenos Aires on the development of tuberculosis prevention efforts, recommended the purchase of the sanatorium and its transformation into a modern public sanatorium that would serve the poor and compare with the best sanatoriums in Europe.⁵⁰



FIGURE 7: Cottages of the Sanatorio Nacional de Tuberculosis, Santa María, Cordoba. Photo by the author in October 1999.

In 1910 the government purchased the Santa María sanatorium for 250,000 pesos (\$105,485.23). School teachers, members of the army and navy, and public employees received first preference for the initial fifty beds, thirty for men, twenty for women. In 1912 the Argentine Parliament provided 500,000 pesos (\$210,970.46) to expand the sanatorium. By 1915 Santa María accommodated 440 patients, of which only one percent were students. The new construction consisted of 13 pavilions; two for impoverished patients, 125 in each building, two for pensioners, 50 in each building, and structures for the administration, Brothers of Charity, medical interns, laboratory and deposit of cadavers, workshop and machinery, dairy, kitchen, laundry and disinfection and garage. As at Mont Alto, Santa María continued to expand reaching a capacity of over 1,000 patients with a large hospital and administrative center.⁵¹

The Sanatorio Nacional de Tuberculosis Santa María imposed a strict regimen. Patients were to wash, brush their teeth, make their beds and dress before breakfast at 8:00 with coffee, tea or milk, bread, butter and two glasses of milk. At 10:00 residents ate a second breakfast with bread, butter, fresh

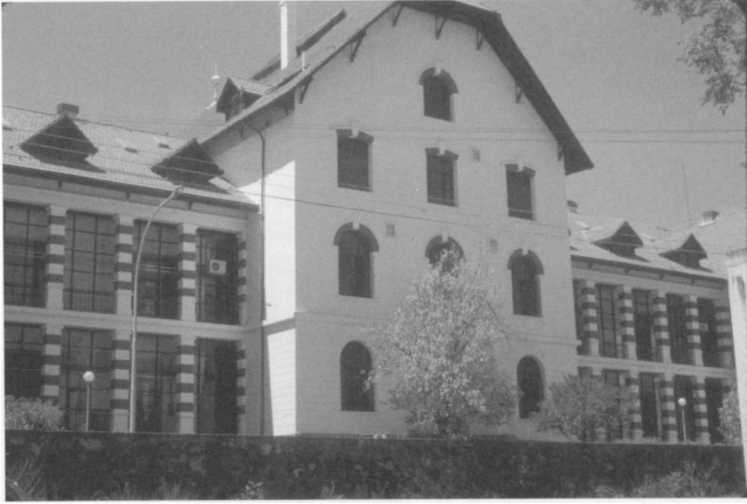


FIGURE 8: Main administration building and hospital, Sanatorio Nacional de Tuberculosis Santa María, Córdoba which is presently a mental and general health center. Photo by author, October 1999.

eggs and glasses of milk. The tubercular at 1:00 P.M. had the main meal of the day with meat, vegetables, bread, followed by coffee. Afternoon tea at 4:00 consisted of two glasses of milk and bread and butter followed by abundant and varied food at 7:00 with milk at 9:00 o'clock. Recreation involved quiet activities such as reading, writing, playing dominoes or cards, embroidering and listening to music. Music was prohibited if it bothered others, and there was to be no discussion of politics or religion. Although tables were segregated by sexes, residents ate in a common dining room. Patients were not to smoke, drink alcoholic beverages or spit on the ground. Doors and windows remained open unless a doctor ordered otherwise. No one was to leave the sanatorium without permission. Transgressions of the rules involved being sent to bed for a specified time, private dining, or dismissal. As at other sanatoriums, the treatment emphasized a balanced diet, abundant food, rest in the sun and fresh air. Those able to pay were to contribute toward their costs. For example, pensioners were to pay three pesos (\$1.27) per day, which is rather costly in comparison with Mont Alto. However, few of the tubercular paid.⁵²

Although physicians resorted to surgery in the 1920s, an inventory of equipment suggests that most treatments were simple and economical.⁵³ By the 1930s the pneumothorax treatment was being used at Santa María. Patients at times rejected treatment. For example, a university student fought the treatment, arguing that he was a free individual, but after the first

application, he lost his fear and eventually was cured, later becoming a distinguished professor at the University of Córdoba. But this treatment eventually became quite acceptable with the patients at Santa María. The sanatorium physicians were less inclined to use a variety of medicines but rather to emphasize what made the patient most comfortable. Koch's serum of 1890, for example, was useless for treatment but a significant aid in diagnosis.⁵⁴

When a patient died, an inventory was made of those things of value and these were given to heirs. Clothes and objects of no value were to be burned immediately. If no one claimed the objects within two years, they reverted to the sanatorium.

More important than rules involving the dying were efforts to prepare the living. To teach patients new skills during their illnesses so that they might be able to earn a living when they left the sanatorium, and to enable patients to earn some money, the sanatorium installed a printing press, book binding shop and basket weaving center. If cured, some patients found work at the sanatorium. Released patients needed to check in with public dispensaries, particularly if they returned to Buenos Aires. Similar to Mont Alto, sanatorium life at Santa María provided extended life for some and hope for all.⁵⁵

Santa María did not have a children's preventorium associated with it. The major institution for children was the Sanatorio Marítimo y Solarium in Mar del Plata which began operating in 1893 in Argentina as a permanent institution to care for children under 14 who had operable tuberculosis and were convalescing or who were anemic, debilitated and considered pretubercular. The Sanatorio Marítimo, the first maritime sanatorium in Latin America, located 500 meters from a beach, began with forty beds in a former ten-room hotel. By 1902 the facility had expanded to thirteen rooms and lounges for 125 children of both sexes, eight rooms for personnel, six bathrooms and storage space. By 1921 a solarium, fifty meters from the beach, could accommodate 100 patients.⁵⁶

The children, similar to adults, followed a strict regimen. They rested between each activity, ate a balanced diet, and received appropriate medication and various tonics. Although the medicines included tuberculin and remedies to reduce temperature and pain, physicians preferred to use diet and climate to cure. When the weather permitted, particularly in the summer, all the children enjoyed the ocean. Those who could walk, played on the beach, while others sat in the sun. The seriousness of patient illnesses varied greatly as did their degree of improvement. Many of the children came in poor physical condition, and occasionally there was a death. Health professionals

observed that with only a short residence at the Sanatorio Marítimo the health of the children improved; they gained weight and improved their appetites. Children were expected to develop socially and morally and to return home healthy and useful.⁵⁷

Armando and Marie lived in rural sanatoriums in two different countries, but had experiences that were surprisingly similar. Both sanatorium complexes were state-run and accepted individuals of limited to moderate income with a variety of backgrounds, ages, genders and races. Marie's family lived near Scranton and, like Armando's family, had to come from a distant city to visit. The different time period did influence the type of treatment. Marie benefited from new chemotherapeutic medications, while in Armando's case it is not clear why his health improved or how he was cured.

Although governments varied in financial support, sanatoriums were surprisingly similar in operation and locations because of medical consensus on the nature of tuberculosis and how to treat it. Sanatoriums were built in isolated locations so that the infected would not spread the disease. Private sanatoriums, operating as small businesses in large houses or small hotels and appealing to the middle classes, developed before state institutions. Tax dollars funded public sanatoriums in the United States and Argentina to serve the poor and lower classes who needed to be treated and could not afford private facilities. Joseph Walsh investigated sanatoriums in Europe in 1905 when attending the International Tuberculosis Congress in Paris and commented on the similarities and difference, between European and U.S. sanatoriums. He reported that Europe had many more sanatoriums than the United States and that European governments were willing to provide luxury accommodations. For example, Germany with two-thirds the U.S. population, one-tenth the area, and one-twentieth the wealth had more sanatoriums and was spending three times the amount of money. He also noted that the British, German, and French governments were more committed to spending funds particularly on buildings while the U.S. sanatoriums were more like camps and focused more on working with patients. The British government took five years to build the Kings Sanatorium at Midhurst, Sussex, at a cost of one million dollars to accommodate 100 patients, while the French built a new four thousand bed sanatorium.⁵⁸ Argentina with limited funds provided for the poor in Buenos Aires and Córdoba, while Pennsylvania generously financed the building and operation of three sanatoriums to provide for those with limited resources. At the same time, public and private sanatoriums

served only a small percentage of the world's tubercular. Most patients died at home.

Sanatoriums became a popular means of treatment of tuberculosis in both Argentina and the United States. Dr. Lawrence Francis Flick commented on the strength of the campaign against tuberculosis of the smaller countries. He noted that the prevention programs of European and Latin American countries surpassed that of the anti-tubercular efforts of the United States. For example, he stated that in Buenos Aires, Argentina's "crusade against tuberculosis (was) the most advanced in the Western Hemisphere and perhaps of the World" and that even if the United States had "been represented at its best, it could not have competed with Buenos Aires." Argentina funded anti-tuberculosis dispensaries, sanatoriums, vacation colonies, seaside hospitals, and promoted popular education to combat the disease.⁵⁹

A comparative examination of the development of sanatoriums in Argentina and the United States demonstrates that the sanatorium movement in Pennsylvania was not unique. A growing worldwide consensus on the causes of tuberculosis led to treatments that followed similar patterns in many countries. What becomes clear from the similarities of the two sanatoriums in Mont Alto and Santa María was that international consensus on treatment of the tubercular and the world conquest of the disease were the dominant factors that shaped the national treatment of tubercular patients.

Between 1900 and 1945 most public health officials and tuberculosis physicians viewed sanatorium care as providing the surest cure for tuberculosis. Although initially tuberculosis specialists emphasized building sanatoriums at high altitudes, in the early twentieth century mountain climate was de-emphasized. Sanatoriums were hybrid institutions; they drew their inspiration from infectious disease hospitals that isolated individuals, asylums that provided therapy, and resorts that had a comfortable environment. They also responded to changes in medicine that met the medical profession's interest in both coercing and curing. For example, while sputum testing was part of the regimen, sanatoriums in addition taught consumptives how to resist illness and disease through diet, rest, heliotherapy, limited work, job training and moral improvements. Sanatoriums also filled a need because hospitals were adding innovative expensive medical technologies and procedures, and the number of tubercular patients needing inexpensive care was increasing. The poor did not have in their small, crowded homes adequate space for the ill who needed to be treated in a separate location. In addition, the local elite and national governments tended to blame the immigrants and the poor for

the spread of tuberculosis, and elites did not want to associate with them. Government leaders and medical professionals tended to go beyond disinfection policies and hygienic measures to focus on changing the morals of the poor and working class. In effect, sanatoriums successfully satisfied government, medical, and class interests by meeting the psychological and medical needs of the community in expanding treatment for tuberculosis by isolating the contagious, by enabling the state to ensure the social order and civic responsibility of caring for the impoverished ill, and by providing some investors with profitable possibilities.⁶⁰

The popularity of sanatoriums led to the expansion of their construction at the same time that tuberculosis began to decline in both Pennsylvania and Argentina. By the 1890s, before the development of public health polices, sanatoriums or the introduction of effective drugs, death rates due to tuberculosis were decreasing. The reasons for the decline of death rates are unclear. Possibly, the amelioration of living standards, including more balanced diets, an improved living and working environment, the quarantine of the tubercular and public education led to the decline of tuberculosis as public health officials had hoped.⁶¹

Both sanatoriums received patients from distant port cities, Mont Alto from Philadelphia and Santa María from Buenos Aires. Both the United States and Argentina were attracting large numbers of immigrants. Health officials and elites had similar attitudes toward the poor and immigrants. But more importantly, the institutional operations and treatments of both sanatoriums, the structure of the daily routines of patients, and even the closing of the sanatoriums were comparable. Since sanatoriums in Pennsylvania and Argentina were influenced by earlier sanatorium developments, it is not surprising that the construction and operation of the sanatoriums were similar. Both sanatoriums were built in the mountains where the air was expected to contribute to better health. Both started as private enterprises which required more funding in order to develop world-class facilities. Although patient housing at Santa María was initially larger, both facilities later expanded with larger buildings; the emphasis was on separate buildings for different functions.

The patient routine also proved remarkably alike. As curative institutions, physicians assured the ill that tuberculosis could be cured if identified at an early stage and if one followed a regulated life. Treatment followed similar patterns with the movement from emphasis on pure air, rest, and food to the pneumothorax treatment and the use of drugs. The schedules, disciplines and

even types of food were similar. Patient experiences also appeared similar. To assure fresh, wholesome food and keep the cost to a minimum, sanatoriums had vegetable gardens and raised poultry and even cattle. Patient light work contributed to the operations of the sanatoriums and decreased costs. Small honorariums for work done or craft sales allowed patients to earn some money for incidental expenses. To the degree possible patients were to care for themselves which meant that few registered nurses were needed.

The sanatoriums provided patients with a treatment that they might try to continue in their homes with the building of porches or constructing of half-tents, eating an improved diet, and using sputum cups. Sanatorium residents were not to be excited but could be amused or distracted and they might do light work when their health improved, and some learned new skills to use once they returned home. Most patients preferred treatment in sanatoriums to hospitals; though they might not like the regimen, they understood the focus was on making them comfortable and well. The absence of a certain cure led many invalids to view sanatoriums as their major hope. Good health was usually elusive. A trip to the hills of Córdoba or South Mountain or any one of the world's sanatoriums did not guarantee a long life, decrease the fear of death, or relieve anguish over the loss of family and friends.⁶²

Some individuals' immune systems did "wall off" the bacteria in the lungs, thus forming tubercles that prevented the spread of bacteria and led to "cures." Once "cured," many former patients including Armando Droz chose to work in sanatoriums or live close to the community which had restored their health, such as Marie Matteucci. Those individuals who survived the disease to return to their home communities often preferred that no one know they once had the disease because tuberculosis was contagious and associated with stigma.⁶³ Walter Smith, who had spent ten months at Mont Alto beginning in 28 June 1928 and successfully adjusted to new jobs and regions, willingly discussed his success as a survivor. In 1993 he wrote from Newark Valley, New York, that after an x-ray indicated he was cured, he moved in 1929 to New York to work for IBM. He wrote in 1933 that he married and eventually fathered four children. He retired after forty-two years. At eighty-three he wrote, "We have lived in our home for 54 years. I have had cataract surgery, prostate surgery and the usual aches and pains. Now I am thankful that I can get up and enjoy life each day."⁶⁴

The development of streptomycin in the 1940s and other chemotherapeutic agents in the 1950s such as para-aminosalicylic acid and isoniazid, which were less toxic and more effective against tuberculosis, led first to shortened

stays for the tubercular and then to the emptying of the sanatoriums.⁶⁵ Pennsylvania began closing its sanatoriums and transferred patients to hospitals. By 1968 Mont Alto, which had treated over 65,000 patients in sixty years, had only 196 patients. Some of the institution's buildings were closed because of high upkeep and other buildings were used to provide medical facilities for both the very ill and those who might be rehabilitated and discharged to their home communities. In 1965 the Pennsylvania Department of Public Welfare opened the South Mountain Geriatric Center in the vacant children's preventorium. By 1968 the South Mountain Restoration Center provided long-term nursing care for geriatric mental patients in the 1938 constructed tubercular hospital building. Santa María pursued the same pattern as Mont Alto; buildings vacated by tubercular patients were soon used for new functions such as mental health and drug treatment. During the 1960s most former sanatoriums became medical centers, mental health establishments, regional hospitals, research institutions or drug treatment centers.⁶⁶ The tuberculosis sanatorium age was over, but the disease was not dead. By the 1990s the AIDS virus which destroys the body's immune system allowed for the resurgence of TB. New strains of tuberculosis are drug-resistant leading to rapid spread of the disease among the poor, the homeless and those living in crowded conditions.⁶⁷

NOTES

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1. Based on a questionnaire completed by Armando Droz in June 2000 at Santa María Puntill, Córdoba, Argentina with the help of his daughter Irma Droz.
2. From written questionnaire of July 2001 and interview with Marie K. Matteucci in 18 October 2004, Shippensburg, Pennsylvania.
3. Pulmonary tuberculosis or TB was known as phthisis or consumption until the late nineteenth century when Robert Koch proved the disease to be bacterial and communicable. It also went by a variety of other names including wasting disease, weakness of the lungs, and graveyard cough; individuals might refer to themselves as tbs or lungers. The enlargement of cervical lymph-nodes, also a form of tuberculosis, was known as The King's Evil or scrofula, while the spinal form of the infection was known as Pott's disease. See Thomas Dormandy, *The White Death: A History of Tuberculosis* (New York: New York University Press, 2000), 2, 4, 22; also see Katherine Ott, *Fevered Lives: Tuberculosis in American Culture since 1870* (Cambridge: Harvard University Press, 1996),

- 159–60; Sheila M. Rothman, *Living in the Shadow of Death: Tuberculosis and the Social Experience of Illness in American History* (Baltimore: Johns Hopkins University Press, 1995), 214.
4. Georgina D. Feldberg, *Disease and Class: Tuberculosis and the Shaping of Modern North American Society* (New Brunswick, N.J.: Rutgers University Press, 1995), 29–35, 45–46; Dormandy, *White Death*, 43; Héctor E. Recalde, *Vida popular y salud en Buenos Aires (1900–1930)* (Buenos Aires: Centro Editor de América Latina, 1994), 46.
 5. Pulmonary tuberculosis (TB) is a chronic infection. Two types of tubercle bacilli exist: one responsible for tuberculosis in humans, and the other primarily found in cattle; the tubercle bacilli primarily infects through aerial transmissions of coughing and spitting, although it may also be spread through contaminated meat and milk. Once the tubercle bacilli enters the body, it remains suppressed until resistance to the bacteria fails. Although some individuals are more susceptible to the disease than others, childhood exposure tends to end in high tuberculosis mortality in later life. The reaction of the immune system to tubercle bacilli does the damage, most commonly in the lungs. The major contributory factors of tuberculosis are age, gender and environment such as living and working in crowded rooms, poor nutrition, and working in dust laden facilities. Without medical tests early diagnosis is difficult because the most common symptoms such as violent coughing, bloody sputum, fatigue, weight loss, and low grade fever are similar to other diseases. For a general discussion and useful bibliography on tuberculosis see William D. Johnston, “Tuberculosis,” *The Cambridge World History of Human Disease*, Kenneth F. Kiple, ed. (New York: Cambridge University Press, 1993), 1059–68.
 6. The new scholarship on tuberculosis is extensive: among the general works, recent and comprehensive are Dormandy, *The White Death*; Francis Barrymore Smith, *The Retreat of Tuberculosis, 1850–1950* (New York: Croom Helm, 1988); the classic pre-antibiotic monograph by Rene and Jean Dubos, *The White Plague: Tuberculosis, Man and Society* (Boston: Little Brown, 1952); extensive recent scholarship on tuberculosis in the United States includes Ott, *Fevered Lives*; Feldberg, *Disease and Class*; Rothman, *Living in the Shadow of Death*; Barbara Gutmann Rosenkrantz, (ed.), *From Consumption to Tuberculosis: A Documentary History* (New York: Garland Pub., 1994); David L. Ellison, *Healing Tuberculosis in the Woods: Medicine and Science at the End of the Nineteenth Century* (Westport, Conn: Greenwood Press, 1994); and Barbara Bates, *Bargaining for Life: A Social History of Tuberculosis, 1876–1938* (Philadelphia: Pennsylvania University Press, 1992). The remaining world areas are fortunate if there is one published monograph on tuberculosis; for Argentina see Diego Claudio Armus, “The Years of Tuberculosis: Buenos Aires, 1870–1950” (Ph.D. diss., University of California, Berkeley, 1996); for Canada, George Jasper Wherrett, *The Miracle of the Empty Beds: A History of Tuberculosis in Canada* (Toronto: University of Toronto Press, 1977) and Pat Sandiford Grygier, *A Long Way from Home: The Tuberculosis Epidemic among the Inuit* (Montreal: McGill-Queen’s University Press, 1994); William Johnston, *The Modern Epidemic: A History of Tuberculosis in Japan* (Cambridge: Harvard University Press, 1995); A. J. Proust, (ed.), *History of Tuberculosis in Australia, New Zealand, and Papua New Guinea* (Canberra: Brolga Press, 1991) and John Arthur Reginald Miles, *Infectious Diseases: Colonising the Pacific* (Dunedin, New Zealand: University of Otago Press 1997); Randall M. Packard, *White Plague, Black Labor: Tuberculosis and the Political Economy of Health and Disease in South Africa* (Berkeley: University of California Press, 1989) and H. M. Coovadia and S. R. Benatar, eds., *A Century of Tuberculosis: South African Perspectives* (Oxford: Oxford University

- Press, 1991); Linda Bryder, *Below the Magic Mountain: A Social History of Tuberculosis in Twentieth-Century Britain* (Oxford: Oxford University Press, 1988); David S. Barnes, *The Making of a Social Disease: Tuberculosis in Nineteenth-Century France* (Berkeley: University of California Press, 1995).
7. M. Harrison and M. Worboys, "A Disease of Civilization: Tuberculosis in Britain, Africa and India, 1900-1939," in Lara Marks and Michael Worboys, eds., *Migrants, Minorities and Health: Historical and Contemporary Studies* (London: Routledge 1997), 94.
 8. Specific research dealing with sanatoriums are much less common than general works on tuberculosis. A major article is Michael Worboys, "The Sanatorium Treatment for Consumption in Britain, 1890-1914," in *Medical Innovations in Historical Perspective*, John V. Pickstone, ed. (New York: St. Martin's Press, 1992), 47-71. T.M. Healy, *From Sanatorium to Hospital: a Social and Medical Account of Peamount, 1912-1997* (Dublin: A. & A. Farmar, 2002) is a more traditional institutional study of an Irish sanatorium. State and provincial historical journals have published articles on institutions within their respective regions: Janice P. Dickin McGinnis, "The White Plague in Calgary; Sanatorium Care in Southern Alberta," *Alberta History* (Canada) 28, no. 4 (1980): 1-15; Gwyneth Patterson, "I Cured There," *Adirondack Life* 2, no. 4 (1971): 8-12; Connie Staudohar, "'Food, Rest, & Happiness': Limitations and Possibilities in the Early Treatment of Tuberculosis in Montana," *Montana* 47, no. 4 (1997): 48-57; Sandra L. Wheeler, "From Hospital to Sanatorium: Institutional Care of the Tubercular Poor in Hartford, 1900-1910," *Connecticut History* 38, no. 1 (1997-99): 1-11; and Lynn Alison Downey, "Philip King Brown and the Arequipa Sanatorium," *Pacific Historian* 29, no. 1 (1985): 46-55.
 9. For Germany see Rothman, *In the Shadow of Death*, 194-95 and Joseph Walsh, *European Trips* 10 (1896-1910): 80-81, Joseph Walsh Papers hereafter, JWP), College of Physicians of Philadelphia (hereafter, CPP); for China see Andrew J. Bridie, "Tuberculosis and the Assimilation of Germ Theory in China, 1895-1937," *Journal of the History of Medicine and Allied Sciences* 52 (January 1997): 118 and for Australia see Robin Walker, "The Struggle against Pulmonary Tuberculosis in Australia, 1788-1950," *Historical Studies* (Australia) 20, no. 80 (April 1983): 449.
 10. Ken Chowder, "How TB Survived its Own Death to Confront Us Again," *Smithsonian*, 23, no.8 (1992): 185; Trudeau had decided to start a sanatorium in the Adirondacks as early as 1882 but received his first patients in the fall of 1884; see Ellison, *Healing Tuberculosis in the Woods*, 65, 77; for primary material on Trudeau see the following: C. H. Thomas to Flick, 19 September 1901, *Tuberculosis Letters*, Vol. 13, 1901, pt. 2, LFCP, CPP and materials from Trudeau Sanitorium, Hugh M. Kinghorn Papers, Box 3, CPP.
 11. S. Adolphus Knopf, *Tuberculosis: A Preventable and Curable Disease* (New York: Moffat, Yard and Company, 1909), 175, 191.
 12. The Strittmatter Award provides a concise bibliography of the accomplishments of Dr. Lawrence F. Flick. See CPP, Lawrence Francis Flick, Collected Reprints (hereafter FCR), "The Strittmatter Award, 1933 to Dr. Lawrence Flick," privately printed for the Philadelphia County Medical Society, March 22, 1933.
 13. Lawrence Francis Flick, "The Tuberculosis Situation in Pennsylvania in year 1909," Discussion of Mr. J. Byron Deacon's Paper before the Medical Society of the Commonwealth of Pennsylvania at Pittsburgh, Pa., October 5, 1910, 10-14, FCR, CPP.
 14. William Charles White, ed., "The Official Responsibility of the State in the Tuberculosis Problem," in *Transactions of the Eleventh Annual Meeting, Seattle, Washington, June 14-16*. The National

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- Association for the Study and Prevention of Tuberculosis (Baltimore, 1915), 271; Barron H. Lerner, "Public Health Then and Now: New York City's Tuberculosis Control Efforts: The Historical Limitations of the 'War on Consumption,'" *American Journal of Public Health* 83 (May 1993): 759; for statistics see Wheeler, "From Hospital to Sanatorium," 2 and Rothman, *Living in the Shadow*, 198.
15. Kathryn Yelinek wrote a short history of Mont Alto for its 100th anniversary. See *The History of South Mountain Restoration Center*, Pennsylvania Historical and Museum Commission, Commonwealth of Pennsylvania, 2001.
16. For information on the beginning of Mont Alto, see Joseph Trimble Rothrock Collection: Box 5, folders 4, 5; Box 6, folders 1, 3; Box 7 folders 25, 27; and Box 8, folder 8, Chester County Historical Society; information on private contributions can be found Box 5, folders 4, 7 and Box 6, folder 3; R. H. McCutcheon, "Mont Alto Sanatorium: Past and Present," *The Listening Post* 1 no. 2 (January 1923): 6–7.
17. Samuel Dixon to Francis Flick, 5 March 1908, Lawrence Francis Flick Papers (hereafter, LFCP), vol 47 (March 1908), CPP; Samuel Dixon to Francis Flick, Harrisburg 14 July 1908, LFCP, vol. 50 (June/July 1908), CPP; "South Mountain Restoration Center: and There was Light," unpublished pamphlet on the center, n.d. (1968), 1; Mary Brady Caverly, "From Cabin to Classic Revival," unpublished paper, 17 October 1994, 1.
18. For general information on Mont Alto, see "Battling for Health at Mont Alto," *Pennsylvania Health Bulletin* 39 (October 1912): 1–3; Knopf, *Tuberculosis; A Preventable and Curable Disease*, 191–92; "South Mountain Restoration Center: and There was Light," 1; Dennis Fleagle, Director of Maintenance South Mountain Restoration Center, gave me a tour of Mont Alto pointing out the few early buildings remaining including the Chapel and location of others; the first time visitor to Mont Alto must have been impressed with its size, grandeur and isolation even as I was in 1999.
19. "Information for the Public," *Spunk* 9, no. 1 (April 1917): 1; William G. Turnbull, "Tuberculosis Sanatoria," *The Listening Post* 3, nos. 24, 25, 26 (March, April, May 1925): 27; Commonwealth of Pennsylvania, Department of Health, Division of Tuberculosis Sanatoria, "Information and Rules for Patients," Harrisburg, Penna. n.d. (1914), 4.
20. Commonwealth of Pennsylvania Department of Health, Division of Tuberculosis Sanatoria, "Information and Rules for Patients," 4, 15.
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 24. "Your Tuberculosis Bill," *Spunk* 6, no. 9 (December 1914): 35; Johnson, "Pennsylvania State Sanatorium," 889, 890.
 25. Samuel A. Silk, "Why do We Give Tuberculin," *Spunk* 6, no. 10 (January 1915), 8-12; Johnson, "Pennsylvania State Sanatorium for Tuberculosis," 885; interview with Marie Matteucci, 18 October 2004.
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 32. See the following issues of *Spunk*: 1 (1909); 4 no. 4 (July 1912); "Hallowe'en Night Joyfully celebrated," 5, no. 9 (December 1913): 39; C. J. Hunt, "The Significance of Tuberculosis in Early Childhood," 6 no. 6 (September 1914): 8-11; Joseph A. Stockler, "The Contagiousness of Tuberculosis," 6, no. 6 (September 1914): 12-14; quote on Thanksgiving, 6 no. 9 (December 1914): 31; Silk, "Why do we Give Tuberculin," 8-12, 22-23; "Hallowe'en", 9 no. 9 (December 1917), 44-45; 18 no. 5 (August 1926): 26-27; "Christmas at the Preventorium," 18 no. 10 (January 1927): 31-33.
 33. See for example the following *Spunk*: "Camp Chat," 6, no. 12 (March 1915); 4, no. 7 (October 1912): 22-24; 9, no. 5 (August 1917); "Hospital Chat," 9, no. 7 (October 1917): 40-42.
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 35. For statistics see Johnson, "Pennsylvania State Sanatorium," 912-13 and McCutcheon, "Mont Alto Sanatorium," 9.
 36. *Spunk* 9, no. 7 (October 1917): 33-34; *Spunk*, 4, no 7 (October 1912): 27; "Children's Hospital Notes: Wonders of a Child Patient," *Spunk* 18, no. 10 (January 1929); "Children's Home," South Mountain Restoration Center, privately produced, 1935, videocassette; Caverly, "From Cabin to

- Classic Revival," 4–8; Wilfert Shipe Jr. "First Hand Account: Life in the Children Preventorium, Mont Alto, Pa. 1944–45," 23 June 1998, unpublished paper, Mont Alto Archives.
37. "As Seen by an Ex-Patient," *Spunk* 3, no. 11 (February 1912): 19.
38. For optimistic articles see for example, "The Call of the Heights," *Spunk*, 3, no. 9 (December 1911): 5–8 or "What an Ex-Patient Says of Mont Alto," *Spunk* 3, no. 10 (January 1912): 9–13; "One-Lung Minstrel company," *Spunk* 6, no. 5 (August 1914): 32–33; Memorial Day Observance," *Spunk* 4, no. 4 (July 1912): 18; cemetery statistics, Caverly, "From Cabin to Classic Revival," 5.
39. Francine, "Results on January 1, 1913," 285 provides statistical evidence.
40. Blanche Gildae, "Alumnae Notes," *Spunk* 18, no.7 (October 1916): 25; "Let's Get Acquainted," *Spunk*, 18, no. 8 (November. 1926): 20; "After the Sanatorium then What? *Spunk* 9, no. 11 (February 1918): 34–35.
41. Caverly, "From Cabin to Classic Revival," 6.
42. Caverly, "From Cabin to Classic Revival," 9. Because major records of Mont Alto were destroyed in Hurricane Agnes of 1972, *Spunk* remains the major primary source and longest record for Mont Alto. Two libraries hold substantial records. The National Library of Medicine holds volumes 3, 7–17, 19–50, 52–54 and the College of Physicians holds volumes 4–13, 17–18, 20–54.
43. Samuel G. Dixon, "The Hillside City of Hope," *Spunk* 5, no. 11 (February 1914): 5.
44. Enrique P. Azárez, "Historia de la climatoterapia de la tuberculosis en las sierras de Córdoba," *Segundo Congreso Nacional de Historia de la Medicina Argentina, Córdoba 21–24 October 1870* (Córdoba, 1870); Dr. Scrivener, "Argentine Republic-Sanitary Character of the Mountains of Cordova and the Andine Heights," *Medical Times and Gazette* 2 (30 October 1869): 557; C. Malbrán and Ezequiel Castilla, "Profilaxia de la tuberculosis en las sierras de Cosquín, Córdoba," *Anales del Departamento Nacional de Higiene* 12, no. 8 (August 1905): 391.
45. Emilio R. Coni, "La campaña contra la tuberculosis en la República Argentina," *La Semana Médica*, XVI, no. 41 (14 October 1909): 1437–49 provides a detailed description of the structure. "Liga Argentina contra la tuberculosis: Informe, anual de su presidente correspondiente al año 1907," *Alianza de Higiene Social* 7 (1907–8): 333; Emilio R. Coni, *Higiene Social: asistencia y previsión social Buenos Aires caritativo y previsor* (Buenos Aires: Imprenta de Emilio Spinelli, 1918), 432–35; "Sanatorio Municipal Doctor Tornú," *Lucha Antituberculosa* 4, no. 12 (12 May 1905): 531–35; "Hospital para tuberculosos," *La Semana Médica*, 11, no. 41 (13 October 1904): 1110; Manuel Scheier, "Hospital Tornú," *Mundo Hospitalario* 27 (November 1941): 55–56.
46. Coni, "La campaña contra la tuberculosis," 437; "Sanatorio Municipal Doctor Tornú," 533–35; Emilio R. Coni, "La Lucha Antituberculosa en la República Argentina," *La Lucha Antituberculosa* V: 4–9 (1905), 172–74.
47. Coni, "La Lucha Antituberculosa en la República Argentina," 170–78; Coni, "La campaña contra la tuberculosis," 1449, provides weekly amounts of various foods served patients. "Sanatorio Municipal Doctor Tornú," 536; Alberto B. Martínez, *Censo General de la Ciudad de Buenos Aires, levantado en los días 11 y 18 de Septiembre de 1904* (Buenos Aires Compania Sudamerican de Billetes de Banco, 1906), 319–20.
48. *La Lucha Antituberculosa* V:4–9 (1905), 172–79.
49. The Conversion Law of 1899 valued one gold peso at 2.27 paper pesos; See A.G. Ford, *The Gold Standard, 1880–1914: Britain and Argentina* (Oxford: Clarendon Press, 1962), 95. The exchange rate

- for US dollars is based on one gold peso equals \$0.96; "Value of Foreign Coins in United States Money," *The World Almanac and Encyclopedia* 1906 (New York: Press Publishing Co., 1905), 189. The exchange rate for a gold peso did not vary between 1905 and 1920; see "Foreign Coins Valued in United States Money," *The World Almanac and Encyclopedia* 1921 (New York: Press Publishing Co., 1921), 526. It is clear that the various costs associated with Santa María are quoted in paper pesos. This would make the exchange rate of 2.364 paper pesos per U.S. dollar until 1910–1913 when 2.37 paper pesos equaled one U.S. dollar. The relationship between the paper peso and dollar varied only slightly between 1899 and 1930; see Carlos F. Díaz Alejandro, *Essays on the Economic History of the Argentine Republic* (New Haven: Yale University Press, 1970), 484, who provides exchange rates for 1910–1930.
50. Emilio R. Coni, "La lucha antituberculosa en la República Argentina," *La Lucha Antituberculosa* V: 4,5,6,7,8,9 (1905): 163–65.
 51. H. Rodríguez Castells, "Apuntes para la historia de la tuberculosis en la República Argentina," *Revista Argentina de Tuberculosis y Enfermedades Pulmonares* 31, no. 3: 129; Enrique P. Aznárez, "Los Sanatorios Universitarios Antituberculosos," *Revista de la Federación Médica de la República Argentina* 3, no. 27 (August 1943), 48; José Antonio Pérez, "Gumersindo Sayago y el desarrollo de la fisiología Argentina," *Segundo Congreso Nacional de Historia de la Medicina, Córdoba, 21 al 24 de Córdoba, 1970*, 45; Félix Garzón Maceda, *De los hospitales en Córdoba desde 1573 hasta 1916*, vol. 2 of *La medicina en Córdoba apuntes para su historia* (Buenos Aires: Talleres Gráficos Rodríguez Giles, 1917), 725–30, which also provides detailed descriptions of the new constructions, 731–36.
 52. Garzon Maceda, *De los Hospitales*, 736–40; Cetrángolo, *Treinta años cuidando*, 176; Manuel Santas, "Tratamiento racional de la tuberculosis en la República Argentina," (Ph.D. dissertation, Universidad Nacional de Buenos Aires, Facultad de Ciencias Médicas, Buenos Aires: Imprenta Mariano Moreno, 1898), 72–76. Personnel at Sanatorium Nacional de Santa María at Cosquín provided me with a tour of the institution which gave a sense of what the facilities were like in the early twentieth century; Armando Droz, who arrived at the Sanatorium 2 February 1924 at age nineteen, answered a questionnaire that I sent him.
 53. "Santa María," *Sanatorio Nacional de tuberculosis Santa María, contabilidad de especies, laboratorio, utiles*, 1935, manuscript held by Santa María.
 54. Antonio Cetrángolo, *Treinta años cuidando tuberculosos* (Buenos Aires: Librería Hachette, 1944), 45–47, 67–69, 75–76.
 55. Garzon Maceda, *De los Hospitales*, 740; Armando Droz questionnaire.
 56. "Sanatorio Marítimo de Mar del Plata," *Revista de la Tuberculosis* 1, no. 8 (January 1902): 285; Coni, "La lucha antituberculosa" (1905), no. 159–60; José M. Jorge, "Sanatorio Marítimo y Solarium de Mar del Plata," *La Semana Médica* 28, no. 35 (1 September 1921): 261–62. For a detailed discussion of issues facing tubercular children see Vera Blinn Reber, "Poor, Ill and Sometimes Abandoned: Tubercular Children in Buenos Aires, 1880–1920," *Journal of Family History*, 27, no. 2 (April 2002), 128–149.
 57. AGN, SB, Sanatorio Marítimo, 22 May 1893, legajo 103, vol. 1, "Informe sobre el resultado de la asistencia de este hospital de los niños expósitos; AGN, SB, Sanatorio Marítimo," 19 January 1921, legajo 98, exp. 1339; José Vallis, "Sanatorios Marítimos," *Revista de la Asociación Médica Argentina* 56, nos. 477–78 (15–30 January 1942): 25–28; Jorge, "Sanatorio Marítimo," 258–59, 266, 292–95; Coni, "La lucha antituberculosa" (1905): 159–60.

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58. Joseph Walsh, "Tuberculosis Work in Europe," *European Trips*, Vol 10: 116, JWP, CPP; on German statistics as well as comparison with the United States, 19–20. Walsh describes in detail some twenty institutions he visited; for descriptions of German sanatoriums see 103–26; for English, 82–83, 86–102; for French, 81–82.
59. For quote see Lawrence Francis Flick, "Crusade against Tuberculosis," *John Hopkins Hospital Bulletin*, 18 (1907): 304–09, quote 306; also, Emile R. Coni, "The Antituberculous Campaign in Latin America," *Medical Record* (May 2, 1903): 690–91.
60. Feldberg, *Disease and Class*, 52–53, 91–92; Wheeler, "From Hospital to Sanatorium," 2–3, 6–7; Ott, *Fevered Lives*, 146–47, 150–53. Before 1905 both Lawrence Flick and Emilio Coni were arguing that sanatoriums were important for the cure of the tubercular but climate had no effect; see Lawrence Francis Flick, "Home Treatment of Tuberculosis," (February 1901: 2, (FCR), CPP; and Emilio R. Coni, *Higiene Social*, 432–34 and "Sanatorio Municipal Doctor Tornú," 531.
61. G. Fernández, I Fernández, S. Jorolinsky and N. Míguel, "Los determinantes sociales de la tuberculosis en la ciudad de Buenos Aires," *Medicina y Sociedad* 73 (May/June, 1984): 64 discusses reasons for the decline of tubercular deaths. However, historians are not in agreement as to the cause of the decline before the discovery of antibiotics, see Barbara Bates, *Bargaining for Life*, 320–27.
62. There are few studies from patient perspectives; see Rothman, *Living in the Shadow* for the United States and for Argentina, Vera Blinn Reber "Misery, Pain and Death: Tuberculosis in Nineteenth Century Buenos Aires," *The Americas* 56, no. 4 (April 2000), 497–528. Given the number of individuals who had tuberculosis, one would expect large numbers of memoirs, diaries, and letters. Sheila Rothman successfully identified manuscript collections where patient letters can be found. See *Living in the Shadow*, pp. 254–58; however she has not identified letters for Pennsylvania. I have found no significant collection of letter from Mont Alto patients except for some personal accounts in *Spunk*. There are letters from Pennsylvania patients in the Lawrence F. Flick papers (Tuberculosis Letters to Flick) Historical Collections of the College of Physicians of Philadelphia and Lawrence F. Flick papers (to Flick), Department of Archives and Manuscripts, Catholic University of America. Three examples of printed first person accounts are: Margaret V. Rastetter, "Blue Ridge: Eight Months in a Tuberculosis Sanatorium," *Virginia Cavalcade* 46, no. 6 (1997): 244–52; and Reidun Dahle Nuquist, ed., "Taking the Cure at the Vermont Sanatorium, 1917–1918," *Vermont History* 61, no. 1 (1993): 41–51; and Mary Hosmer Lupton, "Memories of Blue Ridge Sanitarium: Two Cases, 1926 and 1930," *Magazine of Albemarle County History* 44 (1986): 51–58.
63. Interview with Marie Matteucci, 18 October 2004 Shippensburg, Pennsylvania.
64. Johnson, "Pennsylvania State Sanatorium," 885; Walter S. Smith, Newark Valley, NY 13811, to Chief of Staff, State Sanatorium Mont Alto, Pa., 27 November 1993, Archives, South Mountain Restoration Center.
65. Rothman, *Living in the Shadow*, 248.
66. Caverly, "From Cabin to Classic Revival," 9–10; Audrey Smith, "Memo," Historical File South Mountain Restoration Center; Visit to Cordoba in October 1999.
67. A search after 1990 of the Argentine newspaper, *La Nación*, or the *New York Times* clearly illustrate the resurgence of tuberculosis. Also see Chowder, "How TB survived," 191–94; "Spread of TB threatens region," *Washington Report on the Hemisphere* 14, no. 22 (11 November 1994): 1, 6; Lisa Belkin, "A Brutal Cure," *New York Times Magazine*, 30 May 1999, 34–39.