

# SEALING THE FATE OF THE GREAT WHITE PLAGUE

BY DENNIS WILSON

It was known as Consumption, Phthisis, and The White Plague. Until the early twentieth century it was the greatest killer of all. One in four died of the disease in 1800, and by the late 1890's it was still one in seven. It didn't sweep its victims away in hours as cholera and bubonic plague might. It was a chronic disease; it consumed its victims over months and years. They lost strength; they grew thin and pale as a dry, blood spotted cough accompanied the growing infestation of their lungs. Breathing in shallow draughts and coughing they wasted away like leaves withering in cold autumn. In the 18th century some saw it as a romantic, even stylish to have the look of a consumptive. It gave the men and women tangled in its web time to wax poetic about lost loves and crushed dreams. Style dictated pale powders to give young ladies that delicate look, as if you could faint away and surrender like a flower to the coming angel of death. One author wrote of the fad that there was "a versatile and long-lasting cultural vision that associated tuberculosis with a heightened state of creativity, emotion, and spirituality and that lent tragic and redemptive quality to the disease." In fact, there was nothing beautiful in dying of TB.



Greta Garbo as Camille. Photo from [stanford.edu/~brooksie](http://stanford.edu/~brooksie)

The coughing starts,  
The small crimson droplets begin to fall,  
And I continue to wonder,  
Why me?  
Why me?

Many famous and talented people died of tuberculosis. Among them are Elizabeth Barrett Browning, Robert Burns, Albert Camus, Stephen Crane, Dashiell Hammett, Washington Irving, John Keats, Eugene O'Neill, George Orwell, Sir Walter Scott, Robert Louis Stevenson, Henry David Thoreau, Paul Gauguin, Frédéric Chopin, Igor Stravinsky, John Calvin, John C. Calhoun, James Monroe, Eleanor Roosevelt and many, many others.

A story is told of a ragged Philadelphia newsboy who was selling his morning papers in 1907. After he sold them all, he went to the post office, where his newspaper had said penny stamps were being sold to help the many sick, who had no aid. "Gi' me one" he said to the clerk, "me sister's got it." His penny, and millions of others gave birth to a mighty movement to control, and hopefully conquer tuberculosis, the great consumer of lives; the slow white plague.

It started in Denmark in 1903, where a postal clerk named Einar Holboell, while reading of the toll of the disease and the need for funds to fight it came up with an idea. Why not make a stamp and sell it for a small amount for people to affix to their Christmas mailings. The money raised would then be used to fund care and research. The King approved and in 1904 the Christmas seals, bearing the queens image were sold. The magic was that millions of small donations could dwarf even the bequest of the richest philanthropist.

At about the time Einar was developing his Christmas seal plan several American doctors in Delaware were developing the concept of treating TB patients by isolating them, and providing rest, fresh air, sunshine, and good food. They established a small facility with eight patients, a nurse and a cook. The results were encouraging, but their financial backing had dried up. If they had the funds, sanatoriums could be built to treat sufferers by this method.

Emily Bissell, a cousin of one of the doctors had read of Holboell and the Danish Christmas Seal system. She decided to do the same. She designed a seal and with friends raised the money to print them. Sales were slow until the editor of the North American, a newspaper in Wilmington took the idea and started a campaign to publicize and sell the tiny colorful squares. Then sales took off.

In Wisconsin Doctor Hoyt Dearholt, a Milwaukee physician established a group within the County Medical Society to organize the fight against tuberculosis, which was then killing 200 per year per every 100,000 in the population. Frank Hutchins, a Madison librarian persuaded his friend, Dr. William D. Frost, a bacteriologist at the University of Wisconsin, to go with him to Milwaukee, where Dr. Dearholt argued for a State-wide Christmas Seal campaign. From this start, the Wisconsin Anti-Tuberculosis Association sprang. People of all stripes volunteered to sell the little seals. In 1910, Dr. Dearholt himself accepted the offer of John Koerner of the Retail Liquor Dealers' Association to sell them in the thousands of saloons across the state.

Doctor Robert Koch won the Nobel Prize in 1905 for having discovered in 1884 the microbe, *Mycobacterium tuberculosis*, which causes the disease. Once it was known that the disease was transmitted when people with active pulmonary TB cough, sneeze, speak, sing, or spit, a campaign was mounded to increase hand washing, isolate the infected, and stop habits that increased transmission of the germ. Spitting came in for special attention. Note this article from the Lancaster Teller of June 9, 1904:

***TO SUPPRESS SPITTING ON SIDEWALKS***  
***Sanitary Ordinance Passed by the City Council***

*Lancaster now has an anti-spitting-ordinance. The city council at the meeting held Tuesday evening passed an ordinance, official publication of which is given in another column of The Teller, providing for a fine of from one to three dollars for any person convicted of spitting upon any street-sidewalk, steps leading to public buildings, the floors of public buildings and other public places. Mayor Hassell introduced the ordinance and all the aldermen present voted for its adoption except Alderman Place. The mayor read a communication from*

the board of health of Detroit, where such a law is enforced, which told of the success of that city in the suppression of expectoration on sidewalks and in public places.

A public health poster with a yellow background on the left and a white background on the right. The yellow section features two red crosses flanking the text: "Hundreds Die of Consumption BECAUSE SPITTING SPREADS DISEASE". Below this, it says "Do not spit yourself--Ask others to stop" in red. At the bottom of the yellow section, it reads "ISSUED BY THE VIRGINIA ANTI-TUBERCULOSIS ASSOCIATION 1110 Capitol Street, Richmond, Va. WRITE FOR INFORMATION ON CONSUMPTION". The white section contains the text: "Spitting is DANGEROUS and ILLEGAL! TUBERCULOSIS is transmitted in this way and kills more people than any other disease." followed by "The Baltimore and Ohio Railroad Co."

The Christmas Seals sold well. By December of 1913 44 million Christmas Seals were sold nationwide netting \$440,000 to fund the fight. In that same year 93,421 people in the United States died of tuberculosis, but a sense of optimism prevailed. "With improved sanitation and with better understanding of the laws of health and the importance of pure air" The Day, of New London Connecticut declared, "the 'White Plague' is becoming a less serious menace to health and happiness" Sanatoria were funded, and research and hygiene promoted. Wisconsin established a state TB sanatorium at Wales in 1907. One Wisconsin woman wrote: "I was shocked to learn in 1910 that I had consumption. I thought it was the end of me." She went on to tell of the efforts of the Wisconsin Anti-tuberculosis Association to establish sanatoria in various parts of the state. "So when the disease became a very personal matter to me, there was an institution near at home to teach me how to breathe, eat, rest, and think, so as to live with tuberculosis, and at a price within reach of my moderate purse... I must always be grateful for my present health and strength." This was the result of funds raised by selling the little penny Christmas Seal. By 1923, the death rate from tuberculosis in Wisconsin per 100,000 of population had fallen to sixty seven.



In 1946 the development of the antibiotic Streptomycin, an effective, proactive treatment for tuberculosis was made possible. Before that, the only widely used intervention was surgery to collapse the diseased lung (the pneumothorax technique) to allow it to "rest" and heal the TB lesion. Other drugs have been used in

combination since 1952 to fight the disease and the results have been good. These include Isoniazid, the first oral mycobactericidal drug, and Rifampin. Until the 1980's reduced treatment times and good outcomes were the rule. In 2006, the mortality rate was only 0.2 per 100,000 people. In 1953 there were 84,304 new TB cases. In 2008 there were only 12,904. By the 1970's, tuberculosis was not generally seen as condition requiring a public health crusade. The Christmas Seal had served its purpose. Today Christmas Seals are still sold, but they are not common on the envelopes which descend upon us with Christmas greetings.



The Great White Plague may be forgotten, but it is not gone. Since 1993, multi-drug resistant TB has become an ever greater problem. Incomplete treatment and dilution of drugs have given the *Mycobacterium tuberculosis* a chance to mutate and grow resistant to the drugs and chemicals used to treat tuberculosis. No new vaccine has been created since 1921, but dozens are being researched. A new Epidemic lurks in the shadows. We are after all living in an ocean of microbes, and our bodies work every day to stop their inroads. Perhaps the fight that the humble Christmas Seal was designed for is not done.

