Dr. Samuel Crumbine  
Public Health Pioneer

Samuel Crumbine, who supported many Progressive Era reforms, became one of the nation’s leaders in the field of public health. He began his medical career in Ford County, Kansas, in the 1880s. He had a large practice and was well respected across the state. In 1904 he was appointed secretary of the newly formed Kansas State Board of Health, a position he held for two decades.

In this position Crumbine began to make a significant impact on the health of citizens both in Kansas and the United States. At this time little was known about the spread of infections and diseases. Diseases, such as tuberculosis (TB), a disease of the lungs, were widespread throughout the state and nation. The death rate of infants and toddlers was also extremely high. Dr. Crumbine later recalled, “I began to realize, as I never had before, how much the health of each one of us depends on the health of all of us . . . in my work for public health I came on another great fact, that we doctors and public health workers can make progress but slowly unless the public backs us up.” To improve the health of Kansans, Crumbine started campaigns designed to teach that disease was spread by filth.
At this time the public drinking cup was common. A single tin cup was available on trains, along city streets, and even in schools. Once when Crumbine was riding on a train he observed a man who displayed symptoms of TB. This man was spitting on the floor and even drank from the public drinking cup. Without any method of cleaning the cup, it was placed back beside the water cooler for the next person to use. Crumbine then observed a mother giving her child a drink from the same cup. It was then that Crumbine began his crusade to ban the public drinking cup.

In 1909 Kansas led the nation by abolishing the common drinking cup in public places and beside coolers in railroads. They were replaced with a newly developed folded paper cup that sold for a penny each. Crumbine’s campaign and the new “Health Cup” received much publicity. In one year 24 states had passed laws to forbid the use of a common drinking cup in public places.
Crumbine also convinced Kansas brick makers to remind people not to spread disease through spitting. Placing this message on brick sidewalks was a clever warning.

Crumbine’s health crusades did not end with banning the public drinking cup. In the late 1800s most families experienced the loss of at least one child. Common causes of early childhood death included whooping cough, measles, scarlet fever, typhoid, pneumonia, and diphtheria. Death among children was so common that one country doctor said, “If a woman decided she wanted to raise six [children], she would need to bear ten.”

Crumbine and his small staff at the Kansas State Board of Health worked to erase the factors that led to the illness and death of babies and toddlers. In 1914 at least one thousand Kansas toddlers died from “summer diarrhea.” Toddlers developed intestinal problems related to drinking milk and eating table food that had been spoiled by the summer heat. Crumbine’s staff identified additional factors contributing to infant deaths. These included poor diet and unsanitary living conditions. The Board of Health initiated a “Healthy Baby” campaign at county fairs to educate parents.

“For several years I had been troubled by the thought of infant mortality. How many of these deaths were preventable!”

— Samuel Crumbine
As secretary of the Kansas State Board of Health Crumbine knew that teaching people about germs was as important as doctoring. People needed to be aware that flies landing on food, cups, and plates spread diseases.

Children across Kansas helped fight the fly. Boy Scout troops helped people put screens on their doors and windows. The boys cut leftover screening into small squares, which they nailed to the ends of yardsticks to make “fly bats.” When Crumbine saw the invention he declared, “But that’s not a fly bat, it’s a flyswatter.” Thus began the “Swat the fly” campaign.

Children conducted parades to increase awareness of the germs carried by flies. Dressed as flies, children were seen pushing baby carriages with coffins through the streets. In 1914 Hutchinson school children killed 224 pounds, or approximately seven million flies. These were turned in for cash bounties or movie tickets.

Dr. Samuel Crumbine’s work with the State Board of Health eventually made Kansas a leader in providing healthier living conditions for its citizens. His public health promotions for pure food and drugs, the elimination of flies and rats, water and sewage sanitary control, and the prevention of tuberculosis improved many lives. During this time the state saw decreasing death rates. This innovative approach to treating disease placed Kansas among the leading states in safeguarding the health of its people.