The End of an Old Enemy

Smallpox in Clay County, Kansas 1900-1925



Figure 1. Photograph of the Porter Morgan Hospital, the first hospital in Clay County, Kansas. Photo courtesy of Clay County Medical Center: http://www.ccmcks.org/ourhistory1920.php

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This study analyzes the cases of smallpox in Clay County, Kansas, between the years of 1900-1925. Evidence suggests proactive prevention methods were used to limit and eventually eradicate Smallpox. Data and information is drawn from county disease records and the county newspaper, along with other sources.

Smallpox in Clay County

Clay County, Kansas, a north-central county, is a picturesque expanse of rolling fields dotted with small communities. The serenity belies the terror that swept through the county in the early 1900s, brought on by an epidemic of the deadly smallpox disease. The culprit is an extremely infectious disease that was dangerous in both severe and mild cases. Today it is difficult to envision a world where smallpox would kill, maim and devastate entire families, because the World Heath Organization declared the disease eradicated in 1980, with the last case appearing in Somalia in 1977. The contagious disease is caused by the variola virus and is spread through contact with an infected person. Once infected with smallpox, a person enters an incubation period between seven and seventeen days, during which he would experience no symptoms and be unable to infect others.² Following this short period, a smallpox victim experiences fever, overall discomfort, headache, severe fatigue, severe back pain, vomiting and breakouts of spots and sores all over the body. As the disease progressed these small raised dots would eventually cover the entire body and fill with a yellow fluid.³ In two out of every three cases, these spots would eventually scab and fall of signaling the end of the infection, but those infected were often left disfiguring scars. The other third of the infected population were not so lucky; they would experience an extensive rash that would become so infected it would result in death.4

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¹ "Smallpox," World Health Organization, accessed November 28, 2015,

http://www.who.int/csr/disease/smallpox/en/

² Ibid.

³ Donald A. Henderson, Smallpox: *The Death of a Disease: The inside Story of Eradicating a Worldwide Killer* (Amherst: Prometheus Books, 2009), 33-36.
⁴ Ibid.

At the turn of the 20th Century, Clay County, located in Northeastern Kansas, was primarily a farming county, with its largest population and county seat in Clay Center. ⁵ Located in the center of the county, Clay Center became the hub of activity for the county because of its connection to major cities via the railroad station it contained. ⁶ A record of the Clay Center newspaper, *The Times*, provides key information on smallpox during this time period. In January 1902, a physician in Clay Center stated that smallpox was present in the county but "so far it had not done much damage...Clay County has escaped this year so far but there is no telling when cases will appear". ⁷ The following April, it was reported in the *Topeka Daily Capitol* that: "Smallpox is not epidemic" which the paper qualified by stating that there were fewer than 400 reported cases in the state of Kansas that year. The article goes on to state that smallpox had been prevalent in the previous two years, when it could have been considered an epidemic. ⁸ Smallpox was a consistent reality in Clay County at the beginning of the 20th century, but with the exception of a series of outbreaks from 1913-1915, the county was able to take effective measures to limit the impact and eventually eradicate the disease.

The Spread of Smallpox

Clay Center was especially susceptible to smallpox because of its railroad hub that brought trade and people that potentially carried the disease, and its high population of its central geographic location. In 1909, a man named P.J Kauhler was traveling west from Kansas City on the Rock Island line. Unknown to him, he was nearing the end of the incubation period. He started to exhibit symptoms and was removed from the train in Clay Center. In It has been found

⁵ Homer E. Socolofsky and Huber Self, *Historical Atlas of Kansas* (Norman: University of Oklahoma Press, 1972).

⁷ "Smallpox Epidemic," *Times* (Clay Center, KS), Jan. 23 1902.

^{8 &}quot;Smallpox is Not Epidemic," Topeka Daily Capitol, Apr. 10, 1902.

⁹ Homer E. Socolofsky and Huber Self, *Historical Atlas of Kansas* (Norman: University of Oklahoma Press, 1972). ¹⁰ "A Slight Case," *Times* (Clay Center, KS), Nov. 11, 1908.

that the correlation between the railroad system and the transportation of disease is likely in the rise of smallpox during the First World War because of the increasing numbers of men and military shipments traveling across the nation. Kansas' economy thrived during World War One because of the constant demand for goods to support the war effort overseas, especially food products. Farmers who used the railroad to ship goods ran a risk of contracting the disease and bringing it back to the smaller communities and farms in Clay County. As shown in Figure 2 above, the number of cases of smallpox drastically increased from 1914-18. The county disease records show that an epidemic hit the farming community of Oakhill in 1914 with 34 cases contracted during that winter. ¹¹ More communities followed including Idana, which had thirty cases in 1915. ¹² The rise in demand for crops during WWI turned out to be a wolf in sheep's clothing for Clay County, which experienced a spike in smallpox cases carried by increased rail traffic.

Smallpox could also be spread through everyday human interaction. The disease would frequently spread between groups of people who lived, worked, or gathered in close proximity. In 1919, Emerson Burke's mother traveled to a gathering in Omaha Nebraska; upon her arrival home in Clifton, Kansas, she discovered that she had smallpox. In the next two days, her son Emerson and husband, C.M, contracted the disease. In March of 1921, four schoolboys ranging in age from seven to eight were all diagnosed with the disease. Since all the boys lived in the same area of town, and had contracted the disease in the same week, it can inferred that the four cases were related, likely from school or some other public gathering of the boys.

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¹¹ Clay County Contagious Disease Records, 1907-1918, Clay County Historical Society, via Chapman Center for Rural Studies, Kansas State University.

¹² Ibid.

¹³ Clay County Contagious Disease Records, 1919-1939, Clay County Historical Society, via Chapman Center for Rural Studies, Kansas State University.

¹⁴ Clay County Contagious Disease Records, 1919-1939, Clay County Historical Society, via Chapman Center for Rural Studies, Kansas State University.

Healing and Preventing

A key factor in limiting the spread of Smallpox is making the public aware of prevention methods.

Figure 2 depicts a bright orange paper issued by the Kansas State Board of Health, issued sometime between 1900-1910, that forbids anyone who sells tickets for transportation to allow a smallpox infected person to purchase a ticket. In 1910, the Clay County Health Department suggested in *The Times* that they were focused on preventing the spread of diseases. 15

The board expended \$150.00 in the year, (which in terms of 2015 dollars would be approximately be \$3,510)



Figure 2. Released by the State Board of Health, this poster warns that it is illegal to sell transportation tickets to anyone infected with smallpox. Source: http://www.kansasmemory.org/item/221847

much of which was likely invested in disease prevention. 16

The addition of a hospital in Clay County was also a factor in the decline of Smallpox. In 1896, Dr. Melanchthon Cameron Porter moved to Clay Center where he practiced for twelve years and became one of the leading physicians in the town. With the help of his colleague, Dr. Benjamin Franklin Morgan, they organized the first hospital known as the Porter-Morgan

¹⁵ "The County's Health," *Times* (Clay Center, KS), Jan. 29, 1910.

 $^{^{16}}$ " Measuring Money," $\it Measuring \, Money, \, accessed \, December 7, 2015.$

Hospital. This small private hospital was located in a house on Third and Blunt Street. The success of the first hospital led to a public demand for a larger hospital that could hold more patients. Thus, a second hospital, the Clay Center Hospital, formally opened in 1902 at another private residence at 1508 6th Street that could accommodate 20 beds. These hospitals handled Clay County's medical demands until 1925, when the first publically owned hospital was built at 2121 Seventh Street. This hospital still stands today and holds the Clay County Museum. These three hospitals would have treated smallpox patients and served as a source of information on the disease and its prevention. Patients who exhibited signs of smallpox would have been isolated at one of the three hospitals. These signs could be as subtle as an odor; a doctor working at one of the hospitals in 1908 described that every disease had a particular odor that could be easily smelled, "with smallpox having a strong and hideous smell that resembled burning bones." ¹⁹

Once smallpox was detected, doctors would put patients into isolation until their scabs began to fall off, signifying that the disease was no long contagious. In some cases, the doctor would recommend placing an entire family under quarantine because of the likelihood they contracted the disease from a common carrier. P. J Kauhler, the man who entered Clay Center on a train while infected with smallpox, was put into isolation and had provisions brought to him. He was expected to recover and resume his travel after three weeks of quarantine, and there's no evidence that he spread the disease to anyone else in Clay County. The case of Bessie Steph also demonstrated how effective the practice of quarantine was at liming the spread of smallpox.

¹⁷ "Our History," *Clay County Medical Center*, accessed December 4, 2015, http://www.ccmcks.org/ourhistory.php Our History," *Clay County Medical Center*, accessed December 4, 2015, http://www.ccmcks.org/ourhistory.php

¹⁹ "Disease Scents," *Times* (Clay Center, KS), Dec. 24, 1908.

²⁰ "A Slight Case," *Times* (Clay Center, KS), Nov. 11, 1908.

Steph had twelve children in 1920, when she was diagnosed with the disease. However, she was quarantined early enough that no one in her family contracted smallpox from her. ²¹

Though considered unorthodox today, records show that herbal medicines and remedies were used to combat smallpox and other diseases. A healer named John Dringer, known to locals as Indian John, was a purveyor of natural remedies who was said to be able to diagnose an ailment by simply looking at someone or touching an item belonging to them. ²² Although there are not any records showing that Indian John directly cured cases of smallpox, it is known that

his methods were helpful in treating symptoms of the disease, such as a fever and skin lesions.

Conclusion

As demonstrated in Table 1 at right, the years 1919 to 1925 in the Clay County Record Book of Contagious Diseases show a decline in the number of recorded cases of smallpox, except for the year 1921. In 1919, the records show twelve cases were recorded, with five being from the Glidden Family, three from the Perry Family, two from the Faidley family and two from the Burke family. ²³ This demonstrates that although smallpox was still a prominent disease, the virus was only spreading to those in extreme contact, living in the same household, with the original infected person.

Following that year, in 1920 the Mack family, two adults and two

Table 1. Smallpox	
in Clay County	
Year	# Cases
1907	4
1908	3
1909	0
1910	3
1911	9
1912	10
1913	8
1914	56
1915	83
1916	82
1917	13
1918	6
1919	12
1920	5
1921	13
1922	0
1923	0
1924	0
1925	0

²¹ Clay County Contagious Disease Records, 1919-1939, Clay County Historical Society, via Chapman Center for Rural Studies, Kansas State University.

²² "Indian John still Baffles Clay Countians," Salina Journal, May 9, 1974.

²³ Clay County Contagious Disease Records, 1919-1939, Clay County Historical Society, via Chapman Center for Rural Studies, Kansas State University.

children, all came down with the disease as well as the singular case of Bessie Steph who was isolated and thus prevented her twelve children from contracting smallpox.²⁴ The last major outbreak was in 1921 with the four schoolboys, mentioned above, and in the summer months three people from the Shaples family, three from the Bauman family and four other individuals contracted it in Clay County, with their prognoses all positive.²⁵ Although thirteen cases is 1917 was much higher number than the previous years, the cases were concentrated in families. Thus the disease was not spreading broadly but had not been caught in time for the first person to be put into isolation. The records show not another case was recorded through the year 1925.²⁶

During World War One, the rise in transportation, including the arrival of the automobile, helped spread the disease, through increased contact at railroad stations and even filling stations. After the war, the number of cases of smallpox fell drastically. This can be directly connected to active medical measures. As a result of Clay County strengthening their smallpox prevention methods, establishing hospitals that residents could come to for treatment, implementing the use of isolation techniques to prevent the further spread of the disease, raising public awareness through printed material, and perhaps as legend suggests, relying on the herbal remedies of a legendary Native American healer, there was a clear decline and eventual defeat of smallpox, an ancient enemy.

²⁴ Ibid.

²⁵ Ibid.

²⁶ Ibid.

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