The Epidemic Cholera in Springfield, 1832 and 1849

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Few diseases are more feared than cholera, which in past centuries has decimated whole populations. In 1974, cholera is common to many Asian, Middle Eastern and African nations, which lack modern sanitation and where water supplies are often contaminated.

The disease is caused by comma-shaped bacteria called Vibrio Comma and it thrives in contaminated water supplies. These bacteria prosper in the digestive system, where they multiply rapidly; it is spread mostly by food and water infected by human excrement. During the course of the disease, the lining of the intestinal tract is damaged, causing vital fluids from the blood-stream to be rapidly excreted. The disease causes vomiting and diarrhea which can exhaust as much as 25% of the body's fluids in hours, emptying it of vital salts and resulting in dehydration, kidney failure and circulatory dehydration.

Treatment of the disease entails an intensive replacement of the lost fluids and infusions of salts to restore the body's water and chemical balance. Without prompt medical attention, 50% of all cholera victims die. In mild cases, an attack is often dismissed as a case of summer diarrhea and usually clears up in about a week. Severe cases, left untreated, can result in death in less than 24 hours.

This disease has been the cause of untold suffering and death. Fortunately, the United States has not been visited by cholera since 1913. Through modern medicine and sanitation, it has avoided this plague which can take the lives of thousands in a period of a few weeks.

In the early 19th century, there was little knowledge of scientific medicine or sanitation. The modern methods of intravenous fluid replacement and the administration of antibiotics, such as tetracycline which aid in controlling the disease, had yet to be discovered. In fact, medical practices were barbaric compared to twentieth century standards.
The average medical man had little or no formal education. The early years of the 19th century were times of public prejudice concerning education. This era of the "common man" produced a generation which resented education, for to succeed in life man only needed his natural "common sense." Thus the medical field was filled with "quacks." The usual methods of curing the sick followed the principles of bloodletting, purging, blistering, or administering ash bark, mercury, and camphor. "It was not surprising that patients — or victims — of such prescribed therapy frequently considered their recovery a miracle, and one can imagine that only the strongest survived both the illness and cure."

Other systems of medicine included homeopathy, hydrotherapy, and botanical medicine. Many people learned to treat themselves with such remedies as ardent spirits, Indian cures, and prayer. The aid of a physician was considered a last resort and no one would send a sick relative or friend to the "pest houses (hospitals) of the early 1800's."

In the 1830's when cholera struck, the American city was medically unprepared. Springfield, Massachusetts, as the rest of New England, felt relatively safe. People believed that New England was blessed with healthier conditions than Europe or the congested city of New York. Cholera was assumed to be an urban phenomenon and not a rural one. Therefore, the citizens of Springfield and vicinity did not need to worry.

On July 13, 1831, in the Springfield Weekly Republican, Western Massachusetts first heard of the plague of "cholera morbus" which massacred so many thousands in Europe. An article traced the recent disease from the Far East and Russia. "It had appeared in the Russian and Polish armies and the probability was that is would extend over the greater part of Europe. Many people in Germany, France and England were alarmed, fearing that those countries would be visited by this giant pestilence..." It was reported that half of those who were inflicted with the disease died from it.

Cholera was reported in Montreal on June 6, 1832. The Atlantic Ocean had not protected the Western Hemisphere from this terrifying plague. "Few Americans could continue to hope that their country might long escape the fate of its northern neighbor." On June 26, 1832, New York City reported its first cholera victim. By July, New York had 689 deaths from the disease, from a total of 1494 reported cases. By August 18, cholera had struck Boston. On September 15, it was reported in Hartford, Connecticut.

The severity of the disease grew within the public mind. Cholera news appeared daily in the local papers and it seemed to exist in every major city. Cholera had been reported in Hartford, Boston, New York, Baltimore, Washington, Syracuse, Albany, Philadelphia, Rochester, Montreal, and New Orleans. To avoid panic in Springfield, action by the civic and medical factions
was required. In order to prescribe a cure, it became necessary to determine the cause of the disease. It was suggested that cholera must be like previous plagues — yellow fever, small pox, or spotted fever. Yet, unlike smallpox, no vaccine for cholera was known. Many conflicting ideas were used to describe cholera and its symptoms. On January 7, 1832 the *Springfield Weekly Republican* reprinted material from the *Catechism of Health* (a local medical pamphlet), and published a report of the ten most prominent causes of cholera. They were:

1) Insufficient exercise.
2) Late rising and later retiring.
3) Inattention to the cleanliness of clothing and dwellings.
4) Food rendered pernicious by modern cooking. Adulteration in food and drink and abuse of an appetite. Over seasoning and eating too wide a variety of foreign dishes or flavors.

5) The use of intoxicating drink in any quantity. The only wholesome drink, adopted to the wants of the system is pure water. Every drop of alcohol which is taken into the stomach, whether in the form of ardent spirits or fermented liquors produces injury. The powers of life are gradually undermined and the system is open to the inroads of serious and fatal diseases.

6) Defective and improper clothing. This included clothing which cannot be adjusted to sudden changes in the weather, that which inhibits free movement of the limbs or that which compresses or binds some part of the body too firmly.

7) Influences of cold. Exposure to the night air or inclement weather after being in a heated room.

8) Intense or protracted application of the mind. Long hours of mental application care more exhausting to the "powers of life" than "protracted" through manual labor.

9) Giving way to the passion. "Violent anger and ambition, jealousy and fear have produced the speedy death of thousands."

10) The unnecessary or imprudent use of medicine. "Domestic quackery has ruined many constitutions." A dose of medicine to prevent a disease often invite one which otherwise would not have occurred. The practice of "losing blood or taking purgatives" should be avoided.  

Yet, there were others who had different ideas. It was said that cholera was a disease that prevailed throughout the globe, in dissimilar climates, during any season, and in any variety of weather. Cholera was considered to be a result of some "morbid property in the air we breathe... in no other manner could it be explained, the sudden appearance in the midst of an extensive population, the greater part of which at once become its subjects." Then, it was said that the
“cholera of the east operated as a poisonous cloud.”\textsuperscript{13} The tiny invisible particles in the air known as “contagion” and “miasms” were believed to be sources of the disease. It was said that the pestilence “has been known to pursue its course in the very teeth of the most powerful monsoons.”\textsuperscript{14}

Additional causes of cholera were cited in the weekly newspapers. “Dr. Watershed” of Boston reported that cellars containing vegetables, cider, and pickled items were dangerous to health. He explained that “remnants” of these articles died and the cellars with the “pernicious vapors... were unwholesome.” This “deleterious air” filled the whole house. “The very bed clothes smell of the cellar, the effluvie of dead vegetables,” he said, “is as pernicious to human life as the effluvie of a dead body.”\textsuperscript{15} One article declared that the use of tobacco was a cause of cholera.\textsuperscript{16} In January of 1832, J. M. Penman, the United States Consul in Hull, England announced that he thought “the most likely cause is some electrical change in some particular part of the earth and not some poison generated in the atmosphere....”\textsuperscript{17}

Although there were many explanations for the disease, description of the symptoms were much more precise. There were two type of cholera — Asiatic and the milder English cholera. The symptoms of the Asiatic cholera were periods of “nausea and uneasiness in the stomach and bowels,” followed by vomiting a fluid resembling rice-water and frequent “evacuations from the bowels.” Then cramps in the toes and fingers, spreading rapidly to the legs, arms, abdomen and chest. The pulse weakened, “the voice reduced to a hoarse whisper, the tongue became dry, the skin became cold as marble and livid, and the urine became suppressed at which time the vomiting, cramps, and purging generally ceased.” Respiration dwindled until nearly invisible and “were it not for the placid and rational answers to questions you would suppose the body had been dead for hours.”\textsuperscript{18} These symptoms were followed by stages of collapse. It was said that within a few days after the second fall nearly all victims died.

Doctor Charles Ludwig Seeger, a member of the Massachusetts and South Carolina medical societies, divided the disease into three distinct stages. The first, the forming or “premonitory” stage, was witnessed by a “disagreeable taste in the mouth, a sensation of nausea sickness or oppressive load in the stomach, a white tongue, a loose state of the bowels, gripping pains and a feverish pulse.”\textsuperscript{19} The second or “cold” stage was characterized by a “burning heat in the stomach caused by vomiting and loose evacuations of a watery liquid, resembling the water of boiled rice.” Also the fingers became shrivelled, the pulse weakened, hands and feet became cold, and extreme thirst resulted. “Spasms” painfully affected the extremities and an interrupting pulse and respiration commenced. Also deafness, giddiness and sunken features were observed in the patient.\textsuperscript{20} In the third stage of collapse the pulse disappeared,
the spasms and evacuations ceased, the respiration became slower and intermittent, the eyes glazed, the skin became damp and the body appeared as a corpse. “At this time spasmodic twitches in the limbs and body were sometimes witnessed.”

Dr. Seeger stated that the blood of cholera victims became “thick, black, vivid, imperfectly coagulated and deficient in serum.” He said that because of this thickening of the blood, the heart ceased to act. The extremities failed to receive warmth from the blood, the pulse failed and the patient died.

The cure or remedies out-numbered the causes and symptoms by a wide margin. One method of cure was bloodletting. One physician reported: “Generally when we had succeeded in extracting twenty or thirty ounces the patient has recovered.” The Consulting Physicians of the City of Boston prepared a format to instruct cholera victims. Based on the Edinburgh System, it stated that if cholera affected an adult, he should be given 50 drops of laudanum in a wine glass of hot brandy and water. This process was to be repeated every 15 minutes until a maximum of 200 drops was consumed. “If thrown up repeat the process with only a teaspoon of brandy.” Then hot bags of sand were applied to all parts of the body. A poultice, or a heated paste of common mustard, was deposited over the whole surface of the bowels. Following this, an injection made of a gill of starch, arrowroot or gruel with a teaspoon of laudanum was to be administered. If the milder English cholera was contracted, the use of solid food was omitted, only arrow root or rice water was eaten, while water or tea were the only beverage allowed. Complete rest was advised. If the bowels were not completely emptied, then a dose of powdered rhubarb was suggested. This was to be followed by an injection of one half pint of flaxseed with 20 drops of laudanum every four hours. In addition, the surface of the bowels should be blistered. If the patient was exhausted, a teaspoon of tincture of cinnamon in a wine glass full of hot water was to be given every half hour. Dr. Seeger recommended that patients have hot boiled potatoes applied to their stomach. Then the patient should be rubbed all over with a coarse flannel which had been dipped in aqua ammonia. At the same time, hot stones wrapped in flannel moistened with ammonia were placed in the hands to aid the circulation. Then about 30 ounces of blood was reinfused.

Another system was the Burgundian, which prescribed various drinks, mixed with opium. Calomel, a mercury compound, was widely used as a cholera remedy. Other physicians relied on massive doses of laudanum. These methods of treatment, the Edinburgh and Burgundian Systems, were among the more conservative remedies. “The more radical methods advocated such expedients as tobacco smoke enemas, electric shocks and the injection of saline solutions into the veins. The president of the New York State Medical Society suggested that the rectum be plugged with beeswax or oil-cloth as to check the diarrhea.”
It soon was realized that the best cure for cholera was prevention of the disease. On June 21, 1832 a Health Committee was appointed by Springfield’s citizens at a town meeting. This Health Committee was comprised of the most respected medical men of the community. The members of the committee were Lemuel W. Belden, John Stone, George Frost, Matthew B. Baker, and J. B. Brigman. Belden had attended Yale in 1817 and graduated with honors. In 1826 he received his Doctor of Medicine degree. He also was a member of the Massachusetts Medical Society. Very little is known of John Stone (1763-1838) except that he studied medicine in Rutland, Massachusetts. George Frost (1800-1846) studied medicine at Yale (1820-22) but he received his degree from Bowdoin College in 1822. Matthew Baker (1806-1839) and J. B. Brigman both graduated from Harvard. 29

An inspection of the town was undertaken on the 29th of June to determine the possibility of cholera in Springfield. Three hundred dollars was made available to the committee, with an additional seven hundred set aside if cholera should be discovered within the city limits. 30 The committee discussed the best means of prevention, and advised personal cleanliness and bathing at least twice a week. Then, rooms should be aired often. Citizens should practice temperance in drink and appetite, eating bread, eggs, fresh meat and vegetables, rice, and thoroughly cooked potatoes and asparagus. Uncooked vegetables and fruits such as those used in salads were to be avoided. Abstinence of pastries and pickled items was a must. Most of all, the committee recommended that the public not worry about cholera — those who worried were its most common victims. Cholera was a disease of the nervous system, and they declared that the best vaccine was “confidence in your labors and in one’s devotion for God.” 31

Careful examination of those struck by cholera revealed that its victims were usually among the lower classes. The ill-fed, ill-clothed, those of vice, misery, poverty and intemperance were its unfortunate victims. It took the lives of those who resided in “low damp houses, huts or cellars and those given up the habit of intemperance and careless health.” 32 Ninety percent of all cholera deaths were attributed to the abuse of “spirituous liquors.” 33 It was reported that the mayor of Philadelphia claimed that “cholera is a blessing to the world for it weeds out the weak, intemperate and unclean citizens.” 34

Religious groups had a different interpretation of the meaning of cholera. Strict Sabbatarians felt that the disease resulted from “the vices which a proper regard to the sabbath would check more effectually than anything else.” 35 A religious newspaper, the Christian Watchman, warned the American public about its lack of sympathy and apathy towards cholera victims. stating that America was not safe from cholera itself. 36 National and state “Fast Days” were periodically decreed as days of “public fasting, humiliation and prayer.” All denominations were requested to observe the fast days, in hope that the
Commonwealth would be granted mercy from "the Divine" and the pestilence would be avoided. Governor Levi Lincoln declared April 5, and August 9, 1832 and April 4, 1833 as fast days.\(^{37}\)

By 1833 cholera disappeared and was no longer an item for the local newspapers. Interestingly, no cases of cholera were ever reported in the epidemic of 1832 in Springfield. Multiple remedies, cures, preventatives and medical opinions appeared in the weekly papers, but there were no reports of deaths in the city. Apparently, cholera had surrounded Springfield but never infiltrated it. The headlines of the *Weekly Republican* in 1832 and 1833 centered not around the hundreds of cholera deaths throughout the nation, but rather on the tariff question and President Jackson. Cholera, although it never truly appeared in the city, disappeared until 1849.

On January 10, 1849 cholera was reported in New Orleans; on January 16, a case was reported in Northampton. In the years since 1832 and 1833 cholera had begun to shed some of its mystery and advancements had been made in sanitation. The old fantasies still existed in the minds of many but progress was being made. It was reported by the medical counsel of the New York Board of Health "that the cause of the disease exists in the atmosphere and that the whole community are at present under the influence of this peculiar condition and in this way predisposed to the disease...."\(^{38}\)

"Typical advertisement, 1849. All illustrations in this article were photographed from the files of newspapers at the Westfield Atheneum."
This was a unique suggestion, for the majority believed that cholera was the result of filthy living conditions in the city. For example, it was reported that "the cholera flourishes in the dirty streets and in an uncleanly population of New Orleans." Deaths exceeded one hundred a day, and New Orleans was in the most appalling condition with dirty streets, stagnant pools and heaps of decaying rubbish. The entire city reportedly reeked of horrible stench. 39

As soon as cholera started to appear near Springfield, the city became alarmed. Beginning in May of 1849 numerous "letters to the editor" began to appear in local newspapers. One writer declared that he had to "call the attention of our Board of Health to some of our filthy streets and lanes. There are piles of filth in little nooks and by places, that have not been removed for years. Where people live closely, as they do in some places in town, it must necessarily accumulate." 40 It was feared that if cholera should pass by Springfield these deposits of "corporation pie" would bring it down upon them. 41 "We esteem it high time that we had a scavenger, who should be employed six months in the year, in keeping the street clean." 42 Later that week another such article appeared, which was entitled "Cholera Seed." The article described the "untidy" conditions of the streets. "A fine lot of cholera seed can be found in Ferry Street. Also few cisterns near Old Hiveria, green and spouting. Seed of an inferior quality can be found in Market and Sanford Streets. We can recommend this seed to the Board of Health as a genuine article and we state it as our firm conviction that it will not fail to produce. When are we to have systematic efforts for keeping our streets clean?" 43
Charles Marsh, a local politician and former vice-president of Springfield Institute for Savings, wrote in his diary about the epidemic. He was only seventeen in the summer of 1849. On Tuesday, July 3, 1849 he recorded: "Everybody is now anxiously waiting the morrow, dear to the heart of every American. Cities will celebrate less this year than usual for fear of an increase in cholera which the excitement of a great day would have a tendency to spread." This was a reference to the belief that cholera was a disease of the nervous system. Thus excitement was to be avoided. "The only celebrations in these parts of any note" he said, "are at Chester Village 17 miles west and at Northampton the same distance North. I shall probably go to the latter place in the afternoon." Charles Marsh's writings indicate a great fear in Western Massachusetts, a fear of crowds and excitement that might induce cholera. The usual Independence Day celebrations had been cancelled.

Three days later Marsh wrote what he called "the most startling news I have recorded in this book." He stated that a death had occurred in Springfield, on Water Street, due to Asiatic cholera. He noted that no report of the incident appeared in the newspapers, for they were filled with the Fourth of July news.
Despite this apparent rumor, the Springfield newspapers never printed anything which would give the impression that Springfield was anything but the healthiest city in America. One article which appeared on July 18, 1849 stated that the health of the city was unusually good. Several of the oldest physicians were quoted as saying "that they never knew of so little sickness in Springfield." A coffin maker whose shop was located near the newspaper was quoted as "complaining that he has had nothing to do for weeks." Then, Mr. Marsh, the superintendent of the cemetery, informed the newspaper that "since June 1, 1849 there have been but ten interments there." The previous year burials for that time numbered sixteen. 46

The newspaper printed numerous accounts of cholera in Cabotville (presently Chicopee) and in the "New City" (Holyoke). In August of 1849 cholera was reported in Cabotville among the Irish tenements. The cholera reported in the "New City" was also predominantly in the Irish section. A typical letter to the editor about the epidemic in the "New City" stated that "the cases like cholera, which have occurred at the New City, have all been in the Irish quarter. The high point of the land which the Irish occupy is as healthy a situation as could be found; but it is as much as a man’s nose is worth to walk among their shanties. They work in a leisurely way all day, and dance and drink all night, and crawl into their close, filthy houses to sleep awhile, and wake up with the cholera, or something like it." 47 The letter also attributed the drinking of water and eating of raw lettuce and cabbage as leading factors in detecting cholera. The letter continued by declaring that "every funeral is turned
into a drunken frolic.” Cholera may be produced by such habits, but the real cause of their death is their own worse than beastly filth and gluttony.” The writer advised that the “premises have a thorough cleaning and the shanties be white washed.” It was hoped that this would prevent the disease although it was noted that the deaths would continue as long as the bad habits.

Every day as many as ten to twenty deaths attributed to cholera were reported in the “New City.” A great number of Irish fled the “New City” and settled in Cabotville in the “Patch,” the Irish section of town. This flood of Irish to Cabotville was cited as the cause of the outbreak of cholera there. Others simply left the area and returned after the epidemic. By late August of 1849 the number of cholera deaths began to dwindle. “The disease seems abating though perhaps more from the lack of victims than any other cause.” Eventually, fatal cases of cholera were reported in Springfield.

Prior to the arrival of the epidemic in Springfield, some social reforms had been enacted. A study was completed by area physicians which determined that cholera was not contagious. They stated that since “none of the physicians, nurses, laborers or inmates of the hospital on Center Street have suffered in the
least" cholera must not be contagious.\textsuperscript{50} Also the Board of Health adopted its regulations and published them in the local papers. Briefly it stated that no one would be allowed to deposit anything on the streets, be it animal or vegetable. Drains were to be installed at all tenements. Minimum standards for housing were prepared. The Board advocated the use of lime as a disinfectant. "By universal consent lime is considered a disinfecting agent of considerable power. We suggest to our citizens that it be scattered freely in the wet places around every house and where there is any decomposing vegetable matter. The cholera is near us and always trusting that it will not reach us let us be well prepared to receive it, if we are not fortunate enough to repel it altogether...."\textsuperscript{51}

In the summer of 1849 sulphur became the new wonder preventative of cholera. Dr. Bird of Chicago stated that cholera was dependent upon the presence of a substance known as "azone". He believed that sulphur would neutralize the influence of this agent. A letter to the editor of the \textit{Springfield Daily Republican} stated that "in certain streets in certain cities, gunpowder was burned and that in such streets no cholera appeared."

The basic reason for the lack of progress was the composition of the Board of Health. This Board, unlike the one of 1832, was comprised of city politicians, townsmen, and local merchants. Their membership included: Elijah Blake (1784-1880) who was a selectman, school committeeeman, member of the fire department, overseer of the poor, and a "catcher of troublesome criminals." He
was a tanner and shoemaker by trade. Daniel Hitchcock (1791-1877) was a farmer. John B. Kirkham (1791-1857) was a selectman, assessor, and school committeeman. Joseph Ingraham (1808-1883) was a printer of drug and medical remedies. "Dr." James Gray (1821-1855) was a member of the Massachusetts Medical Society. Unlike the situation in 1832, his Board of Health was not medically orientated. These men were common people with a civic duty. Their goal was to prevent disease the cheapest possible way. Innovations and progressive programs were expensive commodities. Many reforms were recommended by the public, but politicians were hesitant to support expensive public works projects like the installation of sewers and drains.

On August 17, 1849 the first fatal case of cholera was reported in Springfield by the Board of Health. There were a few more deaths in the next few months, and then cholera disappeared. Due to the short visitation of cholera the citizens of Springfield continued to exhibit an interested disconcern. Occasionally a fast day was declared or some new "quack" discovered a "miracle drug," but little municipal progress was made.

In 1849 the headlines of the Springfield papers were not filled with reports of the epidemic cholera, for that was second and third page news (in a paper of four pages). The headlines were primarily concerned with the "Gold Rush Mania" in California. Springfield remained passive, for it had avoided the disease twice (1832 and 1849). Thus, change was not necessary. Neglect triumphed over progressivism. The fact that Springfield's first "scavenger" was not employed until 1873 emphasizes this point only too well. Conservative democracy had retarded social progress.

NOTES
4. Ibid.
8. Ibid.
13. Ibid.
15. Springfield Weekly Republican, September 22, 1832, p.3, col. 3.
18. Ibid.
21. Ibid.
26. Ibid.
29. Obituary Files, Springfield Library Genealogy Room.
33. Ibid.
45. Ibid., July 6, 1849, pp. 18-19.
48. Ibid.
52. Obituary Files, Springfield Library Genealogy Room.