Salubrious or Unsanitary Iowa?
The Struggle for the Public's Health

by Ginalie Swaim

A few days before Christmas, 1865, the *Iowa State Register* in Des Moines described a tragic scene: "Two nights ago, as we are informed by Mr. Abel, two girls, one ten years of age, and the other four, were lying dead at the residence of their father, Mr. Barlew, two or three miles east of town. They had died of diphtheria. At the same time a son, another daughter, and a sister of Mr. B. were prostrated by the same disease."

Of eastern Iowa in the 1840s, an early resident remembered: "We just shook, and shook, and shook, with the ague. We could only eat when the chill was on us, being too sick when the fever was on. I well remember how the cup would rattle against my teeth when I tried to drink. . . . Almost everybody in that thinly settled part of Iowa would have the ague part of the time. . . . I can still see how thin and pale and woe-be-gone everyone looked."

Iowans in the Des Moines River valley in 1874 were no less vulnerable: "When one of a family became sick [with cholera], another and another would be attacked, till often whole families in a few hours would be taken away. Neighborhoods would be alarmed and many left their homes, and frequently it was difficult to get any one to take care of the sick, or bury the dead."

Although immigrant guides and local editors rhapsodized about Iowa's salubrious climate and its citizens' glowing health, there was plenty of disease and poor health. Early newspapers reprinted sensational news of outbreaks of disease from other cities or states, but sometimes they were more cautious in reporting local outbreaks, fearing its negative impact on attracting new businesses and residents, and thus on the local economy. The *Indianola Herald* in 1875, for example, quashed rumors of smallpox in town. "Appearing just at a time when immigration is pouring into our county, the amount of damage it will do is almost incalculable [with the story being reprinted in] papers all over the country." Certainly there must have been a feeling of panic among the citizenry over such rumors or reports, for Iowa physicians had few if any tools with which to battle malaria ("ague"), cholera, diphtheria, typhoid fever, or any of the other prevalent diseases.

The mid-19th-century understanding of disease was that it was caused by miasmas, or vapors, emanating from filth, rotting vegetation, stagnant water, sewage, and damp soil. "The low grounds on the south and west of the city seem to be the favorite locations for the deposition of garbage and street cleanings," complained Des Moines's *Iowa State Register* in the summer of 1875. "These, in the heat and rains, undergo slow decomposition, and send off poison, its emanations during the whole summer to be carried by the prevailing winds over the whole city. These evils can be remedied and a considerable sickness prevented."

In 1885 the president of Keokuk's board of health counted 65 filthy alleys, 25 privies, 3 stables, 12 hog pens, and 2 chicken coops that needed to be abated, as well as a "green pond, emanating obnoxious gases of a dangerous character, endangering the health, not only of the neighborhood, but of the whole city." He ordered that debris be burned and "dirty and damp cellars be cleaned, ventilated and disinfected."

Ridding towns and cities of filth and decay was the goal of the great sanitary movement. Focused on the poor and overcrowded slums of large American and European cities, sanitarians first blamed the "ignorant and filthy" poor and immigrant populations for squalor that caused disease. But as cities built public sewage systems, and wealthy households installed water closets (indoor toilets), sanitarians claimed that sewer pipes and traps in upper-class homes also emanated dangerous vapors. These homes were just as likely to be the source of deadly diseases. Diagrams of correct household plumbing be-
In the wake of the groundbreaking germ theory came new consumer products promising the ability to kill germs. Here, an 1890s advertisement claims that this pump for wells and cisterns prevents cholera, typhoid fever, scarlet fever, and malaria, all caused by "animalcule and bacteria." "Water never becomes a harbor of such foul animal life when the vital element, OXYGEN, is given, and circulated through by the use of the 'Perfection' Purifying Pump."

The diagram illustrates the kind of animalcule and bacteria that is contained in impure water. Water containing such animal life drank into the system is the cause of more diseases than all others combined. Water never becomes a harbor of such foul animal life when the vital element, OXYGEN, is given, and circulated through by the use of the "Perfection" Purifying Pump.

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Historian Maureen Ogle writes that "systematic sewer building was spurred by prevailing notions of contagious diseases in the mid-nineteenth century. Disease did not distinguish rich from poor. The six cholera epidemics that swept North America between 1832 and 1873 showed the deadly strength of contagion. While mid-century physicians did not understand that underlying viruses or bacteria were responsible . . . they were convinced that disease was caused by bad air."

By the 1880s, the miasma theory began to lose its hold as European scientists identified specific germs as the cause of certain diseases. The new State Board of Health in Iowa worked hard to dispel the perception that miasmas from decay and filth caused disease. "What the older observers were wont to call causes were conditions only," the board emphasized in 1893. "Overcrowding or density of population, faulty ventilation, and the presence of filth, are simply the favorable and unfavorable conditions in the propagation of disease, and not in any sense its causes." Although sanitation remained a weapon against disease, health workers now turned to contagion control, knowing that diseases could be passed from one to another—sometimes even by a healthy, asymptomatic carrier. Quarantines, vaccines, antitoxins, and other preventive measures were the new arsenal in the battle against disease.

Public health had long been in the hands of professionals—social reformers, health officials, physicians, and local authorities. The individual citizen was the recipient of their work. But it wasn’t long before the American homemaker became an agent of change, disease control and health reform. To the extent that she believed in these changes, and as best as she could, she incorporated new information about nutrition, child-rearing, housekeeping, and cleanliness (not easy for farm women who were still lugging water into their homes from outside wells). She harped at her children to keep the flies out, wash their hands, cover their mouths when they sneezed or coughed.

Women also had consumer clout; playing on their concern for healthy families, manufacturers and advertisers created a delicate balance between what was hygienic and what was hype. New words appeared in advertisements: sanitary, pure, disinfects, germ-fighting. The scent of fresh pine was added to cleansers. Packaged food and cellophane-wrapped bakery goods replaced uncovered, open-air displays of groceries. Vacuums promised to suck up dirt and germs, filters would shut them out. Anything with cracks and crevices, where dirt and germs could lurk, were culprits of disease. Linoleum covered wooden floors. Victorian dust-catching draperies, knick-knacks and elaborate woodwork gave way to simpler decor. The carved walnut bed was packed off to the attic; a more "sanitary" metal bed took its place. Magazines assured women that kitchens and bathrooms with smooth, nonporous, white surfaces were easier to clean. Dishes must sparkle. So must teeth. Germs could lessen one’s beauty and sexual attraction, too, so pharmacies stocked special soaps, deodorants, and mouthwashes for the somewhat paranoid consumer, who now shouldered a new set of social expectations. Meanwhile, unbeknownst to most Americans focused on their daily lives, public health workers were facing off against new threats to the nation’s health, the focus of the following articles.

This issue is a collaboration of the Iowa Department of Public Health and Iowa Heritage Illustrated magazine. It traces the history of public health in Iowa—something we ordinary citizens seldom think about, because public health has vanquished or diminished so many of the diseases that once menaced Iowans. But as in any drama—and saving lives is dramatic—there’s always a new enemy around the corner.

This is also a story of institutions and individuals whose work has built upon each other’s, overlapping and intertwining for more than 125 years. The story also extends well beyond our state. Iowans outside of our borders have done important work for a healthier world, and today’s global community brings stubborn new diseases to Iowa’s doorstep.

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