Instructing the Masses
The Development of Iowa's Health Department

by Ronald D. Eckoff

One hundred and twenty-five years ago, the State Board of Health was created. The board comprised seven physicians, one engineer, and the attorney general. A "secretary" (the director) was chosen by the board. The legislature appropriated $5,000 to the board (about $100,000 in today's dollars).

Iowa law in 1867 had placed local health responsibilities on city, town, and township boards of health, as had many states. But as U.S. immigration and nationwide transportation grew, so did the spread of diseases, calling for coordination within states and regions, hence state boards of health.

William S. Robertson, State University of Iowa medical department professor and the state senator responsible for the law creating the State Board of Health, was the board's first president. His vision was far ranging: "by wise and timely suggestions" the board would "mold popular opinion and . . . instruct the masses in the elements of sanitary science that all may recognize the wisdom in the enactment of the health law which shall give them purer water, better drainage, better ventilated homes, more healthy food, and longer life."

For its first five years, the state board's role was largely informational and advisory, limited to reporting outbreaks of contagious disease and trying to compile records of births and deaths. Its biennial reports and health bulletins functioned as conduits of questions and answers between local doctors, the state board, and other experts—questions such as how to disinfect a schoolhouse after diphtheria; where to locate a pest house to isolate smallpox patients; how to choose the best kind of earth closets as indoor toilets.

Doctors' frustration was often evident. In 1882, for example, a Sioux Center doctor complained that in Orange City, smallpox vaccination "is absolutely refused, many of the Hollanders, if not nearly all, being fatalists, and claiming that if they are destined to have small-pox they will have it, whether precautions are taken or not." A Fort Dodge physician was uneasy about the water supply, taken from the Des Moines River "a few feet below the mouth of Soldier creek . . . [which was] the only sewer of the north third of our city." Upstream were "filthy hog and cattle yards," a brewery, and two cemeteries on its banks. In Sidney, a Fremont County doctor described the most prevalent diseases as "malorious . . . largely caused by immense river bottoms of the Nishnabotna and Missouri rivers." There, he observed, "we have more frequent cases of severe congestion, intermittent and remittent fevers."

One doctor who had inspected dozens of homes despaired over one with "seven children, four dogs, a sick cat, a pile of rotten potatoes, a pile of bones, and a lame goose, and the only means of admitting fresh air was through bullet holes in the door."

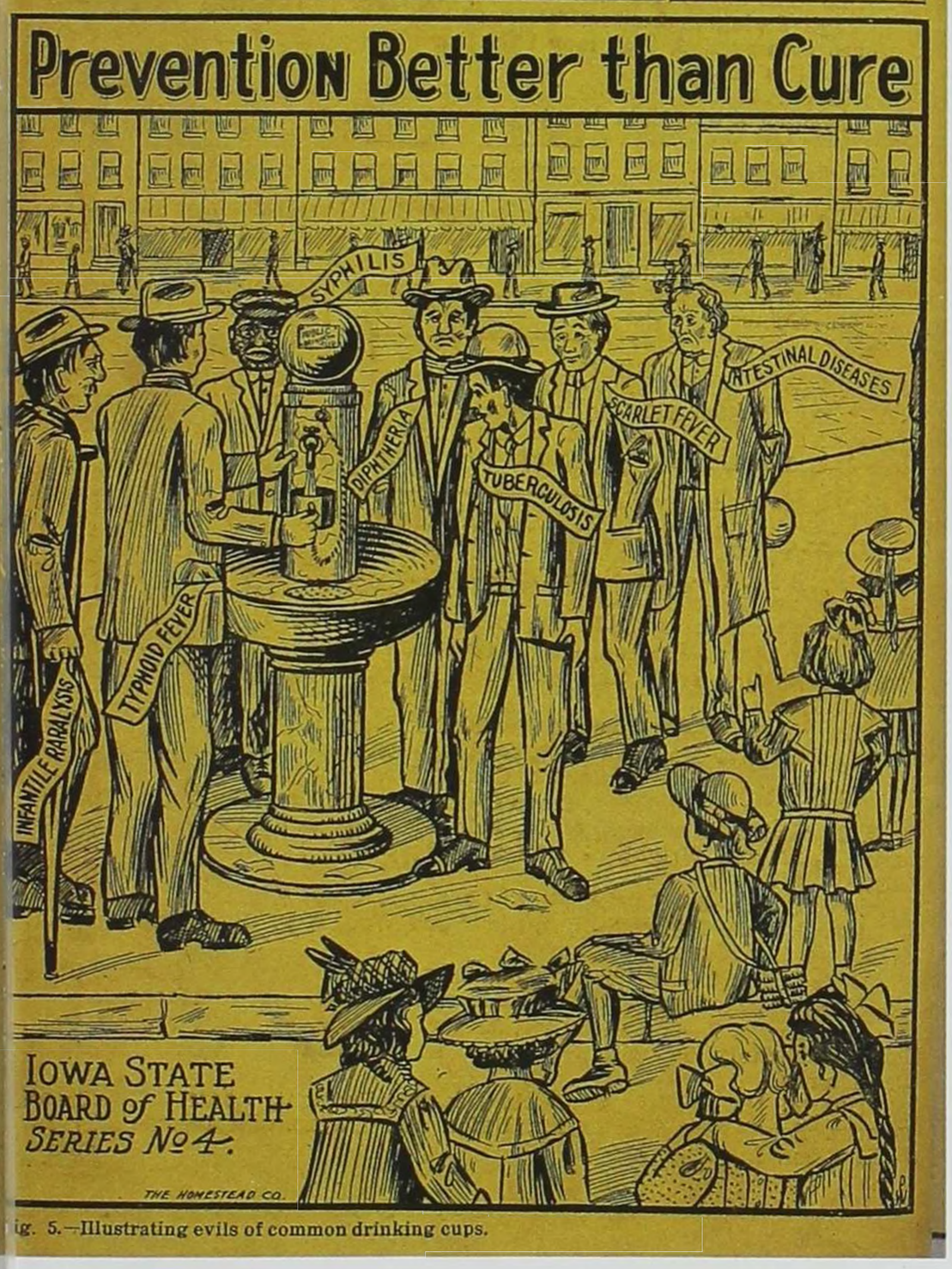
Historian Lee Anderson writes that "as a pulpit for dissemination of the gospel of scientific medicine, the board of health was both cause and effect of an extraordinary expansion of the state's role in the broad area of public health in the 1880s and 1890s." The board gained greater regulatory power over quarantines, disinfection, and other contagious disease controls. A state veterinarian was added to the board, and a bacteriologist and chemist designated. Iowa passed laws regulating pharmacy, dentistry, and medical practice. Still, the board ended the century with the same yearly allocation ($5,000) since its founding in 1880, despite rapid increases in the state's population and the board's responsibilities.

As the new century began, the State Board of Health launched public campaigns to vaccinate against smallpox, diphtheria, and typhoid fever. It distributed diphtheria antitoxin to the underprivileged and to others at low cost through 300 statewide stations. The board directed a watchful eye over towns and cities as they developed new public water and sewage systems and plumbing codes, and it began surveys of creeks, rivers, and lakes for pollution.

World War I forced the nation, and the State Board of Health, to focus on venereal disease. In the war's aftermath, the board finally won support for mandating reporting of vital records. But there was no dearth of demands on the board in the 1920s. It recommended

HOW DISEASES ARE SPREAD BY THE COMMON DRINKING CUP

The Iowa State Board of Health by resolution has condemned the common drinking cup, and has forbidden its use in all public places such as parks, streets, schoolhouses, hotels, factories, workshops, libraries, railway stations and cars and all other public places, and was in effect January 1, 1912. Examine the following:



ig. 5.—Illustrating evils of common drinking cups.

As of 1912, the State Board of Health forbade the "common drinking cup" in all public places: "parks, streets, schoolhouses, hotels, factories, workshops, libraries, railway stations and cars," to help prevent communicable diseases. Below: The 1912 health bulletin suggested that privies be distant from houses and wells, to avoid water contamination and control flies.

closing a loophole in hotel inspections so that a room infested with bed bugs and vermin be closed to the public until it was "free of night terrors." Far more serious, a new infectious disease from cattle (undulant fever, or brucellosis) was discovered in a packinghouse worker in Mason City; more cases soon appeared across the state. The bewildering array of small, local health departments needed to be changed to larger, more efficient county units. Stronger housing statutes were needed for coal miners and road-grading crews living in camps; college students renting poorly ventilated attics with inadequate fire protection and toilet facilities; and Mexican "or other foreign labor" sheltered in boxcars along railroad right-of-ways, with little or no ventilation and unsanitary surroundings.

In 1924, state government consolidated the Board of Health and other government functions (hotel inspection, and the boards of examiners for medicine, dentistry, embalming, nursing, osteopathy, optometry, chiropractic, and podiatry). The new agency was the Iowa Department of Health, but its financial woes were not new. Care of the sick and prevention of disease was "on a lower plane in Iowa than in any other state in the Union," the health commissioner complained a few years later—two cents per capita compared to an average of nine cents.

The Great Depression had a substantial impact on public health in Iowa. Budgets were severely cut. New federal funds, however, helped support many activities. Social Security Act funds added new positions: an engineer for rural sanitation programs, a milk sanitarian, three graduate engineers, a vital records statistician, a stenographer, and more staff in epidemiology, obstetrics, pediatrics, and dentistry, as well as advanced training of nurses, doctors, and engineers, often leading to a master of public health degree.

The health department was routinely inspecting

BOTH IMAGES: SHSI (IOWA CITY)

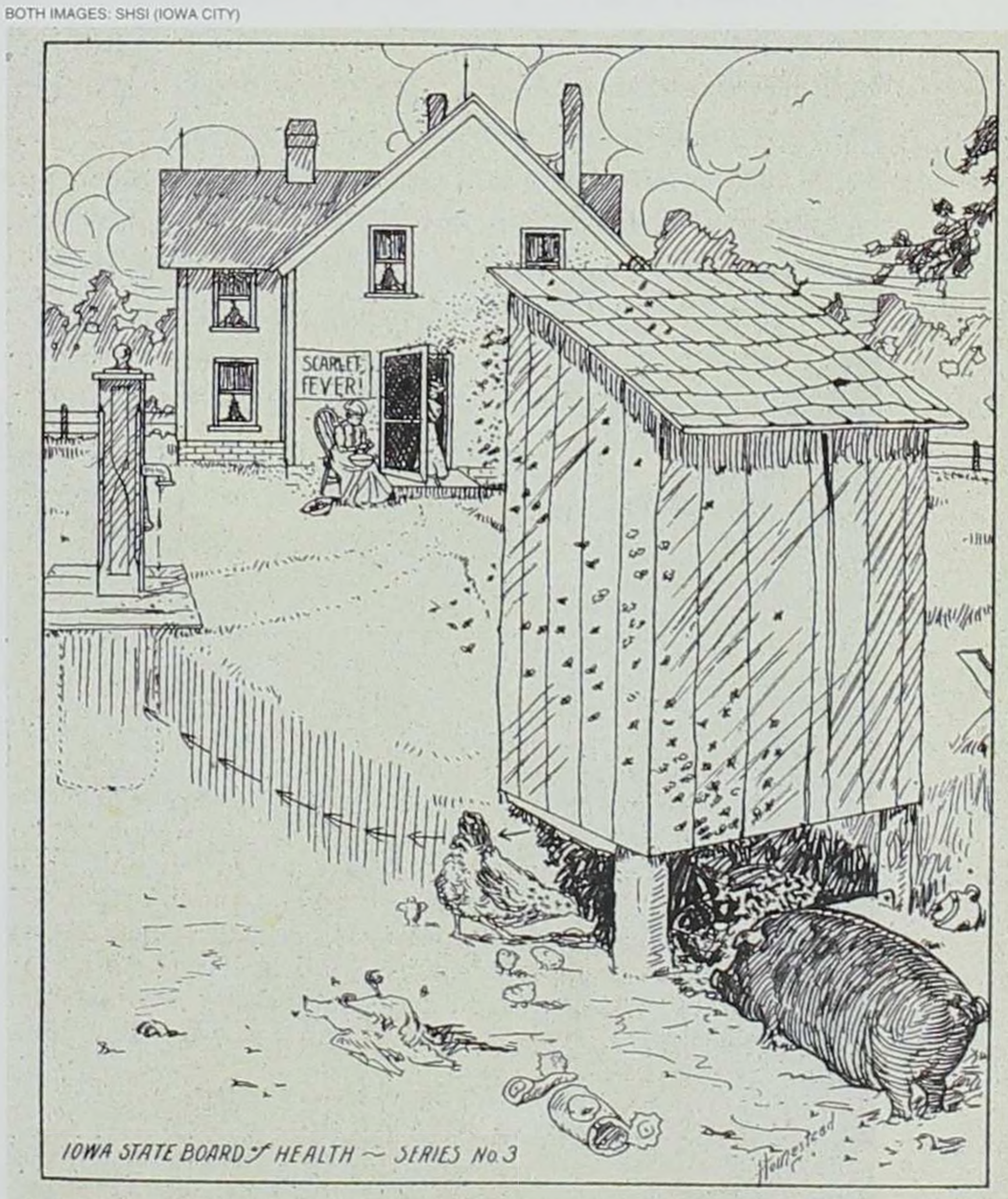
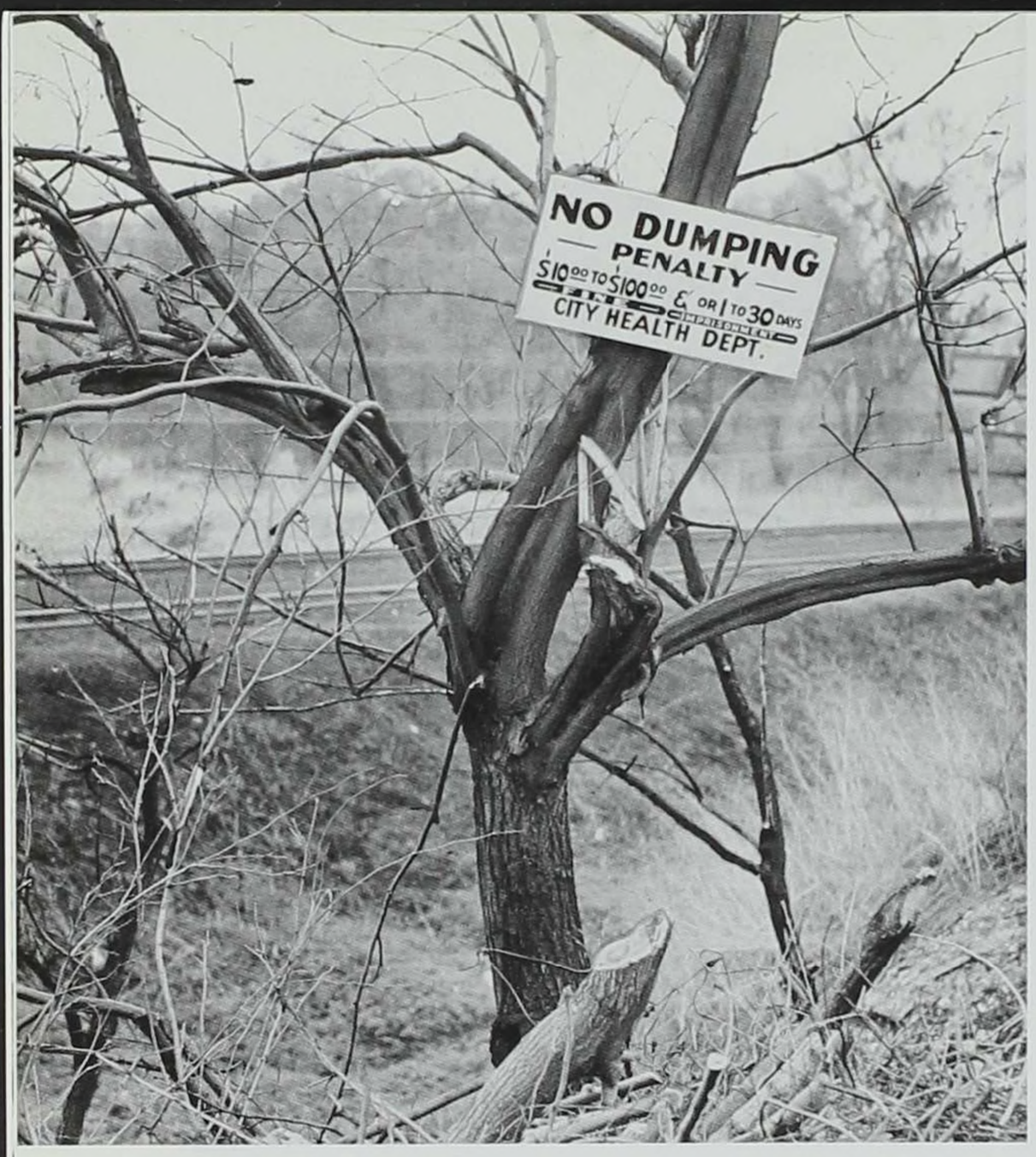


FIG. 4.—The insanitary privy with the well not far away.



Controlling waste disposal was another responsibility of health departments (Des Moines, 1940). Below: Ramshackle dwellings with primitive plumbing in Des Moines, 1937.

BOTH PHOTOS: SHSI (DES MOINES) *DES MOINES REGISTER AND TRIBUNE*

water quality by the 1930s. Water supplies in tourist camps concerned the department, but they were pleased that the WPA was building nearly 1,000 new sanitary privies for schools and homes. "Industrial hygiene" focused on ventilation and air purity in factories and the strain on workers' eyes, ears, nerves, and repetitive use of muscles. Good health was especially important for those working in munitions plants for the war effort.

There was no let-up in challenges and responsibilities in the following decades: new diseases that "jumped species," pollution, polio, the fight for fluoridation, and the push for public health nurses.

Now celebrating its 125-year anniversary, the Iowa Department of Public Health has seen massive expansion of its responsibilities and its effect on Iowans' health. ❖

Ronald D. Eckoff retired in 2002 after 36 years at the Iowa Department of Public Health. He served as a division director, division medical director, and twice as acting department director. He is preparing a history of the Iowa State Board of Health/Iowa Department of Public Health and local public health in Iowa. Anyone with information or suggestions may contact him at Ronald D. Eckoff, 12534 SW Maffitt Lake Drive, Cumming, Iowa 50061, or by e-mail: reckoff@radiks.net.