

STATE ADMINISTRATION OF PUBLIC HEALTH IN IOWA

The promulgation and administration of laws and regulations concerning public health were, in the early history of Iowa, considered a local function. Indeed, medical science and sanitation were so little developed that not much could be done by any governmental agency. Fortunately disease was the exception on the Iowa frontier, except for epidemics of cholera. Pioneering tended always to leave behind the sick and the physically unfit.

The first attempt to develop a State organization for the advancement of health in Iowa was made in 1850, when the Iowa State Medical Society, a private agency which was destined to have a noteworthy influence on the future development of public health within the State, was created.¹

The next year, 1851, marks the first legislation in the interest of public health. A law enacted that year provided that any person who inoculated himself or another person or permitted himself to be inoculated with smallpox or who intentionally brought such disease into the State might be imprisoned for three years, or be fined \$100 and imprisoned in the county jail for one year. An attempt was also made to prevent the adulteration of foods. Persons offering adulterated foods for sale were subject to imprisonment for one year in the county jail. Legislative provision was also made for the control of the purity of drugs and medicines.²

¹ Fairchild's *Medicine in Iowa from its Early Settlement to 1876*, pp. 82, 103.

² *Code of 1851*, Secs. 2725, 2727, 2729.

The first official organization for the purpose of safeguarding health appears to have been provided for in 1858 when city councils were authorized to appoint boards of health. These boards were supposed to have authority to remove nuisances, filth, and unhygienic accumulations on private property, as a means of suppressing contagious and infectious diseases.³

The legal provisions for safeguarding health throughout the State were augmented in 1870. Changes in the law extended the list of foods and other commodities which were protected against adulteration. These commodities included meat, butter, and milk. The proper labeling of drugs and poisons was also required. The law sought not only to restrict the sale of adulterated foods, but also to prohibit the sale of "corrupt or unwholesome provisions". It was so worded, however, that difficulty was experienced in its administration.⁴

It will be noted that the administration of health up to this time was largely legislative; the legislature enacted laws providing in detail for certain types of regulations, the actual execution was by the local peace officers.

This system was not satisfactory. The field of regulation was very limited, and the system covered only a fraction of the need. The method was obviously rigid. The legislature attempted to provide detailed provisions for the regulation of health, a matter about which it knew very little. Moreover, the local areas were not provided with agencies to care for those matters that were not sufficiently guarded by the legislature. As a result, health administration, like all forms of public administration at this period, was poorly organized and ineffective.

³ *Revision of 1860*, Secs. 1057, 1064, 1070.

⁴ *Code of 1873*, Secs. 4035-4042; *Medical and Surgical Directory of Iowa*, 1878-1879, pp. 72, 73; *Laws of Iowa*, 1870, Ch. 156.

The Secretary of the State Board of Health in his report of 1887 tells of the feeble administration of health in this early period: "A few years ago, before the passage of the present State Board of Health law, a man entered the office of the Secretary of this Board, (who was then practicing medicine in this city.) He detailed a train of symptoms, and presented such physical signs as led the physician to inform him that he had smallpox. . . . He was locked in the office, and the Mayor of the city notified. The reply of the Mayor was: 'Why the thunder didn't you let him go! What can we do with him?'"⁵

In commenting on this situation, the President of the Iowa State Medical Society, in addressing its members in convention, said: "with every encouragement which a dependent and enlightened people, and an influential medical body can offer, we entreat you to individual effort in behalf of the establishment of a Board of State Medicine. . . . To say that you will passively submit to the stigma which an excusable apathy has entailed, is too derogatory to the character of your profession, too humbling to your pride as public spirited citizens of a growing commonwealth."⁶

Following this exhortation, a committee of the Iowa State Medical Society was selected to study the proposition of establishing a State Board of Health. The committee made a study of health agencies and health laws in other States, and arranged for conferences with health officers in States that had established State Boards of Health. As a result of its investigation, the committee recommended that the Iowa State Medical Society endorse the "Draft of a Health Law and Medical Practice Act". After favorable action upon the resolution by the Medical Society, information was sent to other organizations with-

⁵ *Biennial Report of the Iowa State Board of Health, 1885-1887*, pp. 3, 4.

⁶ Fairchild's *Medicine in Iowa from its Early Settlement to 1876*, p. 113.

in the State as to the purport of the proposed law. A program of general education was carried on and favorable legislation resulted.⁷ With this law there began a twenty-year period of State advisory health work.

THE PERIOD OF ADVISORY HEALTH ADMINISTRATION BY THE
STATE BOARD 1880-1902

The law providing for the creation of a State Board of Health was approved by the Governor on March 26, 1880. With the establishment of the Board a period of advisory health administration was inaugurated, and continued until 1902. Under the original law the Board was to consist of one civil engineer and seven physicians, to be appointed by the Governor with the approval of the Executive Council, and the Attorney General as an ex officio member. The term of office was seven years. The Board of Health was authorized by law to select a President and a Secretary. The President was to be selected from the membership of the Board, but the Secretary was not a member. The members of the Board received no compensation beyond actual expenses. The Secretary received for his services a salary not to exceed \$1200 per year. Meetings of the Board were to be held in May and November of each year and at such other times as the Board deemed necessary.

The State Board of Health had general supervision over public health, with special reference to such matters as quarantine, and over the registration of marriages, births, and deaths; and was authorized to conduct sanitary investigations with authority to make such rules as were necessary. The Board was required to make a biennial report to the Governor, including information on such subjects as

⁷ Fairchild's *Medicine in Iowa from its Early Settlement to 1876*, pp. 113-115.

vital statistics, disease, hygiene, and legislative recommendations.⁸

Local boards of health were also established by law. These local boards were made up of the township trustees and the town and city councils acting *ex officio*. The duties of the local health authorities included the making of regulations with respect to "nuisances, causes of filth, causes of sickness, rabid animals and quarantine". They were to report annually to the State Board of Health concerning their work.⁹

In pursuance of the law, the Governor appointed the seven physicians and the sanitary engineer on April 23, 1880. These members, with the Attorney General, met at the State Capitol for the purpose of organizing the first State Board of Health. After the selection of the President and Secretary, agreement was reached that certain standing committees should be established. Each member of the board was placed in charge of a committee. The committees designated included: foods, drinks, and water supply; rest; ventilation; education — relation of school to health — kind and methods of instruction in use, and methods to be proposed; sewerage, drainage, and disposal of excreta; influence of slaughter-houses, rendering-houses, etc., on public health; endemics, epidemics, and contagious diseases; and legislation relating to the State Board of Health.¹⁰

The procedure of the State Board of Health during the early years of its existence was simple. The State was divided into nine divisions. Each division was a unit for

⁸ *Laws of Iowa*, 1880, Ch. 151. In this study, public health work has been considered as including vital statistics, preventive work, and curative agencies, but no attempt has been made to discuss these separately.

⁹ *Laws of Iowa*, 1880, Ch. 151.

¹⁰ *Biennial Report of the Iowa State Board of Health*, 1880-1881, p. 17; Fairchild's *Medicine in Iowa from its Early Settlement to 1876*, p. 117.

comparative purposes and it also constituted a unit for study. The Board, through its proper committees, arranged a very elaborate questionnaire, which was sent to every physician in the State. These questionnaires were devised to collect information on such subjects as the prevalence of disease, the probable causes of the spread of contagion in the community, and the number and causes of deaths.¹¹

Two major problems have faced the State Board of Health from the very beginning—the collection of vital statistics and the control of epidemics. The first President of the Iowa Board of Health said, in commenting on subjects to be investigated: “I suggest the subject of ‘Vital Statistics’ receive early attention. . . . The medical profession throughout the State will be so ready to co-operate in this work that it will be only necessary for the Secretary of the Board to invite them to furnish any information in their possession—direct or indirect—regarding the diseases of their several localities, as to insure hearty and intelligent responses, since such information will form a stock—so to speak—which will be utilized for the prevention of disease and the reduction of the mortality lists.”¹²

The members of the Board of Health, profiting from the experiences in the cholera epidemic of 1848, and the more recent scourge of smallpox in 1876, realized the need for the control of contagious disease. As a result, the control of traffic involving diseased persons, the isolation of diseased persons, and the proper preparation of dead bodies for shipment were early recognized as problems for State supervision.

The early experiences of the Board showed that it had

¹¹ *Biennial Report of the Iowa State Board of Health, 1880-1881*, pp. 75-79.

¹² *Biennial Report of the Iowa State Board of Health, 1880-1881*, pp. 3, 4.

very little effective control over the matters within its province. It had no mandatory control over local boards, and could not use coercion to accomplish its purpose. This is clearly revealed in a letter written by the Secretary of the Board to a person desiring the intervention of State health officers in a local area. The Secretary said: "The State Board of Health publishes rules and regulations for the instruction of local boards, according to law. It rests, however, with the various communities, such as townships, towns, and cities, to enforce these regulations. If they neglect or refuse to do so, they must suffer the consequences . . . and the State Board cannot interfere, as its function is purely an advisory one."¹³

Although the State Board could promulgate rules to prevent the spread of disease, the enforcement of these rules depended upon the local authorities. Forms to be used in reporting marriages, births, and deaths were also devised but were not uniformly used. Contrary to the prophecy of the first President of the State Board, the Secretary pointed out the reluctance with which physicians coöperated in the actual execution of the health laws. "It is to be regretted", the Secretary reports, "that many physicians throughout the state habitually, and some even obstinately, refuse . . . to report births and deaths. . . . Instead of cheerful compliance with the law, we have, in one county the Physicians of the County Medical Society, by deliberate resolution declaring they will ignore the law while in no county perhaps is there a faithful report made to the clerk."¹⁴

According to the original health law of 1880 the physicians and midwives in the State were required to report births to the clerk of the district court, and the clerk was

¹³ *Biennial Report of the Iowa State Board of Health, 1881-1883, p. 10.*

¹⁴ *Biennial Report of the Iowa State Board of Health, 1885-1887, p. 15.*

required to report to the State Board of Health. The act was the subject of litigation, but was sustained by the courts. It appears that the physicians were not in sympathy with the provision on vital statistics, because no compensation was provided for those reporting, and many physicians refused or neglected to make the required reports.¹⁵

The general failure of the system of collecting vital statistics under this law resulted in a revision of the law in 1894. This act required that such data should be collected by assessors, appointed by the county auditor, upon blanks furnished by the State Board of Health. The new law proved to be of little value. The assessors were not qualified to make a satisfactory collection of vital statistics; and the county auditors in convention during 1901 declared that the law was ineffective and recommended a return to the former system.¹⁶

The Secretary suggested that the original law might have worked satisfactorily had compensation been provided for reporting births and deaths, or if authority had been conferred upon the Medical Examiners to revoke the certificates of the physicians failing to furnish the prescribed data.¹⁷

As early as 1883 the reports of the State Board of Health to the Governor contained recommendations that the authority of the Board be strengthened. "Practical experience has demonstrated the necessity for executive powers and authority, vested in the State Board of Health. Contingencies constantly arise, where local influences prevent the operation of the health law. Authority should rest

¹⁵ *Report of the Iowa State Board of Health, 1903-1906*, p. 29; *Robinson v. Hamilton*, 60 Iowa 134. Because of a delay in printing, this report of the Board of Health covers three years.

¹⁶ *Biennial Report of the Iowa State Board of Health, 1901-1903*, pp. 83-87.

¹⁷ *Report of the Iowa State Board of Health, 1903-1906*, pp. 23-29.

somewhere to secure to the communities the benefit of the statute, and no where could this be lodged, with a view to impartial judgment more safely than with the State Board of Health." This advice was reiterated in 1885, but apparently no attempt to confer more authority upon the State Board was successful until 1902.¹⁸

In the meantime, the Board emphasized education as a means of improving the conditions of health throughout the State. Correspondence was carried on with boards of health in other States to determine methods of preventing disease. The members made investigations and collected literature upon certain diseases, and this information was made available to physicians and the general public. To further this process of education, the Iowa Public Health Association was organized as another means of bringing information before the physicians of the State and also to integrate the activities of the State Board.¹⁹

The office of State Veterinary Surgeon was created in 1884 and the Veterinary Surgeon was made a member of the State Board of Health. This addition was made at the request of the State Board, whose members were constantly faced with the problem of contagion in animals and its effect on the health of the general public.²⁰ The Veterinary Surgeon was to be appointed by the Governor and must be a graduate of a recognized veterinary college. He

¹⁸ *Biennial Report of the Iowa State Board of Health, 1881-1883*, p. 2, 1883-1885, pp. 9, 10.

¹⁹ *Biennial Report of the Iowa State Board of Health, 1891-1893*, p. 2. "As an adjunct to the State Board of Health, there has been organized the Iowa Public Health Association. Its work, while scientific and along the line of sanitary and hygienic methods, is purely philanthropic. . . . Conjointly the State Board of Health and this association have arranged to hold in various parts of the State sanitary conventions, at which the best means of not only preventing sickness, but of promoting the highest type of health will be discussed in a practical manner."

²⁰ *Biennial Report of the Iowa State Board of Health, 1883-1885*, p. 194; *Laws of Iowa, 1884*, Ch. 189.

had general supervision over contagious and infectious diseases among animals and with the concurrence of the State Board of Health might make the necessary regulations for the suppression of such diseases. If the Executive Council concurred with the Board of Health, the Veterinary Surgeon could call for the assistance of any police officer in the execution of the regulations for the suppression of disease among animals.²¹

The State Veterinary Surgeon was an influential officer. He conducted experiments with animals to determine the transmittable character of certain diseases. His work was more demonstrable than that of other members of the State Board of Health, and much confidence was placed in him. It is little wonder, then, that the Veterinary Surgeon was once President of the Iowa State Board of Health.²²

During this period of advisory administration (1880-1902) the expenditure of the State for public health was relatively small. The Board was allotted \$5000 per year to carry on its activities. Every biennial report of the Board contained a plea for a larger appropriation.²³

During the period of advisory health administration extending from 1880-1902 auxiliary agencies were provided to look after certain functions. In many cases, these agencies performed health services, but had no direct relation to the State Board of Health. In some instances administrative agencies designed to carry on other functions were actually placed in charge of health administration.

State Board of Medical Examiners.—A State Board of Medical Examiners was provided in 1886, made up of the

²¹ *Code of 1897*, Secs. 2529-2538.

²² *Iowa Official Register*, 1898, p. 16; *Biennial Report of the Iowa State Board of Health*, 1895-1897, p. 1.

²³ *Biennial Report of the Iowa State Board of Health*, 1893-1895, p. 371, 1903-1906, p. 20.

physicians on the State Board of Health and its Secretary. The members of the Board of Medical Examiners were authorized to elect a President and a Secretary. Later the Secretary of the Board of Health ceased to be a member of the Board of Examiners, but served as Secretary of the Examiners by virtue of his being the Secretary of the State Board of Health.

The law creating the Board of Medical Examiners required that every physician in the State should be certified by the examiners. Certificates were to be issued to three different groups: (1) to those holding diplomas from medical colleges in good standing; (2) to those who had practiced medicine in the State for five years prior to the passage of the act providing for the examination; and (3) to those who passed a satisfactory examination before the Board of Medical Examiners.

A fee was required of all persons certified. The charge was greater for those who took the examination than for those who received a permit on the basis of a college diploma or through a provision of reciprocity with the other States. Itinerant physicians were charged a much higher fee than those who had a residential practice.

The money received for certification was paid into the State Treasury and this fund was used to sustain the Board of Medical Examiners — to defray such expenses as the cost of examination, postage, printing, and stationery. The Board of Medical Examiners was self-sustaining financially, and frequently left a comfortable balance in the Treasury.²⁴

Mine Inspection. — The Mine Inspector was an administrative agent. While he was charged primarily with

²⁴ *Laws of Iowa*, 1886, Ch. 104; *Code of 1897*, Secs. 2576-2578; *Iowa Official Register*, 1887, p. 31; *Biennial Report of the Iowa State Board of Health*, 1899-1901, p. 68.

responsibility for the safety of the miners, and needed the qualifications of an engineer, he was required to make examinations directly affecting the health of the miners. One of the difficult problems confronting the Inspector was the matter of proper ventilation to insure protection of the miners from noxious gases.

The first Mine Inspector began his work on July 27, 1880. The law provided for the inspection of coal mines in which more than fifteen men were employed. The original law made provision for only one Inspector, who was appointed by the Governor for a two-year term with the confirmation of the Senate. The qualifications of the Inspector included the theoretical and practical knowledge of different mine ventilating systems and the properties of noxious gases. His entire time was to be devoted to mine inspection, and he received a salary of \$1500 per year. The law required the Inspector to make a report to the Governor on the first of January each year.

In 1897 three inspectors were provided and the method of selection was changed.²⁵ For administrative purposes, the State was divided into three districts, and an Inspector was assigned to each area. This Inspector was supposed to examine all mines within his district as often as time would permit. Each Inspector was required to investigate alleged cases of violation of the law with respect to the use of illuminating oil in the mines. The State Board of Health was given the responsibility of prescribing an oil to be used in mines. This appears to be the only relation the State Board of Health had to mine inspection.²⁶

The Pharmacy Commission.—The Pharmacy Commission was another auxiliary agency participating in the ad-

²⁵ *Report of the State Mine Inspector*, 1881, p. 1, in the *Iowa Documents*, 1882, Vol. V; *Code of 1897*, Secs. 2478, 2479, 2481, 2483, 2484.

²⁶ *Code of 1897*, Secs. 2482, 2493.

ministration of public health. The Commission was created by a legislative enactment in 1880 and consisted of three members selected for a period of five years by the Governor, with the approval of the Executive Council.

This Commission was to examine candidates to be licensed as pharmacists and keep a record of all registered pharmacists within the State. It was unlawful for other than registered pharmacists to sell or compound drugs. Originally, it was thought that the Commission should make investigations in regard to the illicit sale of certain drugs. Subsequent experience has, however, demonstrated that the Commission should not make investigations, although if information is brought to the Commission, it may prosecute the offender.²⁷

The Commission was required to select a Secretary-Treasurer on the first Monday in May. The Secretary, who was not a member of the Commission, received a salary not to exceed \$1500 per annum, and was required to furnish a bond of \$8000.

Each person was charged five dollars for a certificate granted after taking an examination; two dollars was the fee in those cases in which a certificate could be issued without an examination. One dollar was charged for a renewal. The fee for licensing itinerants was one hundred dollars.²⁸

The Pharmacy Commission was required to turn over to the Treasurer of the State all funds in excess of \$2000. In other words, \$2000 of the funds collected could be used to defray the expenses of the Commission. The only expense that might devolve upon the State was the cost of the necessary blanks and stationery, which were to be furnished

²⁷ *Laws of Iowa*, 1880, Ch. 75; *Biennial Report of the Commissioners of Pharmacy*, 1880-1881, pp. 6-17.

²⁸ *Biennial Report of the Commissioners of Pharmacy*, 1900-1901, p. 25, in *Iowa Documents*, 1902, Vol. V.

by the Secretary of State. It appears that funds were never ample to carry on prosecution or investigations.²⁹

The Commission was empowered to make the needed rules for executing the law, and could revoke certificates of pharmacists for cause.³⁰ The State was divided into three districts, and a member of the Commission was placed in charge of each district. Complaints of violation of the pharmacy law were to be made to the resident Commissioner.

Iowa Board of Dental Examiners.—Another auxiliary health agency, the Iowa Board of Dental Examiners, was provided in 1882. This Board was made up of five practicing dentists, who had actually been engaged in dentistry within the State for five years or more. The members were appointed by the Governor. The law provided, however, that the Governor might request the Iowa State Dental Association to provide him with a list of dentists of recognized ability, from which list the Governor might make his appointments.

According to the terms of the law every practicing dentist within the State had to be registered. For any who had not been registered and wished to practice in Iowa, the Board held examinations covering both theory and practice. A system of reciprocity was arranged, so that dentists in good standing in other States need not take the examination in order to be registered on coming to this State. Each member of the Iowa Board of Dental Examiners received five dollars for each day of actual service, but no part of the salaries or other expenses of the Board was to be paid out of the State Treasury. A fee of two

²⁹ *Biennial Report of the Commissioners of Pharmacy, 1900-1901*, pp. 5-14, in *Iowa Documents, 1902*, Vol. V.

³⁰ *Laws of Iowa, 1880*, Ch. 35, Sec. 13; *Biennial Report of the Commissioners of Pharmacy, 1885-1887*, p. 13.

dollars charged for registration was to constitute the source of revenue and any surplus had to be held by the Secretary of Dental Examiners as a special fund.³¹

In addition to the work of examining and registering dentists, the Board also collected literature on dentistry. Some of the literature appeared in the annual report to the Governor. The Dental Examiners were very closely associated with the Iowa Dental Association.

Iowa Dairy Commission.—The Iowa Dairy Commission was created in 1886. A Commissioner was appointed for a term of two years by the Governor, with the confirmation of the Executive Council. The Commissioner's qualifications prescribed by law included a practical knowledge of dairying and experience in the manufacture of dairy products.³²

The functions of the Dairy Commission were supervisory and educational. The Commissioner was required to examine creameries, cheese factories, and stores in which dairy products were sold, the purpose being to detect the presence of adulterations.

In his report of 1902, the Commissioner mentions a number of prosecutions that resulted from his inspection, including the following convictions: an hotel keeper for selling colored oleomargarine to guests; a milk dealer for selling milk adulterated with water; and a dealer who sold cream that did not contain the required amount of butter fat.³³

Much of the work was done by means of reports. The various creameries and cheese factories were required to report to the Commissioner setting forth the condition of the place where the dairy products were manufactured.

³¹ *Report of the Iowa State Board of Dental Examiners*, 1885, pp. 5, 10-17, in *Iowa Documents*, 1886, Vol. III.

³² *Laws of Iowa*, 1886, Ch. 52.

³³ *Report of the State Dairy Commissioner*, 1901, pp. 7, 8.

On the educational side, the Commissioner collected data pertaining to better methods in the manufacture of cheese and butter, and frequently went directly to creameries to advise the butter makers with respect to ventilating and cooling systems.³⁴ He also attempted to show the character of dairying in Iowa as a commercial enterprise. This he did by tabulating the number of pounds of butter and cheese manufactured in each county. The number of cows of approved dairy strain was also featured to denote the progress of the enterprise commercially.

In 1899 the Commissioner was given the authority to appoint one assistant and one deputy to perform such duties as he might assign.³⁵

The Department of Agriculture.—The Department of Agriculture was created in 1900, and was designed to embrace the local agriculture societies organized to receive aid from the State. The State Weather Service, the Dairy Commissioner, and the State Veterinary Surgeon were included as integral parts of the Department.

The activities of the Department were managed by an ex officio board consisting of the President of the Iowa State College, the State Dairy Commissioner, and the State Veterinary Surgeon. In addition to these, the president, vice president, secretary-treasurer, and a director from each of the local agricultural districts served on the Board of Agriculture.

It will be remembered that the Veterinary Surgeon was formerly a member of the State Board of Health. It will also be recalled that the Dairy Commissioner examined the dairy products, and the places wherein the products were manufactured and sold. Naturally, when the Department

³⁴ *Report of the State Dairy Commissioner, 1901, pp. 8-11.*

³⁵ *Report of the State Dairy Commissioner, 1900, p. 15.*

of Agriculture was established these officers were placed in it. The Dairy Commissioner and the Veterinary Surgeon were required to perform certain functions pertaining to public health, because they had always been performed by those officers. The Veterinary Surgeon continued, however, as a member of the State Board of Health until 1913.³⁶

CENTRALIZATION OF PUBLIC HEALTH ADMINISTRATION
1902-1924

Centralization in health administration in Iowa started in 1902, when authority over local areas was conferred upon the State Board of Health. The law extending this authority provides: "if any local board of health shall refuse or neglect to enforce the rules and regulations of the State Board of Health, the State Board of Health may enforce its rules and regulations within the territorial jurisdiction of such local board, and for that purpose shall have and may exercise all of the powers given by statute to local boards of health; and the peace and police officers of the state, when called upon by the State Board of Health to enforce its rules and regulations, shall execute the orders of such boards." The expense of enforcement in local areas by the State Board was to be paid as though the law had been executed by the officials of the local jurisdiction.³⁷

This law marks the first time the State Board of Health was given real authority over local boards. A number of investigations were made, but the administration of health was not as satisfactory as the Board had hoped, owing to the fact that appropriations and personnel were not increased sufficiently to carry on the additional work.³⁸

The next extension of authority to the Board of Health

³⁶ *Laws of Iowa*, 1900, Ch. 58, 1913, Ch. 207; *Biennial Report of the State Board of Health*, 1912-1914, p. 7.

³⁷ *Laws of Iowa*, 1902, Ch. 107.

³⁸ *Report of the Iowa State Board of Health*, 1903-1906, p. 20.

was in the field of vital statistics. Until 1904 the law concerning vital statistics had been so poorly administered that the statistics collected were of little value. In an attempt to improve this situation, the General Assembly in 1904 passed a law modifying the administrative machinery previously designed to collect vital statistics. The Board was given authority to make such rules and regulations as were necessary to carry out the act. Local health officers of cities and clerks of townships became local registrars. Each local registrar was supposed to appoint a deputy who must be approved by the State Board of Health. This deputy was to act during the illness of the regular officer. The State Board of Health was permitted to appoint as sub-registrars the clerks of all "incorporated villages" and not more than three persons from each township. These sub-registrars were required to issue birth certificates and burial permits and transmit them to the township registrar. Sub-registrars were required to file with the township registrar a monthly report of births and deaths. The township registrar was expected to report to the State Board of Health on a specified date.

The Secretary of State was to distribute the blanks to the registrars and sub-registrars and give the instruction for the execution of the law. He also made an annual report to the county boards of supervisors, indicating the number of certificates of births and deaths received from each local registrar. For every certificate properly filed each local registrar received a fee, which was paid from county funds.³⁹

This law proved to be little better than previous laws pertaining to vital statistics. The line of authority between the State Board of Health and the Secretary of

³⁹ *Laws of Iowa*, 1904, Ch. 100; *Report of the Iowa State Board of Health*, 1903-1906, pp. 24-27.

State was not clearly defined. Furthermore, there was some difficulty in reporting deaths, some physicians leaving it to the undertakers and *vice versa*. As a result, the law was a failure so far as securing accurate data was concerned.⁴⁰

The years following were replete with changes in the methods of collecting vital statistics, a satisfactory method not being secured until 1921.

For a number of years the report of the State Board of Health contained articles setting forth the value that would accrue from a laboratory under the direction of the Board. Laboratory work had been done, as the occasion arose, by faculty members in Iowa colleges. In 1904, the legislature remedied this situation by making definite provision for a laboratory under the direction of the State Board of Health.

The Bacteriological Laboratory of the Medical Department of the State University was designated as the agency to make investigations upon the request of the State Board of Health and the Professor of Bacteriology of the Medical Department of the State University became the Director of the Laboratory. The legislature also appropriated \$1000 for additional necessary apparatus, and \$5000 for such assistants as might be necessary to carry on the work the State Board of Health might require.⁴¹

Shortly after the approval of this law the State Board of Health established culture stations in cities and towns throughout Iowa, where typhoid, diphtheria, and tuberculosis outfits for taking cultures and mailing them to the Laboratory were available to every physician, who complied with the rules of the State Board. No investigations

⁴⁰ *Report of the Iowa State Board of Health, 1903-1906*, pp. 26, 27.

⁴¹ *Laws of Iowa, 1906*, Ch. 101; *Report of the Iowa State Board of Health, 1903-1906*, pp. 129, 130.

were made by the Laboratory unless the physicians used the special sterilized containers furnished for sending the samples.⁴²

The Laboratory was in a position to analyze reputed polluted water and milk as well as to make other hygienic investigations. Every report of the Director of the Bacteriological Laboratory is full of records of bacteriological investigations made from cultures sent to the Laboratory by physicians in the State. Many cases of rabies also have been investigated in the Laboratory.

In 1915 the General Assembly made provision for the care and treatment of indigent children. The law provided that upon a court order children whose parents were unable to provide the proper medical or surgical treatment could, in remediable cases, be sent to the State Hospital at Iowa City, and there at State expense receive such treatment as was deemed necessary to effect a cure.⁴³ This policy seems to have evoked popular approval, for in 1924 the law was extended to adults and all persons who were unable to provide the necessary medical or surgical attention could, upon court order, be sent to the State Hospital in Iowa City. After the necessary examinations were made, if the case was found to be one that could be remedied, the necessary treatment was to be furnished. This law augmented the health functions to be performed under the general control of the State Board of Education.⁴⁴

The activity of the State Board of Health was extended in 1919 to include venereal disease control. The establishment of a venereal control unit as part of the Board of Health was largely the result of the war time activity of the Federal government under the Chamberlain-Kahn Act.

⁴² *Report of the Iowa State Board of Health, 1903-1906*, pp. 133-155.

⁴³ *Laws of Iowa, 1915*, Ch. 24.

⁴⁴ *Code of 1924*, Secs. 4005-4030.

At the conclusion of hostilities, the Venereal Control Service was continued as a peace time measure. In 1919, the Iowa General Assembly enacted the law making venereal control a service of the State Board of Health, and appropriated \$15,000 to carry on the service. An equal amount was provided for the State during the next year by the Federal government.⁴⁵

The staff of workers in charge of venereal control was selected by the State Board of Health with the approval of the Executive Council. The bureau staff included a director, a lecturer for women and girls, and a secretary and record clerk. In addition to this work of general administration, a laboratory was maintained at Iowa City. The laboratory staff included a serologist, an assistant serologist, a stenographer, and a technician.⁴⁶

Furthermore, clinics were provided in the principal cities of the State where there was a demand for treatment of venereals. These venereal clinics were sponsored by the local communities, but the State Board of Health provided certain medicinal materials for treatment. A venereal laboratory, as an adjunct to the Bacteriological Laboratory at Iowa City, coöperated with physicians of the State in determining the existence of venereals. In like manner, the laboratory was used to prove a cure had been effected. In addition, the University Hospital treated cases that were presented.⁴⁷

After the termination of the war the assistance from the Federal government for venereal disease control was lessened. As a result, some of the activities of the State Board of Health had to be curtailed, but medicines to treat the

⁴⁵ *Laws of Iowa*, 1919, Ch. 299; *Biennial Report of the Iowa State Board of Health*, 1918-1920, p. 31.

⁴⁶ *Biennial Report of the Iowa State Board of Health*, 1918-1920, p. 31.

⁴⁷ *Biennial Report of the Iowa State Board of Health*, 1918-1920, pp. 32, 33.

more serious cases were furnished to clinics and physicians. The Venereal Control Service was deemed so important by the Board that the major activities were continued even though the State had to rely upon its own resources for the funds.⁴⁸

The collecting of vital statistics was made definite and reliable by an act passed by the General Assembly in 1921. This law makes provision for local registration districts. In each local district a local registrar is appointed by the county board of supervisors with the approval of the Secretary of the State Board of Health, who is the State Registrar. Local registrars originally reported births and deaths to the clerk of the district court; the latter reported this data to the Secretary of the Board of Health. With the establishment of the Department of Health in 1924, the local registrars were required to report directly to the Commissioner, who is the State Registrar. Marriages and divorces have been reported to the State Board of Health by the clerk of the court since 1886.⁴⁹

In 1924 the General Assembly extended the health functions under the general control of the State Board of Education by accepting the provisions of the Sheppard-Towner Act, adopted by Congress to promote "the welfare and hygiene of maternity and infancy". Grants-in-aid were available to States matching the amount furnished by Congress for the purpose specified. In accepting Federal aid, the Iowa legislature charged the State Board of Education with the duty and responsibility of coöperating with the Children's Bureau of the United States Department of Labor in the administration of the act, and it was given all power necessary to such coöperation. The Extension Divi-

⁴⁸ *Biennial Report of the Iowa State Board of Health, 1922-1924*, p. 7, 1924-1926, p. 9.

⁴⁹ *Laws of Iowa, 1921*, Ch. 222; *Code of 1924*, Secs. 2393, 2394; *Report of the Iowa State Board of Health, 1903-1906*, p. 23.

sion of the University of Iowa was selected by the Board of Education to carry out the provisions of the act. Congress discontinued the appropriation for this service in 1929.⁵⁰

INTEGRATION OF PUBLIC HEALTH AGENCIES

While centralization of health administration started in 1902, little attempt was made at that time to group the various administrative bodies according to service rendered. Integration started in 1909 and has been in progress since, although Iowa is far from having an integrated system for the administration of public health. Integration is usually introduced to provide a division of labor and supervision of services; but at the same time, it should prevent dissimilar services from being administered by a given administrative body.

Prior to 1898 educational and charitable institutions of Iowa were managed separately by boards of regents. As early as 1891 the Secretary of the State Board of Health recommended that a member of the State Board of Health be given a place on the Board of Regents of the respective institutions to insure that healthful conditions would be maintained,⁵¹ but the legislature did not follow the recommendations in toto. In 1898 a State Board of Control was created. This Board was the supervisory agency for the penal and charitable institutions within the State.

The Board of Control was to consist of three persons selected by the Governor with the approval of the Senate. Each member was originally given a salary of \$3000 a year, and was required to devote his entire time to the execution of the functions that devolved upon his office. Provision was also made for a secretary.

⁵⁰ *Code of 1924*, Sec. 4001; *Iowa Public Health Bulletin*, 1928, Vol. XLII, No. 1, p. 6; MacDonald's *Federal Aid*, p. 226.

⁵¹ *Biennial Report of the Iowa State Board of Health*, 1889-1891, pp. 2, 3.

The act required the Board of Control, in addition to its purely administrative functions, to collect information in regard to the best methods of treating defectives and delinquents. This information was to be published in bulletin form. The Board of Control was also required to make periodic visits to the hospitals for the insane. Contracts for proposed improvements at State institutions subject to its management were to be examined by the Board before being awarded.⁵²

The organization of the State Board of Health remained the same until 1913, although the method of appointment was slightly changed in 1900, when the State was divided into eight districts. As the term of each physician on the Board expired, a representative for a district was to be appointed until seven had been named. Subsequent appointments to the Board were made by selecting a physician from the district not represented the preceding year. This system was designed to keep all sections of the State in touch with the work of the State Board of Health.⁵³

Because of the greater degree of authority given the Board in 1913, a change was also made in the membership and in the method of selecting the Board members. The appointed members of the State Board of Health were thereafter to be selected by a special board of appointments, consisting of the Governor, the Secretary of State, and the Auditor of State. This change was intended to eliminate partisan influence in the appointment. Definite qualifications were also provided for the Secretary, who had to be a legally qualified physician with ten years medical experience.

The members of the Executive Council became *ex officio* members of the Board of Health. The five appointive mem-

⁵² *Laws of Iowa*, 1898, Ch. 118; *Iowa Official Register*, 1929-1930, p. 169.

⁵³ *Laws of Iowa*, 1900, Ch. 88.

bers were to include a civil and sanitary engineer and four reputable physicians. The salary of the sanitary engineer was to be fixed by the board of appointments but was not to exceed \$2500. The term of all the members, including the Secretary, was five years.⁵⁴

In 1913, too, a unique change was effected in the organization. The Secretary was made the executive officer of the State Board of Health and of the associated agencies over which the State Board had control. When the Board was not in session, the Secretary became the Commissioner of Public Health. As a result of the integrating legislation passed in 1913, the State Board of Health was organized to include nine divisions: sanitary engineering; hotel inspection; embalmers; nurses; anti-toxin; bacteriological laboratory; medical examiners; vital statistics; and optometry examiners.⁵⁵

The jurisdiction of the State Board of Health was extended over the nine activities. In some cases, control was secured by placing members of the State Board of Health on the staff of the respective divisions. This was done in case of the medical examiners, embalming examiners, nurse examiners, and optometry examiners, and the membership of the State Board of Health was represented in each of these agencies. Hotel inspection and sanitation was supervised by the engineer member of the Board. The second form of control was secured through a law requiring certification to practice the professions affecting public health, the certificates to be issued by the State Board of Health upon recommendation of the proper examining body.⁵⁶

Each examining board charged a fee for examination and

⁵⁴ *Laws of Iowa*, 1913, Ch. 207; *Biennial Report of the Iowa State Board of Health*, 1914-1916, p. 5.

⁵⁵ *Biennial Report of the Iowa State Board of Health*, 1914-1916, p. 5.

⁵⁶ *Supplement to the Code of 1913*, Sec. 2576.

a lesser fee for the annual registration of persons who were certified to practice professions affecting public health. The examining boards were to depend financially on the fees collected and were not to be a drain on the State Treasury.⁵⁷

The Hotel Inspector was permitted to charge a fee for each hotel inspected and certified. For his services as Hotel Inspector, he was allowed \$1500 annually from the funds secured through inspection fees.⁵⁸

The Hotel Inspector was given the privilege, with the concurrence of a majority of the State Board of Health, to appoint and remove one or more deputies. The Inspector was authorized to determine the compensation of the deputies, which was not to exceed five dollars per day.⁵⁹

It will be observed that in 1913 the Secretary of the State Board of Health became the integrating factor in administering those functions that were entrusted to the State Board of Health. His office tended to be a clearing house for the agencies administering public health in Iowa. Because of the greater responsibility his salary was increased by law to \$3000.⁶⁰

THE PRESENT STATUS OF STATE ADMINISTRATION OF PUBLIC HEALTH IN IOWA

The greatest degree of integration of public health agencies came to pass in 1924, when the present Department of Health was created. This enactment made possible the reorganization of those agencies carrying on health administration, giving the Department more authority.⁶¹

⁵⁷ *Supplement to the Code of 1913*, Sec. 2582.

⁵⁸ *Supplement to the Code of 1913*, Secs. 2514-h-2514-t.

⁵⁹ *Supplement to the Code of 1913*, Secs. 2514-p, 2514-t.

⁶⁰ *Supplement to the Code of 1913*, Sec. 2574.

⁶¹ *Code of 1924*, Secs. 2181-2217.

The legislation creating the Department of Health provided that the Department be divided into at least six units — vital statistics; a division of contagious and infectious diseases; a division of venereal disease control; a division of housing; a division of sanitary engineering; and a division of examinations and licensures.⁶²

The divisions within the Department have been changed since 1924, and at the present time (1933) there are five bureaus and seven divisions, each in charge of a specified service.

There does not appear to be any organic difference between bureaus and divisions. The term bureau, however, is attached to those units which the Commissioner thinks are more significant and have greater possibilities of expansion. The names of the respective units suggest the activities of the Department rather than a hegemony of subordinate parts. The Department enforces legislation pertaining to public health, such as regulations with reference to the control of contagious diseases, the shipment of dead bodies, the collection of vital statistics, and the investigation of stream pollution. Furthermore, the State Department of Health is permitted to make detailed regulations concerning some phases of health administration that can not be well controlled by means of legislation. This is the authority that permits the Department to prescribe the methods of fumigation of houses after a contagious disease and the methods of preparing dead human bodies for transportation. Regulations made by the Department are enforceable as though they were statutes, and in case local officials refuse or neglect to enforce these rules or legislation the Department may enforce them in lieu of the local health physician.

A State Board of Health, consisting of the members of

⁶² *Code of 1924*, Sec. 2191 (16).

the Executive Council, the Commissioner, ex officio, and five physicians appointed by the Governor, serves in an advisory capacity to the Department on matters of administrative policy.⁶³

The services rendered by the Department of Health may be divided into five categories: educational, judicial, licensure, collection of data, and the distribution of supplies.

Educational Service of the Department of Health.— All units within the Department of Health carry on some educational activity. A significant phase of educational service is observed in the control of communicable diseases. Two sets of bulletins — the *Iowa Public Health Bulletin* and the *Weekly Health Message* — prepared and disseminated by the Department bring to the public information concerning the prevalence of diseases and methods for their control. Articles appearing in these bulletins are frequently reproduced in the newspapers of the State, as well as in some professional magazines. Occasionally, the bulletins contain articles on hygiene and sanitation, discourses on sewage disposal, expositions on water supplies, or similar subjects.⁶⁴

The program of education is also carried on by means of conferences, lectures, and demonstrations. Local health officers, organizations having an interest in public health, and social workers are frequently provided with conferences. The maternity and child hygiene service is almost exclusively an educational process. Conferences and demonstrations are arranged with parent-teacher associations, mothers' clubs, and similar organizations where instruction is given along the many lines of child care. In like man-

⁶³ *Code of 1931*, Secs. 2191, 2212, 2218, 2220.

⁶⁴ *Code of 1927*, Sec. 2191 (16); *Biennial Report of the Iowa State Department of Health*, 1928-1930, pp. 20, 21; *Iowa Public Health Bulletin*, Vol. XLII, No. 3.

ner, instruction is sometimes given to public health nurses in the State. Occasionally, demonstrations are provided in this field. Furthermore, the division of nursing education has for its purpose the improvement of equipment and instruction in hospitals that have training departments. The object is to secure higher standards and better trained nurses.⁶⁵

Judicial Service of the Department of Health.—The State Department of Health has quasi-judicial functions in connection with the housing law and the law relative to the pollution of streams.⁶⁶ Appeals from the orders of local boards in regard to controversies involving the housing law may be made to the Department which is given authority to enforce its own decision in the local area. It appears, however, that this judicial service has been of little consequence since the housing law applies only to the first class cities, of which there are but sixteen in the State. Moreover, the housing law is administered locally in the first class cities. Provision is made for appeal but such appeals are rarely taken.

Occasionally, the Department renders a quasi-judicial service in connection with stream pollution. After a chemical and bacteriological examination the Department may order a hearing to determine whether or not the alleged offender is guilty. During the trial, the procedure is similar to that of a court; witnesses may be summoned and testimony given. If the hearing discloses the guilt of the alleged offender, the Department may enter an order requiring the guilty party to desist from emptying waste

⁶⁵ *Biennial Report of the Iowa State Department of Health, 1928-1930*, pp. 66-69, 71-73; *Iowa Public Health Bulletin; Public Health Nursing*.

⁶⁶ *Code of 1931*, Secs. 2191, 2196.

materials into the stream or to treat the materials in such a way as to render them innocuous.⁶⁷

The Department can not, however, enforce an expenditure in excess of five thousand dollars without the concurrence of the Executive Council.⁶⁸ It is generally understood that the Department of Health is without quasi-judicial power and the reports of the United States Public Health Service and of the White House Conference suggest that interpretation, but, in reality, such powers do exist.⁶⁹

Licensures.—A license is required in Iowa to practice medicine, dentistry, osteopathy, chiropractic, nursing, embalming, cosmetology, barbering, pharmacy, and podiatry. With certain exceptions, an examination must be satisfactorily passed before a license is issued. Iowa has a policy of reciprocity with a number of States so that in certain professions a license to practice in these States will be satisfactory basis for the issuing of a license without an examination. Furthermore, Iowa accepts for certain professions, a certificate of proficiency issued by the National Board of the profession concerned. The bulk of new licenses issued in Iowa are based on examinations.⁷⁰

These examinations are prepared and supervised by an examining board for each profession. Each examining board is composed of three members, except the Board of Dental Examiners which has five. All members of examining boards are appointed by the Governor. The respective professions affecting public health may provide the Governor with a list of nominations. The Governor may, if he

⁶⁷ *Code of 1931* Secs. 2199–2201.

⁶⁸ *Code of 1931*, Secs. 2201, 2201-a1.

⁶⁹ *Public Health Organization* (Report of the Committee on Public Health Organization, White House Conference, 1932), p. 153.

⁷⁰ *Code of 1931*, Secs. 2439, 2442, 2481; *Biennial Report of the Iowa State Department of Health*, 1926–1928, p. 113.

chooses to do so, select the members of the examining boards from those nominated.⁷¹

Application for examination is made to the Division of Examination and Licensures of the Department of Health, except for prospective pharmacists, osteopaths, and chiropractors, who make application directly to the secretary of the respective examining board. The names of applicants together with other credentials are transmitted, through the Commissioner to the proper examining board. After the examination, each examining board certifies to the Commissioner the names of those who have satisfactorily passed the examination, and the Commissioner issues the license. A renewal of each license is required annually, with the payment of the renewal fee.⁷²

License fees are collected by the Division of Examinations and Licensures and deposited by the Commissioner in the State Treasury. Three professions are exceptions to this procedure — osteopathy, chiropractic, and pharmacy. In the case of the chiropractors and osteopaths, the fees are collected by the Secretary of each Examining Board and are then deposited with the Commissioner of Health, who transmits them to the State Treasury. The Secretary of the Pharmacy Board collects the pharmacy fees and deposits them in the State Treasury without their going through the Commissioner's hands.⁷³

Plumbers are licensed by the city councils, although some persons believe this is a proper activity to be performed by the Department of Health, permitting the funds received from plumbing licensure to be used in administering the State Housing Law.⁷⁴

⁷¹ *Code of 1931*, Secs. 2449-2461.

⁷² *Code of 1931*, Secs. 2466, 2529, 2534.

⁷³ *Code of 1931*, Secs. 2516, 2518, 2529, 2534, 2535.

⁷⁴ *Code of 1931*, Sec. 2195.

Public health authorities are wont to point out that health service would be more efficient if the professions affecting public health were required to take a periodic examination. At the present time one examination suffices for a lifetime. The license is supposed to be presumptive evidence that the licensee is proficient in all phases of his profession. A periodic examination, possibly similar to that required of the professional employees in the United States Public Health Service, would improve the professional service and would instill a greater public confidence in these professions.

Investigation and Inspection by the Department of Health.—The Department of Health may make investigations of polluted waters and other alleged sources of disease. Such investigations must be made by the Department upon the request of a local board of health or by twenty-five petitioners.⁷⁵

A comprehensive survey has been undertaken of the principal streams in Iowa, which includes thus far, the Des Moines, Cedar, Iowa, and Shell Rock rivers, and Lime Creek. As a result of these surveys a few plants discharging industrial wastes into the rivers have installed waste-converting plants. A quantity of untreated wastes, however, are still discharged into the streams. Furthermore, constant vigilance over waste-converting plants is necessary to be sure that the system used by each plant is operating satisfactorily.⁷⁶

The Department also makes surveys of public water supplies, sewage disposal systems, resorts, and lakes. No investigations are made of water supplies or sewage systems

⁷⁵ *Code of 1931*, Sec. 2198.

⁷⁶ *Biennial Report of the Iowa State Department of Health*, 1928-1930, p. 81.

other than through the surveys, except upon the appearance of a water-born disease.⁷⁷

The Department of Health has no analytical laboratory of its own. The State Hygienic Laboratories, operated as a part of the Medical College of the State University, are, however, required to make analytical examinations when requested by the Department of Health. This arrangement saves some duplication of equipment and expert services, but makes for a division of responsibility. Samples that the Department desires to have analyzed must be sent to Iowa City. This requires correspondence, transportation of samples, and duplication of clerical service in tabulating the results of laboratory examinations.⁷⁸

The Department of Health has general supervision over the Housing Law, but the enforcement and administration is largely left to local authorities. This law applies only to the first class cities of the State, and fifteen of these sixteen cities have departments for enforcing the State Housing Law. Building plans are submitted to the local department. In case of disagreement over housing plans, the controversy may be submitted to the State Department of Health.⁷⁹

An inspection service of cosmetology establishments and barber shops is provided through the Department of Health. This inspection service is an effort to maintain the standards of sanitation prescribed by the State Department of Health. It is also an endeavor to preclude persons

⁷⁷ *Iowa Public Health Bulletin*, 1928, Vol. XLII, No. 3, p. 4; *Biennial Report of the Iowa State Department of Health*, 1928-1930, pp. 77-83.

⁷⁸ *Biennial Report of the Iowa State Department of Health*, 1928-1930, p. 86; *Code of 1931*, Secs. 3952, 3953; letter to the author from Dr. E. R. Coffey, of the United States Public Health Service attached to the Iowa Department of Health, dated April 4, 1924.

⁷⁹ *Code of 1931*, Secs. 2191, 6327, 6328; *Iowa Public Health Bulletin*, 1928, Vol. XLII, No. 3, p. 11.

from practicing barbering or cosmetology without a license.⁸⁰

Until 1929 such inspection service was confined to the two named professions. In that year the legislature provided for a legal investigator to operate through the Department of Health. The law states that the service shall embrace all professions included in the practice act. The ambiguity of the several laws raises a question as to the extent of this service. The laws pertaining to pharmacy especially raise the question as to the legal investigative service being coterminus with the practice act. It would appear that investigations pertaining to pharmacy are to be made by the Secretary of the Pharmacy Examining Board. A case was not discovered that clearly demonstrated the authority of the Department, through its legal service, to enforce chiropractic and osteopathy regulations, but the ambiguity would seem to be much less with these two professions than it is in the case of the Pharmacy Examining Board.⁸¹

Evidence of violations of the practice act are collected by the legal investigator, and presented to the Commissioner. The Commissioner then notifies the Attorney General of the violations, and provides him with the evidence collected. The Attorney General is to commence action when notified and provided with the supporting evidence. The legal obligations of the investigator have been satisfied when the evidence has been collected and presented to the Commissioner of Health.⁸²

⁸⁰ *Code of 1931*, Secs. 2585-b6, 2585-b18; *Biennial Report of the Iowa State Department of Health*, 1928-1930, pp. 44-47.

⁸¹ *Laws of Iowa*, 1929, Ch. 64; *Biennial Report of the Iowa State Department of Health*, 1928-1930, pp. 17, 18; *Code of 1931*, Secs. 2523-c1, 2530-2533.

⁸² *Biennial Report of the Iowa State Department of Health*, 1928-1930, pp. 74, 75.

Collection of Data by the Department of Health.—Iowa is divided into registration districts for the collection of vital statistics. Each district consists of a city or town or the portion of a township lying outside of a city or town. A local registrar is selected for each district by the county board of supervisors. In cities with a population of over 35,000 the selection of the registrar is made by the local board of health.⁸³

Each local registrar keeps a register of all birth and death certificates issued within the district. Each physician is required to file with the local registrar a certificate of each birth attended in the district. In like manner, undertakers must report monthly all death certificates issued.⁸⁴

On the tenth of each month all local registrars send to the Commissioner of Health, who is the State Registrar, all original certificates registered during the preceding month. If no deaths or births have occurred during the month, that fact is to be reported. Each local registrar receives a twenty-five cent fee for each certificate recorded and sent to the State Registrar. A fee of twenty-five cents is paid the local registrar each month he reports that no deaths or births have occurred during the previous month.⁸⁵

Data pertaining to marriages and divorces is collected by the clerks of the district courts. The clerks keep a record of all marriages and divorces taking place within their respective counties and transmit annually to the State Department of Health the original marriage certificates filed in their offices during the year together with a copy of the record of every divorce granted during the year, and any

⁸³ *Code of 1931*, Secs. 2385, 2389-2391.

⁸⁴ *Code of 1931*, Secs. 2319, 2394 (7), 2399.

⁸⁵ *Code of 1931*, Secs. 2394 (8), 2417, 2420.

other information concerning vital statistics requested by the State Registrar.⁸⁶

Local registrars and clerks of the district courts are subject to State supervision with reference to the registration of vital statistics, and the enforcement of the law pertaining to the disposal of dead bodies.⁸⁷

After the vital statistics are received by the Department of Health, they are classified according to the political divisions of the State to show information in regard to the population of Iowa. This material is bound and filed in the Historical, Memorial and Art Department of Iowa, for future use.⁸⁸

In 1923 Iowa was admitted to the United States Registration Area for deaths and in 1924 for births. This means, according to the reports of the Bureau of the Census of the Department of Commerce, that more than ninety per cent of the births and deaths in Iowa are reported.⁸⁹

Information concerning contagious and infectious diseases is collected by the local health officers. Each physician attending persons with a quarantinable disease must report the case immediately to the local health officer; the latter is required to report the disease to the State Department of Health. Venereal diseases, however, are reported by the examining physician directly to the State Department of Health, except where the city or town maintains a full-time health physician, in which case the report is made to the local health officer, who reports to the State Department of Health. From the reports made by the local officers the Bureau for the Control of Preventable Diseases

⁸⁶ *Code of 1931*, Secs. 2421-2425.

⁸⁷ *Code of 1931*, Secs. 2393-2420.

⁸⁸ *Iowa Public Health Bulletin*, 1928, Vol. XLII, No. 2, pp. 1-16; *Code of 1931*, Sec. 2393.

⁸⁹ *Biennial Report of the Iowa State Department of Health*, 1926-1928, p. 43.

analyzes and compiles the data into useable form. The information obtained is disseminated so that it will be available in combating epidemics. The Department may take direct action in certain areas as a result of the information secured from the local health officers.⁹⁰

Distribution of Supplies by the Department of Health.—The State Department of Health furnishes each local registrar of vital statistics with books for registering births and deaths, as well as blank forms for use in reporting to the State Registrar. Similarly, supplies are furnished and registers are prescribed for the clerks of the district court for use in connection with registration of marriages and divorces. Furthermore, forms, instructions, and other materials are furnished to the local health officers.⁹¹

In addition, the Department of Health distributes biological supplies throughout the State. The State Department of Health simply enters into a contract with a manufacturer for a consigned emergency stock of biologicals. The Department serves physicians and druggists from this consigned emergency stock. When biologicals are needed in a given area, the Department sends the necessary materials to a proper person, and at the same time notifies the manufacturer of the shipment; the manufacturer collects the cost of the supplies directly from the dealer or health officer receiving them. Some materials, such as toxin, antitoxin, and neoarsphenamine, are supplied without charge by the Department of Health.⁹²

⁹⁰ *Biennial Report of the Iowa State Department of Health, 1928-1930*, pp. 20, 21; *Code of 1931*, Secs. 2249, 2281.

⁹¹ *Code of 1931*, Secs. 2393, 2394 (7), 2422.

⁹² *Code of 1931*, Sec. 2191 (11); letter to the author from Dr. E. R. Coffey, of the United States Public Health Service attached to the Iowa Department of Health, dated March 24, 1932.

The State Board of Eugenics.— The Forty-third General Assembly, in 1929, created a Board of Eugenics. This Board consists of the Superintendent of the Psychopathic Hospital, the Superintendents of the four hospitals for the insane, the Superintendent of the Institution for Feeble-minded Children, the Superintendent of the Hospital for Epileptics and Feeble-minded, and the Superintendent of the Women's Reformatory.⁹³

Persons in charge of each of the State penal and correctional institutions are supposed to "report to the state board of eugenics the names of all persons, male or female, living in this state, of whom he or she may have knowledge, who are feeble-minded, insane, syphiletic, habitual criminals, moral degenerates, or sexual perverts and who are a menace to society."⁹⁴ These reports are supposed to be made on the first of January, April, July, and October of each year.

The purpose of the law is to furnish the Eugenics Board with information in regard to persons who are a menace to society so that such degenerates may be sterilized, if investigation discloses the mental infirmity to be inherited. However, the Eugenics Law in Iowa is a dead letter. The Board is unwieldy in its composition, and its members are scattered over the State, making meetings difficult. But the most striking defect in the law is its failure to provide for an administrative body. There is no agency designated for the purpose of receiving reports; although reports are supposed to be made to the Eugenics Board, membership of the Board is scattered over the State, and there is no provision for an executive officer. No one is designated to investigate the report of mental degeneration, if such reports are made. The law further states that the Eugenics

⁹³ *Code of 1931*, Sec. 2437-c1.

⁹⁴ *Code of 1931*, Sec. 2437-c2.

Board must notify the person to be sterilized, when such a decision is reached. If the person is not rational, then the next of kin is to be notified of the decision. However, no executive officer is provided and there is no appropriation to carry out the provision if there were executive responsibility. Consequently, the law and the Eugenics Board which it creates are without potency.⁹⁵

Health Work of the Bureau of Labor Statistics.— In addition to collecting labor statistics, the Bureau of Labor Statistics inspects factories to determine the state of sanitation, the condition of lighting, plumbing and heating equipment. The inspection of machinery with a view to determining the safety of employees also comes within the authority of the Labor Bureau. Iowa, however, has no distinct service in industrial hygiene.⁹⁶

Health Work of the Department of Agriculture.— Refinement in administration was going on in the Department of Agriculture as well as in the Department of Health, and in 1923 the inspection of hotels, restaurants, cold storage plants, slaughter houses, and food establishments was placed in the Department of Agriculture.⁹⁷

Food and sanitary inspections are administered in Iowa by the Department of Agriculture, through the Dairy and Food Division. The inspection service is under the general supervision of the Secretary of Agriculture, who is elected by popular vote. Inspectors and other subordinate officers are appointed by the Secretary.⁹⁸

The State is divided into thirty districts with an inspec-

⁹⁵ *Code of 1931*, Secs. 2437-c12—2437-c14.

⁹⁶ *Iowa Official Register*, 1929-1930, p. 156.

⁹⁷ *Laws of Iowa*, 1923, Ch. 46.

⁹⁸ *Code of 1931*, Secs. 2590, 2591.

tor in charge of each district. Each inspector visits dairies, creameries, bakeries, grocery stores, canning factories, butcher shops, restaurants, and hotels to determine the degree of sanitation in each establishment, and to see that each place is properly licensed. This health inspection is, however, incidental to a commercial service that each inspector is required to do. Much of his activity consists of testing gasoline pumps, oil measures, scales, seeds, and commercial feeds.⁹⁹

A laboratory of the Food and Dairy Division is used to determine the adulteration of foods. In addition, this laboratory does the analytical work for the Pharmacy Board, which has charge of the enforcement of the law standardizing the purity of drugs. The Pharmacy Board has no other laboratory.¹⁰⁰

The sanitary and food inspection service in Iowa is frequently criticized because of its inadequacy. Under the present arrangement, the inspection service is little more than a copying of the license number of the place visited, which is tangible evidence that the inspector visited the place of business on the date indicated in his weekly report to the chief of the Food and Dairy Division. Since the inspection service ranges from the examination of milk to the testing of seeds, and from exacting a standard loaf of bread to the determination of the accuracy of oil and gasoline measures, the sanitary inspection at best can be little more than a routine procedure.

Furthermore, the service is inadequate because the sanitary program is divided between the Department of Agriculture and the Department of Health. Persons having tuberculosis, venereal disease, or other infectious diseases

⁹⁹ *Report of the Dairy and Food Division of the Department of Agriculture*, 1927, pp. 41-45.

¹⁰⁰ *Code of 1931*, Sec. 3180; *Iowa Year Book of Agriculture*, 1929, pp. 94-96.

are prohibited by law from handling food offered for sale, or working in close contact with foods, or being engaged in food preparation. Information concerning diseases is collected by and reposes in the Department of Health, but the sanitary law is enforced in the Department of Agriculture, by a personnel not familiar with infectious diseases and without information as to the existing cases reported by the local health officials.

The Division of Animal Industry also does some public health service through its control of animal diseases. According to a State law all dairy and breeding cattle in Iowa are to be given a tuberculin test. Cattle reacting to the test are condemned. Through comity with the United States Department of Agriculture and legislation requiring the counties to levy a tax for the purpose, indemnity is paid the owners of reactors. The indemnity is paid in part by the Federal government, in part from State appropriations, and, in counties in which the State allotment has been exhausted, by the counties from a special tax fund. The program of tuberculin testing has been carried out in over half of the counties, although there has been opposition to the program in certain localities.¹⁰¹

In 1930, a comprehensive investigation of malta fever was made through the combined efforts of the Department of Agriculture, the Department of Health, the Veterinary Department of Iowa State College, the State Hygienic Laboratories, the American Medical Association, the College of Medicine, and the United States Public Health Service. From this study Dr. A. V. Hardy, then Director of the Hygienic Laboratories, concluded that the disease showed a correlation with contact with raw meat. Those in direct contact with raw meats, packing house employees, for ex-

¹⁰¹ *Code of 1931*, Secs. 2665, 2681, 2691, 2703; *Iowa Year Book of Agriculture*, 1929, p. 133.

ample, were more prone to have malta fever, while those isolated from contact with raw meat showed symptoms of the disease less frequently.¹⁰²

Anthrax and rabies have not been general diseases in Iowa. Each year there are a few cases of rabies among animals. These cases are reported to the local board of health which is expected to notify the Division of Animal Industry in the Department of Agriculture and the State Department of Health. Upon receipt of the report, the Department of Agriculture may quarantine the premises where the infected animal was found. In order to insure correct diagnosis of the disease a pathological examination of the infected animal can be secured at the State Hygienic Laboratories or the Veterinary Division at Iowa State College. Anthrax occurred in Harrison County during the summer of 1931. The epidemic was not considered serious and was confined to the county. The control measures were established by the Department of Agriculture.¹⁰³

Responsibility of the State Board of Education for Public Health.—Under the supervision of the State Board of Education several institutions perform significant health service incidental to teaching. Much of this public health service is furnished through the State University although each of the five educational institutions under the control of the State Board of Education offers some health service.

One aspect of public health service is incidental to the teaching of medicine at the State University. The Perkins-Haskell-Klaus Law permits indigent persons suffering from maladies or deformities that can probably be improved through medical or surgical treatment to be sent to the University Hospital for the necessary medical care.

¹⁰² *Iowa Year Book of Agriculture*, 1929, pp. 143, 144.

¹⁰³ *Iowa Year Book of Agriculture*, 1929, pp. 135, 136; *Code of 1931*, Secs. 2191 (4), 2651, 3952, 3953.

This service is secured through a court order. Before issuing an order the Judge is authorized to appoint a physician to make an examination of the person seeking medical care, to determine if the case is one that can be improved through hospitalization, and whether the case will have any clinical value. The county attorney is supposed to determine the degree of indigence of the patient. In practice, much of this work is done through welfare organizations and local medical societies.¹⁰⁴

Because of the limited appropriation for the indigent service the funds are insufficient to operate the hospital to capacity. Consequently, there is a long waiting list of patients for some departments of the hospital. A number of departments, however, have no more material than is needed.¹⁰⁵

The Psychopathic Hospital is designed to care for persons having mental diseases that are remedial. Admission to the hospital may be gained through a court order or by application directly to the Superintendent. The court order is not coercive upon the Hospital, however, because cases that do not lend themselves to the purposes of the hospital are not admitted. Furthermore, if there is insufficient room at the time of commitment, the patient can not be received. The out-patient service is growing rapidly.¹⁰⁶

The College of Dentistry also furnishes some public health service incidental to its teaching program. A dental clinic in the College of Dentistry provides dental service for about 55,000 people annually. Patients pay for the ser-

¹⁰⁴ *Code of 1931*, Secs. 4005, 4006, 4009, 4010, 4012; *Report of the Committee on Medical Education and Hospitals Iowa State Medical Society*, 1930, p. 45.

¹⁰⁵ *Report of the Committee on Medical Education and Hospitals Iowa State Medical Society*, 1930, pp. 30, 45, 46.

¹⁰⁶ *Report of the Committee on Medical Education and Hospitals Iowa State Medical Society*, 1930, pp. 30-32; *Code of 1931*, Secs. 3963-3971; *Bulletin of the State University of Iowa*, New Series, No. 579, pp. 16, 30, 31.

vice received; the College of Dentistry has no indigent patient fund.¹⁰⁷

In addition to the clinic, the Dental College carries on a program of dental education through the public schools of the State. This is a very important educational activity. Students of public administration observe, however, a division of responsibility between the Bureau of Dental Hygiene and the Department of Health in the State's educational health program.¹⁰⁸

The Child Welfare Research Station offers some public health service through its literature on the several aspects of child care. Furthermore, a consultation service is provided on infant feeding. Infants from all sections of the State are brought to the station for observation and advice upon dietary matters. Moreover, the pre-school laboratories guard the health of the children in attendance, and also serve as a research station on matters of diet and kindred subjects.¹⁰⁹ Some duplication of services is observable between the State Department of Health and the Child Welfare Research Station.

The State Board of Control.— Seven hospitals under the management of the State Board of Control provide public health services. In the other eight institutions the public health service is incidental to custodial care. In all of the juvenile homes, however, health service is an important part of the training system.

The hospitals providing a distinct public health service

¹⁰⁷ Information concerning the operation of the Dental Infirmary was secured through interviews with the Dean of the College of Dentistry and the Director of the Dental Infirmary.

¹⁰⁸ *Iowa Dental Bulletin*, 1931, Vol. XVIII, No. 3, pp. 72, 73; *Public Health Organization* (Report of the Committee on Organization, White House Conference, 1932), p. 329.

¹⁰⁹ *Code of 1931*, Sec. 3950; *Bulletin of the State University of Iowa*, New Series, No. 560, pp. 26, 27.

are: the four hospitals for the insane, the two hospitals for feeble-minded and epileptics, and the State Sanatorium for the Treatment of Tuberculosis.

Patients are received at hospitals for the insane only after a commitment through a local commission of insanity which is composed of three persons, who are appointed by a judge of the district court. The commission in each county is composed of the clerk of the district court, who serves as the secretary, a practicing physician, and an active attorney. Provision has been made for treating drug addicts and alcoholics at the insane hospitals in addition to the care of purely mental cases.¹¹⁰

Expense for the care of patients in the four hospitals is charged to the counties from which they are committed unless no legal settlement is indicated in the commitment, in which case the State bears the expense. The cost is determined on the per capita expenditure for support each month, which is the basis for payment in all cases, whether borne by the county or by the State.¹¹¹

The cost of a patient's care is collected through the State Auditor's office. Patients who are financially responsible are supposed to pay for their own care, but each county is responsible for the cost of the care of the patients from its jurisdiction. The sum is paid from county funds and later may be collected by county authorities from the responsible parties.¹¹²

The Hospital for Epileptics at Woodward was originally established to better care for a growing number of epileptics committed to the Institution for the Feeble-minded at Glenwood: one institution was for feeble-minded persons

¹¹⁰ *Code of 1931*, Secs. 3478, 3479, 3534, 3535, 3536, 3544.

¹¹¹ *Code of 1931*, Secs. 3581-3586.

¹¹² *Code of 1931*, Secs. 3600, 3601; *Biennial Report of the Auditor of State*, 1928-1930, pp. 239-242.

and the other for epileptics. The State has now been divided, however, into districts, so that each one of the institutions accommodates a district. As a result, both feeble-minded persons and epileptics are sent to each institution, although feeble-minded cases predominate at Glenwood and epileptics at Woodward.¹¹³

Each county is responsible for the transportation of persons to the hospitals at Glenwood and Woodward as well as for the cost of the clothing of all persons while in the custody of either institution. The State pays the remainder of the support.¹¹⁴

Unlike the four hospitals for the insane, patients can be admitted to these two hospitals privately; that is, without a formal commitment. Private cases, however, must arrange at the time of admission for the payment of the service. Most of the commitments are the result of court order.¹¹⁵

Admission to the State Sanatorium is gained through application directly to the superintendent. The application must be accompanied by a physician's diagnosis. If the information contained in the application and the supporting evidence provided by a physician indicate the probability of tubercular infection the patient is asked to come to the hospital for further examination. If the examination discloses a case of tuberculosis, the patient is given a place on the waiting list and admitted as soon as facilities are available. Indigent patients are given preference in admission to the hospital. Furthermore, patients living in

¹¹³ *Code of 1931*, Sec. 3476; *Biennial Report of the Superintendent of the Iowa Institution for Feeble-minded Children*, 1926-1928, p. 3; *Biennial Report of the Superintendent of the Hospital for Epileptics and School for Feeble-minded*, 1928-1930, p. 23.

¹¹⁴ *Code of 1931*, Secs. 3406, 3474; *Biennial Report of the Auditor of State*, 1928-1930, pp. 239-246.

¹¹⁵ *Code of 1931*, Secs. 3405, 3464, 3469, 3470.

counties not accommodated by a tuberculosis sanatorium are given preference, other factors being equal.¹¹⁶

CONCLUSION

Iowa offers the usual public health services. Health administration in Iowa has expanded tremendously since the establishment of the Board of Health in 1880. The appropriations for the Department have increased from \$5000 per annum to \$95,950;¹¹⁷ and the expansion of services seems to be commensurate with the increase in appropriations. At the same time, with the evolution of our disintegrated system, public health administration in Iowa has been extended to other departments. Consequently, a very significant body of health service is administered through other agencies, and no general unification of the health program of the State has come to pass. The integration that has been effected has been piecemeal in character and without a State wide program. For that reason, each agency has an independent program that may be in competition with others, resulting in duplication of effort and a division of responsibility. Division of responsibility is noted in regard to the program of sanitation which is divided between the Department of Health and the Department of Agriculture, without a clear statement as to the authority of either.

All of the activity pertaining to mental hygiene is carried on either by the hospitals under the management of the State Board of Control or the Psychopathic Hospital at Iowa City. However, the hospitals for the insane and the two institutions for the feeble-minded and epileptics

¹¹⁶ *Code of 1931*, Secs. 3390, 3391, 3392; *Biennial Report of the Superintendent of the State Sanatorium*, 1926-1928, pp. 1, 2; *Biennial Report of the Attorney General*, 1925-1926, p. 256.

¹¹⁷ *Biennial Report of the Iowa State Board of Health*, 1881-1883, p. 319, 1883-1885, p. 425; *Laws of Iowa*, 1931, Ch. 257.

are not exclusively engaged in preventive or remedial work. The service provided at the Psychopathic Hospital is entirely of a remedial or preventive nature.

Except for the indigent patient service at the University Hospital, no cost accounting system has been instituted. For that reason, it is impossible with our present arrangement to secure an accurate statement of the total expenditure for public health administration in Iowa or to secure an accurate comparison of the cost of health services with other States. The health departments in many of the other States are more highly integrated than is the Department of Iowa. Consequently, the expenditures of the health departments are not comparable. Some State Departments of Health have supervision of services that in Iowa are divided between the Department of Health, the Department of Agriculture, and the agencies under the State Board of Control and the State Board of Education. A comparison of expenditures of the respective departments of health is not a satisfactory method, although that was the method used by the investigators for the White House Conference. Since there is no complete cost accounting system in Iowa it is impossible to accurately determine the cost of health services furnished by the State.

There is no merit or personnel system for the administration of public health in Iowa. Legal qualifications are provided for the supervising officers; for other officers no qualifications are imposed. The supervising officer is restricted only by his own discretion in making his selections.

N. W. McGEE