

REPORT OF THE COMMITTEE ON ORGANIZATION AND FUNCTIONS OF MUNICIPAL HEALTH DEPARTMENTS

Read before the American Public Health Association, Havana, Cuba, December, 1911.

To the American Public Health Association:

Your Committee mailed a questionnaire on the Organization and Functions of Municipal Health Departments to the Health Officers of all cities in the United States, Mexico, Canada and Cuba having a population of 25,000 or over, and received replies from eighty-eight cities.

Criticism as to the weakness of system, unsatisfactory conditions of municipal organization and suggestions founded on practical experience, for the improvement of existing evils, are treated in confidence. While general use is made of this information, names of officers and cities are not used in the report.

The population of the various cities ranges from 26,937 (Sague La Grande, Cuba) to 4,776,883 (New York City, N. Y.). Of these, 21 have a population of from 25,000 to 50,000; 25 of from 50,000 to 100,000; 20 of from 100,000 to 250,000; 7 of from 250,000 to 500,000, and 5 over 500,000.

The title of the executive officer of a health department is not of great importance, but in the majority of cities recorded in the questionnaire it is termed "Health Officer" (45) and "Commissioner of Health" (10). His appointment is by the Board of Health in 36 cities; by the Mayor in 10; by the Mayor confirmed by Councils in 8; by Councils in 6, and by the President in 2.

The tenure of office is by pleasure of the appointing power in 15 cities; no definite time in 2; during good behavior and satisfactory service in 4; one year in 10; two years in 16; three years in 5; five years in 3 and permanent in one. The salaries are from nothing to \$10,000 per annum. In 2 cities the emoluments are received from fees; in 1 (Ft. Wayne Ind.) the officer is paid two cents per capita of population. In 36 cities the

¹ The Chairman of your Committee is not absolutely fixed in his own mind that the conclusions reached in this report are sound and, therefore, does not ask the approval of the Association. The report is presented to bring up the entire subject in a tangible manner for discussion and recommitment to a committee for further consideration and report on the technique and methods of operating as well as organization.

² Replies were received from New York City, N. Y., Detroit, Mich., Elizabeth, N. J., and Erie, Pa., after the completion of the compilation on which this report is based. The Bureau of Municipal Research of Philadelphia made a statistical tabulation of all the information received from the cities which answered the questionnaire. The Committee hereby makes due acknowledgement for the efficient aid of the Bureau and regret that the size of this study makes it impossible to print here.

entire time of the occupant is required for the performance of his duties; in 42 only part of the time.

He is directly responsible in 45 cities to the Board of Health; in 9 to the Mayor, and in others to various public officers and legislative bodies.

In the event of the health officer being under control of the Board of Health, he is a member of such Board in 15 cities, in 8 of which he is the executive officer, and in 45 cities he is not a member.

Where he is not a member of the Board of Health, his relation to that Board is of an executive character in 25 cities; of an advisory capacity in 2 cities. In 17 cities there is no Board of Health.

The members of the various Boards of Health number from one to sixty; the latter being in Montgomery, Ala., where the members of the County Medical Society constitute the Board. Five members seems to be the popular number in 27 cities. In 16 cities there are three members and in 7 cities, seven.

The Board of Health is appointed by the Mayor in 26 cities; by the legislative body in 12; by the Mayor confirmed by the legislative bodies in 8, by the Governor in 1, and elected by the people in 1.

The tenure of office of members of the Board is from one to seven years; the majority (36) being from three to five years.

In 42 cities the members serve without compensation and in 15 they are paid in various ways. In a number a fixed figure is paid per meeting, which averages about \$3. Where salaries are paid they run from \$100 to \$500 per annum. In some cities the executive officer only is paid, while in others the lay members receive compensation, but not the physicians.

In 35 cities ordinances provide that the members shall be medical men; in 25 there is no such provision; in 8 at least one member must be a physician; in 7 at least two, and in 5 at least three must be physicians.

In answer to the question: "To what extent is the Board of Health active in executive duties?" there are twenty-four different characters of answers, the majority of which are negative. In a number no general interest is taken; in others their action is chiefly advisory, and what executive work is done as a rule, is performed by other officers who mostly class as "Health Officers" and "Sanitary Commissioners."

In 2 cities the Board meets daily; in 8, weekly; in 14, bi-monthly, and in 26, monthly. In several cities no meetings are held and in others only when called by the proper officers.

The Board is responsible to the Mayor in 14 cities; in 14 to the legislative branch of the government; in 7 they appear to have no responsibility; in 16 are responsible to the State Board, and in other cities the responsibility is divided.

In 39 cities the Board has authority to adopt a sanitary code which

has the force of law; in 21 no such power exists, and in 1 city the power is divided.

In 40 cities Councils or the legislative body, have a Committee on Health, which in most instances is perfunctory; in 34 cities no such committee exists.

In 14 cities this committee has no relationship at all with the Board of Health. In the majority of replies no answer has been made to this question.

Under these circumstances it is not surprising to find that in 32 cities the arrangement, where such committees exist, does not tend to confusion of authority. In 2 cities there is continual strife between the committee and health authorities, causing inefficiency of service.

In connection with the scope and limitation of the Health Department in most cities the registration of births, deaths and contagious diseases are entirely controlled by the Health Officer; marriages and divorces are included in but few cities; in 2, marriages are recorded, but in the majority of cases this record is kept by the City Clerk, the County Clerk, the Courts, and in 1 city by the Supreme Court. The record of divorces is kept, as a rule, by the City or County clerks, by the Courts and, in one case, by the Supreme Court. In some cities the registration of births comes under the State authorities: the State Board of Health or the State Registrar of Vital Statistics. With but few exceptions, where reports are made to the State Registrar of Vital Statistics or the State Board of Health, the registration of deaths comes directly under the municipal health department.

The control of contagious diseases comes under the municipal health department in 72 cities, and the abatement of nuisances in 77 cities. In the other cities the Board of Public Works, Sanitary Officer or Police control abatement of nuisances.

Street cleaning is under the municipal health department in but one city (Louisville, Ky.). In many of the cities (23) it comes under the Department of Public Works, while in others it is under the "Director of Service," Engineering Department, Highway Department, Sanitary Department, and various street cleaning departments under different titles. In some few cities there is a special officer with the title of Street Commissioner.

The removal of dead animals is under control of the health authorities in 48 cities; in others this comes under various public officials, Department of Public Works, Street and Highway Department, Dog Catcher, Street Sewer and Drain Department, etc.

Waste collection and disposal is handled by the health authorities in 28 cities and by the Department of Works in 11 cities.

Plumbing inspection is under the health department in 49 cities; there

is no such inspection in 4, and in 10 others this is cared for by building departments under various titles.

A bacteriological laboratory for diagnosis, research work, manufacture of antitoxins and vaccines, and milk examinations is cared for by the health department in 25 cities; in many others there is no such laboratory, and in a number part of the work only is done.

In 70 cities provision is made for milk inspection.

Inspection of food supplies is covered in 67 cities by the municipal health department, and in 5 by the State.

Inspection of dairy farms is made by the municipal health authorities in 74 cities.

A chemical laboratory for analysis of milk, food supplies and drugs is provided for in 45 cities by the health department, while in 3 this comes under the State.

Medical inspection of schools and school children is covered by the health department in 40 cities and by the Board of Education or School Board in 27 cities.

Public vaccinations come under the Board of Education in 3 cities; charity department in 3; health department in 65 and none are required in 6.

Tuberculosis: — registration, sputum examinations and fumigation — is cared for in 59 cities by the municipal health department and in 3 by the State department. Three cities cover registration and fumigation and not sputum examinations; 1 covers fumigation but not registration and sputum examinations, and 3 cover registration and fumigation, but not sputum examinations.

There are very few cities having the same rules in connection with this subject. In many replies the question is not answered as to whether the following tuberculosis institutions are under the health department:

- a. dispensaries.
 - b. day or night camps.
 - c. sanatoria for incipient cases.
 - d. hospitals for advanced cases.
- 6 cities reply in the negative to all.
 4 “ “ “yes” to a, c and d.
 3 “ “ “ “ a and b.
 2 “ “ “ “ d.

Families of the tuberculous are given assistance in 17 cities by the Department of Charities, and in other cities through private agencies under various titles.

General fumigation for contagious diseases is conducted by the health department in 78 cities; in 1 soap and water cleansing is used; in another fumigation is not required, and the question is not answered by the other cities.

Free medical attendance on the indigent sick is provided in 77 cities, in 22 of which it is under control of the health department. In 2 cities assistance is rendered by the health department in cases of contagious diseases only; and in the balance of cities this activity is under control of various departments, viz.: the Department of Charities under various titles in 13 cities, City Councils, County Boards, County Directors, Physicians and State Boards.

District nurses are employed by the health department in 18 cities; in 7 they are under municipal charity boards; in 22 under various private and organized charities, and in 3 under State control.

Public education in hygiene, and sanitation, is under the health department in 10 cities, and under various other activities in a number of cities. A great variety of means are employed, the most common of which are lectures, leaflets, bulletins, newspaper publicity, moving pictures (in 3 cities), and public schools (in 5 cities).

Tenement house inspection is conducted under the health authorities in 58 cities; by building inspectors in 2, and by State authorities in 2.

Inspection of lodging houses is conducted by the health department in 15 cities (only 5 of which are in the United States); by the health department in conjunction with the police department in 2, and in 12 by other departments, such as Councils, State Tenement House Commission, etc.

Inspection of general housing conditions is conducted by the health department in 59 cities, and in 13 cities comes under building inspectors and private agencies.

Child Hygiene is under the control of the department of health in 26 cities; under the Board of Education in 4 cities, and under private organizations in 7 cities.

The work of the health department is done under city ordinances, sanitary code enacted by the Board of Health and State laws; under a combination of these in 49 cities; under city ordinances and State laws in 20 cities; and under sanitary code and State laws in 5 cities.

All practicing physicians are required to register with the Board of Health in 35 cities and in 40 no such registration is required.

Requirements for registration vary materially: 2 cities require filing of diploma with the Court or License Clerk; 5, the filing of diploma with the health authorities; 2, registration at county seat; 2, merely filing name and address; 8, filing of State license, and 9, certificate from State Board of Medical Examiners. Where physicians are not required to register with the health authorities they register with the State Board in 5 cities, and in 9 with various county officers.

Physicians are required to report all births to the health authorities in 59 cities; in 20 to city or county clerks, and in 10 no report is required. The time limit allowed for report is, as follows:

In 4 cities within 24 hours.

2	"	"	36	"
3	"	"	3 days.	
9	"	"	5	"
21	"	"	10	"
1	"	"	15	"
2	"	"	30	"
1	"	"	the calendar month.	
1	"	"	2 months.	
2	"	"	before the first day of the succeeding month.	
4	"	"	within the fifth day of the following month.	
1	"	"	"	"
6	"	"	there is no time limit.	

Physicians are required to report all deaths to the health authorities in 55 cities; in 1, only deaths from contagious diseases; in 2, report must be made to the city clerk, and in 13 there are no requirements. In 35 cities there is a time limit for reporting, as follows:

In 3 cities at once.

1	"	within	2	hours.
1	"	"	6	"
13	"	"	24	"
2	"	"	36	"
3	"	"	2	days.
1	"	"	3	days.
1	"	"	5	"
2	"	"	10	"
1	"	"	30	"
6	"	"	before burial.	
1	"	"	the seventh of the succeeding month.	

Most cities require reporting of some communicable disease, varying from one (smallpox), in 1 city to thirty-nine. Time allowed for making report is:

In 1 city, as soon as possible.

2 cities at once.				
4	"	within	6	hours.
10	"	"	12	"
24	"	"	13	"
1	"	"	14	"
1	"	"	36	"
2	"	"	1 week.	

Forty-three cities require physicians to report recovery from reportable diseases; 1 city requires report in diphtheria and scarlet fever only, although all communicable diseases are reportable, and 1 city makes requirement in diphtheria only, although there are eight diseases specified as reportable.

There are a variety of measures employed for detecting unreported

births, deaths, contagious diseases and recoveries from contagious diseases. In 26 cities no effort is made to check any of these reports; in 8, upon receipt of death notices, a search of the birth records is made to ascertain if birth has been reported; 2 use the baptismal records in churches; 2 make a house-to-house canvass; 2 employ school nurses and examine church records; 1 has a regular "baby census" taken by the City Clerk, and in 1 monthly visits are paid to the physician. In cities where deaths are reported, 9 have no checks for detection of failure to report; in 15, burials or removals cannot occur without permit from the Board of Health; in 3 the notices in the daily papers are scanned, and in single cities the police, nurses and medical inspectors are variously used. From many cities the replies to the question on this subject are unsatisfactory. To keep check on reports of contagious diseases the school medical inspectors are used in 7 cities; in 8, sanitary medical inspectors; in 11, a careful examination is made of the list of absentees from school; in 2, arrests are made for failure to report; in 3 rumors are investigated; in 1, tab is kept on the sale of antitoxin, and in 1, personal notes in the daily papers are watched. The necessity for using any check in reporting recoveries from contagious diseases is denied in 7 cities; in 5 it is necessary to have recoveries reported before the placard is taken down; in 6, cases of contagious diseases are followed up and checked by medical inspectors; in 2, sanitary inspectors keep a check on this; in 4, the attending physicians' reports are relied upon, and in single cities reports are made by nurses, the school physician, truant school officer and quarantine guard.

All births are reported in 3 cities:

95 per cent.	in 2 cities.
90	" " 7 "
85	" " 1 "
80	" " 4 "
75	" " 1 "
60	" " 1 "
50	" " 1 "
fairly	" 1 "
fully	" 1 "
Indifferently	" 1 "

All deaths are reported in 14 cities.

fully " 7 "

90 per cent. " 1 city.

All contagious diseases are reported in 3 cities.

95 per cent. " 3 "

90 " " 2 "

80 " " 1 city.

75 " " 2 cities.

fairly " 1 city.

fully " 3 cities.

Indifferently " 3 "

Diphtheria, typhoid fever and scarlet fever are well reported and the balance of contagious diseases:

	poorly	" 1 city	
	fully	" 1 "	
80 per cent.		" 2 cities; balance poor.	
95	"	" 1 city; " "	

In 1 city 90 per cent. of tuberculosis is reported; balance of contagious diseases, 70 per cent.

From the meager replies to the question in reference to the co-operation of physicians in reporting recoveries from contagious diseases it is to be judged that but little attention is paid to this important subject. Of the 7 cities replying in full, the answers are from "fair" to 90 per cent. of recoveries reported. The remaining answers to this series of questions cannot be used for statistical purposes, due possibly to the misunderstanding of the question, as the replies for the most part are unintelligible.

The question was asked whether the most efficacious method of securing full reports from physicians was (a) by persuasive measures, including personal appeals in cases of actual delinquents, or (b) universal reporting of delinquents to court and the imposing of a stipulated fine. Fifty-six cities replied in favor of the former; 6 in favor of the latter; 5 believed that the former method should be used, with an occasional prosecution; 5 in the combination of both methods. This question was not answered in a number of cases and in some few the answer was unsatisfactory.

Most cities reported good co-operation of the medical profession with the municipal health department, both in the regular routine backing-up of the department among their patients and in active support under emergency conditions. In replies to this question from 36 cities the following terms are used: "Hearty, full, complete, excellent, very good co-operation of the profession at all times." A few cities report on the percentage of the profession that co-operate. In 1 city there is 95 per cent. in 1, 80 per cent., and in 2, 75 per cent. of the medical profession that co-operate with the health authorities. Six cities use the term "generally" and in a majority of instances, "co-operate." In 1 city there is a fair co-operation at times, but excellent at times of emergency; 3 cities report "fair co-operation"; 1 city, "some interest"; in 1 city the interest is variable; in 4 there is but very little interest taken, and in 2 decided antipathy by the profession to the department.

There are very few health departments that have any systematic means of keeping the physicians actively in touch with the authorities, in acquainting them with general and special health conditions. Ten cities issue bulletins; 2, weekly; 4, monthly, and the balance not stated. Four cities issue special circulars as occasion requires; 5 issue circular letters when anything of importance arises; in 3 cities the medical profession is

kept in touch with the work by personal attendance of the health officer at meetings of the medical societies; in 19 reports of vital statistics are issued at periods, varying from a month to a year; the daily press is used in 5 cities and no means of securing this necessary aid is employed in 11 cities.

The proper organization of a health department depends largely upon the size, location and activities of a city. Modifications must be made in accordance therewith; for example, in residential cities inspections in connection with manufactories would not be needed; in cities where the tenement house problem does not exist, no tenement house inspection would be required; and there are some subjects incorporated herein that many believe should not be chargeable to a health department, such as plumbing inspection and collection of garbage. But in the following organization plan attempt will be made to cover everything, as the elimination of the unnecessary can be made as required. For example: a scheme for a city of 500,000 population is mapped out, allowing roughly a 20 per cent. increase in the number of employees and 10 per cent. increase in salaries for every 100,000 population over 500,000 and up to 1,000,000 (when the limit of increase of most salaries is reached and the ratio of increase of employees diminishes) and, in a similar manner, a 20 per cent. decrease number of employees and 10 per cent. decrease in salaries for every 100,000 population under 500,000.

The Mayor should be *ex-officio* a member of the Board of Health.

The Board of Health should consist of the health commissioner, head of the department of public safety, head of the department of public works, and two others to be appointed by the Mayor with or without the endorsement of the legislative body of the city government, one of whom should be a sanitary engineer and one a lawyer. The Board should serve without salary. The functions of the Board should be purely legislative and advisory. It should be clothed with power to enact laws in relation to the public health and declare nuisances prejudicial to the public health. These arbitrary powers are too great to invest in any one man. The Board should also have the appointment of its secretary and of the health commissioner.

The co-operation of the police is necessary for the effective administration of a health department as, without this, quarantine cannot be maintained and laws cannot be enforced. In most American cities the police are organized for repression of violence and protection of life and property. With the head of the department a member of the Board of Health the police can be organized to repress disease and preserve health. They intimately know the highways and byways and could report nuisances of all kind; they could keep track of the ash can, garbage can, waste paper and rubbish — become, in fact, sanitary inspectors without adding much

to their labors and be an important factor in economy of municipal administration.

The head of the Department of Public Works should be a valuable man with his knowledge of sewer construction, sewage disposal, the water problem, opening of streets, the survey of the city in its relation to grades, surface drainage, etc.

These officials, if interested, could throw the influence of their departments in aid of the Health Department and accomplish results not otherwise obtainable.

The Board should have a secretary at a salary of \$1,000 per annum.

The Commissioner of Health should receive a salary of \$5,000 per annum and be under the control of the Board of Health only in so far as pertains to the execution of the laws enacted by them, but he should be under their influence as acting in an advisory capacity. The commissioner should be the supreme executive of the Municipal Department of Health. His appointment should be permanent and influenced by efficiency and not politics. Inefficiency or malfeasance in office should be the only cause for discharge. The power of discharge should lie with the Board subject to an appeal by the Commissioner to a Court of Record, provided such appeal be taken within ten days.

The various bureaus should each have a chief, at an average salary of \$2,000, who should be the executive head of the bureau, reporting only to the health commissioner.

1. BUREAU OF MEDICAL INSPECTION:

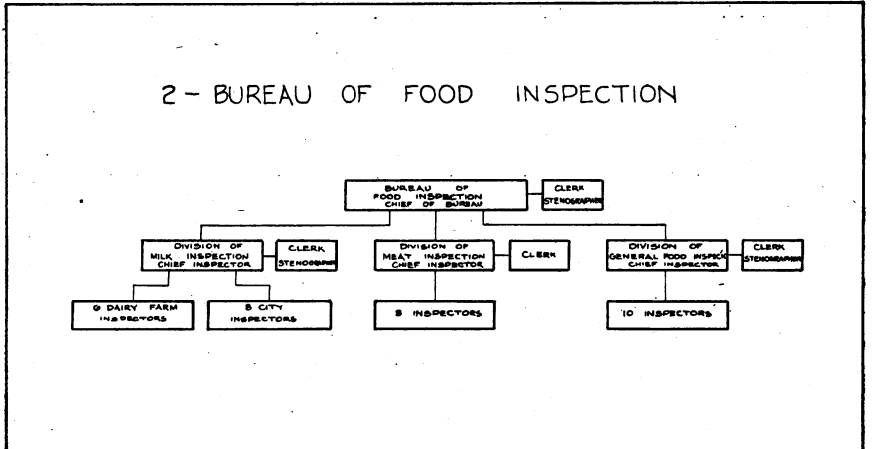
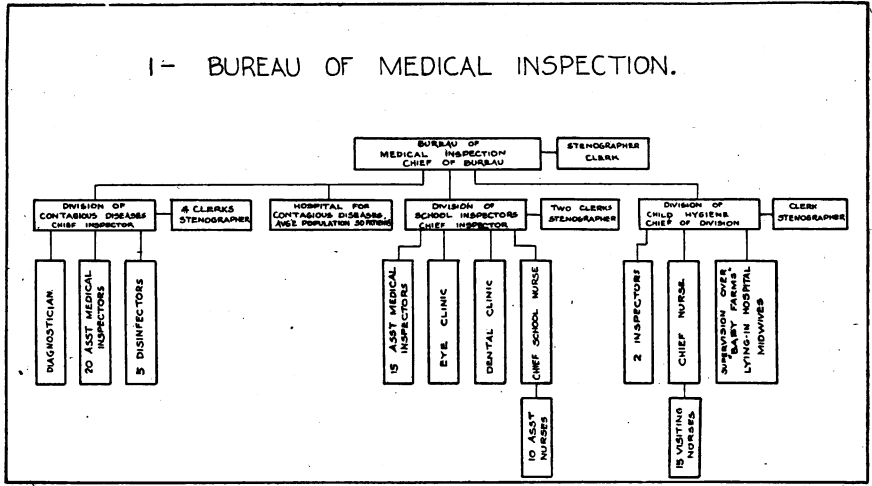
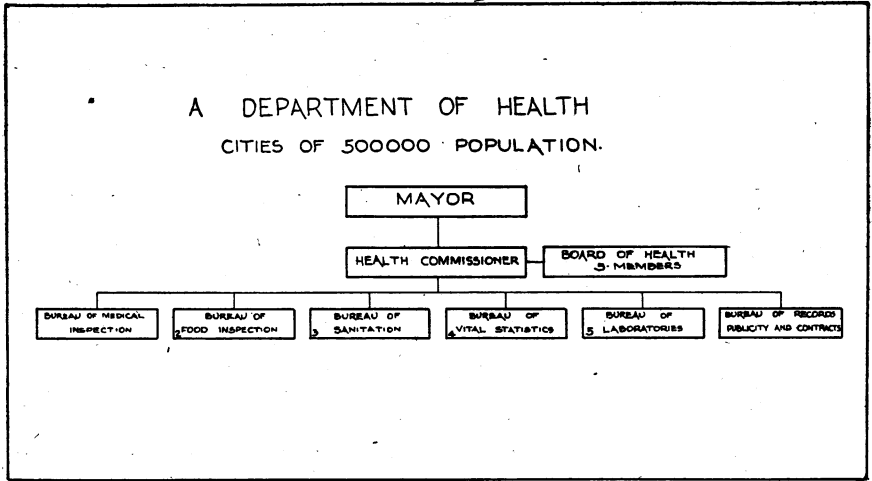
The chief of this bureau should have a clerk at \$800 and a stenographer at \$650. The bureau should control the following divisions:

- a. Inspection of Contagious Diseases.
- b. Hospital for Contagious Diseases.
- c. School Inspection.
- d. Child Hygiene.

(a) Division of Inspection of contagious diseases should have two clerks at \$800 and one stenographer at \$650; a chief inspector at \$1,800; 10 assistant inspectors at \$1,200; 1 expert diagnostician, paid by fees which, for calculation, would amount to \$800 per annum, and 5 disinfectors at \$1,000.

(b) A hospital for contagious diseases (excepting tuberculosis) should be maintained as the best means of preventing the spread of contagion by the prompt removal from the homes in the slum districts of those suffering from contagious diseases. Such an institution, accommodating on an average of 50 patients per day with maintenance of \$1.30 per diem, would cost \$23,725 per annum.

In most cities advanced tuberculosis is cared for in the City Poor Hos-



pital by the Department of Charities, and incipient cases by private charities. In an ideal organization the Health Department should superintend all activities for the study, prevention and treatment of tuberculosis through its division of contagious diseases, day camps, dispensaries, sanatoria and, most important of all, institutions for segregation of advanced cases.

(c) Division of School Inspection should have one chief inspector at \$1,800. He should instruct school teachers in the proper methods of teaching social, sex and personal hygiene, and supervise 15 assistant inspectors at \$900; a dental dispensary, \$2,000; an eye dispensary, \$2,500; chief school nurse, \$1,000; 20 assistant nurses at \$700; 2 clerks at \$800 and 1 stenographer at \$650.

(d) Division of Child Hygiene: Chief of the division, \$1,800; 2 clerks at \$800; 1 stenographer at \$650; 1 inspector at \$1,000; chief municipal nurse at \$1,000; 15 visiting nurses at \$700. This division should provide for examination, licensure and control of midwives, "baby farms" and so-called "lying-in" establishments, as well as for milk stations and all special endeavors for children; and should co-operate with private associations.

2 — BUREAU OF FOOD INSPECTION:

This bureau should have a clerk at \$800, a stenographer at \$650 and the following divisions:

- a. Milk Inspection.
- b. Meat (Fish and Fowl) Inspection.
- c. General Food Inspection.

(a) Division of milk inspection: This division should have a chief at a salary of \$1,800; 6 dairy farm inspectors at \$1,000; 8 city inspectors at \$900, for examination of pasteurizing plants and of milk on the platform, in the wagons and in the stores; and 1 clerk at \$800.

(b) Division of Meat Inspection should have a chief — preferably a veterinary physician — at \$1,800; 4 inspectors (veterinarians) at \$1,400; 4 inspectors (lay) at \$1,000, and 1 clerk at \$800.

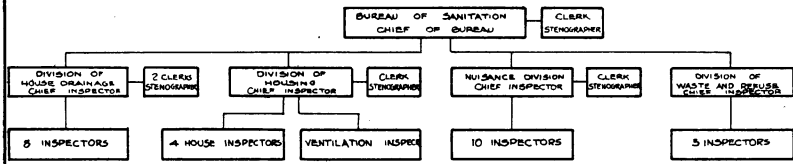
(c) Division of General Food Inspection should have a chief at \$1,800; 5 assistant inspectors at \$900; a clerk at \$800, and a stenographer at \$650. The duty of this Division is to inspect all places where food may be prepared — bakeries, restaurants, hotels and cold storage plants, and inspect the transportation of food and food exposed for sale.

3 — BUREAU OF SANITATION:

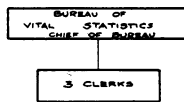
The chief of this bureau should be preferably a sanitary engineer. The bureau should have a clerk at \$800, a stenographer at \$650 and the following divisions:

- a. House Drainage.
- b. Housing.
- c. Nuisances.
- d. Wastes and Refuse.

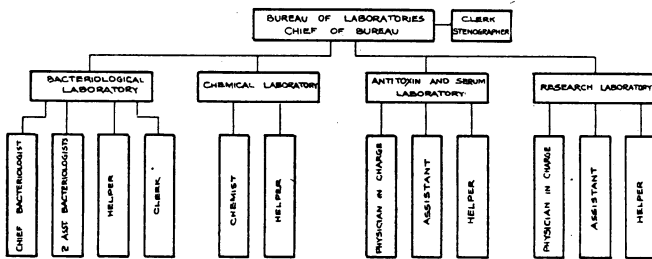
3 - BUREAU OF SANITATION



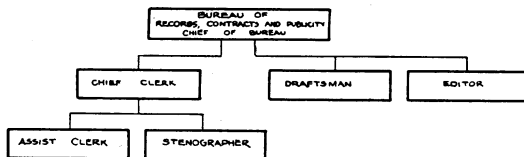
4 - BUREAU OF VITAL STATISTICS



5 - BUREAU OF LABORATORIES.



6 - BUREAU OF RECORDS, CONTRACTS AND PUBLICITY.



(a) Division of House Drainage should have a chief at \$1,500; 1 clerk at \$800; clerk and stenographer at \$800, and 5 inspectors at \$1,000.

(b) Division of Housing should have a chief at \$1,800; 4 tenement and lodging house inspectors at \$900; 1 special inspector of ventilation to examine all public and semi-public buildings at \$1,200; 1 clerk at \$800 and a stenographer at \$650.

(c) Division of Nuisances should have a chief at \$1,800; 9 inspectors of Nuisances, including those of offensive trades, stables and housing of animals at \$900; 1 smoke inspector at \$900; 1 clerk at \$800 and a stenographer at \$650.

(d) Division of Wastes and Refuse should have a chief at \$1,500 and 3 inspectors at \$900.

4 — BUREAU OF VITAL STATISTICS:

The chief of this bureau should not only keep an accurate record of deaths, births, marriages, registration of physicians and midwives, but compile statistics for the bureau of records and contracts. He should have a salary of \$1,500 and 3 clerks at \$800.

5 — BUREAU OF LABORATORIES:

The chief of this bureau should be preferably a bacteriologist and receive a salary of \$2,000 per annum. This bureau should include the following:

Chief Bacteriologist	\$1,500
Assistant Bacteriologist	1,000
Helper	600
Clerk	800
Chief Chemist	1,200
Helper	600
Physician in charge of Antitoxin and Serum Laboratory	1,500
Assistant	1,000
Helper	600
Hostler	600
Physician in charge of Research Laboratory	1,200
Assistant	1,000
Helper	600

The Chemical, Antitoxin and Serum, and Research laboratories may be eliminated from cities of 500,000 population as an economic problem, as examinations made in the first-named and the products of the second named laboratories may be purchased for less money than the maintenance cost of the laboratories; and research work may be carried on in institutions other than municipal. For cities of 1,000,000 and over there is no question that the municipal laboratories are more economical.

6 — BUREAU OF RECORDS, CONTRACTS AND PUBLICITY.

The chief of this bureau should receive \$2,000. He should personally conduct all publicity; edit a weekly bulletin and all circulars for educa-

tional purposes; compile all statistics of the department; be responsible for all records and contracts and take care of all accounts of the different bureaus. The bureau should have a chief clerk at \$1,200; a draftsman at \$1,000 to chart and prepare data for benefit of the public: a clerk at \$800 and a stenographer at \$650.

Total cost as enumerated, 41 cents per capita of population	\$204,975
Allowing \$5,000 for postage, printing and incidentals, the cost would be 42 cents per capita	233,175
Allowing \$17,000 for new equipment and supplies the cost would be 45 cents per capita	250,000

a cheap investment for any community, for, with such organization, efficiently handled, the returns in improved health, less suffering, lowered mortality, increased vigor and general civic uplift would be impossible to figure in dollars and cents.

In organizations for cities under 100,000 population similar units will avail. For example: In cities, say of 25,000 inhabitants, the allowance would be at 45 cents per capita, \$11,250. This amount, although small in comparison, will accomplish the same results as the larger sum in larger cities. Here the various bureaus and divisions are dropped; the medical inspector would be a practitioner of medicine and devote to municipal work but a few hours a day; 1 inspector would cover general sanitation and nuisances of all kinds; 1 would cover milk, meat and all foodstuffs; 1 clerk would attend to the entire division of vital statistics; laboratory examinations would be made in a hospital; and the health commissioner, devoting his entire time to his official duties, should take over the duties of the several bureau chiefs; edit all educational leaflets, compile statistics and prepare all data for public information, etc. This small, but thoroughly efficient force could be secured for \$11,250 per annum — a 45 cent per capita.

JOS. S. NEFF, *Chairman*

Dr. J. H. Landis, a member of the Committee, submitted the following statement to the Chairman: "I have gone over your plan of organization of Municipal Health Departments and agree heartily with all but the organization of the Board. While the presence of the directors of Public Safety and Service on this Board would theoretically be desirable, I believe that a non-partisan Board will secure better results."

APPENDIX.

Commissioner of Health	\$5,000
Secretary, Board of Health	1,000
Bureau of Medical Inspection.	
Chief	\$2,000
Clerk	800
Stenographer	650
	————— \$3,450

(a) *Division of Contagious Diseases.*

Chief	\$1,800	
2 clerks at \$800	1,600	
1 stenographer	650	
10 assistant medical inspectors at \$1,200	12,000	
Diagnostician	800	
5 disinfectors at \$1,000	5,000	
Hospital (50 patients)	23,725	
		<u>\$45,575</u>

(b) *Division of Medical School Inspection.*

Chief	\$1,800	
2 clerks at \$800	650	
Stenographer	650	
15 assistant medical inspectors at \$900	\$13,500	
Dental dispensary	2,000	
Eye dispensary	2,500	
Supervising school nurse	1,000	
20 nurses at \$700	14,000	
		<u>\$37,050</u>

(c) *Division of Child Hygiene.*

Chief	\$1,800	
2 clerks at \$800	1,600	
Stenographer	650	
Inspector	1,000	
Supervising visiting nurse	1,000	
15 nurses at \$700	10,500	
		<u>\$16,550</u>
		<u>\$102,625</u>

Bureau of Food Inspection.

Chief	\$2,000	
Clerk	800	
Stenographer	650	
		<u>\$3,450</u>

(a) *Division of Milk Inspection.*

Chief	\$1,800	
Clerk and stenographer	800	
6 dairy farm inspectors at \$1,000	6,000	
8 city inspectors at \$900	7,200	
		<u>\$15,800</u>

(b) *Division of Meat Inspection.*

Chief	\$1,800	
Clerk	800	
4 veterinary inspectors at \$1,400	5,600	
4 veterinary inspectors at \$1,000	4,000	
		<u>\$12,200</u>

(c) *Division of General Food Inspection.*

Chief	\$1,800	
Clerk	800	
Stenographer	650	
5 inspectors at \$900	4,500	
	<hr/>	\$7,750
		<hr/>
		\$39,200

Bureau of Sanitation.

Chief	2,000	
Clerk	800	
Stenographer	650	
	<hr/>	\$3,450

(a) *Division of House Drainage.*

Chief	\$1,500	
Clerk	800	
Clerk and stenographer	800	
5 inspectors at \$1,000	5,000	
	<hr/>	\$8,100

(b) *Division of Nuisance Inspection.*

Chief	\$1,800	
Clerk	800	
Stenographer	650	
10 inspectors at \$900	9,000	
	<hr/>	\$12,250

(c) *Division of Housing Inspection.*

Chief	\$1,800	
Clerk	800	
Stenographer	650	
4 tenement and lodging house inspectors at \$900	3,600	
1 inspector of ventilation	1,200	
	<hr/>	\$8,050

(d) *Division of Refuse and Waste.*

Chief	\$1,500	
Clerk and stenographer	800	
3 inspectors at \$900	2,700	
	<hr/>	\$5,000
		<hr/>
		\$36,850

Bureau of Vital Statistics.

Chief	\$2,000	
3 clerks at \$800	2,400	
	<hr/>	\$4,400
		<hr/>
		\$4,400

Bureau of Laboratories.

Chief	\$2,000	
Clerk	800	
Stenographer	650	
	<hr/>	\$3,450

<i>Bacteriological Laboratory.</i>		
Chief	\$1,500	
Clerk	800	
Assistant	1,000	
Helper	600	
	<hr/>	\$3,900
<i>Chemical Laboratory.</i>		
Chief	\$1,200	
Helper	600	
	<hr/>	\$1,800
<i>Serum and Antitoxin Laboratories.</i>		
Chief	\$1,500	
Helper	600	
Hostler	600	
	<hr/>	\$2,700
<i>Research Laboratory</i>		
Assistant	\$1,200	
Helper	1,000	
	600	
	<hr/>	\$2,800
		<hr/>
		\$14,650
Bureau of Records.		
Chief	\$2,000	
Chief Clerk	1,200	
Draftsman	1,600	
Clerk	800	
Stenographer	650	
	<hr/>	\$5,650
		<hr/>
		\$5,650
		<hr/>
		\$209,375