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## RAT-PROOFING ORDINANCE HELD VALID.

**THE NEW ORLEANS ORDINANCE REQUIRING RAT PROOFING OF ALL STRUCTURES IN THE CITY HELD BY THE COURT TO BE VALID.**

The Supreme Court of Louisiana has upheld the rat-proofing ordinance adopted by the commission council of the city of New Orleans in June, 1915. This ordinance requires the rat proofing of all structures in the city, and makes it unlawful to construct or maintain any structure which is not rat proofed as provided by the ordinance.

This ordinance was adopted to replace a similar ordinance which had been held by the court to be "unreasonable in not providing for notice to property owners and in delegating certain powers to the health officer of such nature as to enable him to discriminate between individuals as to work to be done and materials to be used."

Two opinions in which the later ordinance is considered are published in this issue of the Public Health Reports, pages 1437 and 1441.

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## PUBLIC HEALTH ADMINISTRATION IN FLORIDA.

By CARROLL FOX, Surgeon, United States Public Health Service.

The following report gives the results of a study of public health organization and administration in the State of Florida carried on throughout a period of approximately three months, beginning November 29, 1915.

Florida has a gross area of 58,666 square miles. It forms a large peninsula, having the Atlantic Ocean on the east and the Gulf of Mexico on the west, and has therefore a long coast line with several important seaports having communication with other States and with foreign countries.

The mild, or even warm, winters of the State and its semitropical environment offer a great attraction, not only to permanent settlers, but to tourists and invalids seeking relief from the cold winters of the North.

The principal products of the State are naval stores, lumber, phosphate, citrus and other fruits, garden stuff, cotton, tobacco, and sponges.

Manufacturing is of less importance, except for the manufacture of cigars, which forms a large industry in Tampa and Key West.

Dairying and cattle raising are carried on to some extent.

The population of the State according to the State census of 1915 is 921,569;<sup>1</sup> the Negro race forms approximately 40 per cent of that number, and for this reason the problems in sanitation become more difficult to solve.

In the course of this study the following-named cities were visited: Jacksonville, Tampa, Pensacola, Miami, Key West, St. Augustine, and Tallahassee.

For information and assistance received in the preparation of this report the writer is indebted to the State health officer and his subordinates, and to other State and local officials.

#### STATE BOARD OF HEALTH.

The constitution of the State of Florida, adopted in 1885, provides for the establishment of a State board of health, and of county boards of health. It further specifies that, "The State board of health shall have supervision of all matters relating to public health, with such duties, powers, and responsibilities as may be prescribed by law;" and that, "The county boards of health shall have such powers, and be under the supervision of the State board of health to such extent as the legislature may prescribe."

Under this authority there was established by the legislature in 1889, a State board of health, and laws were enacted giving it certain powers and duties. This step was taken at the time mainly because of the fear of yellow fever, a disease having produced such widespread havoc that, in the opinion of the people, its importance overshadowed all other diseases. The laws passed at the time, and in fact, several passed subsequently, were enacted without an understanding of the way in which the disease is transmitted, and are now antiquated, requiring unnecessary procedures and frequently referring to "noisome odors" and "noxious gases," which were supposed to play a part in the propagation of the disease. Two other diseases likewise feared by the people were mentioned in the early law, viz, cholera and smallpox.

Attempts have been made from time to time, with more or less success, to bring the laws up to date.

*Appointment and tenure of office.*—The State board of health is required to be composed of three "discreet" citizens of the State appointed by the governor and confirmed by the senate. Each member holds office for four years and until his successor is appointed and qualified.

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<sup>1</sup> In computing statistics the estimated population figures of the United States Census Bureau were used in the case of the four cities in the registration area; for the other cities and for the State as a whole, State census figures have been used.

*Meetings.*—The board meets on the second Tuesday of February each year. Either the governor of the State, or the president of the board, is given authority to call a meeting at any time and at such place as he may designate. At the first meeting of the board a president must be elected from among its members.

*Salary and expenses.*—The members of the State board of health receive a per diem of \$6 for each day of actual session, and mileage at the rate of 10 cents per mile.

*Powers and duties of the board.*—The powers and duties of the State board of health are: To exercise a general supervision over the public health of the State; to prevent the importation and spread of hydrophobia; to authorize the institution or operation of quarantine within the State and to modify or abrogate it; to impose upon railroads and navigation companies or individuals owning or operating steamships or other vessels, such restrictions and regulations providing for inspection, quarantine, and sanitary rules as may be necessary to protect the health of the people of the State.

In addition, the State board of health is empowered to make, adopt, promulgate, and enforce rules and regulations to preserve the public health of the State; for the sanitation and disinfection of vehicles of common carriers, convict camps, prisons, jails, factories, hotels, schools, and other places used by or open to the public; for the treatment, segregation, and disinfection of animals having communicable diseases; to prevent the spread of rabies; to care for segregation and isolate persons having communicable disease; for the disposition of garbage or sewage, or other refuse in or near an incorporated or unincorporated community; for the investigation and study of cases of disease or epidemics, and the means of prevention; for the dissemination of public health information; and for the supervision and regulation of municipal and county sanitation.

For violation of any regulation made by the State board of health there is provided a fine of not to exceed \$1,000, or imprisonment for not to exceed one month.

The entire composition of the board of health may be changed with each change of governors, a system whereby men who have gained experience are liable to be supplanted by men lacking that qualification, and one that is not conducive to a successful fight against disease. There is likewise a possibility that politics may creep in, producing a very unfortunate situation and one to be shunned by all health departments. It would seem best to increase the number of members of the board of health to seven, one member only to be appointed each year, and the term of service to be five years.

It is to be understood that while the suggestion has been made in this, as well as in other reports, that the controlling board be continued with certain necessary changes, the writer does not consider

it ideal, but one rather of expediency or policy. The ideal system is undoubtedly that contemplating a one-man control with an advisory board.

Notwithstanding that the State board of health is carrying on with great credit many of the activities required of such a board, the organization of the work is rather incomplete. There are four divisions, viz, executive division, laboratory division, division of vital statistics, and the veterinary division. The executive division presided over by the State health officer, includes a number of activities which should be segregated and placed under a separate head, or bureau chief.

#### The Executive Division.

The executive division is under the immediate control of the State health officer, who has as his assistants a medical officer known as an assistant to the State health officer, and a clerical force.

The personnel of this division and their respective salaries are at present as follows:

State health officer.....	\$3,000
Assistant to the State health officer.....	2,000
Chief clerk.....	1,500
Auditor.....	1,500
1 stenographer.....	1,200
1 stenographer.....	720
1 stenographer <sup>1</sup> .....	600
1 filing and mailing clerk.....	720
1 office boy.....	240
1 janitor.....	600
1 gardener.....	390
	12,470

*State health officer—Appointment and qualifications.*—The State health officer is appointed by the State board of health. He must be a physician graduated from a recognized medical school, an expert in the diagnosis of yellow fever, smallpox, cholera, and other infectious diseases, and skilled in hygienic and sanitary science.

*Term of office and salary.*—He holds his office for a term of four years and until his successor is appointed and qualified. His salary is \$3,000 per annum, and he is entitled to actual and necessary expenses when traveling on official business.

*Powers and duties.*—The State health officer is empowered to act as executive officer and secretary of the State board of health. In this capacity he is responsible for the enforcement of all laws with the administration of which the State board of health has been charged by the legislature. He is required personally to investigate reported

<sup>1</sup> Detailed for duty with the president of the board of health.



cases of yellow fever, smallpox, cholera, and hydrophobia. In the case of the latter, one of his agents may carry on the investigation and take the necessary steps to prevent the spread of the disease, and may call upon sheriffs and police officers in the city to assist in the enforcement of regulations. The State health officer is given a general control over all intrastate quarantine systems. He is authorized to abate nuisances. In addition, there are certain duties imposed upon him by the early law which are now antiquated and need not be mentioned.

The State health officer of Florida is a full-time health officer and has acted in that capacity since the establishment of the State board of health in 1889. He is, therefore, a man of long and extensive experience in public health work.

*Assistant to the State health officer.*—A law provides that there shall be employed an assistant State health officer to receive a per diem of \$15 a day and mileage, for each day that he is engaged in active service. The activities of the State board of health are now so extensive that the assistant as contemplated under this act would have to be employed every day, which would prove an expensive procedure. In lieu of this a medical officer from the field has been detailed as assistant to the State health officer. His duties are virtually those of an assistant executive officer, relieving the State health officer of certain duties in connection with the correspondence, supervision of the different activities of the State board of health and the performance of a certain amount of field work.

*Attorney for the State board of health.*—The attorney of the State board of health is a resident of Jacksonville and refuses compensation for his services.

*Chief clerk.*—The chief clerk is in charge of the clerical force employed by the State board of health and exercises a general supervision over property, records, and accounts. He is also stenographer for the State board of health during its meetings.

*Auditor.*—The auditor is responsible for the correctness of all bills and the preparation of vouchers together with their transmission to the comptroller, as well as acting as the bookkeeper of the State board of health.

*Requisitions.*—Requisitions for supplies are required except when the purchase amounts to less than \$1 or when it may be classed as an emergency expenditure. When articles are bought under these circumstances the official making the purchase is reimbursed at the end of the month upon presentation of an expense account.

Requisitions are made in triplicate. They are signed by the State health officer and the auditor of the State board of health. The triplicate is filed in the office of the individual making the requisition,

the duplicate in the office of the auditor and the original sent as an order to the firm from which the supplies are to be obtained.

Requisitions from the branch laboratories are O. K'd by the chief of the main laboratory before they are submitted to the State health officer.

It is suggested that requisitions be submitted on the first of January and July of each year to cover a six months' supply of articles. Thus a larger quantity of material could be bought at one time and a better price obtained. The form or requisition should be changed so that each new requisition should show the amount on hand at the date of the last requisition, the amount received during the previous six months, the amount on hand at the date of the present requisition and the amount required for the coming six months, with additional space for unit price, total price, and catalogue number. These forms may be devised to be used both as a requisition and an order.

*Vouchers.*—Bills must be submitted in duplicate. After they have been checked by the individual receiving the supplies, duplicate vouchers are made out, certified to by the State health officer and approved by the president of the State board of health. The original voucher, together with the original bill, is transmitted to the State comptroller for settlement, while the duplicate voucher and the duplicate bill are filed in the office of the auditor. At the same time a postal card is addressed to the payee informing him that his bill has been forwarded to the State comptroller for payment.

The State board of health is allowed by law the sum of \$2,500 monthly from which to pay traveling expenses or other expenses requiring prompt settlement. This fund is disbursed by the auditor of the State board of health. At the end of the month the vouchers so paid, together with any balance from the fund, are transmitted to the State comptroller with the request that another sum of \$2,500 be allotted for the following month.

All accounts are entered under the name of the payee in a large book ruled so that the amounts may be segregated according to the division of the State board of health incurring the expenditure or the activities necessitating the expense. Special forms are used by the employees of the State board of health on which to itemize their travel or emergency expenses.

It would seem better to arrange the bookkeeping so that the different expenditures could be itemized according to the nature of the expense as well as according to the bureau or division incurring the expense. This could be done readily by instituting a filing-card system for expenditures. There should be a card for each item or group of items, ruled to show the date, the voucher number for reference, and the bureau or division incurring the expense. Also a cross-reference card on which could be shown the amount of

expense incurred in certain well-defined activities, as, for instance, expenses incurred in antituberculosis work or on account of small-pox, etc.

The book at present in use would be needed for the entry of expenditures under name of payee and voucher number only.

*Buildings.*—The headquarters of the State board of health are located in Jacksonville in a fireproof building owned by the board. This building is steam heated, well lighted and ventilated, and provided with modern toilet appliances. Its construction was finished in 1912 at a cost, including grounds, of approximately \$40,673.82. The grounds were obtained from the city of Jacksonville at the nominal cost of \$100. Being marshy land a great deal of filling was required.

On the first floor of this building ample laboratory space is provided, together with an office for the chief of the diagnostic laboratory and a room to house the division of vital statistics. The second floor contains six rooms occupied respectively by the State health officer, the assistant to the State health officer, the chief clerk, the auditor, a stenographer, and the library. The veterinary division is located in the basement, which also contains rooms for washing glassware and preparing media used in the laboratory, storage space, the heating apparatus, and the ice machine. The attic is utilized as a store room for old records. In connection with the auditor's office there is provided a fireproof vault. Located on the ground surrounding the building is an animal house designed to care for the animals used in the laboratory.

The main building is fast becoming too small to accommodate the various offices of the State board of health and in time will have to be enlarged.

The State board of health also owns a brick office building at Tampa, which was constructed in 1910 at a cost of \$17,511.60. This building houses the district health officer and the branch laboratory and contains much more space than is at present necessary. Some of the extra space is at present being used by the county medical society and as a laboratory for the city food and drug department.

There is another fireproof building owned by the State board of health at Pensacola, which was completed in 1915 at a cost of \$19,424.34. It furnishes space for the branch laboratory and an office for the district health officer. The building is large, well planned, and well constructed. The necessity for such a large building is not apparent. One room in the building has been loaned to the county medical society. The State board of health also owns four isolation hospitals. Mention of these will be made hereafter.

*Office hours.*—The office hours of the employees of the board of health are from 8.30 a. m. to 5 p. m., with one hour for lunch, every

day except Sundays and holidays. Some of the bacteriologists are not infrequently engaged in their duties before this hour and are present in the laboratory Sundays and holidays for a sufficient length of time to attend to necessary work. Each employee is allowed one month's leave of absence on full pay, during the year.

*Library.*—The library located at the headquarters of the State board of health is small but well ordered and contains text books, books of reference, scientific magazines and reports, and publications from other health organizations. The library is well catalogued and indexed according to subject and author, making it possible to find with little delay any article desired.

**THE REGISTRATION OF BIRTHS AND DEATHS.**

The State legislature in 1915 enacted a law providing for a State-wide registration of births and deaths. This act was modeled after the law proposed by the Bureau of the Census, and it is therefore unnecessary to summarize it here. It has not as yet been put into effect by the State board of health, however, so that at present the registration of births and deaths is accomplished by means of the old system. The successful operation of this system depends primarily upon the enactment by municipalities of a local ordinance in conformity with a model presented by the State board of health. One hundred and twenty cities now have such an ordinance, though few seem to be making any great effort to enforce it. There are, however, certain municipalities where death returns are satisfactory. In fact, four cities have been admitted to the death registration area, and there are other municipalities where, judging from the death rates, the registrations seem equally good. The personnel of the division of vital statistics and their respective salaries are as follows:

1 statistician.....	\$2,000
1 clerk and stenographer.....	900
	2,900

*Death registration.*—The notification of deaths in the State as a whole is very deficient. There were received in 1915 from all sources 5,446 death certificates, which number in a population of 921,569 gives a death rate of 5.9 per 1,000—obviously incorrect. In order to arrive at a figure which would represent approximately the death rate for the State as a whole, computations have been made based on the records from 21 cities having a death rate of over 10. The results show that the four cities in the registration area have a crude death rate in the aggregate of 16.2 per 1,000. The 17 cities not in the registration area have a combined death rate of 16.6 per 1,000, while the 21 cities have a combined death rate of 16.4. It is thought that the latter figure probably approximates the death rate obtaining over the entire State. No corrections have been made for non-residence, and stillbirths have been excluded. On the basis of a

death rate of 16.4 per 1,000 population it may be assumed that at present but one-third of the deaths that actually occur in the State, are notified to the State registrar.

*Preventable diseases.*—In determining the number of deaths from preventable diseases, only the deaths recorded in the 21 cities mentioned above have been analyzed. These records show that there were during 1915, 2,318 deaths from causes that might have been prevented, which is 53.4 per cent of the total deaths registered in this area. The following table shows these deaths by causes, death rates per 100,000, etc.

*Deaths from preventable diseases, all ages, in 21 cities of Florida having a death rate of over 10 per 1,000, year ended Dec. 31, 1915.*

Disease.	Total number of deaths.	Death rate per 100,000 population.
Tuberculosis, pulmonary.....	468	177.1
Tuberculosis, other forms.....	47	17.7
Pneumonia.....	253	95.7
Typhoid fever.....	81	30.6
Malaria.....	41	15.5
Influenza.....	49	18.5
Measles.....	10	3.7
Diphtheria.....	41	15.5
Whooping cough.....	10	3.7
Tetanus.....	39	14.7
Syphilis.....	52	19.6
Meningitis, exclusive of tuberculosis.....	27	10.2
Septicemia, including puerperal.....	54	20.4
Diarrhea and enteritis.....	285	107.8
Dysentery, eudamoebic and bacillary.....	13	4.9
Other acute infections.....	45	17.0
Malignant growths.....	171	64.7
Pellagra.....	127	48.0
Accidental deaths.....	194	73.4
Causes peculiar to early infancy.....	311	117.7
Total.....	2,318	.....

*Deaths in infants under 1 year, in 21 cities of Florida having a crude death rate of over 10 per 1,000 inhabitants, year ended Dec. 31, 1915.*

Causes given in death certificates.	Deaths.	Per cent of total deaths under 1 year.
Tuberculosis.....	2	0.35
Pneumonia.....	63	11.0
Tetanus.....	19	3.3
Malaria.....	2	5.0
Influenza.....	2	
Measles.....	1	
Diphtheria.....	2	
Whooping cough.....	4	
Syphilis.....	7	
Typhoid fever.....	1	
Erysipelas.....	1	
Infantile paralysis.....	1	
Bronchitis.....	6	
Pyemic infection.....	2	2.4
Meningitis, exclusive of tuberculosis.....	14	
Diarrhea and enteritis.....	121	21.2
Pellagra.....	1	.17
Accidental deaths.....	9	1.5
Premature births.....	100	17.5
Congenital debility, convulsions, etc.....	74	13.0
Other causes, mostly preventable.....	61	10.7
Unspecified.....	76	13.3
Total.....	561	99.42

Table of information relating to birth and death registration in 21 cities of Florida having a recorded crude death rate of over 10 per 1,000, year ended Dec. 31, 1915.

Cities in registration area for deaths:	Population.			Number of deaths.			Death rate per 1,000.			Number of births.			Birth rate per 1,000.			Still-births.
	White.	Colored.	Total.	White.	Colored.	Total.	White.	Colored.	Total.	White.	Colored.	Total.	White.	Colored.	Total.	
35,909	37,228	73,137	530	824	1,354	14.7	22.1	18.5	947	724	1,671	26.3	19.4	22.8	185	
14,290	11,452	25,742	176	241	417	12.3	21.0	16.2	357	188	545	24.9	16.4	21.1	59	
39,259	12,262	51,521	491	253	744	12.5	20.6	14.4	1,164	220	1,384	29.6	17.9	26.8	85	
15,457	5,950	21,437	193	92	285	12.4	15.4	13.2	1,343	106	1,449	13.2	17.8	20.9	31	
104,945	66,892	171,837	1,390	1,410	2,800	13.2	21.0	16.2	2,811	1,238	4,049	26.7	18.5	23.5	360	
Cities not in registration area:																
Orlando.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Apalachicola.....	1,290	.....	6,449	51	148	.....	.....	23.1	77	23	100	.....	.....	.....	.....	15.5
St. Petersburg.....	.....	7,188	114	36	150	10.1	34.9	21.5	47	35	82	31.7	27.7	.....	.....	20.9
Ocala.....	.....	5,370	34	75	109	.....	.....	20.8	92	44	136	.....	.....	.....	.....	18.9
St. Augustine.....	.....	5,471	61	46	107	.....	.....	20.2	52	29	81	.....	.....	.....	.....	15.0
Palatka.....	.....	4,622	37	44	81	.....	.....	19.5	74	32	106	.....	.....	.....	.....	19.3
Tarpon Springs.....	.....	1,938	17	16	33	.....	.....	17.0	51	40	91	.....	.....	.....	.....	19.6
Fernandina.....	1,158	.....	13	39	52	12.0	19.9	16.7	8	42	50	.....	.....	.....	.....	26.3
Fort Myers.....	2,222	1,022	3,244	20	54	15.3	19.5	16.6	56	12	68	25.2	11.7	20.9	.....	16.0
Gainesville.....	9,616	5,676	15,292	114	129	243	11.4	22.7	15.5	210	135	345	21.1	23.7	22.1	37
Plant City.....	3,609	3,127	6,736	42	62	104	11.6	19.8	14.8	86	42	128	23.8	13.4	19.0	11
Lakeland.....	.....	3,229	25	23	48	.....	.....	14.5	54	11	65	.....	.....	.....	.....	20.1
West Tampa.....	6,867	970	7,837	79	27	106	.....	.....	78	18	96	.....	.....	.....	.....	13.1
Tallahassee.....	.....	.....	80	20	106	12.5	20.6	13.5	301	29	330	43.8	29.8	42.1	.....	20.0
De Land.....	.....	.....	30	35	65	.....	.....	12.5	52	31	83	.....	.....	.....	.....	15.9
De Funiak Springs.....	2,054	1,436	3,490	24	18	42	11.6	12.5	45	12	57	.....	.....	.....	.....	16.3
Total.....	.....	.....	842	696	1,538	.....	.....	16.6	1,347	555	1,902	.....	.....	.....	.....	11.6
Grand total, 21 cities.....	.....	.....	2,232	2,106	4,338	.....	.....	16.4	4,168	1,793	5,961	.....	.....	.....	.....	22.5

*Birth registration.*—There were registered during the year 1915 from the 21 cities 5,951 births as against 8,178 for the entire State. The recorded birth rate for the 21 cities in the aggregate is therefore 22.5 per thousand while the recorded birth rate for the State is but 8.8 per 1,000. The city showing the highest birth rate is West Tampa with a recorded rate of 42.1 per 1,000, or 43.8 for the white and 29.8 for the colored population. Several other cities show a commendable effort to secure the notification of births as indicated by a recorded rate of 25 and over per 1,000.

*Discussion.*—It is desirable to bring the State of Florida into the registration area for deaths as soon as possible. To do this will require the institution of many measures which, as yet, have not been attempted. Progress was unfortunately interrupted by the untimely death of the statistician of the State board of health. However, there has since been appointed a statistician familiar with registration methods. It is therefore thought that specific suggestions for putting the new law into effect are unnecessary.

After the law has been put into effect and the number of certificates registered increases, it will be necessary to enlarge the clerical force in order to attend to the increased amount of correspondence that will necessarily occur.

#### EPIDEMIOLOGICAL ACTIVITIES.

The epidemiological activities of the State board of health will be discussed under the following headings: The notification of disease, the control of disease, the diagnostic laboratories, and the field forces, active and potential.

##### The Notification of Disease.

*Requirements of laws.*—A law enacted in 1889 required the notification of yellow fever, cholera, and smallpox only. At that time yellow fever especially had caused such widespread havoc throughout the State that it was uppermost in the minds of the people.

The "vital statistics" act passed in 1915 carried with it a clause relating to the notification of disease.

These laws are summarized as follows:

It is the duty of every physician in the State to report immediately to the president of the board of health, by telegraph or other expeditious manner, any case of yellow fever, smallpox, or cholera coming within his practice. For failure to report, there is provided a fine of not to exceed \$1,000 or imprisonment not to exceed six months.

Physicians are also required to report the above-named diseases to the city or county health officer, or, if there is no such officer, to the mayor or the chairman of the county commissioners. For failure to report there is provided a fine of \$100 or imprisonment for 30 days.

The State board of health is empowered "to adopt, promulgate, and enforce rules and regulations requiring the notification of all cases of sickness necessary for the preservation and protection of the public health."

*Requirements of regulations.*—In addition to the law which requires the notification of smallpox, yellow fever, and cholera, the State board of health, acting under the general authority granted by law to promulgate regulations in the interest of the public health, has formulated regulations as follows:

It is the duty of every physician to report immediately to the State health officer or his representative, by first mail, any case of tuberculosis, typhoid fever, scarlet fever, diphtheria, measles, cerebrospinal meningitis, anterior poliomyelitis, bubonic plague, glanders, anthrax, rabies, or leprosy occurring in his practice.

Where no physician is in attendance it then becomes the duty of the person having charge of, or in attendance upon, or upon whose premises a case occurs, to make the necessary report.

*Methods of procedure.*—The form devised for the use of physicians to report diseases is a postal card containing the usual questions. Physicians, however, have not voluntarily made use of the cards, and the regulation is not enforced. As a result the records from this source are worthless. In a few instances letters may be found on file from physicians reporting cases of, or rather outbreaks of, certain diseases, but such reports are not worth analysis.

Positive reports from the laboratories have been practically the only source of information of the prevalence of malaria, typhoid fever, tuberculosis, and diphtheria occurring in different localities. While it is true that many physicians of the State make use of the laboratory facilities, the information of the prevalence of disease obtained in this way is incomplete and inadequate.

*Discussion.*—It is essential that the clause in the "vital statistics" act recently passed by the legislature and giving authority to the State board of health to collect morbidity reports be put into effect without delay.

Even then it will be some time before all of the physicians learn to appreciate their obligations to the State and to respond to the request that diseases be reported.

It would also be wise to continue the acceptance of positive reports from the laboratories in lieu of morbidity reports, in which case data cards submitted with specimens and on which are noted results of the examination, should conform in size to the morbidity report cards.

#### **The Control of Disease.**

*Requirements of laws.*—In addition to the general powers and duties vested in the State board of health, the following provisions of law apply directly to the control of disease:

It is the duty of the local authorities after a suspicious case of yellow fever, cholera, or smallpox is reported, to take immediate steps to make the necessary examination, furnish medical attention, food, and clothing, and to do whatever may be necessary to care for, segregate, and guard the case until the arrival of the State health officer.



Whenever the State health officer has investigated a suspicious case as above and determined that the same is a menace to the citizens of the State, he or his agent is required to assume charge, after which all legitimate expenses concerned therewith must be defrayed out of the funds of the State board of health.

For a violation of these provisions by any physician, city health officer, mayor, county physician, or chairman of the board of county commissioners there is provided a fine of \$100 or imprisonment for 30 days.

It is unlawful for any person to operate a hotel, boarding house, restaurant, or lunch counter unless all doors, windows, and similar openings in the dining room, kitchen, and passageways between and hallways leading thereto, or any place where food is prepared, are screened with wire netting with a mesh sufficiently close to prevent the admission of flies.

The law further provides that all food offered for sale, and which may be eaten raw, or without further cooking, must be screened with wire netting of sufficiently close mesh to prevent the admission of flies.

It is made the duty of the person operating any place where food is sold to keep such place free of flies so far as possible.

For violation there is provided a fine of not to exceed \$50 or imprisonment not to exceed three months. Each day that business is conducted in violation of the act constitutes a separate offense.

*Requirements of regulations.*—Acting under the general provisions of statute the State board of health has promulgated the following provisions in regulations for the control of disease:

Concealing a case of communicable disease or any personal effects or other articles which have been used by such case is prohibited.

When it is deemed necessary, the State health officer or his assistant is authorized to remove to a suitable place for isolation, any case of communicable disease and provide the required medical treatment.

Where the patient is too sick to be moved, isolation may be practiced on the premises.

Contacts may be quarantined provided that in the case of scarlet fever and diphtheria, when reasonable precautions are taken, the breadwinner may be permitted to carry on his vocation.

By isolation is meant the complete separation of the sick person and those dependent upon him, from all other persons on the premises.

It is advised that a nurse be obtained but where this is impossible for financial reasons, the parent or other attendant assuming the duties of nurse must be isolated with the patient.

Warning placards are required in the case of diphtheria, scarlet fever, measles, epidemic cerebrospinal meningitis and smallpox. In the last case, however, only those contacts who refuse vaccination are quarantined.

The warning cards are furnished by the State board of health, and it is prohibited to alter, deface, remove or destroy them without the authority of the State board of health or the local health officer.

The occupant of a placarded house is required to notify the State board of health when such card has been removed or destroyed without authority.

It is prohibited to use any apartment previously occupied by a person ill with smallpox, typhoid fever, diphtheria, epidemic cerebrospinal meningitis, or tuberculosis, until such apartment has been thoroughly disinfected. When these requirements are not complied with the local or State health officer may placard the house with a warning to this effect.

It is forbidden to spit upon sidewalks, railroad depots, cars, or platforms, on the floors or walls of any church, theater, street car, or in other public place except in spittoons provided for the purpose. Spittoons must be furnished for this purpose by the person in control. Spittoons must be cleaned once a day and each must contain at least one-half pint of a germicidal solution.

A placard prohibiting spitting, to be furnished by the State health officer, must be displayed in all stations, cars or other vehicles.

Notwithstanding the meagerness of the regulations the methods of prevention as practiced are in conformity with modern procedures. The methods advocated are shown in the tabulation. It should be noted that they are not always covered by either law or regulation.

*Smallpox.*—Smallpox, a disease entirely too prevalent in the State, is due to a failure on the part of some of its citizens to protect themselves by vaccination. It might be said in this connection that in the city of Tampa where last year there were some 56 cases of smallpox, but few originated in the foreign population who are adequately vaccinated. The vast majority were in unvaccinated native-born Americans.

The laws of the State require that the expense of caring for smallpox be defrayed from the funds of the State board of health, and so long as there are unprotected individuals there is a constant expenditure necessary to provide for those who contract the disease. Those citizens who respect the rights of their neighbors and submit to vaccination are compelled to stand their share of the expenses incurred solely because of the perverseness of those who will not submit to vaccination and who, therefore, lay themselves open to infection.

For some years the State has had to maintain four hospitals solely for the purpose of isolating smallpox. During the year 1915 these hospitals cared for some 99 cases of smallpox at a cost to the State of \$4,277.64. The personnel of these hospitals and their respective salaries are as follows:

1 superintendent (Duval County).....	\$780
1 attendant (Duval County).....	360
1 caretaker (Hillsboro County).....	480
1 caretaker (Escambia County).....	360
1 caretaker (Dade County).....	180
Total.....	2,160

Many of the cases are of residents of the city in which they are found and are occasioned by neglect on the part of local authorities to enforce vaccination, which likewise accounts for the frequency of secondary cases. The local authorities are too prone in public health matters to shift their responsibilities to the State, forgetting that they are under some obligation to share morally and financially in the fight against disease. There is no more reason why the State should be required to defray the expenses incurred in caring for

smallpox patients than for patients suffering from diphtheria or any other common communicable disease, except that, unfortunately, an old law in the case of smallpox, cholera, and yellow fever requires the State to shoulder the entire burden. The writer knows of no other instance where the State is required to maintain isolation hospitals for local communities. This is a duty of the county, the city, or both. Arrangement should be made with the counties whereby these hospitals could be transferred. They need be opened only as the occasion arises. There is also a need for a State-wide vaccination law, thereby permitting the health officer to apply the only sure method for eradicating smallpox.

*Tuberculosis.*—Because of its equable climate, Florida is thought to be peculiarly suited to those suffering from tuberculosis, for which reason a great many tuberculous individuals from farther north migrate into the State. The death rate from this disease is therefore high, being for the 21 cities from which death certificates were analyzed, 177.1 per 100,000. Because of a deficiency in the records it was not possible to determine the death rate among residents only. It is obvious, however, that the problem is even greater here than in many other localities.

The State legislature has authorized the State board of health to erect a tuberculosis sanatorium and make the necessary regulations for its management. Fortunately this act did not provide any money, so that what would have been a useless expenditure was obviated. Any hospital which the State might build would be entirely inadequate to meet the situation. The question is one that must be carefully considered by each community, for it is only by a multiplicity of hospitals, and therefore a distribution of expenses, that isolation is feasible. The necessity, however, is great and should be immediately provided for by individual counties.

Tuberculosis is said to be especially common among the cigar makers. There is no law or regulation prohibiting a person suffering from tuberculosis to work in cigar factories. The prevalence of the disease is no doubt due to the close proximity of the workers to each other and the overcrowded conditions in the home. It would seem consistent for the State board of health to promulgate regulations for the maintenance of sanitary conditions in the cigar factories of the State.

*Typhoid fever.*—The death rate from typhoid fever per 100,000 population for the 21 cities during the year 1915 was 30.6, a rate too high for a progressive and growing State encouraging immigration. It is a good index to show the need of epidemiological studies and activities along the lines of sewage disposal and water purification by a competent public health engineer in the State board of health, as

well as a more careful supervision of patients, and a more thorough enforcement of the law requiring the screening of privies.

*Pellagra.*—The death rate for pellagra per 100,000 in the cities under consideration in 1915 was 48.

The State board of health has made through its district health officers, public health nurses, and physicians of the State a more or less superficial survey of the pellagra situation and has carried on some active work along the lines laid down by Goldberger, with some excellent results. Without morbidity reports, it is difficult to get any idea of the prevalence of this or in fact any other disease.

*Tetanus.*—The death rate from tetanus in the 21 cities in 1915 was 14.7 per 100,000. Of the 39 cases reported, 19 were in infants under 1 year of age. As in the case of puerperal septicemia and ophthalmia neonatorum, the ignorant midwife is largely responsible for the condition, which occurs mainly among the colored population. The State board of health should attempt some supervision over the work of these women through its field nurses, and should issue free of charge prophylactic packages against tetanus and ophthalmia neonatorum. The package used by the public health department of Cuba might be taken as a type. The State board of health issues tetanus antitoxin free to indigent cases.

*Diphtheria.*—The death rate per 100,000 for diphtheria in 1915 for the 21 cities was 15.5. There were 41 deaths from this disease. Comparing this number with the positive reports from the laboratories (the only morbidity reports available) there seems to have been a case-fatality rate of 5.3. It is probable that while practically all deaths have been reported from this area there are a number of cases which recover and from which specimens were not taken; the case-fatality rate, therefore, would be even lower than 5.3. This is a very good showing. It indicates a prompt and frequent use of antitoxin. The State board of health furnishes antitoxin to the indigent cases free of charge, and has an arrangement with an establishment producing biologic products whereby those able to pay may secure the antitoxin at reduced rates. That the antitoxin may be easily secured, certain drug stores in different parts of the State have been designated as distributing centers.

*Dysentery.*—There were reported from the 21 cities during 1915, 13 deaths from dysentery, bacillary and endamœbic. In studying the death certificates filed with the State board of health one not infrequently encounters the term "dysentery," without any qualification, given as a cause of death. In the table of preventable diseases such diagnoses have been placed under the heading "diarrhea and enteritis." It is known, however, that both bacillary and endamœbic dysentery occur in the State and it would be well for the State board

of health to carry on some investigations to determine the prevalence, especially of the latter.

*Malaria.*—There were reported from the 21 cities in 1915, 41 deaths from malaria, and there were found as the result of laboratory examinations 291 positive cases. Health departments of the Northern States are little concerned with this disease, but in Florida it causes no small amount of work to the bacteriologist. It is suggested that more intensive studies of malaria be carried on by the epidemiologist, bacteriologists, and sanitary engineer of the State board of health, so that accurate data may be obtained and placed before the local authorities with a view to securing their cooperation and ultimately eradicating the breeding places of anopheline mosquitoes in and near the centers of population.

*Hookworm.*—Hookworm has been found to be prevalent in Florida. In the past a large amount of dispensary work was done for the purpose of curing the disease. It was so difficult, however, to secure the cooperation of the people in the construction of sanitary privies, and reinfections were found to be so common that activities along this line have been discontinued except to families who agree to maintain better sanitary conditions. When the time arrives that a more extended campaign can be carried on against the insanitary privy it may be wise to reopen the dispensaries and resume the treatment of patients.

*Trachoma.*—Trachoma has been found to exist in several localities. The extent of its distribution is unknown and further investigations are necessary. While the health officer is not usually concerned with the treatment of disease outside of isolation hospitals, exceptions may be made both in the case of hookworm and trachoma, and it may be found wise at some future date to provide, as a part of the eradivative measures, means for treating patients suffering from trachoma.

*Occupational diseases.*—With the exception of a few deaths from caisson disease among the sponge divers and accidents occurring among railroad employees, deaths from occupational diseases were few in number in 1915, and have been recorded as accidental deaths in the tabulation.

#### The Diagnostic Laboratory.

The main laboratory of the State board of health was established in 1903 and is located in the State board of health building at Jacksonville. On account of the steady increase in the amount of work and in order to facilitate the handling of specimens received from physicians and health officers located in more distant parts of the State, branch laboratories have been established from time to time,

*Tabulation of the methods pursued to prevent the spread of certain of the communicable diseases.*

Disease.	To be reported.	Placarded.	Isolation of patient.	Quarantine of contacts.	Terminal disinfection of rooms and articles.	Sale of dairy products.	Exclusion from schools.		Special precautions.	Disinfection of discharges.
							Patient.	Contacts.		
Smallpox.....	Yes, immediately, by wire.	Yes.....	Yes, until complete desquamation.	Not if vaccinated..	Yes.....	.....	Yes.....	Not if vaccinated.	Vaccination of contacts (voluntary).	.....
Diphtheria.....	Yes, immediately, by mail.	Yes.....	Yes, until two negative cultures obtained.	Yes, except breadwinners.	Yes.....	Prohibited.	Yes.....	Yes.....	Cultures from throat and nose immunizing dose of antitoxin (voluntary).	Yes; from throat, nose, and mouth.
Scarlet fever.....	do.....	Yes.....	Yes, until complete desquamation.	do.....	Yes.....	do.....	Yes.....	Yes.....	.....	Do.
Measles.....	do.....	Yes.....	Yes.....	No.....	No.....	.....	Yes.....	Not if immune	.....	Do.
Anterior poliomyelitis.....	do.....	No.....	Yes.....	No.....	No.....	.....	Yes.....	No.....	.....	Do.
Epidemic cerebrospinal meningitis.....	do.....	Yes.....	Yes.....	Yes.....	Yes.....	.....	Yes.....	Yes.....	.....	Do.
Tuberculosis.....	do.....	.....	.....	.....	Yes.....	.....	Yes.....	No.....	Instructions by visiting nurse when practicable.	Do.
Typhoid fever.....	do.....	.....	.....	.....	.....	Prohibited.	Yes.....	No.....	.....	Yes, of feces and urine.
Leprosy.....	do.....	.....	Yes.....	.....	Yes.....	.....	Yes.....	No.....	.....	.....
Trachoma.....	No.....	.....	.....	.....	No.....	.....	Yes.....	No.....	.....	.....

so that there are at present, in addition to the main laboratory, five others—one located at Tampa, one at Pensacola, one at Miami, one at Tallahassee, and one at Key West.

The work done at these laboratories consists of the examination of specimens for evidence of diphtheria, typhoid fever, malaria, tuberculosis, intestinal parasites, gonorrhoea, ophthalmia neonatorum, rabies, and malignancy. In addition, a certain amount of water analysis is performed and occasionally the analysis of a milk sample submitted by an official of the State board of health while engaged in making a sanitary survey. At the last annual meeting of the State board of health (Feb. 8, 1916) it was decided to perform Wassermann reactions as a routine measure.

The members of the laboratory staff are permitted to perform certain laboratory work for physicians which is not always of a public-health nature. Such work includes blood counts, differential and plain, urinalysis, and the preparation of autogenous vaccines.

The personnel of the laboratories and their salaries at present are as follows:

Central Laboratory (Jacksonville):		Salary.
Senior bacteriologist.....		\$2,500
1 assistant bacteriologist.....		1,500
1 assistant bacteriologist.....		1,200
1 assistant bacteriologist.....		900
1 stenographer.....		900
1 technician.....		480
1 orderly.....		360
1 orderly.....		300
		----- \$8,140
Tampa Laboratory:		
1 bacteriologist.....		2,000
1 assistant bacteriologist.....		1,500
1 stenographer.....		780
1 janitor.....		480
		----- 4,760
Pensacola Laboratory:		
1 bacteriologist.....		2,000
1 janitor.....		480
1 office boy.....		240
		----- 2,720
Miami Laboratory:		
1 bacteriologist.....		2,000
1 office boy.....		240
		----- 2,240
Tallahassee Laboratory:		
1 bacteriologist (vacant).....		2,000
1 office girl and stenographer.....		240
		----- 2,240
Key West Laboratory:		
Laboratory in charge of assistant to the State health officer. No extra remuneration for laboratory work.....		-----

*Methods of procedure.*—In the case of diphtheria the mailing outfit in use consists of a sterile swab inclosed in a sterile test tube stopped with a cotton plug and packed in an approved mailing tube. Culture media are sent out only in case of a local epidemic where the health officer can be made responsible for their distribution. In order that a diagnosis may be made as promptly as possible, smears prepared from the swabs are first examined. At the same time a culture is made from the swab for subsequent examination. The type of the organism is always determined, but not reported nor recorded. The types commonly found and reported upon as positive are the A, C, and D, and A', C', and D'. The diphtheria work is performed for diagnosis, for the detection of carriers among contacts, and for the release of quarantine.

In the case of tuberculosis the mailing outfit consists of a wide-mouthed bottle containing about 10 c. c. of lysol solution and packed in an approved mailing tube. Upon receipt of a specimen of sputum for examination the bottle is placed in the autoclave and heated, after which its contents are found to be emulsified. It is then centrifugalized and examined by the usual method.

In the case of typhoid fever, malaria, and gonorrhoeal or other pus infection, the mailing outfit consists of two glass slides properly packed, on which drops of blood may be placed, if for the diagnosis of typhoid fever, or a smear of blood or pus, as the case may be, if for the diagnosis of malaria, or gonorrhoea or other purulent infection.

Each mailing outfit is accompanied by a blank form to be filled in by the physician with the necessary data. The back of this blank contains directions for collecting the specimen. Upon receipt of a specimen for examination the specimen is given a serial number which, with certain of the information contained on the data sheet, is transcribed to a daily report sheet on which is afterwards added the result of the examination. This report is submitted daily to the secretary of the State board of health.

The result of the examination is reported by telephone, telegraph, or mail, depending upon the instructions received from the person submitting the sample. When a report is made by telephone or telegraph it is always followed by a mailed report on a regular form devised for the purpose. Different forms are used for each disease, the form with its corresponding data blank for each disease having a distinctive color so that it may be quickly identified. Each week there is submitted to the secretary a weekly report containing the number of examinations that have been found positive for the commoner diseases and the locations from which the specimens were sent. Likewise there is made a monthly report containing this information, as well as similar information for the less prevalent maladies.



Upon the completion of an examination the results are entered on the original data sheet, which is filed numerically and indexed by name of physician and locality.

The diagnostic laboratories are well equipped to perform all work that they may be called upon to do, and the work performed therein is skillfully done.

*Discussion.*—The cost of maintaining the diagnostic laboratories in 1915 amounted to \$29,912.65. There were 40,677 examinations made, making a cost per examination of 73½ cents. Excluding the cost per examination in Key West, where no charge has been made for services, the lowest cost is found to be 60½ cents in the main laboratory at Jacksonville, where 19,708 examinations were made, at a total cost of \$11,959.85.

The following table gives these figures by laboratories:

Laboratory.	Total examinations.	Average number bacteriologists employed during year.	Total number of months employed.	Total number of hours engaged in bacteriological work.	Examinations per hour per man.	Total cost of laboratory.	Cost per specimen examined.
Main (Jacksonville)...	19,708	4	47½	10,310	1.90	\$11,959.08	\$0.60½
Tampa.....	10,100	2½	30	6,558	1.54	6,901.98	.68½
Pensacola.....	4,363	1	12	2,660	1.61	4,079.99	.93½
Miami.....	2,395	1	12	2,660	.90	2,950.47	1.23
Tallahassee.....	3,281	1	12	2,660	1.23	3,591.09	1.09½
Key West.....	830					‡ 427.01	.51½
Total.....	40,677					29,912.65	.73½

<sup>1</sup> Cost of new construction has been subtracted.

<sup>2</sup> No salary included. Bacteriological work is performed by the district health officer.

The greatest number of men employed in bacteriological work during 1915 at the main laboratory was seven, the average for the year being four. In making this average the chief of the laboratory has been considered as giving full time to diagnostic work. As a matter of fact, however, much of his time is taken up with administrative details. It is suggested that the work of a bacteriologist is in the laboratory rather than the office and, except for an occasional correspondence of a purely technical nature, such matters should be attended to by other officials of the health department.

There has also been included the work performed in the laboratory by the sanitary inspector, who devotes at least one-half of his time in the capacity of a technical assistant. It is the intention further on in this report to recommend other duties for the sanitary inspector, as it is thought that the strictly technical men now employed, namely, the chief bacteriologist and his three assistants, are ample to carry on the work at all times.

In going over the monthly expense account from the various laboratories it would seem that a good many articles are bought in the localities which had better be bought in bulk by requisition.

On the 1st of January and 1st of July each year the bacteriologist in charge of the main and branch laboratories should submit a requisition for at least a six months' supply of stationery, drugs, chemicals, and laboratory supplies, those from the branch laboratories to be submitted through the chief of the main laboratory for approval.

It is also suggested that where practicable prepared culture media be furnished to the branch laboratories from the main laboratory, and that all tumor work be carried on in the main laboratory by one man skilled in pathological as well as bacteriological diagnoses.

The chief of the main laboratory should be made responsible for the technical work of each branch laboratory, but for the purpose of general administration the branch laboratories should be placed under the supervision of the assistant State health officer located in the district, and the main laboratory should be made a part of a bureau of communicable diseases.

It is questionable whether strictly clinical examinations should be made at all, certainly not where there is a private laboratory in the vicinity. If, because of local conditions, it is deemed advisable to extend certain clinical laboratory facilities to the physicians it should be done free of charge in indigent cases, and some arrangement made with the physicians whereby the State would be reimbursed if the patient were able to pay.

In the Tampa laboratory the bacteriologists are both graduate physicians, and the sanitary inspector stationed in that locality also devotes much of his time to laboratory work. The same remarks that apply to the sanitary inspector at the laboratory in Jacksonville would apply to Tampa, but in the latter place it would probably be necessary to employ a laboratory assistant if the sanitary inspector were detailed for other work. The assistant bacteriologist has had experience in water and sewage work, and it might therefore be well to remove him to Jacksonville in charge of a water and sewage laboratory, as contemplated in the formation of a bureau of sanitary engineering, substituting in his place in the laboratory a bacteriologist who need not necessarily be a physician.

The branch laboratories at Miami and Tallahassee are located in rooms provided by the city, which also furnishes the necessary heat, light, and electricity. The city of Miami furnishes stenographic service for the bacteriologist. These two laboratories perform a good deal of the laboratory work required by the city, including milk and water analyses.

The Key West laboratory is located in a room paid for by the State board of health; the branch laboratories at Tampa and Pensacola are located in buildings owned by the State board of health.

It should be noted that the cost of maintaining the laboratories of the State board of health is approximately one-fifth of the total cost

of operating the entire department, and while it is realized that a diagnostic laboratory is one of the most important divisions of public-health work, the amount expended in the present instance should certainly not be exceeded. As compared with other States, Florida has a goodly number of branch laboratories. Theoretically, at least, there can not be too many, but practically there is a limit which is certainly reached in the present instance, and the establishment of any more would be unwarranted.

*Number of examinations made in the laboratories of the Florida State Board of Health, year ended Dec. 31, 1915.*

	Main (Jackson- ville).	Tampa.	Pensa- cola.	Miami.	Talla- hassee.	Key West.	Total.
Intestinal parasites.....	1,901	1,255	422	100	153	32	3,863
Diphtheria (swabs).....	532	123	174	108	122	14	1,303
Diphtheria (cultures).....	7,339	1,451	1,461	273	1,419	21	11,974
Gonorrhoea.....	750	504	475	90	61	22	1,902
Malaria.....	2,278	1,926	468	217	587	15	5,492
Tumors for malignancy.....	98	119	36				253
Rabies.....	67	8	5				87
Tuberculosis.....	1,575	978	472	212	163	13	3,413
Typhoid fever.....	2,142	1,519	410	197	426	11	4,735
Paratyphoid fever.....	33				52	1	86
Water for colon.....	1,025	158	61	282	37	10	1,573
Water, chemical.....	875						875
Leprosy.....	5	4				1	10
Ophthalmia neonatorum.....	10	31				1	42
Rats examined.....		1,525				668	2,193
Milk analyses.....	175	3	155	776	29		1,138
Urine analyses.....	159	245	88	42	87	4	625
Blood counts.....	173	120	111	24	80	7	515
Animal inoculations.....	37	16	8		3	1	65
Miscellaneous.....	534	85	17	74	55	8	773
<b>Total.....</b>	<b>19,708</b>	<b>10,100</b>	<b>4,363</b>	<b>2,395</b>	<b>3,281</b>	<b>830</b>	<b>40,677</b>

<sup>1</sup> Includes examinations for carriers and of release cultures.

<sup>2</sup> Includes reexaminations.

### Field Force, Active and Potential.

The State board of health is fortunate in having in its employ a field force for public-health work. The personnel of this force and their respective salaries are at present as follows:

4 assistants to the State health officer, at \$2,400.....	\$9,600
3 assistants to the State health officer, at \$2,000.....	6,000
3 county agents (part time), at \$600.....	1,800
6 public-health nurses, at \$1,200.....	7,200
4 sanitary patrolmen, at \$1,200.....	4,800
<b>Total.....</b>	<b>29,400</b>

*District health officers.*—For several years previous to 1913 there were employed four assistants to the State health officer. One was detailed to headquarters and three were detailed to field work. In 1913 the State was divided according to density of population and facilities of transportation into seven districts, and four more assistants to the State health officer were appointed, thus making seven medical assistants in the field, or one to each of six districts, and one

for the State at large, while the bacteriologist appointed for work in the branch laboratory in the remaining district was detailed to act in the capacity of the assistant to the State health officer in the district. His duties, however, have been confined almost entirely to the laboratory.

The district health officers are expected to make an inspection trip through their districts at least three times each year. If an emergency arises the officer in whose territory it occurs is detailed to make an investigation and when necessary to institute preventive measures for the control of the disease. Blank forms have been devised for the purpose of submitting epidemiological data by attending physicians or data gathered during investigations of smallpox, typhoid fever, diphtheria, scarlet fever, rabies, and pallsagra.

Upon the request of local authorities sanitary surveys are carried on and expert advice is given.

Upon the completion of any investigation or inspection a report is submitted to the State health officer.

The assistants to the State health officer are required to deliver popular lectures as the occasion arises. One assistant has been especially active along these lines in that he gives a course in public health in high schools. This course has been made a part of the regular curriculum and the pupils are required to pass an examination on the subject at the end of the term. This is a very excellent idea and should result in great good.

*County agents.*—The county agent is a remainder from the old system in vogue before the position of assistant State health officer was created. The activities of the county agents are limited to the county and to a large extent are confined to the principal city in the county. They are part-time employees and are expected to perform in their respective counties the same duties that are performed by district health officers.

*Public health nurses.*—The public health nurses of the State board of health began their work less than a year ago. There are now actively engaged in field work six nurses, each having a district. At a recent meeting of the State board of health the State health officer was authorized to employ six additional nurses. This will require the subdivision of the State into 12 districts instead of six as at present. It is the intention to utilize, as soon as possible, the services of the nursing staff for all classes of public health work in which it may engage, though last year the nurses' duties were mainly concerned with tuberculosis, their visits being made only to houses from which tuberculosis had been reported. At these visits they give not only instructions as to the care of tuberculous patients and the means of prevention, but advice and instruction on other health mat-

ters as well. A number of talks have been given before women's clubs and other organizations.

For the part of the year 1915 in which these nurses were employed they visited a total of 1,225 cases of tuberculosis.

When a case of tuberculosis has been seen for the first time, it is reported to the State board of health and a card is filled in with full data relative to the social conditions of the patient; "follow up" reports are forwarded at each subsequent visit. A monthly report of her activities is required from each nurse. Upon her arrival in a community the physicians are first visited and interviewed with reference to any tuberculous patients whom they may be attending, the purpose of the antituberculosis work of the State board of health is explained, together with the methods of procedure, and the cooperation of the physicians is requested.

*Sanitary inspectors.*—The duties of the sanitary inspectors are not unlike those performed by men in similar positions elsewhere, except that two of them spend much time in the laboratory assisting in routine work. Many of the duties of the sanitary inspectors are performed in the municipality in which the district health officer has his headquarters.

*Discussion.*—It is unfortunate that some of the assistants to the State health officer are engaged in the private practice of medicine. All experts will agree that private practice and the work of the health officer are incompatible.

Potentially this force is capable of performing an amount of public health work of incalculable value to the State of Florida. Actually, however, there is not sufficient field work of an important and intensive nature accomplished. There is too much time spent at headquarters. The representative of the State board of health is at times too apt to limit his duties to the locality in which he resides, performing work that should be done by a municipal health department. This limited sphere of action is partly due to the fact that the funds of the State board of health will not warrant too large an expenditure for traveling expenses. This obstacle, however, must be overcome, even though it may be necessary to economize in other directions, for in order to get the valuable results that may be expected, the field men must be active in the field. The small municipality and rural districts are in greater need of State aid than is the larger municipality which should be equal to taking care of itself. There are many public health problems in the State requiring thorough epidemiological investigation, and it is strongly urged that intensive studies be carried on as to the prevalence and eradication of malaria, typhoid fever, dysentery, infant mortality, pellagra, tetanus, trachoma, and other similar conditions within the State. That such

work may be performed to the best advantage it should be understood that each district health officer must give his full time to the State and not engage in private practice or any other business that will interfere with his official duties.

*Number of investigations made by the assistants to the State health officer, outside of the cities comprising their headquarters, year ended Dec. 31, 1915.*

District.	Diphtheria.	Small-pox.	Typhoid fever.	Scarlet fever.	Other preventable diseases.	Sanitary inspections, lectures, etc.	Sanitary surveys.	Total.
Southwestern.....	3	3	2	.....	3	20	2	33
Western.....	1	.....	.....	.....	2	.....	.....	3
South tropic.....	.....	4	.....	.....	.....	2	.....	6
South central.....	5	6	2	3	6	9	1	32
Central.....	15	9	2	.....	22	17	2	57
East coast.....	5	3	3	.....	.....	35	.....	46
West central.....	1	1	.....	.....	3	.....	2	7
State at large.....	4	1	5	1	9	20	6	46
Total.....	24	27	14	4	45	103	13	230

<sup>1</sup> 1 investigation made in east coast district.  
<sup>2</sup> 15 investigations made in the western district.  
<sup>3</sup> 1 investigation made in south central and one in the western district.

It is suggested that the position of county agent be abolished and that the county be included in the district to which it logically belongs.

It is likewise suggested that the nursing staff be increased as funds will permit, so that each nurse in time will have a small district in which she may carry on all of the duties required of her, including the activities concerned with antituberculosis and other communicable disease nursing, child welfare and prenatal nursing, school nursing, and the supervision of midwives.

It is suggested that much more good could be obtained from the service of the sanitary inspectors if they were given some specific duties to perform. In the present instance they might be transferred to a division of dairy inspection, which should be created in the veterinary division, and given the duties involved in the inspection of milk-producing establishments when such places are not operated under the supervision of local authorities. This would mean that they would require a thorough preliminary training along that line.

It is pointed out that it would be more businesslike to form each district into a health unit to be in charge of the district health officer, who should have as his assistants those public-health nurses working within the district, and the general administrative control of the branch laboratory, where one is established, together with a general supervisory control over local health authorities.

In order to enable the field force to cover more territory in a more expeditious manner and in a way that would eventually prove economical, each district health officer and nurse should be provided with an inexpensive runabout.

The undue morbidity of the State of Florida is chargeable in large part to the ignorance and lack of right living on the part of the negro population; it is therefore obvious that the work of the health officer is required among the negroes as well as among the whites. The preventable diseases are no respectors of color and preventive measures should be applied among the negro race, not only to prevent the spread of disease to the white population, but also to conserve the life and health of the laboring class of the South, upon whose physical fitness many of the industries depend. It would, therefore, be desirable to appoint some colored nurses in the State board of health who can carry on work among their own people to advantage.

*Local health authorities.*—No county in the State has a health organization of any kind, and there are only two cities in the State having a health department worthy of the name—Jacksonville and Miami. In the other larger cities, as well as in some of the smaller municipalities, there is a part-time health officer whose duties are not onerous. Too much dependence is placed upon aid received from the State, especially in those communities forming headquarters for the assistants to the State health officer. Such a condition is inconsistent in a growing and prosperous community.

*Jacksonville.*—The health organization of Jacksonville is controlled by a board of health, which has as its executive officer a full-time health officer.

The board of health expended in 1914, \$42,466.44. The financial statement for 1915 has not been completed, but the appropriation for that year amounted to \$36,690, while the total available money for public-health work during 1916 will amount to approximately \$41,152.

The activities of the Jacksonville board of health comprise the health supervision of schools, the control of communicable diseases, infant welfare work, the recording of births and deaths, milk and dairy inspection, including a laboratory, sanitary inspection, mosquito extermination, and the disposal of night soil.

To carry on the work required in a health supervision of schools there are employed two doctors at \$50 per month, both part-time men, and two nurses giving their full time to the work, at \$75 per month. The inspection is made among the white pupils only. During the year 1914 the total cost of this work amounted to \$2,680.27.

For the inspection of milk and dairies there is employed one inspector who, though not a veterinarian, is a graduate of a school of dairying and has had practical experience in the business.

An inspection of some of the producing farms supplying milk to Jacksonville shows that much has been accomplished toward improving sanitary conditions, not by requiring the installation of expensive

equipment, but by teaching the principles of cleanliness, as applied to milk production.

Maintained in conjunction with this division there is a laboratory in which there is employed a bacteriologist and chemist, who receives \$2,100 a year. The principal work of the laboratory consists of the examination of milk samples. In addition to this, analyses are made of the city water supply and a small amount of diagnostic work is performed, especially in the case of diphtheria. Most of the diagnostic work, however, is done in the State laboratory. The analyses of milk samples show that there is a constant improvement in the cleanliness of the milk, as shown by the bacterial count. To support the milk inspection division, including the laboratory, during the year 1915, cost \$3,807.29.

The city board of health owns and controls a modern isolation hospital, which is operated and maintained by the general hospital of the city. The isolation hospital is far superior to most institutions of its kind, and the city of Jacksonville is fortunate in having such excellent hospital facilities for isolating the communicable diseases according to modern ideas.

The registration of births and deaths in the city of Jacksonville is highly efficient and is in the immediate charge of the secretary of the city board of health.

In addition to the two school nurses who perform not only school nursing but nursing in connection with the communicable diseases as well there is employed by the health department one colored nurse who works among the colored population, maintaining a supervision over the negro midwives, and performing work along educational lines and to prevent the spread of the communicable diseases. In addition, the infant welfare society of the city employs a nurse who works under the supervision of the health officer, and there are two nurses employed by private charity who work independently of the health officer. The board of health plans to add two more nurses to its staff in the very near future, after which it is expected that there may be effected an amalgamation of the nursing forces of the city so that it will be possible for them all to work under one head, the health officer, and that the districts will be small enough to enable a nurse to perform all public-health activities required in her respective district. Such an arrangement would be in accordance with modern views and would mean increased efficiency.

There are 15 sanitary inspectors at \$85 a month and one chief inspector at \$150 a month. One of these inspectors is detailed for the inspection of hotels and restaurants; one acts as fumigator, placards houses, and investigates special complaints; and one acts as assistant chief. The others are engaged in general sanitary



inspections. The cost of maintaining the sanitary inspection division in 1914 was \$17,713.

Engaged in the operation of mosquito extermination there are three men employed at a total of \$2,341 per year. Expenses for oil, etc., for 1914 were \$618.87, making a total of \$2,959.87. In addition to this, two creeks in the city are kept free of weeds by contract, at a cost in 1914 of \$350.

The scavenger collecting the night soil pays the city for that privilege and collects his fee from the householder. In this way the board of health receives \$2,712 per year, which may be used for public-health purposes. The night soil is dumped into one of the city sewers at a station especially equipped for the purpose. The board of health employs two men at this station at a cost of \$1,000.

The board of health maintains a free dispensary, employing a pharmacist and three city physicians at \$900 a year each for part-time services.

There are furnished free of charge prophylactic packages, to be used against infantile tetanus and ophthalmia neonatorum. Midwives are instructed, examined, and licensed by the city board of health. This, together with the use of the prophylactic packages and the activities, more especially of the colored nurse among the midwives of her race, has been instrumental in decreasing the amount of infantile tetanus and ophthalmia neonatorum to a very marked degree.

The board of health furnishes to the dairy inspector an automobile as well as a machine, which is used jointly by the health officer and the chief sanitary inspector. For mosquito extermination there are furnished two wagons and two mules. Employees of the department ride free on the street cars.

The collection and disposal of rubbish are under the control of the board of public works. An ordinance requires that householders place their rubbish in a proper receptacle and specifies that no garbage may be mixed with it. There is no provision made, however, for the collection of garbage. The householder is required to dispose of this refuse as best he may, and it is usually collected by the farmers who feed it to the hogs. As a result of this unfortunate condition the householder frequently surreptitiously places his garbage in the rubbish can.

The rubbish is used for filling in low places, a legitimate and economical procedure provided the rubbish contains no garbage.

The city should make provision without delay for the collection and disposal of garbage according to the methods pursued in modern cities, requiring the householder to have two cans, one for garbage

and one for rubbish, the garbage to be disposed of by means of incineration or in a modern reduction plant. The collection of garbage and rubbish can be made on alternate days and if the wagons are properly constructed they may be used to collect both rubbish and garbage.

The city water supply is from flowing wells. It is treated with hypochlorite because there has been found evidence of contamination derived either from seepage through cracks in the aeration reservoir or from the dust of the streets, the reservoir being uncovered.

The city of Jacksonville has an efficient health organization. It should be pointed out, however, that the number of sanitary inspectors employed as compared to nurses, keeping in mind the relative importance of the work performed, is out of all proportion and unnecessary. It would be better to reduce the number of sanitary inspectors and employ more nurses.

*Miami.*—The city board of health employs a health officer who is permitted to do some private practice. He has under him a milk inspector who is a veterinarian, a plumbing inspector, and a clerk.

Garbage is collected by the city health department. Cans are furnished free of charge to each householder. They are collected and taken to the incinerator, dumped, flushed, and steamed. A clean can is substituted for the one collected. The system is highly satisfactory and carried out efficiently.

Milk inspection is thorough and has resulted in a great improvement in the dairies supplying milk to Miami.

The collection of birth and death reports seems to be satisfactory, but the city is not in the registration area.

The water supply is secured from deep wells, but has showed some evidence of pollution and is therefore being treated with hypochlorite of lime.

The city is sewerred, the sewage emptying into the bay untreated.

Laboratory work is performed by a branch laboratory of the State board of health.

A visiting nurse employed by the relief association cooperates with the health department.

The other cities visited had such poor local health organizations that it is not thought worth while to attempt any description.

Except in Key West the water supplies are all derived from deep wells. In Key West rain water is used, attempts to drive wells having been unsuccessful.

With the exception of Key West all the cities visited were sewerred in whole or part. In Tampa, sewage is treated by three Imhoff tanks located in different parts of the city. In Tallahassee it is treated by septic action and percolated through coke beds. In both Tampa and Pensacola provision is made for milk inspection. In the former city,

however, inspection is done by the division of food and drugs, which is not a part of a health organization.

A word should be said relative to the division of sanitation in Tampa. The chief of this division is in charge of street cleaning and the collection of garbage and rubbish. He takes great interest in the work and manages affairs efficiently and economically, but in order to keep up with the growth of the city he requires an increased appropriation.

Garbage is incinerated, there being four incinerators of two units each, with a capacity of 100 tons. There is collected an average of 48 tons of garbage per day though the collection at times may greatly exceed this amount. To incinerate costs about 38 cents per ton. No figures were available for the cost of collection. The division of sanitation employs sanitary inspectors.

#### PUBLIC HEALTH ENGINEERING.

The State board of health has never established any bureau of public health engineering nor has it ever had in its permanent employ a public health engineer. Assistance has been obtained from the outside from time to time as the occasion arose and the service paid for as required.

*Requirements of laws.*—The laws relating to public health engineering are summarized as follows: It is prohibited to deposit any rubbish, filth, or other deleterious substances liable to affect the health of persons, fish, or live stock in any of the waters of the lakes, rivers, streams or ditches in the State. For violation there is provided a fine of not to exceed \$500. The enforcement of the law is placed with the State board of health.

It is prohibited to use any cavity, sink, driven or drilled well for the purpose of draining any surface water or discharging any sewage into the underground waters of the State, without first obtaining a written permit from the State board of health. For violation there is provided a fine of \$25 for each offense or imprisonment not to exceed one month or both. Each day during which the act is violated constitutes a separate offense.

It is unlawful for any person to maintain a surface closet within incorporated limits, which is not fly proof in construction, and is not built in conformity with plans approved by the State board of health.

For violation there is provided a fine of not to exceed \$10.

The State board of health is authorized "to employ or engage the services of a sanitary engineer \* \* \* whenever in the opinion of the State health officer the necessities of sanitation in and about the State may require an expert opinion and decision in regard to construction of sewers, drainage of a sanitary character, etc." The law further provides that the sanitary engineer "shall only be employed at such times and such periods as in the judgment of the State health officer, his expert services may be required."

*Discussion.*—It has been suggested on several occasions to retain the services of an engineer or firm of engineers in private practice who could act, when needed, for the State board of health. To put the proposed arrangement into effect a retaining fee would be necessary

and actual work paid for at the rate of \$25 a day and expenses. The scheme would not be satisfactory, would not be consistent with the practice in modern health departments and would prove in the end an expensive procedure. There are so many communities in the State with problems of water supply and sewage or garbage disposal, which for their solution require the advice of an expert, that the services of a full-time official could be employed to great advantage. His duties would be to study thoroughly the conditions in a community and to inform the authorities what should be done to best meet the requirements; to estimate the probable cost of construction; to approve all plans presented by the constructing engineers employed by the locality; and by advice and supervision to determine that the locality is getting all that it is paying for. It is entirely too common to find a small city supplied with a sewerage or water system entirely inadequate for the purpose, solely because sound advice was not obtained beforehand.

The legislation relating to the disposal of sewage and maintenance of the purity of water supplies is very meager, but even with little authority the State engineer could render services of inestimable value to the locality because of the advice he would be able to give, at the expense of the State. In time, after the establishment of a bureau of public health engineering and the employment of a sanitary engineer, it would be advisable to give him assistance; as, for instance, a draftsman and a water and sewage analyst.

#### DISSEMINATION OF INFORMATION.

The activities carried on for the dissemination of information on the subject of public health, including publications and exhibits, might well be considered more highly specialized than any other work of the State board of health. During the year 1915 there were spent for educational purposes \$13,408.11. Funds spent in this way may be considered money well invested.

*Requirements of law.*—The law relating to the subject of education along public health lines is summarized as follows:

The State board of health is authorized to disseminate information concerning the cause, nature, and extent of communicable disease and may arrange for free lectures and health exhibits and the publication and distribution of bulletins, pamphlets, circulars, or other printed matter.

The State board of health is further authorized to send a public health exhibit in a railway car or cars over the different lines of railroad in the State and to give free illustrated lectures to the people. The State health officer may employ a sufficient number of assistants to carry on the work.

The railroad companies may haul the cars free of charge and furnish free transportation to the necessary number of employees.

The State health officer is authorized to accept any donation and contribution that may be made by any local government to assist in defraying the expense of the exhibit in the locality.

The personnel of the State board of health at present engaged in strictly educational activities, and their salaries, are as follows:

**Exhibit:**

1 assistant to the State health officer.....	\$1, 200
1 cook.....	520
1 porter.....	520
1 engineer.....	520

**Publications:**

1 publicity agent (press service, part time).....	300
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3, 060

**Publications.**

*Monthly bulletin.*—There is a bulletin issued monthly and distributed to some eight thousand people, including physicians and other citizens, to newspapers of the State, and officials in Florida and other States. This bulletin contains statistics on health matters derived from the reports received by the division of “vital statistics,” and original or other articles pertaining to the prevention of disease and personal hygiene. The bulletin is full of excellent material, but like other publications of its kind, unfortunately reaches but few of those people most in need of instruction.

*Pamphlets.*—A large number of publications of this nature have been issued from time to time by the State board of health, and cover a wide range of subjects, including hookworm disease, malaria, mosquitoes, flies, smallpox, Imhoff tanks, antityphoid vaccination, tuberculosis, vital statistics, water purification, measles, child welfare, ophthalmia neonatorum, typhoid fever, and preventive medicine in general. Some of these pamphlets are original and some reprints from other sources. All are worthy of perusal and make a valuable addition to a library of popular information on public health subjects.

These pamphlets are sent to the same individuals who receive the monthly bulletin but in addition are distributed from the exhibition train, as well as by the field officials of the State board of health during their various trips. In this way they have a much wider circulation and reach a more varied population.

*Circulars of information.*—Circulars of information have been published on the subjects of malaria, consumption, hookworm, typhoid fever, pellagra, whooping-cough, flies, and sanitary privies. These circulars are small and contain in a few words the essentials of the subject. They are intended more especially for general distribution from the health train and by the public health nurses in their house to house visits, supplementing instructions given verbally.

*Posters.*—A number of instructive posters have been issued from time to time by the State board of health from original or other

sources. Some were intended for posting in public places while others have been used exclusively for reproduction in the various publications of the board and for exhibition on the health train. They are all drawn in the health department by an artist employed as the occasion arises.

*Press service.*—There is written each week a popular article on some subject of public health which is sent gratis to every newspaper in the State, with the request that it be published in the interest of the public health. These articles are composed by a part-time employee of the State, of long experience in newspaper work, and are therefore written in the style that may be appreciated by the general reader.

#### Exhibits.

In the past the public-health exhibit of the State board of health was sent from place to place by freight or express. This necessitated the packing and unpacking of the exhibit each time it was shown, a cumbersome and expensive procedure and one limiting the number of localities visited. During the last year, however, three cars were purchased from the Pullman Company and remodeled, one as a living car and two as exhibit cars. The railroads of the State have agreed to haul this train from place to place free of charge, together with the necessary number of attendants. This arrangement was made possible through the action of the State legislature and the Interstate Commerce Commission.

The living car, designed to house the officials in charge of the exhibit, is well planned and contains a kitchen, dining room, four bed rooms, and an office and living room. In this car there are two bath rooms and toilets, with a wash basin and dental lavatory in each bedroom. Pressure tanks are provided for storing the water supplied to the different plumbing fixtures.

The second car contains bunks, toilet and bathing facilities for the train crew, a gasoline engine, and an electric generator which furnishes all of the light and power used on the train. About two-thirds of the space in this car is utilized for the exhibition of models, charts, etc., and projecting apparatus. A compartment has been rendered fireproof and contains the moving-picture machine. The screen is erected outside of the car when required and the picture projected through the open window.

The third car, except for a small compartment containing a public toilet, is devoted entirely to exhibits, especially charts and panels containing in terse phrases the essentials of preventive medicine.

Each car is screened against flies and mosquitoes and provided with electric fans, so that adequate ventilation may be secured.

Beneath each toilet there is a screened can, so that pollution of the tracks, especially at sidings or stations, may be prevented. These cans are cleaned by the laborers employed by the railroads at the various stations. Journals are inspected by the regular car inspectors, and in most instances both ice and water are furnished by the railroad company free of charge.

Among the models shown are the "Flies' air line," a sewage-disposal plant; the way in which underground contamination of water supplies may occur; an open-air house for the tuberculous; "The contrast room illusion;" the comfortable infant; and others. These models will be added to from time to time until all available space is filled.

Practically all of the towns of Florida have railroad facilities, so that by reason of the cooperation of the railroad officials this train will be able to reach every community. It is, in fact, the people of the small community that are most in need of instruction, and it is satisfactory to note that they have shown great interest in the exhibit, many times even 90 per cent of the population taking advantage of the opportunity to see it.

The official of the State board of health in charge of the exhibition train is assisted by the various district health officers who accompany the train during the time that it remains within their respective districts.

It has been thought more businesslike and satisfactory to all concerned to operate the train on regular schedule, visiting each community in a methodical manner. Many requests have been received by the State board of health to send the exhibition train to various places during county fairs and the like, but compliance with these requests would not only interfere with the schedule, meaning long, irregular trips, but would impose an extra burden on the railroad companies as well.

#### Discussion.

The activities on the part of the State health officer for the education of the people along lines of public health and sanitation are excellent and should, in time, result in great good. The work is of such great importance that it is deemed worthy of a special place in the health organization, and it is therefore suggested that a bureau of public health education be formed with a full-time chief to have complete charge of all matters pertaining to publications and exhibits.

The criticism that so many of the people in need of instruction do not read or even see the published articles is probably too true.

It is in fact almost futile to attempt to teach the present generation, and it is thought that greater progress would be made if special

instruction could be given to the younger generation. It is therefore suggested that in order to reach the children the State board of health publish semimonthly articles on preventive medicine to be used in the public schools as texts for the lessons on hygiene and sanitation. The hearty cooperation of the teachers in the public schools would be necessary to insure success.

### HEALTH SUPERVISION OF SCHOOLS.

*Requirement of laws.*—During the 1915 session of the legislature a law was enacted providing for a health supervision of school children which was placed for its enforcement in the State board of health. It is summarized as follows:

All school children must be examined as to their physical condition at least once during each school year. To accomplish this, the State board of health is authorized to promulgate the necessary regulations.

County physicians must act as medical inspectors of school children, and where there is no county physician, the county commissioners must appoint a physician for that purpose. The State board of health is required to pay for the services rendered by county and other physicians appointed to carry on the work. The law also specifies that no one school physician may have more than 2,500 school children under his charge. The provisions of the act do not affect cities of over 5,000 inhabitants where a system of medical inspection of school children has already been established by the city board of health, provided that the authorities carrying on the work adopt the forms prescribed by, and make full reports to, the State board of health.

In addition to the above, a law requires that all school buildings, public or private, be provided with either water or surface closets, having separate compartments for each sex. Where water closets are not practicable, surface closets must be fly proof and constructed in conformity with plans approved by the State board of health. For failure to install the proper closets there is provided a fine of not to exceed \$50.

*Methods of procedure.*—It has been estimated by the department of public instruction that the total enrollment of pupils for the school year 1915-16 is 191,240. Of this number 12,190 are in the high schools and 179,050 in the lower grades. To examine these children according to law, there would be required approximately 76 physicians. As the act did not carry with it any appropriation it is impracticable for the State board of health to pay salaries commensurate with the importance of the work. However, as some action had to be taken it was decided that reimbursement be made to the extent of 10 cents for each child examined. Even this small sum would mean an annual expenditure of approximately \$19,000 for medical services alone.

Regulations were promulgated by the State board of health to carry out the provisions of the law, and the medical inspection of school children commenced about the first of the present year, 1916.

The examining physician is required to record the results of the examination of each child on a separate card and file the same in his



office. This card follows the child throughout the period of school life.

When the physician has completed the examination of the children in his district he submits to the State board of health a report showing the number of pupils examined, the name of the school, the nature of the defects found, the number of pupils vaccinated, and other pertinent information.

*Discussion.*—The law as passed was not recommended by the State board of health and does not seem to have been framed with a full understanding of the requirements for a State-wide health supervision of school children. In the first place the most important factor in a system of health supervision, the school nurse, has been overlooked; also the fact that the State board of health has in its employ seven medical men whose services could be used without extra expense for the examination of children in the small municipalities and rural districts. As in other health matters the health departments of the larger municipalities should be under the obligation of assisting the State by employing their own medical inspectors.

Better results would accrue if the funds of the State board of health devoted to school work were expended in the employment of more nurses. The nurse can detect not only many defects in the children which it may or may not be necessary to refer to the physician, but she can go further and follow up the case into the home. A medical inspection without a follow-up system is useless.

Again, the law makes it necessary to examine all children at least once each year. This matter should be left to the discretion of the examiners. As a usual thing pupils of the high school do not require an examination. Children found without defects at the first examination usually do not require a reexamination.

The payment of expenses has been placed with the State board of health, although that board is not permitted to select the examining physicians.

While the law is very defective, it is a step in the right direction and will result in securing valuable statistics proving the great necessity for some health supervision over the school child.

It is thought highly desirable to amend the law at the next meeting of the legislature, so that the district health officers now employed by the State board of health may perform much of the medical work, the nursing staff of the State board of health be greatly increased, and certain other changes be made as already suggested.

As soon as practicable it would seem advisable to carry on work along the lines of child welfare, and for this purpose a bureau of child welfare should be organized into which could be incorporated the health supervision of schools and the supervision of midwives.

**VETERINARY DIVISION.**

The veterinary work of the State of Florida is performed by an organized division of the State board of health. The personnel of the veterinary division and their respective salaries at present are as follows:

Veterinarian of the State board of health.....	\$2,000
1 stenographer.....	720
1 assistant veterinarian.....	1,800
1 live-stock agent.....	1,500
1 live-stock agent (part time).....	300
Total.....	6,320

In addition to the above there are appointed a number of veterinary inspectors in different parts of the State who receive compensation from the owners of animals inspected. Their duties consist mainly of a supervision over the shipment of horses and mules, with special reference to the presence of glanders.

The work of the veterinary division is concerned with all that its name implies, but more especially with tick eradication, hog cholera, glanders, and tuberculosis.

The problem of the eradication of Texas fever has been a serious one in Florida, and this disease has greatly interfered with the growth of the cattle industry.

The veterinary division of the State board of health has been energetic in its efforts to secure tick-free zones from which shipments of cattle might be made in compliance with quarantine regulations of other State and Federal authorities. To accomplish these results the hearty cooperation of the owners and the authorities in the locality is required. Dipping vats must be built by private capital and regulations looking toward the eradication of the disease adequately enforced. So far, but two counties of the State, Dade and Broward, have eradicated the tick and will soon be declared tick-free. There is, however, a constantly increasing interest taken in this work, resulting in the construction of more dipping vats in various parts of the State. The State veterinarian has delivered a number of addresses before gatherings interested in the subject of tick eradication.

The eradication of hog cholera has also been a serious problem requiring a large expenditure of money for hog cholera serum, which according to an act of the legislature must be issued free of charge to farmers by the State board of health.

Horses and mules are not permitted to enter the State without a certificate to the effect that they have been given the mallein test and are free from glanders. In this as well as in other matters the railroad companies give their hearty cooperation.

The reimbursement for horses and mules killed within the State on account of glanders is allowed by law in a sum not to exceed \$75. The value is determined by a board of three members, consisting of the State veterinarian or his agent, a person appointed by either of them, and one appointed by the owner.

Bovine tuberculosis is not at present a serious problem within the State, due perhaps to the small number of cattle distributed over a wide territory and the open-air life, nor has the veterinary division carried on very extensive work as regards the tuberculin testing of cattle; it may be done upon request. Certain of the cities have enacted ordinances requiring that this test be made in the milch cows and in carrying out this ordinance may receive State aid if they desire it. A law prohibits the importation of cattle, except for immediate slaughter, unless the tuberculin test has been applied and they have been found free from tuberculosis.

#### **CONTROL OF THE MILK SUPPLY.**

No State body is at present exercising any supervision over the milk supply, nor are there any State laws or regulations applying to the subject, except that clause in the pure-food law which defines a chemical standard for milk. As has already been pointed out, some of the municipalities have employed a milk inspector for the inspection of milk-producing farms in the locality and the milk after it has arrived within corporate limits. This important field of public-health work should be immediately taken up by the State board of health with a view towards maintaining a sanitary condition in milk-producing farms not at present being supervised by local authorities and improving the cleanliness of the product. For the purpose there should be established in the veterinary bureau a division of milk inspection. This would necessitate the employment of inspectors to carry on the field work. Such men should be trained in dairy farm inspection. The score card used by the United States Department of Agriculture may be adopted, and regulations providing for the maintenance of cleanliness on dairy farms should be promulgated by the State board of health.

As before stated, the inspectors at present employed for general sanitary work might be transferred to the milk-inspection division as dairy-farm inspectors. It must be kept in mind that the men employed in this class of work should be intelligent and must have a personality permitting them to associate with the farmer on amicable terms, for, after all, the inspector is essentially an educator and the necessary control amounts to a friendly cooperation between him and the milk producer. The State board of health is already well equipped to handle the veterinary side of the question.

**THE TREATMENT OF CRIPPLED CHILDREN.**

In 1911 the State legislature passed a law authorizing the State board of health to erect a hospital for, and to furnish free treatment to, indigent crippled children of the State. To provide the necessary money the legislature authorized the use of \$20,000 to be paid out of funds already available to the State board of health. As the State board of health was already making use of its funds for activities already under way the hospital in question was not built. However, a provision of the law permitted the State board of health to care for crippled children in an institution already established until the number of applicants for treatment would warrant the erection of a hospital for the purpose. Accordingly, arrangements were made with two Jacksonville institutions to furnish the necessary care, and the physician furnishing treatment was last year placed on the pay roll of the State board of health at a salary of \$1,500 a year.

The work involved is essentially charitable in nature and has only indirect bearing on the public health.

**MISCELLANEOUS.**

*Hotel inspection.*—Previous to the year 1913 the inspection of hotels was one of the duties of the State board of health. Since that time, however, the legislature has created the office of hotel commissioner and enacted a comprehensive law for the maintenance of sanitation in hotels, and providing for the safety and comfort of the guests. The hotel commissioner has promulgated a number of regulations to carry out the provisions of the act. This law is similar to hotel inspection laws in other States, and will not be summarized here.

*Abatement of nuisances.*—It is made the duty of the State health officer, upon request of the proper authorities or three responsible resident citizens, or whenever it may be deemed necessary by the president of the State board of health or the State health officer, to investigate sanitary conditions of any city or town or place in the State and if a "sanitary nuisance" be found, it becomes his duty to notify the proper persons to remove or abate the nuisance within 24 hours or within such time as he may deem reasonable, and if such notice is not complied with, the State health officer is authorized to remove or abate it and charge the expense against the person committing the nuisance.

Certain other provisions of law prohibit the keeping of hogs within the limits of any city or town of over 2,000 inhabitants; regulate the maintenance of slaughterhouses; prohibit the importation or sale of diseased animals, and the depositing upon any premises, streets, etc., of any offensive substances, as, for instance, stable manure, decayed animal or vegetable matter, etc.

In addition there are certain provisions of law directed against noisome odors, or noxious gases, which are antiquated and need not be summarized in this report.

*The licensing of embalmers.*—The State board of health has promulgated regulations relating to burials, disinterments, and the transportation of dead bodies. In order to ship a body it must be embalmed. This can be done only by an undertaker licensed by the State board of health. This license is granted after the undertaker has passed an examination before a board composed of the State health officer, one of the assistants to the State health officer, and the chief bacteriologist of the State board of health. The examination is held in the presence of a representative of the Florida State Funeral Directors' and Embalmers' Association.

The regulations promulgated on the subject are similar to those in other States and will not be summarized here.

#### RECEIPTS AND EXPENDITURES.

The State board of health of Florida is supported by a tax levy of one-half mill, which gave it an income in 1915 of \$142,930, and which will amount in 1916 to approximately \$146,285. During the year 1915 there was spent in the support of the health organization the sum of \$157,979.02. It therefore required the entire income for the year plus a large part of the balance remaining from the previous year, to defray the necessary expenses. The amount which the State board of health receives through the tax levy appears to be a generous income until it is understood that out of it must be paid certain expenses which are ordinarily not incurred by a State health department, but which are usually paid for out of funds at the disposal of other State or local authorities. In Florida, however, the payment of such expenses has been imposed upon the State board of health by the legislature. These unusual expenses are as follows:

Veterinary division of the State board of health.....	\$29,339.28
Maintenance of isolation hospitals and reimbursement for smallpox cases..	4,277.64
Reimbursement for birth and death certificates.....	2,421.15
Treatment of crippled children.....	7,187.75
Total.....	43,225.82

If this amount be deducted from the yearly expenditures, there is left \$114,753.20, which figure represents more closely the cost of health activities in Florida as compared to those of other States.

The expenditures of the State board of health have never exceeded the funds at its disposal. There has been, in fact, at the end of each year, a balance available for the payment of expenses incurred during the coming year. This balance, however, is fast becoming less and less with the increasing activities of the health organization. It is

Statement of expenditures of the State board of

	Board of health.	Administration.					Epidemiological.
		Office of the secretary.	General expenses.	Building and grounds.	Clerical.	Library.	Field medical officers.
Ammonia for ice machines							
Animal food							
Animals laboratory							
Antitoxins and vaccines							\$1,782.95
Attorney's fees			\$25.00				
Books, periodicals, and reprints			30.00			\$380.34	
Charts, maps, plans etc.		\$2.25					52.20
Containers, mailing outfits, etc.							
Drugs, chemicals, and disinfectants							
Dues to societies and associations			20.00				
Electrical supplies			11.75				
Emergency services				\$23.30			
Express, freight, and drayage			119.14				1.90
Furniture							
Gasoline							
Glanders, reimbursement for							
Grounds, care of				263.18			
Heat, water, and electricity				396.39			
Hospitals, maintenance of patients including supplies and apparatus							
Household furnishings and supplies							
Installation of equipment							
Insurance, buildings, and fixtures			5.00				
Laboratory supplies							
Laundry			13.50				
Mimeograph and repairs			4.50				
Miscellaneous	\$73.25		80.80	.25			12.00
Models and repairs							
Moving-picture machine and films							
New construction				176.60			
Office supplies			43.55				5.95
Pellagra treatment							132.01
Photograph cuts and X-ray plates			122.55				
Press clippings						60.00	
Printing			1,060.67			4.50	29.24
Registrars' fees							
Reimbursement care of indigent smallpox patients							
Repairs and alterations				173.17			
Repairs to apparatus							
Rent							252.00
Salaries	630.00	4,999.92		954.00	\$5,090.11		16,933.08
Scientific instruments and apparatus							
Screening				2.50			
Signs							13.00
Stamps, post-office box			540.91				
Stationery	39.65		483.90				28.55
Stereomograph and slides							
Telegraph and telephone			486.30				
Transportation indigent smallpox patients to isolation hospitals							
Traveling expenses	207.40	2,314.90					2,260.28
Typewriters and repairs		40.05			177.21		
Vaccinations							
<b>Total</b>	<b>950.30</b>	<b>7,357.12</b>	<b>3,047.57</b>	<b>1,989.39</b>	<b>5,267.32</b>	<b>444.84</b>	<b>21,503.16</b>

health of Florida for the year ended Dec. 31, 1915.

Epidemiological.		Health supervision of schools.	Sanitation.	Education.	Vital statistics division.	Treatment of crippled children.	Veterinary division.	Laboratories.	Total.
Public health nurses, including anti-tuberculosis activities.	Expenses account smallpox, including isolation hospitals.								
								\$14.50	\$14.50
								134.89	134.89
								48.95	48.95
	\$975.00						\$20,456.80		23,214.75
\$2.40				\$236.55				1.35	25.00
41.90		\$17.05		290.50			18.18	.75	650.64
				314.70			115.40	294.30	422.83
	114.06			1.00			11.30	546.75	724.40
									673.11
									20.00
	84.00			95.09				12.21	119.05
	.26	5.64		223.75		\$93.00	56.00	4.55	119.05
				675.24	\$1.17		243.25	289.71	484.60
	10.05			188.23				917.33	1,336.31
				12.85					1,105.56
							1,075.00		22.90
	42.55							18.60	1,075.00
				37.02				788.44	1,264.40
	844.04					5,826.50			6,670.54
				446.31					446.31
				85.63			44.04	80.92	210.59
	119.65			515.00				215.10	854.75
				16.93			20.15	1,721.91	1,742.06
	28.71		\$3.00	9.85				95.11	125.54
				194.00			13.64	54.75	4.50
				838.80					276.25
									194.00
				50				13,408.00	838.80
				28.55	16.95				13,584.60
									95.50
7.12				181.61		15.00		3.10	132.01
									329.38
22.75		368.05	15.75	4,930.18	925.67	3.25	90.65	165.25	60.00
					2,421.15				7,615.96
									2,421.15
	467.65								467.65
	15.45			97.95			4.33	143.44	434.34
				.50				101.33	101.83
5,000.00	2,164.00		3,400.00	105.00	1,285.00	1,655.00	1,250.00	5,804.27	597.00
									70,058.81
	96.81							1,430.69	1,430.69
									99.31
50.00	1.00	808.00		611.90	660.00		200.00	3.00	16.00
49.50				48.55	145.51		51.67	423.53	3,295.34
				587.43				157.05	1,004.38
	188.91			5.66				323.65	585.43
									1,094.52
	98.50								98.50
3,143.61			10.00	1,261.30	176.24		1,073.57	645.84	11,093.14
	2.00			83.03	93.15		61.03	13.00	467.47
									2.00
8,317.28	5,252.64	1,199.24	3,428.75	13,408.11	6,094.84	7,187.75	29,339.23	43,191.43	157,979.02

true that the size of the State board of health fund increases annually, but its growth is slow and does not keep pace with the rapid expansion of a modern health department in a State of the importance of Florida. The time has therefore arrived when the State board of health feels that it must leave undone certain necessary things in fear that the balance sheet may show a deficit.

While there is no desire to minimize the importance of the work carried on by the veterinary division it is obvious that it bears little relation to the conservation of the public health. It is to a large extent an economic measure. During the year it cost to maintain this division \$29,339.28, a little less than one-fifth of the amount required to support the entire health organization. For hog-cholera serum and vaccine alone there was expended \$20,456.80, and hog cholera is a malady which in no way jeopardizes the health of man. The latter remark might be made as well for Texas fever, a disease not transmitted to man.

Admitting the necessity for the prevention of disease among the lower animals and its value to the farmers of the State, the fact is nevertheless deplored that work of this nature must be paid for out of funds intended for the maintenance of the health of human beings. A special appropriation of \$30,000 from the legislature for the prevention of disease among the lower animals would make available to the health department money that could well be spent for strictly legitimate public health purposes.

This expedient would permit the State board of health to enlarge the scope of its present work and take on increased activities until the time arrives when the State health fund has reached that size which will provide an adequate amount to defray all expenses.

In lieu of a special appropriation to support the veterinary division, it is suggested that taxable property might be assessed at a figure more nearly approaching its actual value.

It must be emphatically pointed out that the counties are at present spending little or nothing in the interest of public health, notwithstanding that they are under the obligation to assume a share of the expense incurred in combating disease. They should be required to take over and maintain the isolation hospitals and assume the expense of caring for patients suffering with communicable diseases, smallpox included.

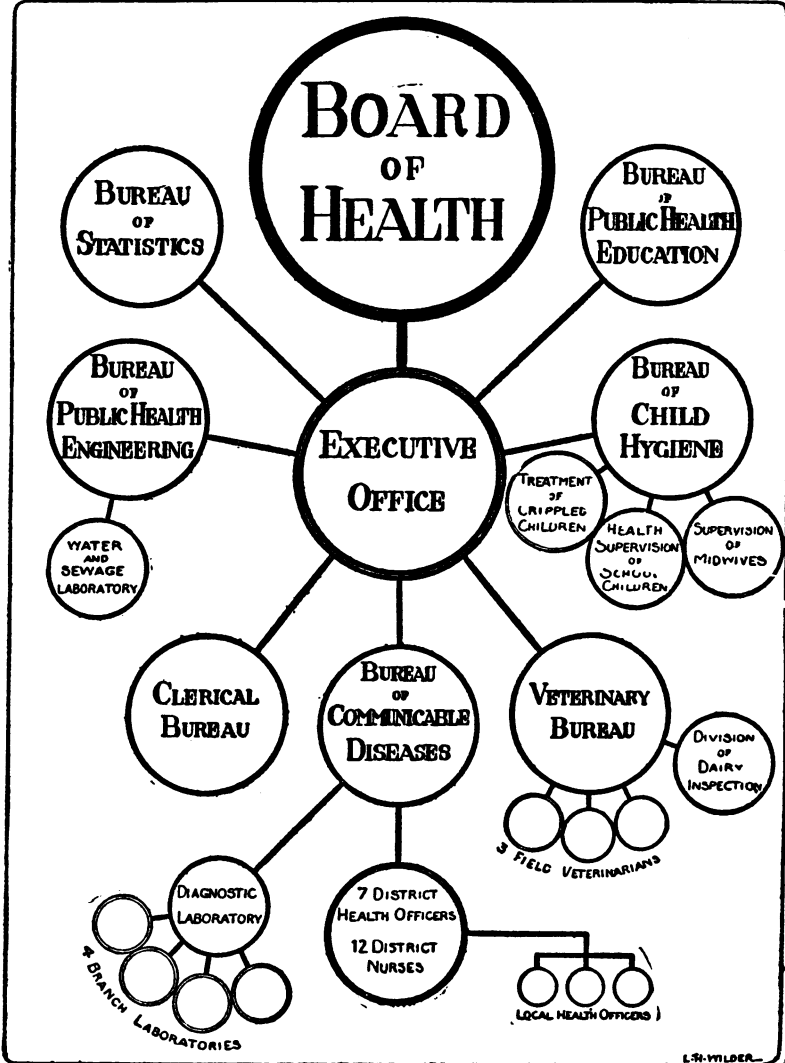
The accompanying table shows the expenditures of the health department during the year 1915 by activities and items of expenditure.



RECOMMENDATIONS.

As a result of the foregoing study it may be concluded that the State board of health is now engaged in many important activities, but that certain changes are desirable in order to increase efficiency

**SCHEME OF REORGANIZATION SUGGESTED FOR THE STATE BOARD OF HEALTH, FLORIDA.**



U.S. PUBLIC HEALTH SERVICE.

and to secure quicker and more certain results. To assist in bringing this about the following recommendations are made:

1. That the designation of the State board of health be changed to the State department of health.

2. That the State department of health be divided into the board of health, the executive office, a bureau of communicable diseases, a bureau of public health engineering, a bureau of public health education, a bureau of statistics, a bureau of child hygiene, a clerical bureau, and a veterinary bureau.

3. That the board of health consist of seven members to hold office for five years and to be so appointed that there will be but one change each year.

4. That a full time chief be placed in charge of each of the bureaus.

5. That the chief of the bureau of communicable diseases be responsible for the work of district and local health officers and public health nurses, the collection of morbidity reports, the administration of the laboratories, and in general the activities concerned with the control of preventable diseases.

6. That the chief of the bureau of public health engineering be granted advisory and supervisory control over the domestic water supplies, drainage, the disposal of sewage, and garbage and trades wastes within the State, and that there be established in this bureau a water and sewage laboratory.

7. That the chief of the bureau of public health education be made responsible for all of the educational activities of the department, including publications, exhibits, and lectures.

8. That the chief of the bureau of statistics be made responsible for the registration of births, deaths, and marriages, and the statistical compilation and tabulation of all data for the department.

9. That the chief of the bureau of child hygiene be made responsible for the activities concerned in child welfare, including pre and postnatal nursing, the health supervision of schools, the supervision of midwives, and the treatment of crippled children.

10. That the chief clerk be designated as chief of the clerical bureau to have control of the clerical force of the department and supervision over the records, property, and accounts.

11. That the activities of the veterinary bureau be the same as they are now with the addition of the inspection of dairy farms.

12. That the assistant to the State health officer who is not at present in charge of a district, but employed in the State at large, be placed in the west central district, vice the bacteriologist resigned, and that there be employed a bacteriologist who need not be a physician, for work in the branch laboratory located in that district.

13. That the district health officer be made responsible for the enforcement of all public health laws and the carrying on of the field activities of the State board of health within his district and that for purposes of administration he be given supervision over the public health nurses and the branch laboratory located in his district.

14. That in order to make the work of the health department more effective the district health officers be required to be more active in the field and to carry on more thorough and intensive studies relative to the conditions of their districts and the diseases existing therein.

15. That district health officers be prohibited from engaging in the practice of medicine or any other business that will interfere with their official duties.

16. That the nursing force be added to from time to time as funds will permit so that eventually the number will be such that each may have a small district and be enabled to carry on all of the duties required of a public health nurse.

17. That the district health officers and public health nurses before they receive an appointment be required to pass a competitive examination.

18. That both medical officers and nurses be given a six months' probationary appointment in order to determine their adaptability for the work required.

19. That the district health officers at their first appointment receive a salary of \$1,600 a year with a regular increase at stated intervals at the discretion of the State board of health.

20. That the public health nurse be started on a salary of \$75 a month with a regular increase at stated intervals at the discretion of the State board of health, and that she be given a course of instruction before entering upon her duties.

21. That the position of the county agent be abolished and the county included in that district to which it logically belongs.

22. That every effort be made to procure adequate health departments in those larger cities where they have not already been provided for, and that in cities with a population of 5,000 or less health inspectors trained in sanitary science be employed to give full time to their duties and work under the supervision of the district health officer.

23. That the State board of health provide the means to give training and instruction to those men who are to be appointed in the above capacity.

24. That there be called annually by the State health officer a conference of district and local health officers and bacteriologists to consider public health matters in the State of Florida.

25. That, in accordance with the vital statistics act, there be promulgated regulations providing for the reporting of sickness that the prevalence of disease may be known and that these regulations conform to the model law proposed by the United States Public Health Service.

26. That the act providing for the registration of births and deaths be put into effect without delay.

27. That a comprehensive law be enacted making it compulsory on the part of all persons interested to have plans for proposed installations of water supplies, sewage, and refuse disposal systems, approved by the State department of health. That the State department of health be empowered to require any changes or extensions in already existing installations that may be necessary to insure safe water supplies or proper sewage or refuse disposal systems; or to order the installation of water-supply and sewage or refuse disposal systems in the absence of same. That the State department of health have the power to close, or to prevent the use of water from, any well, spring, or other source that in its opinion is dangerous to health, or to require the filling or draining of places where there is any accumulation of water, breeding of mosquitoes, or other condition dangerous to health.

28. That the law providing for the medical inspection of school children be amended as suggested in the body of this report.

29. That certain of the antiquated laws relating to the public health be amended or repealed.

30. That more comprehensive regulations be promulgated by the State board of health for the purpose of controlling the preventable diseases.

31. That the officials of the State department of health be full-time men with the exception of the assistant in charge of the treatment of crippled children, the live-stock agents, and the members of the State board of health, as already provided for.

32. That the methods of keeping accounts be changed so as to allow an accurate determination of the actual cost of any bureau or division or any special work at any time.

33. That the isolation hospitals at present being maintained by the State board of health be transferred to the counties and that the law requiring the State board of health to pay for the care of patients suffering with smallpox, yellow fever, and cholera be repealed.

34. That there be an appropriation by the State legislature in the sum of \$30,000 to support the veterinary bureau of the State board of health, and that this amount be reappropriated until such time as the State health fund has reached a size that will enable the State department of health to carry on all of its activities adequately without the assistance of a special appropriation from the legislature.

35. That the field staff be furnished with automobile transportation as soon as the funds of the department will permit.

36. That a popular bulletin on preventive medicine to be used especially for instructing the children in the public schools be issued monthly or oftener by the State department of health.

37. That a sanitary code be written by the health department for adoption by the various municipalities not already provided with adequate ordinances for the maintenance of the public health and that this code be promulgated as regulations of the State board of health.

## PLAGUE-PREVENTION WORK.

### CALIFORNIA.

The following report of plague-prevention work in California for the week ended May 13, 1916, was received from Surg. Boggess, of the United States Public Health Service, in charge of the work:

SAN FRANCISCO, CAL.		SAN FRANCISCO, CAL.—Continued.			
RAT PROOFING.		RAT PROOFING—continued.			
New buildings:		Traps set on vessels.....	252		
Inspections of work under construction.....	218	Vessels trapped on.....	19		
Basements concreted (square feet, 47,500).....	40	Poisons placed on water front (pieces).....	3,600		
Floors concreted (square feet, 28,500)....	9	Poisons placed within Panama-Pacific International Exposition grounds (pieces)...	33,600		
Yards, passageways, etc., concreted (square feet, 18,834).....	85	Bait used on water front and vessels—bacon (pounds).....	6		
Total area of concrete laid (square feet).....	94,834	Bread used in poisoning, water front (loaves).....	9		
Class A, B, and C (fireproof) buildings:		Pounds of poison used on water front.....	3		
Inspections made.....	140	RATS COLLECTED AND EXAMINED FOR PLAGUE.			
Roof and basement ventilators, etc., screened.....	615	San Francisco:			
Wire screening used (square feet).....	3,178	Collected.....	458		
Openings around pipes, etc., closed with cement.....	1,795	Examined.....	374		
Sidewalk lens lights replaced.....	3,178	Found infected.....	None.		
Old buildings:		Oakland:			
Inspections made.....	510	Collected.....	10		
Wooden floors removed.....	41	Examined.....	10		
Yards and passageways, planking removed.....	18	Found infected.....	None.		
New foundation walls installed (cubic feet).....	8,183	RATS IDENTIFIED.			
Concrete floors installed (square feet, 20,973).....	29	Mus norvegicus.....	213		
Basements concreted (square feet, 16,600).....	22	Mus rattus.....	87		
Yards, passageways, etc., concreted (square feet, 31,167).....	69	Mus alexandrinus.....	112		
Total area concrete laid (square feet)....	68,740	Mus musculus.....	46		
Floors rat proofed with wire cloth (square feet, 6,295).....	6	SQUIRRELS COLLECTED AND EXAMINED FOR PLAGUE.			
Buildings razed.....	12	County.	Collected.	Examined.	Infected.
New garbage cans stamped approved.....	375	Santa Clara.....	182	182	None.
Nuisances abated.....	302	San Mateo.....	115	115	None.
OPERATIONS ON THE WATER FRONT.		San Benito.....	418	418	None.
Vessels inspected for rat guards.....	16	Merced.....	598	598	None.
Reinspections made on vessels.....	20	Santa Cruz.....	153	153	1
New rat guards procured.....	18	Monterey.....	327	327	None.
Defective rat guards repaired.....	12	Contra Costa.....	915	915	2
Rats trapped on wharves and water front..	44	Stanislaus.....	248	248	None.
Rats trapped on vessels.....	41	Alameda.....	453	453	None.
Traps set on wharves and water front.....	128	Fresno.....	16	16	None.
		San Luis Obispo.....	302	302	None.
		Total.....	3,727	3,727	3

**RABBITS COLLECTED AND EXAMINED.**

Merced County.....	11
Monterey County.....	2
Alameda County.....	1
Santa Clara County.....	1
Total.....	15

**RANCHES INSPECTED AND HUNTED OVER.**

Alameda County.....	48
Contra Costa County.....	63
Stanislaus County.....	51
San Benito County.....	32
San Mateo County.....	22
Santa Clara County.....	43
Merced County.....	37
Santa Cruz County.....	19
Monterey County.....	17

**RANCHES INSPECTED AND HUNTED OVER—Contd.**

San Luis Obispo County.....	5
Fresno County.....	4
Total.....	341

**PLAGUE INFECTED SQUIRRELS.**

**Contra Costa County:**

Shot Apr. 28, 1916. Harry Keller ranch, 2 miles northeast of Clayton, secs. 11 and 12, T. 1 N., R. 1. W. .... 1 squirrel  
 Shot May 1, 1916. J. Noria ranch, 8½ miles southwest of Antioch, sec. 6, T. 1 N., R. 1 E. .... 1 squirrel

**Santa Cruz County:**

Shot Apr. 28, 1916. Edward White ranch (Calabaras Rancho grant), 7 miles southeast of Aptos ..... 1 squirrel

**RECORD OF PLAGUE INFECTION.**

Places in California.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number rodents found infected since May, 1907.
<b>Cities:</b>				
San Francisco.....	Jan. 30, 1908	Oct. 23, 1908	None.....	398 rats.
Oakland.....	Aug. 9, 1911	Dec. 1, 1908	do.....	126 rats.
Berkeley.....	Aug. 28, 1907	None.....	do.....	None.
Los Angeles.....	Aug. 11, 1908	do.....	Aug. 21, 1908	1 squirrel.
<b>Counties:</b>				
Alameda (exclusive of Oakland and Berkeley).....	Sept. 24, 1909	Oct. 17, 1909 <sup>1</sup>	July 12, 1915	287 squirrels; 1 wood rat.
Contra Costa.....	July 13, 1915	None.....	May 1, 1916	1,602 squirrels.
Fresno.....	None.....	do.....	Oct. 27, 1911	1 squirrel.
Merced.....	do.....	do.....	July 12, 1911	5 squirrels.
Monterey.....	do.....	do.....	Apr. 18, 1916	33 squirrels.
San Benito.....	June 4, 1913	do.....	Apr. 27, 1916	57 squirrels.
San Joaquin.....	Sept. 18, 1911	do.....	Aug. 26, 1911	18 squirrels.
Santa Clara.....	Aug. 31, 1910	do.....	Apr. 22, 1916	27 squirrels.
San Luis Obispo.....	None.....	do.....	Jan. 29, 1910	1 squirrel.
Santa Cruz.....	do.....	do.....	Apr. 28, 1916	4 squirrels.
Stanislaus.....	do.....	do.....	June 2, 1911	13 squirrels.

<sup>1</sup> Wood rat.

The work is being carried on in the following-named counties: Alameda, Contra Costa, San Francisco, Stanislaus, San Benito, Monterey, Santa Clara, San Mateo, Santa Cruz, San Luis Obispo, Merced, Fresno, Lassen, and Modoc.

**LOUISIANA—NEW ORLEANS—PLAGUE ERADICATION.**

The following report of plague-eradication work at New Orleans for the week ended May 20, 1916,<sup>1</sup> was received from Passed Asst. Surg. Simpson of the United States Public Health Service, in charge of the work:

OUTGOING QUARANTINE.	
Vessels fumigated with cyanide gas.....	11
Cyanide used in cyanide-gas fumigation (pounds).....	569
Sulphuric acid used in cyanide-gas fumigation (pints).....	869
Clean bills of health issued.....	39
Foul bills of health issued.....	3
<b>FIELD OPERATIONS.</b>	
Rodents trapped.....	7, 113
Premises inspected.....	8, 012

FIELD OPERATIONS—continued	
Notices served.....	570
Garbage cans installed.....	6
<b>BUILDINGS RAT PROOFED.</b>	
By elevation.....	120
By marginal concrete wall.....	157
By concrete floor and wall.....	147
By minor repairs.....	235
Total buildings rat proofed.....	659
Concrete laid (square yards).....	5, 466

<sup>1</sup> The report of plague-eradication work at New Orleans for the week ended May 13, 1916, was erroneously stated in Public Health Reports, May 26, 1916, p. 1307, as for week ended May 6.

## BUILDINGS RAT PROOFED—continued.

Premises, planking, and shed flooring removed.....	96
Buildings demolished.....	121
Total buildings rat proofed to date (abated)	115,372

## LABORATORY OPERATIONS.

Rodents received by species:	
Mus rattus.....	172
Mus norvegicus.....	1,294
Mus alexandrinus.....	162
Mus musculus.....	5,326
Wood rats.....	54
Muskrats.....	17
Putrid (included in enumeration of species).....	108
Total rodents received at laboratory.....	7,025
Rodents examined.....	2,456
Rats suspected of plague.....	126
Plague rats confirmed.....	2

## PLAGUE RATS.

Case No. 290:	
Address, American Sugar Refining Cooperae.	
Captured, May 5, 1916.	

## PLAGUE RATS—continued.

Case No. 290—Continued.	
Diagnosis confirmed, May 18, 1916.	
Treatment of premises: Intensive trapping.	
Repair of defects permitting rat harborage.	

## Case No. 291:

Address, Bienville Street Dock.	
Captured, May 5, 1916.	
Diagnosis confirmed, May 20, 1916.	
Treatment of premises: intensive trapping.	

## PLAGUE STATUS TO MAY 20, 1916.

Last case of human plague, Sept. 8, 1915.	
Last case of rodent plague, May 5, 1916.	
Total number of rodents captured to May 20	
720,198	
Total number of rodents examined to May	
20	356,315
Total cases of rodent plague to May 20, by species:	
Mus musculus.....	6
Mus rattus.....	18
Mus alexandrinus.....	13
Mus norvegicus.....	254
Total rodent cases to May 20, 1916.....	291

## WASHINGTON—SEATTLE—PLAGUE ERADICATION.

The following report of plague-eradication work at Seattle for the week ended May 13, 1916, was received from Surg. Lloyd, of the United States Public Health Service, in charge of the work:

## RAT PROOFING.

New buildings inspected.....	52
New buildings reinspected.....	47
Basements concreted, new buildings (square feet, 12,315).....	15
Floors concreted, new buildings (square feet, 23,620).....	19
Yards, etc., concreted, new buildings (square feet, 6,175).....	7
Sidewalks concreted (square feet).....	19,270
Total concrete laid, new structures (square feet).....	61,380
New buildings elevated.....	4
New premises rat proofed, concrete.....	34
Old buildings inspected.....	3
Premises rat proofed, concrete, old buildings.	2
Floors concreted, old buildings (square feet, 2,125).....	2
Wooden floors removed, old buildings.....	2
Buildings razed.....	3

## LABORATORY AND RODENT OPERATIONS.

Dead rodents received.....	13
Rodents trapped and killed.....	310
Rodents recovered after fumigation.....	33
Total.....	356
Rodents examined for plague infection.....	240
Rodents proven plague infected.....	None.

## LABORATORY AND RODENT OPERATIONS—contd.

Poison distributed, pounds.....	60
Bodies examined for plague infection.....	2
Bodies found plague infected.....	None.

## CLASSIFICATION OF RODENTS.

Mus rattus.....	8
Mus alexandrinus.....	60
Mus norvegicus.....	208
Mus musculus.....	45
Unclassified.....	35

## WATER FRONT.

Vessels inspected and histories recorded....	17
Vessels fumigated.....	3
Sulphur used, pounds.....	3,550
New rat guards installed.....	12
Defective rat guards repaired.....	19
Fumigation certificates issued.....	3
Port sanitary statements issued.....	47

The usual day and night patrol was maintained to enforce rat guarding and fending.

## MISCELLANEOUS WORK.

Rat-proofing notices sent to contractors, new buildings.....	7
Letters sent in re rat complaints.....	4
Lectures given on sanitary measures.....	1
Medicine chests inspected, fishing vessels....	7

<sup>1</sup> Indicates the number of rodents, the tissues of which were inoculated into guinea pigs. Most of them showed on necropsy only evidence of recent inflammatory process; practically none presented gross lesions characteristic of plague infection.

RODENTS EXAMINED IN EVERETT.

Mus norvegicus trapped .....	64
Mus norvegicus found dead.....	1
Mus musculus trapped .....	9
<b>Total</b> .....	<u>74</u>
Rodents examined for plague infection.....	68
Rodents proven plague infected .....	None.

RAT-PROOFING OPERATIONS IN EVERETT.

New buildings inspected .....	3
New buildings reinspected.....	4
New buildings elevated.....	1
New buildings floors concreted (square feet, 3,802).....	3

RAT-PROOFING OPERATIONS IN EVERETT—contd.

Yards concreted (square feet, 165).....	1
<b>Total concrete laid, new buildings (square feet, 3,967).</b>	

RODENTS EXAMINED IN TACOMA.

Mus norvegicus trapped .....	86
Mus norvegicus found dead.....	3
Mus rattus trapped .....	1
<b>Total</b> .....	<u>90</u>
Rodents examined for plague infection.....	88
Rodents proven plague infected .....	None.

HAWAII—PLAGUE PREVENTION.

The following reports of plague-prevention work in Hawaii were received from Surg. Trotter, of the United States Public Health Service:

Honolulu.

WEEK ENDED MAY 6, 1916.

Total rats and mongoose taken .....	388	Average number of traps set daily .....	984
Rats trapped .....	384	Cost per rat destroyed.....	19½ cents.
Mongoose trapped .....	4	Last case rat plague, Aiea, 9 miles from Honolulu,	
Examined microscopically.....	120	Apr. 12, 1910.	
Examined macroscopically.....	194	Last case human plague, Honolulu, July 12, 1910.	
Showing plague infection .....	None.	Last case rat plague, Paauhau, Hawaii, Jan.	
Classification of rats trapped—		18, 1916.	
Mus alexandrinus .....	139	Last case human plague, Paauhau Plantation,	
Mus musculus .....	150	Hawaii, Dec. 16, 1915.	
Mus norvegicus.....	74		
Mus rattus.....	21		

Hilo.

WEEK ENDED APR. 29, 1916.

Rats and mongoose taken .....	2,426	Classification of rats trapped and found dead—	
Rats trapped .....	2,381	Continued.	
Mongoose taken .....	45	Mus rattus .....	675
Rats and mongoose examined macroscopically.....	2,426	Mus musculus.....	920
Rats and mongoose plague infected.....	None.	Last case of rat plague, Paauhau Sugar Co., Jan.	
Classification of rats trapped and found dead:		18, 1916.	
Mus norvegicus.....	460	Last case of human plague, Paauhau Sugar Co.,	
Mus alexandrinus .....	326	Dec. 16, 1915.	



# PREVALENCE OF DISEASE.

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.*

## UNITED STATES.

### CEREBROSPINAL MENINGITIS.

State Reports for April, 1916.

Place.	New cases reported.	Place.	New cases reported.
California:		Ohio—Continued.	
San Diego County—		Montgomery County—	
San Diego.....	1	Dayton.....	2
Iowa:		Stark County.....	1
Polk County.....	1	Summit County—	
Mississippi:		Akron.....	1
Pearl River County.....	1	Total.....	19
Ohio:		Virginia:	
Butler County—		Augusta County.....	1
Hamilton.....	1	Culpeper County.....	1
Champaign County.....	1	Dinwiddie County.....	2
Cuyahoga County—		Goochland County.....	1
Cleveland.....	8	Hanover County.....	1
Darke County.....	1	Henry County.....	1
Hamilton County—		Lee County.....	2
Cincinnati.....	1	Middlesex County.....	1
Hancock County.....	1	Roaningham County.....	1
Jefferson County.....	1	Tazewell County.....	1
Mahoning County—		Total.....	12
Youngstown.....	1		

City Reports for Week Ended May 13, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Bayonne, N. J.....	1		New York, N. Y.....	2	
Boston, Mass.....	1	1	Omaha, Nebr.....		1
Chicago, Ill.....	2	1	Philadelphia, Pa.....	2	3
Cleveland, Ohio.....	1		Providence, R. I.....	1	1
Hartford, Conn.....	3		Saginaw, Mich.....	1	
Kansas City, Mo.....		1	St. Louis, Mo.....	2	1
Los Angeles, Cal.....	1		St. Paul, Minn.....		1
Lowell, Mass.....		1	Stockton, Cal.....	1	1
Manchester, N. H.....	2	2	Wheeling, W. Va.....		1
Milwaukee, Wis.....	3		Wilmington, Del.....	1	

### DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1422.

**ERYSIPELAS.**

**City Reports for Week Ended May 13, 1916.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....		1	Newark, N. J.....	16	
Atlanta, Ga.....		1	New Orleans, La.....		1
Baltimore, Md.....		2	New York, N. Y.....		9
Binghamton, N. Y.....	2		Omaha, Nebr.....	4	
Boston, Mass.....		5	Philadelphia, Pa.....	23	3
Bridgeport, Conn.....	2		Pittsburgh, Pa.....	10	2
Brockton, Mass.....	1	1	Portland, Oreg.....	1	1
Buffalo, N. Y.....	2	1	Reading, Pa.....	1	
Butte, Mont.....	1		Rochester, N. Y.....	5	
Chicago, Ill.....	36	4	St. Louis, Mo.....	17	3
Cleveland, Ohio.....	4	2	St. Paul, Minn.....	1	
Detroit, Mich.....	10	1	San Francisco, Cal.....	3	
Harrisburg, Pa.....	2		Schenectady, N. Y.....	1	
Hartford, Conn.....	2		Steelton, Pa.....	2	
Jersey City, N. J.....		1	Steubenville, Ohio.....	1	
Kalamazoo, Mich.....	2		Trenton, N. J.....		1
Kansas City, Mo.....	2	1	Wilkinsburg, Pa.....	1	
Los Angeles, Cal.....	4		York, Pa.....	2	
Milwaukee, Wis.....	10				

**MALARIA.**

**State Reports for April, 1916.**

Place.	New cases reported.	Place.	New cases reported.
California.....	22	Mississippi—Continued.	
Mississippi:		Lowndes County.....	23
Adams County.....	18	Madison County.....	58
Alcorn County.....	16	Martin County.....	160
Amite County.....	28	Marshall County.....	74
Attala County.....	68	Monroe County.....	28
Benton County.....	9	Montgomery County.....	41
Bullivar County.....	550	Neshoba County.....	96
Calhoun County.....	34	Newton County.....	31
Carrroll County.....	86	Noxubee County.....	46
Chickasaw County.....	45	Oktibbeha County.....	64
Choctaw County.....	23	Panola County.....	100
Clalborne County.....	54	Pearl River County.....	14
Clarke County.....	50	Perry County.....	75
Clay County.....	36	Pike County.....	76
Coahoma County.....	332	Pontotoc County.....	26
Copiah County.....	54	Prentiss County.....	14
Covington County.....	54	Quitman County.....	52
De Soto County.....	19	Randolph County.....	34
Forest County.....	105	Scott County.....	83
Franklin County.....	53	Sharkey County.....	4
George County.....	13	Simpson County.....	64
Green County.....	6	Smith County.....	53
Grenada County.....	31	Sunflower County.....	425
Hancock County.....	93	Tallahatchie County.....	135
Harrison County.....	113	Tate County.....	135
Hinds County.....	167	Tippah County.....	23
Holmes County.....	287	Tishomingo County.....	55
Issaquena County.....	27	Tunica County.....	122
Itawamba County.....	56	Union County.....	20
Jackson County.....	28	Walthall County.....	16
Jasper County.....	67	Warren County.....	144
Jefferson County.....	64	Washington County.....	186
Jefferson Davis County.....	23	Wayne County.....	13
Jones County.....	172	Webster County.....	39
Kemper County.....	66	Wilkinson County.....	9
Lafayette County.....	45	Winston County.....	143
Lamar County.....	15	Yalobusha County.....	70
Lauderdale County.....	104	Yazoo County.....	293
Lawrence County.....	47	Total.....	6,543
Leake County.....	93	Ohio.....	2
Lee County.....	59	Virginia.....	473
Leflore County.....	233		
Lincoln County.....	56		

## MALARIA—Continued.

## City Reports for Week Ended May 13, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Boston, Mass. ....	1	.....	New Orleans, La. ....	1	.....
Montclair, N. J. ....	1	.....	Sacramento, Cal. ....	1	.....
Newark, N. J. ....	3	.....			

## MALTA FEVER.

## New Mexico.

Passed Asst. Surg. McKeon reported that during the month of April, 1916, a case of Malta fever occurred in a goatherder who was a patient of a physician at Capitan, N. Mex.

## MEASLES.

## Washington—Seattle.

Surg. Lloyd reported that during the week ended May 13, 1916, 473 cases of measles, with 1 death, were notified in Seattle, Wash., making a total of 2,583 cases, with 6 deaths, reported since the beginning of the epidemic February 15, 1916.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1422.

## PELLAGRA.

## State Reports for April, 1916.

Place.	New cases reported.	Place.	New cases reported.
California .....	2	Mississippi—Continued.	
Mississippi:		Lafayette County .....	3
Adams County .....	6	Lamar County .....	6
Alcorn County .....	1	Lauderdale County .....	8
Amite County .....	7	Lawrence County .....	9
Attala County .....	4	Leake County .....	6
Boivar County .....	73	Lee County .....	14
Calhoun County .....	7	Leflore County .....	20
Carroll County .....	8	Lincoln County .....	12
Chickasaw County .....	9	Madison County .....	11
Choctaw County .....	2	Marion County .....	9
Claiborne County .....	2	Marshall County .....	19
Clarke County .....	6	Monroe County .....	7
Clay County .....	6	Montgomery County .....	1
Coahoma County .....	58	Neshoba County .....	12
Copiah County .....	14	Noxubee County .....	12
Covington County .....	12	Oktibbeha County .....	4
De Soto County .....	10	Panola County .....	7
Forest County .....	27	Pike County .....	3
Franklin County .....	2	Pontotoc County .....	2
George County .....	1	Prentiss County .....	2
Grenada County .....	4	Quitman County .....	4
Hancock County .....	3	Rankin County .....	6
Harrison County .....	18	Scott County .....	7
Hinds County .....	30	Sharkey County .....	2
Holmes County .....	17	Simpson County .....	10
Itawamba County .....	7	Sunflower County .....	70
Jackson County .....	1	Tallahatchie County .....	17
Jasper County .....	6	Tate County .....	17
Jefferson County .....	2	Tippah County .....	2
Jefferson Davis County .....	1	Tishomingo County .....	8
Jones County .....	15	Tunica County .....	8
Kemper County .....	3	Union County .....	6
		Walthall County .....	3

**PELLAGRA—Continued.**

**State Reports for April, 1916—Continued.**

Place.	New cases reported.	Place.	New cases reported.
<b>Mississippi—Continued.</b>		<b>Mississippi—Continued.</b>	
Warren County.....	13	Yalobusha County.....	3
Washington County.....	25	Yazoo County.....	23
Wayne County.....	6	<b>Total.....</b>	<b>766</b>
Webster County.....	1		
Wilkinson County.....	2	<b>Virginia.....</b>	<b>65</b>
Winston County.....	4		

**City Reports for Week Ended May 13, 1916.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga.....		2	Mobile, Ala.....		1
Boston, Mass.....	1	1	Nashville, Tenn.....	2	
Charleston, S. C.....		3	New Orleans, La.....	2	5
Galveston, Tex.....		1	Northampton, Mass.....	1	
Lynchburg, Va.....	2		Richmond, Va.....	8	

**PLAGUE.**

**Louisiana—Plague-Infected Rats Found.**

Passed Asst. Surg. Simpson reported the finding of plague-infected rats in Louisiana as follows: A rat captured April 15, 1916, at Chalmette, La., was proven positive for plague infection May 12; another rat captured May 5, on the premises of the American Sugar Refinery in St. Bernard Parish, La., was proven positive for plague infection May 18; and on May 5, a rat was captured at the Bienville Street Dock, New Orleans, La., and was proven positive for plague infection May 20, 1916.

**PNEUMONIA.**

**City Reports for Week Ended May 13, 1916.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Berkeley, Cal.....	2	1	Los Angeles, Cal.....	6	3
Pinghamton, N. Y.....	3	1	Manchester, N. H.....	4	4
Braddock, Pa.....	1		Morristown, N. J.....	1	
Chicago, Ill.....	145	60	Newark, N. J.....	26	9
Cleveland, Ohio.....	26	28	Philadelphia, Pa.....	67	25
Detroit, Mich.....	10	19	Pittsburgh, Pa.....	20	20
Duluth, Minn.....	1	1	Reading, Pa.....	1	
Fall River, Mass.....	4		Rochester, N. Y.....	2	3
Grand Rapids, Mich.....	3	2	Sacramento, Cal.....	2	2
Harrisburg, Pa.....	2	3	San Francisco, Cal.....	12	8
Harrison, N. J.....	1		Schenectady, N. Y.....	4	
Kalamazoo, Mich.....	3	1	Steubenville, Ohio.....	2	
Kansas City, Mo.....	5	15	Toledo, Ohio.....	2	4
Lancaster, Pa.....	3		Wichita, Kans.....	1	
Lorain, Ohio.....	2		York, Pa.....	2	

**POLIOMYELITIS (INFANTILE PARALYSIS).****State Reports for April, 1916.**

Place.	New cases reported.	Place.	New cases reported.
<b>California:</b>		<b>Ohio—Continued.</b>	
Los Angeles County—		Washington County.....	1
Los Angeles.....	1	Wood County—	
Sacramento County.....	2	Bowling Green.....	1
Total.....	3	Total.....	6
<b>Iowa:</b>		<b>Virginia:</b>	
Appanoose County.....	1	Augusta County.....	1
<b>Mississippi:</b>		Bath County.....	1
Harrison County.....	3	Bedford County.....	1
Itawamba County.....	2	Campbell County.....	1
Jefferson County.....	3	Halifax County.....	1
Jones County.....	4	Notoway County.....	1
Marion County.....	2	Orange County.....	1
Tunica County.....	1	Page County.....	1
Total.....	15	Rockingham County.....	1
<b>Ohio:</b>		Smyth County.....	1
Montgomery County.....	3	Westmoreland County.....	1
Putnam County.....	1	Wise County.....	1
		Total.....	12

**City Reports for Week Ended May 13, 1916.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Chicago, Ill.....	2	1	New Orleans, La.....	1	.....
New Haven, Conn.....	1	.....	New York, N. Y.....	1	.....

**ROCKY MOUNTAIN SPOTTED FEVER.****Wyoming Report for April, 1916.**

Place.	New cases reported.	Place.	New cases reported.
<b>Wyoming:</b>		<b>Wyoming—Continued.</b>	
Natrona County.....	2	Lincoln County.....	1
Park County.....	1	Fremont County.....	1
Sheridan County.....	1	Total.....	8
Uinta County.....	1		
Hot Springs County.....	1		

**Oregon Report for March, 1916.**

During the month of March, 1916, 9 cases of Rocky Mountain spotted fever were notified in Grant County, Ore.

**Washington—Odessa.**

Collaborating Epidemiologist Tuttle reported by telegraph June 1, 1916, that a case of Rocky Mountain spotted fever had been notified at Odessa, Lincoln County, Wash.

**SEPTIC SORE THROAT.**

**Massachusetts—Watertown.**

Collaborating Epidemiologist Kelley reported by telegraph that an outbreak of septic sore throat occurred at Watertown, Mass., and that during the week ended May 27, 1916, about 50 cases of the disease were notified.

**SMALLPOX.**

**Maryland—Ocean City and Millington.**

Collaborating Epidemiologist Fulton reported by telegraph May 27, 1916, that 2 cases of smallpox had been notified in Maryland, one at Ocean City, Worcester County, and one at Millington, Kent County.

**Minnesota.**

Collaborating Epidemiologist Bracken reported by telegraph that during the week ended May 27, 1916, four new foci of smallpox infection were reported in the State of Minnesota, cases of the disease having been notified as follows: Filmore County, York Township 1; Hennepin County, Excelsior Township 1; Renville County, Brookfield Township 1; Swift County, Benson 1.

**State Reports for April, 1916.**

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
<b>California:</b>						
Alameda County—						
Oakland .....	1					1
Eldorado County—						
Placerville .....	3			2	1	
Los Angeles County—						
Long Beach .....	5			2	3	
Los Angeles .....	7				7	
San Diego County—						
San Diego .....	3					3
San Joaquin County—						
Lodi .....	1				1	
<b>Total</b> .....	<b>20</b>			<b>4</b>	<b>12</b>	<b>4</b>
<b>Michigan:</b>						
Branch County—						
Coldwater .....	1				1	
Calhoun County—						
Bedford Township .....	1				1	
Homer Township .....	1				1	
Battle Creek .....	1				1	
Cass County—						
Volinia Township .....	1				1	
Clinton County—						
Maple Rapids .....	3				1	2
Dickinson County—						
Waucedah Township .....	1				1	
Eaton County—						
Delta Township .....	1				1	
Windsor Township .....	1					1
Potterville .....	3					3

## SMALLPOX—Continued.

## State Reports for April 1916—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
<b>Michigan—Continued.</b>						
Ingham County—						
East Lansing.....	1				1	
Lansing.....	1				1	
Ionia County—						
Berlin Township.....	2				2	
Ottico Township.....	4				4	
Belding.....	1				1	
Jackson County—						
Jackson.....	1				1	
Kent County—						
Walker Township.....	2				2	
Grand Rapids.....	2				2	
Lenawee County—						
Seneca Township.....	5				5	
Woodstock Township.....	1				1	
Morenci.....	1				1	
Mackinac County—						
Brevort Township.....	1				1	
Mason County—						
Ludington.....	1			1		
Mecosta County—						
Big Rapids.....	1				1	
Monroe County—						
Bedford Township.....	2				2	
Dundee Township.....	5				5	
London Township.....	1				1	
Monroe Township.....	1				1	
Monroe.....	6				6	
St. Joseph County—						
Colon.....	1				1	
Washtenaw County—						
York Township.....	2				2	
<b>Total.....</b>	<b>56</b>			<b>1</b>	<b>49</b>	<b>6</b>
<b>Ohio:</b>						
Adams County.....	6				6	
Allen County.....	4				4	
Brown County.....	1					1
Clinton County.....	3			1		2
Columbiana County.....	3			5		3
Cuyahoga County.....	1					1
Darke County.....	1					1
Defiance County.....	6			3		3
Erie County.....	4			2		2
Fayette County—						
Washington C. H.....	7					7
Fulton County.....	10			3		7
Greene County.....	1					1
Guernsey County.....	6				6	
Lucas County.....	41			1	14	26
Mahoning County—						
Youngstown.....	12				3	9
Miami County—						
Piqua.....	1				1	
Ottawa County.....	1				1	
Putnam County.....	6				1	5
Ross County.....	6				6	
Sandusky County.....	3				3	
Seneca County.....	3				3	
Summit County.....	1					1
Trumbull County.....	3				1	2
Tuscarawas County.....	11				5	6
Williams County.....	41			1	22	18
Wood County.....	24				12	12
<b>Total.....</b>	<b>211</b>			<b>5</b>	<b>106</b>	<b>100</b>

**SMALLPOX—Continued.**

**Miscellaneous State Reports.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
<b>Iowa (Apr. 1-30):</b>			<b>Mississippi—Continued.</b>		
<b>Counties—</b>			<b>Counties—Continued.</b>		
Benton.....	3		Sunflower.....	1	
Blackhawk.....	1		Washington.....	7	
Boone.....	2		Yazoo.....	4	
Buena Vista.....	1		<b>Total.....</b>	<b>103</b>	
Calhoun.....	1				
Carroll.....	2		<b>North Dakota (Apr. 1-30):</b>		
Cerro Gordo.....	2		<b>Counties—</b>		
Cherokee.....	2		Cass.....	3	
Clinton.....	5		Foster.....	8	
Crawford.....	1		Golden Valley.....	4	
Dallas.....	10		Grand Forks.....	1	
Des Moines.....	7		Lamoure.....	1	
Fremont.....	1		Ramsey.....	5	
Grundy.....	1		Stutsman.....	13	
Hardin.....	37		Williams.....	3	
Howard.....	1		<b>Total.....</b>	<b>38</b>	
Keokuk.....	6				
Linn.....	13		<b>Oregon (Mar. 1-31):</b>		
Louisia.....	1		Columbia County.....	3	
Monona.....	1		Hood River County.....	1	
Monroe.....	2		Marion County.....	2	
Montgomery.....	3		Multnomah County—		
Polk.....	1		Portland.....	1	
Scott.....	37		<b>Total.....</b>	<b>7</b>	
Sioux.....	1				
Tama.....	6		<b>Virginia (Apr. 1-30):</b>		
Wapello.....	1		Carroll County.....	1	
Washington.....	3		Greensville County.....	3	
Webster.....	1		Halifax County.....	3	
Winnebago.....	1		Norfolk County.....	1	
Worth.....	1		Northampton County.....	7	
Wright.....	3		Nottoway County.....	1	
<b>Total.....</b>	<b>158</b>		Page County.....	1	
			Roanoke County—		
<b>Mississippi (Apr. 1-30):</b>			Roanoke.....	6	
<b>Counties—</b>			Russell County.....	2	
Bolivar.....	4		Wise County.....	5	
Coahoma.....	4		<b>Total.....</b>	<b>28</b>	
Hinds.....	1				
Holmes.....	45		<b>Wyoming (Apr. 1-30):</b>		
Jasper.....	1		<b>Counties—</b>		
Jefferson.....	1		Natrona.....	1	
Iamar.....	4		Washakie.....	6	
Lauderdale.....	1		Weston.....	1	
Lawrence.....	1		<b>Total.....</b>	<b>8</b>	
Ieflore.....	8				
Marion.....	16				
Pearl River.....	3				
Quitman.....	2				

**City Reports for Week Ended May 13, 1916.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Butte, Mont.....	1		New Orleans, La.....	2	
Chicago, Ill.....	2		New York, N. Y.....	1	
Cleveland, Ohio.....	1		Oakland, Cal.....	1	
Danville, Ill.....	5		Oklahoma City, Okla.....	1	
Davenport, Iowa.....	8		Omaha, Nebr.....	1	
Detroit, Mich.....	24		Portland, Oreg.....	1	
Dubuque, Iowa.....	1		Roanoke, Va.....	2	
Evansville, Ind.....	5		St. Louis, Mo.....	1	
Fitchburg, Mass.....	1		St. Paul, Minn.....	13	
Kansas City, Mo.....	12		Springfield, Ill.....	10	
Lincoln, Nebr.....	4		Tacoma, Wash.....	1	
Los Angeles, Cal.....	1		Toledo, Ohio.....	14	
Milwaukee, Wis.....	1		Washington, D. C.....	1	
Muscatine, Iowa.....	1		Wilmington, Del.....	2	



## TETANUS.

## City Reports for Week Ended May 13, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Charleston, S. C.....		1	Salt Lake City, Utah.....		1
Columbus, Ohio.....		1	San Francisco, Cal.....	1	
New Orleans, La.....		1			

## TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1422.

## TYPHOID FEVER.

## State Reports for April, 1916.

Place.	New cases reported.	Place.	New cases reported.
<b>California:</b>		<b>Michigan—Continued.</b>	
Alameda County—		Genesee County—	
Alameda.....	2	Mundy Township.....	1
Berkeley.....	1	Flint.....	13
Hayward.....	1	Gogebic County—	
Livermore.....	1	Waverfield Township.....	2
Oakland.....	2	Ingham County—	
Butte County—		Mason.....	1
Gridley.....	1	Ionia County—	
Contra Costa County—		Berlin Township.....	1
Walnut Creek.....	1	Iosco County—	
Los Angeles County.....	1	Grant Township.....	1
Long Beach.....	1	East Tawas.....	1
Los Angeles.....	10	Isabella County—	
Merced County—		Mount Pleasant.....	2
Los Banos.....	1	Jackson County—	
Riverside County—		Jackson.....	2
Riverside.....	2	Kent County—	
Sacramento County.....	1	Cedar Springs.....	1
Sacramento.....	1	Grand Rapids.....	12
San Bernardino County—		Lapeer County—	
Colton.....	1	Lapeer.....	1
Redlands.....	1	Lenawee County—	
San Bernardino.....	2	Hudson.....	1
San Diego County—		Manistee County—	
San Diego.....	1	Manistee.....	1
San Francisco.....	20	Marquette County—	
San Joaquin County—		Marquette.....	1
Stockton.....	1	Mason County—	
Santa Clara County.....	1	Ludington.....	2
Sonoma County.....	1	Mecosta County—	
Stanislaus County.....	1	Mecosta.....	1
Modesto.....	1	Big Rapids.....	1
Tehama County.....	2	Monroe County—	
Total.....	58	Monroe Township.....	1
<b>Michigan:</b>		Montmorency County—	
Antrim County—		Briley Township.....	1
Elk Rapids Township.....	1	Newaygo County—	
Barry County—		Sherman Township.....	2
Woodland Township.....	1	Oakland County—	
Bay County—		Oxford.....	1
Bangor Township.....	1	Saginaw County—	
Kawkawlin Township.....	1	Marion Township.....	1
Bay City.....	4	Oakley.....	1
Calhoun County—		Saginaw.....	6
Albion.....	1	St. Clair County—	
Cass County—		Cottrellville Township.....	1
Wayne Township.....	1	Marine City.....	1
Chippewa County—		Port Huron.....	1
Sault Ste. Marie.....	1	Shiawassee County—	
Dickinson County—		Owosso Township.....	1
Norway.....	5	Tuscola County—	
		Akron.....	1

TYPHOID FEVER—Continued.

State Reports for April, 1916—Continued.

Place.	New cases reported.	Place.	New cases reported.
<b>Michigan—Continued.</b>		<b>Ohio:</b>	
Van Buren County—		Allen County.....	1
Decatur.....	4	Ashtabula County—	
South Haven.....	2	Ashtabula.....	5
Washtenaw County—		Conneaut.....	1
Ann Arbor.....	6	Athens County—	
Wayne County—		Nelsonville.....	1
Monseagon Township.....	1	Auglaize County—	
Trenton.....	1	Wapakoneta.....	1
Detroit.....	24	Belmont County.....	9
Wyandotte.....	4	Champaign County.....	4
Total.....	121	Clark County—	
		Springfield.....	5
		Columbiana County—	
<b>Mississippi:</b>		Willsville.....	3
Adams County.....	1	Crawford County.....	2
Amite County.....	3	Bucyrus.....	1
Attala County.....	1	Cuyahoga County—	
Bolivar County.....	7	Cleveland.....	13
Chickasaw County.....	1	East Cleveland.....	1
Copiah County.....	4	Darke County.....	1
Covington County.....	1	Defiance County.....	4
De Soto County.....	2	Erie County—	
Forest County.....	2	Sandusky.....	1
Franklin County.....	1	Fayette County.....	1
Green County.....	1	Franklin County.....	4
Harrison County.....	3	Geauga County.....	1
Hinds County.....	5	Greene County.....	1
Holmes County.....	5	Guernsey County.....	3
Itawamba County.....	1	Hamilton County.....	11
Jackson County.....	1	Hancock County.....	1
Jasper County.....	1	Henry County.....	1
Jefferson County.....	1	Highland County.....	4
Jefferson Davis County.....	1	Jackson County.....	4
Jones County.....	5	Jefferson County.....	2
Kemper County.....	1	Lawrence County.....	9
Lafayette County.....	3	Licking County.....	7
Lauderdale County.....	1	Logan County.....	2
Lawrence County.....	4	Lorain County.....	1
Lee County.....	4	Lucas County—	
Leflore County.....	1	Tol do.....	14
Marion County.....	5	Mahoning County.....	4
Marshall County.....	7	Medina County.....	1
Newton County.....	4	Meigs County.....	1
Panola County.....	8	Miami County—	
Pearl River County.....	2	Piqua.....	2
Pike County.....	5	Montgomery County.....	6
Quitman County.....	1	Morrow County.....	1
Scott County.....	2	Muskingum County.....	1
Simpson County.....	3	Noble County.....	1
Smith County.....	1	Paulding County.....	2
Sunflower County.....	4	Perry County.....	1
Tallahatchie County.....	5	Pickaway County.....	1
Tate County.....	13	Portage County.....	2
Tippah County.....	3	Putnam County.....	1
Tishomingo County.....	3	Ross County.....	1
Tunica County.....	2	Sandusky County—	
Union County.....	3	Fremont.....	3
Walthall County.....	1	Scioto County.....	3
Warren County.....	6	Seneca County—	
Washington County.....	5	Tiffin.....	1
Wayne County.....	3	Stark County—	
Webster County.....	2	Canton.....	5
Wilkinson County.....	2	Massillon.....	1
Winston County.....	6	Summit County.....	4
Yalobusha County.....	3	Trumbull County.....	3
Yazoo County.....	9	Tuscarawas County.....	2
Total.....	170	Vinton County.....	1
		Washington County.....	2
		Wayne County.....	1
		<b>Total.....</b>	<b>170</b>
<b>North Dakota:</b>		<b>Virginia:</b>	
Morton County.....	1	Accomac County.....	1
Felton County.....	1	Albemarle County.....	6
Stutsman County.....	1	Alleghany County.....	1
Williams County.....	1	Amelia County.....	1
Total.....	4		

## TYPHOID FEVER—Continued.

## State Reports for April, 1916—Continued.

Place.	New cases reported.	Place.	New cases reported.
Virginia—Continued.		Virginia—Continued.	
Amherst County.....	3	Northampton County.....	1
Appomattox County.....	1	Northumberland County.....	1
Augusta County.....	3	Nottoway County.....	1
Bath County.....	1	Orange County.....	1
Bedford County.....	1	Page County.....	1
Bland County.....	1	Pittsylvania County.....	1
Botetourt County.....	1	Shenandoah County.....	1
Campbell County.....	1	Spotsylvania County.....	1
Lynchburg.....	2	Pulaski County.....	1
Caroline County.....	1	Roanoke County.....	2
Carroll County.....	1	Roanoke.....	6
Charles City County.....	1	Rockingham County.....	2
Franklin County.....	1	Russell County.....	2
Lee County.....	1	Scott County.....	3
Elizabeth City County.....	2	Shenandoah County.....	1
Fauquier County.....	1	Southampton County.....	1
Franklin County.....	1	Sussex County.....	1
Goochland County.....	1	Tazewell County.....	6
Halifax County.....	11	Warwick County.....	5
Hanover County.....	1	Washington County.....	3
Isle of Wight County.....	1	Westmoreland County.....	1
James City County.....	1	Wise County.....	1
Lancaster County.....	1	Wythe County.....	2
Loudoun County.....	2	York County.....	1
Mecklenburg County.....	1		
Middlesex County.....	1	Total.....	100
Montgomery County.....	2		
Nansemond County.....	1	Wyoming:	
Norfolk County.....	1	Goshen County.....	2

## Oregon Report for March, 1916.

Place.	New cases reported.	Place.	New cases reported.
Oregon:		Oregon—Continued.	
Clackamas County.....	1	Multnomah County—	
Clatsop County.....	1	Portland.....	9
Lane County.....	1		
Linn County.....	6	Total.....	19
Marion County.....	1		

## City Reports for Week Ended May 13, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Ann Arbor, Mich.....	3		Mobile, Ala.....		1
Baltimore, Md.....	6	2	Nashville, Tenn.....	1	
Berkeley, Cal.....	2		Newark, N. J.....	1	
Birmingham, Ala.....	1		New Orleans, La.....	5	1
Buffalo, N. Y.....	5	1	New York, N. Y.....	37	2
Camden, N. J.....	1		Niagara Falls, N. Y.....	1	
Charleston, S. C.....	7		Oakland, Cal.....	3	
Chicago, Ill.....	14		Philadelphia, Pa.....	22	3
Cincinnati, Ohio.....	1		Pittsburgh, Pa.....	2	1
Cleveland, Ohio.....	2		Pittsfield, Mass.....	1	
Coffeyville, Kans.....	1		Portland, Ore.....	2	1
Columbus, Ohio.....	3		Providence, R. I.....	1	
Detroit, Mich.....	5	2	Rutland, Vt.....	1	
Dubuque, Iowa.....	2		Sacramento, Cal.....	1	
El Paso, Tex.....	1	2	St. Louis, Mo.....	4	
Evansville, Ind.....	2		San Francisco, Cal.....	6	
Fall River, Mass.....	4		Schenectady, N. Y.....	2	1
Galveston, Tex.....	2		Springfield, Ill.....	1	
Grand Rapids, Mich.....	2	2	Toledo, Ohio.....	3	
Johnstown, Pa.....	1		Trenton, N. J.....	3	
Kansas City, Mo.....	7	2	Washington, D. C.....	3	
Lincoln, Nebr.....	1		Wheeling, W. Va.....	1	
Los Angeles, Cal.....	3	1	Wilmington, Del.....	7	3
Lowell, Mass.....	1		Worcester, Mass.....	1	
Lynchburg, Va.....	1		York, Pa.....	1	
Milwaukee, Wis.....	9	2	Zanesville, Ohio.....	2	

**TYPHUS FEVER.**

**Texas—Laredo.**

A case of typhus fever was notified at Laredo, Tex., May 13, 1916, in the person of C. R., a native of Mexico, male, aged 24 years, who had lived in Laredo more than a year. The patient made a trip to Tampico, Mexico, in the early part of April, 1916, and returned to Laredo about May 5 and was taken sick May 7. This is the sixteenth case of typhus fever reported at Laredo, Tex.

**Texas—Pearsall.**

Acting Asst. Surg. Hamilton reported that on May 19, 1916, a case of typhus fever was notified in Pearsall, Tex., in the person of R. A., Mexican, male, aged 19, came from Mexico May 8 and was taken sick May 12, 1916.

**DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.**

**State Reports for April, 1916.**

Place.	Cases reported.			Place.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
California.....	229	480	326	North Dakota.....	45	197	98
Iowa.....	29	213	213	Ohio.....	40	13,213	1,070
Michigan.....	383	2,164	753	Virginia.....	97	5,438	62
Mississippi.....	30	252	29	Wyoming.....	1	40	9

**Oregon Report for March, 1916.**

During the month of March, 1916, 16 cases of diphtheria, 131 cases of measles, and 39 cases of scarlet fever, were reported in the State of Oregon.

**City Reports for Week Ended May 13, 1916.**

City.	Population as of July 1, 1915 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<b>Over 500,000 inhabitants:</b>										
Baltimore, Md.....	584,605	186	7	1	209	1	28	3	50	18
Boston, Mass.....	745,139	303	45	4	277	4	42	.....	69	34
Chicago, Ill.....	2,447,045	680	117	15	351	10	245	.....	264	78
Cleveland, Ohio.....	656,975	190	35	1	145	2	25	2	39	18
Detroit, Mich.....	554,717	242	59	2	52	9	59	.....	34	19
New York, N. Y.....	5,468,190	1,515	359	22	1,074	20	189	1	382	184
Philadelphia, Pa.....	1,683,664	532	59	11	393	1	49	3	160	78
Pittsburgh, Pa.....	571,984	162	31	2	202	2	14	.....	23	12
St. Louis, Mo.....	745,988	206	44	.....	418	3	52	3	41	17
<b>From 300,000 to 500,000 inhabitants:</b>										
Buffalo, N. Y.....	461,335	176	9	.....	32	6	22	1	38	17
Cincinnati, Ohio.....	406,706	119	19	.....	215	4	2	.....	30	17
Jersey City, N. J.....	300,133	88	15	.....	67	.....	18	.....	32	11

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

## City Reports for Week Ended May 13, 1916—Continued.

City.	Population as of July 1, 1915 (estimated by U. S. Census Bureau.)	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 300,000 to 500,000 inhabitants—Continued.										
Los Angeles, Cal.	465,367	125	14	1	17		5		67	21
Milwaukee, Wis.	428,062	113	12	4	135	6	46	1	25	19
Newark, N. J.	339,000	127	25	5	247	6	26		70	24
New Orleans, La.	366,484	147	21		45	1	1		31	18
San Francisco, Cal.	416,912	125	45	3	1		30		65	22
Washington, D. C.	358,679	100	11	1	98		10		22	13
From 200,000 to 300,000 inhabitants:										
Columbus, Ohio.	209,722	71	1		112	4	2		10	6
Kansas City, Mo.	281,879		18	3	360	4	60	2	6	13
Portland, Oreg.	272,833	44	1		18		8		6	2
Providence, R. I.	250,025	88	11		23	3	19		1	4
Rochester, N. Y.	250,747		1		21	1				3
St. Paul, Minn.	241,999	62	3	1	100		9		7	9
From 100,000 to 200,000 inhabitants:										
Atlanta, Ga.	184,873	59								7
Birmingham, Ala.	174,108	39	1		5		2		7	3
Bridgeport, Conn.	118,434	44	12	1	10		2		9	2
Cambridge, Mass.	111,609	32	6		10		7		6	4
Camden, N. J.	104,349		5		4				7	
Fall River, Mass.	126,904	42			13	1			8	6
Grand Rapids, Mich.	125,759	33	1		25		11		11	1
Hartford, Conn.	103,969	49	8	1	26	1			3	4
Lowell, Mass.	112,124	37	4	1	40		6		5	7
Lynn, Mass.	100,316	21	4		6		4		10	4
Nashville, Tenn.	115,978	45			1		7		8	3
New Bedford, Mass.	114,194	38	3	1	5		3		5	6
New Haven, Conn.	147,995		2		6		6		7	2
Oakland, Cal.	190,803		3	1	1		2		3	2
Omaha, Nebr.		27	3		20		21		1	4
Reading, Pa.	105,034	33			8		2		14	
Richmond, Va.	154,674	68			511	3	5		15	6
Salt Lake City, Utah	113,567	25	13	1	27		6			1
Springfield, Mass.	103,216	35			113	1	6		3	1
Syracuse, N. Y.	152,534	39	16		8		3		12	2
Tacoma, Wash.	108,094		3		8					
Toledo, Ohio.	187,840	79	3		114	3	17		1	12
Trenton, N. J.	109,212	29	7		5		6		11	1
Worcester, Mass.	160,523	48		1	98		6		7	4
From 50,000 to 100,000 inhabitants:										
Akron, Ohio.	82,958		4	1	24	5	4		1	1
Atlantic City, N. J.	55,806	7	2		5				3	
Bayonne, N. J.	67,582		2		22		3		3	
Berkeley, Cal.	54,879	11					2			1
Binghamton, N. Y.	53,082	32	4		55	3			4	2
Brookton, Mass.	65,746	20	6	1	99	3	3		5	1
Canton, Ohio.	59,139	9					2		2	2
Charleston, S. C.	60,427	32			20					1
Chattanooga, Tenn.	58,576		1				13		2	2
Covington, Ky.	56,520	20			28		1			2
El Paso, Tex.	51,936	32	1		3					8
Erie, Pa.	73,798	19	3		143				7	
Evansville, Ind.	72,125	23					1		3	3
Harrisburg, Pa.	70,754	18			63	1			5	2
Hoboken, N. J.	76,104	29	9		26		10		5	1
Johnstown, Pa.	66,585	18	2		49		2			1
Lancaster, Pa.	50,269		3		243		1		1	
Lawrence, Mass.	98,197	19	7		6		1		7	1
Malden, Mass.	50,067	13	3	1	5					
Manchester, N. H.	76,959	23	4		36				3	3
Mobile, Ala.	56,536	28							1	4
New Britain, Conn.	52,203		1		19				3	1
Norfolk, Va.	88,076		3		46				2	2
Oklahoma, Okla.	88,158	11	1		10		4			
Passaic, N. J.	69,010	18	1	1	2				6	4

<sup>1</sup> Population Apr. 15, 1910; no estimate made.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended May 13, 1916—Continued.

City.	Population as of July 1, 1915 (estimated by U. S. Census Bureau.)	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 50,000 to 100,000 inhabitants—Continued.										
Pawtucket, R. I.	58,156	20								1
Rockford, Ill.	53,761	15	1		34		4			2
Sacramento, Cal.	64,806	17						1		2
Saginaw, Mich.	54,815	17			70		1		2	2
San Diego, Cal.	51,115	18	2		35	1			4	3
Schenectady, N. Y.	95,275	25			2		3		5	4
Somerville, Mass.	85,460	20	9	1	5		4		5	1
South Bend, Ind.	67,030	18	1		49		3			1
Springfield, Ill.	59,468				8		1			1
Springfield, Ohio.	50,804	22	1		42	1	4		3	
Troy, N. Y.	77,738		6	2	11		2	1	8	1
Wichita, Kans.	67,847				7				2	1
Wilkes-Barre, Pa.	75,218	33	1		6				7	
Wilmington, Del.	93,161				23	1				
York, Pa.	50,543		4		26				3	
From 25,000 to 50,000 inhabitants:										
Lamedia, Cal.	27,031	6	1				1			
Brookline, Mass.	31,434	2	1			8		4		1
Butler, Pa.	26,587	5	1		87		1		2	
Rutte, Mont.	42,918	24	3		48				4	2
Chelsea, Mass.	32,452	9	1		3		1			2
Chicopee, Mass.	28,688	10			11				5	
Cumberland, Md.	25,564	4	1		5				4	
Danville, Ill.	31,554	18			11				1	2
Davenport, Iowa	47,127						7			
Dubuque, Iowa	39,650		1		1					1
East Orange, N. J.	41,155	11	2		27		1		2	1
Elgin, Ill.	27,844	5							1	
Everett, Mass.	38,307	3	1		3		1		3	1
Everett, Wash.	33,767	6								1
Fitchburg, Mass.	41,144	8	3		16		4		3	
Galveston, Tex.	41,076	16							3	3
Haverhill, Mass.	47,774	11	1		3		1		2	2
Kalamazoo, Mich.	47,364	19			10				1	2
Kenosha, Wis.	30,319	4			68		3			
La Crosse, Wis.	31,522	15	2				2			1
Lexington, Ky.	39,703	15			3		4			
Lincoln, Nebr.	46,028	11	2		3		3			1
Lorain, Ohio	35,662				22		2			
Lynchburg, Va.	32,385	8	1		96		1		2	1
Madison, Wis.	30,084						2			1
Medford, Mass.	25,737	5	2		1		1			1
Montclair, N. J.	25,550	2	1		8		1		5	
Newport, R. I.	29,631	5	4		6					1
Newton, Mass.	43,085	7			29				1	
Niagara Falls, N. Y.	36,240	14	2		92	4	1		3	
Norristown, Pa.	30,833	6	2		22					1
Ogden, Utah	30,466	5	1				1			
Orange, N. J.	32,524	16	4		39		1		1	1
Pasadena, Cal.	43,859	8			4					1
Perth Amboy, N. J.	39,725		3						2	
Pittsfield, Mass.	37,580	12			1				1	
Portsmouth, Va.	38,610	17	1		6		1			2
Racine, Wis.	45,507				3		4			
Roanoke, Va.	41,929	8			49				1	1
San Jose, Cal.	37,994	16	1						1	3
Steubenville, Ohio	26,631	15	4		14					
Stockton, Cal.	34,508	6					2		1	
Superior, Wis.	45,285	5			6		1			
Taunton, Mass.	35,957	9			1					2
Waltham, Mass.	30,129	10			3		1	1	2	2
West Hoboken, N. J.	41,883	6	1		1				4	1
Wheeling, W. Va.	43,097	16			17					4
Williamsport, Pa.	33,495	9	4		4				5	
Wilmington, N. C.	28,264	9								2
Zanesville, Ohio	30,406	9								1

<sup>1</sup> Population, Apr. 15, 1910; no estimate made.

## DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended May 13, 1916—Continued.

City.	Population as of July 1, 1915 (estimated by U. S. Census Bureau.)	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 10,000 to 25,000 inhabitants:										
Ann Arbor, Mich.....	14,979	11			2		2			1
Beaver Falls, Pa.....	13,316				1					
Braddock, Pa.....	21,310		1		4				2	
Cairo, Ill.....	15,5 <sup>2</sup> 3	8			2					1
Clinton, Mass.....	<sup>1</sup> 13,075	6			19		4			1
Coffeyville, Kans.....	16,765				14					
Concord, N. H.....	22,480	9	2		20					1
Galesburg, Ill.....	23,423	1			6					
Harrison, N. J.....	16,555		1		16				2	
Kearny, N. J.....	22,753	7	1		9		1			
Kokomo, Ind.....	20,312	3	1				1			1
Long Branch, N. J.....	15,057	11							1	1
Marinette, Wis.....	<sup>1</sup> 14,610				3					
Melrose, Mass.....	17,166	2			1					1
Morristown, N. J.....	13,153	6	1		5		3		1	
Nanticoke, Pa.....	22,441	5								
Newburyport, Mass.....	15,195	1			1		4			1
New London, Conn.....	20,771	12			41					1
North Adams, Mass.....	<sup>1</sup> 22,019	8								
Northampton, Mass.....	19,846	6			5		5		2	1
Plainfield, N. J.....	23,280				1		2		1	1
Rutland, Vt.....	14,624	4					4			
Saratoga Springs, N. Y.....	12,842	9								
Steelton, Pa.....	15,337	13			25	1				
Wilkinsburg, Pa.....	22,361	8	1		10		2		3	2
Woburn, Mass.....	15,862	5								1

<sup>1</sup> Population Apr. 15, 1910; no estimate made.

# FOREIGN.

## CUBA.

### Communicable Diseases—Habana.

Communicable diseases were notified at Habana during the 10-day period ended May 10, 1916, as follows:

Disease.	New cases.	Deaths.	Remain- ing under treatment May 10, 1916.
Diphtheria.....	10	3	8
Leprosy.....	2	1	244
Malaria.....			4
Measles.....	11	1	9
Paratyphoid fever.....	4	2	4
Scarlet fever.....	1		4
Smallpox.....			11
Typhoid fever.....	6	1	23
Varicella.....	1		6

<sup>1</sup> Imported.

## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended June 2, 1916.<sup>1</sup>

### CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bassein.....	Mar. 19-Apr. 1.....		4	
Calcutta.....	Mar. 26-Apr. 1.....		47	
Benzada.....	do.....		3	
Langoon.....	Mar. 19-25.....	2	2	

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources.

### PLAGUE.

Ceylon:				
Colombo.....	Mar. 26-Apr. 8....	10	10	
India:				Mar. 26-Apr. 1, 1916: Cases, 6,661; deaths, 5,861.
Bassein.....	Mar. 19-Apr. 1.....		21	
Bombay.....	Apr. 9-15.....	238	209	
Calcutta.....	Mar. 26-Apr. 1.....		7	
Benzada.....	Mar. 19-Apr. 1.....		39	
Karachi.....	Apr. 9-15.....	1	1	
Madras Presidency.....	do.....	38	33	
Mandalay.....	Mar. 19-Apr. 1.....		46	
Moulmein.....	do.....		51	
Meingyan.....	Mar. 12-18.....		2	
Pegu.....	Mar. 19-Apr. 1.....		12	
Prora.....	do.....		32	
Pangoon.....	do.....	128	123	
Toungoo.....	do.....		2	
Mauritius.....	Mar. 2.....	1		



**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—**  
Continued.

**Reports Received During Week Ended June 2, 1916—Continued.**

**SMALLPOX.**

Place.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Austria—				
Vienna.....	Apr. 9-29.....	18	3	
Hungary—				
Budapest.....	Apr. 9-22.....	91	1	
Canada:				
Quebec—				
Montreal.....	May 14-20.....	1		
China:				
Antung.....	Apr. 17-23.....	1		
Chung-king.....	Apr. 2-8.....			Present. Do.
Foochow.....	Apr. 10-16.....			
Hong'ong.....	Apr. 2-15.....	42	35	
Great Britain:				
Cardiff.....	Apr. 30-May 6.....	1		
South Shields.....	Apr. 16-22.....	1		
India:				
Bombay.....	Apr. 9-15.....	144	58	
Calcutta.....	Mar. 26-Apr. 1.....		5	
Madras.....	Apr. 9-15.....	56	18	
Rangoon.....	Mar. 19-Apr. 1.....	135	58	
Mexico:				
Aguaascalientes.....	May 8-14.....		20	
Frontera.....	Apr. 21-May 6.....		10	
Mazatlan.....	May 3-9.....		5	
Vera Cruz.....	Apr. 24-May 7.....	7	8	
Netherlands:				
Amsterdam.....	Apr. 9-22.....	7	1	
Straits Settlements:				
Singapore.....	Mar. 26-Apr. 1.....	1		

**TYPHUS FEVER.**

Austria-Hungary:				
Hungary—				
Budapest.....	Apr. 9-22.....	4		
Egypt:				
Alexandria.....	Apr. 9-15.....	56	13	
Germany:				
Bremen.....	Apr. 2-8.....		1	
Königsberg.....	Apr. 16-22.....	5		
Mexico:				
Aguaascalientes.....	May 8-14.....		14	
Tampico.....				Apr. 24, 1916: Present.
Turkey in Asia:				
Adana.....	Mar. 26-Apr. 1.....			Present.
Tarsus.....	do.....			Do.

**Reports Received from Jan. 1 to May 26, 1916.**

**CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary.....				Total, Oct. 25, 1915-Jan. 2, 1916: Cases, 412; deaths, 165. Jan. 3-Feb. 5, 1916: Cases, 138; deaths, 47. Present.
Austria.....	Nov. 7-Dec. 18.....	209	66	
Do.....	Jan. 1-Mar. 25.....	153	55	
Cattaro.....	Apr. 2.....			
Bosnia-Herzegovina.....	Dec. 23-Jan. 3.....	8	6	
Do.....	Jan. 9-Feb. 22.....	45	17	
Croatia-Slavonia.....	Oct. 18-Dec. 20.....	247	105	
Do.....	Jan. 3-Feb. 14.....	279	265	
Hungary.....	Oct. 18-Jan. 2.....	339	197	
Do.....	Jan. 10-Feb. 27.....	31	27	
Borneo:				Nov. 18-Dec. 10, 1915: Cases, 675; deaths, 276. In a prison camp.
Putatan.....	Oct. 17-23.....	2		
Greece:				
Corfu.....	Mar. 9-28.....		30	

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—**  
Continued.**Reports Received from Jan. 1 to May 26, 1916—Continued.****CHOLERA—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>India:</b>				
Bassein.....	Nov. 28-Jan. 1.....		29	
Do.....	Jan. 2-Mar. 4.....		28	
Bombay.....	Jan. 16-Apr. 1.....	4	3	
Calcutta.....	Oct. 31-Jan. 1.....		139	
Do.....	Jan. 2-Mar. 25.....		275	
Henzada.....	Oct. 7-Nov. 27.....		3	
Do.....	Feb. 20-26.....		1	
Madras.....	Nov. 7-Dec. 4.....	5	.....	
Do.....	Jan. 2-Feb. 26.....	29	23	
Madras Presidency.....	Nov. 26.....		12	
Mandalay.....	Oct. 24-Dec. 18.....		46	
Mergui.....	Oct. 23-Jan. 1.....		12	
Do.....	Jan. 2-Mar. 11.....		23	
Moulmein.....	Mar. 12-18.....		1	
Mvingyan.....	Oct. 14-Dec. 25.....		15	
Pakkoku.....	Oct. 10-Nov. 6.....		45	
Pegu.....	Jan. 16-Mar. 18.....		5	
Prome.....	Nov. 14-Jan. 1.....		106	
Rangoon.....	Oct. 31-Jan. 1.....	88	69	
Do.....	Jan. 2-Mar. 18.....	62	45	
Tavoy.....	Dec. 5-Jan. 1.....		18	
Do.....	Jan. 2-Feb. 5.....		11	
Toungoo.....	Oct. 7-Dec. 11.....		47	
Yenangyaung.....	Nov. 2.....	1	1	American.
<b>Indo-China:</b>				Sept. 1-30, 1915: Cases, 813;
Anam Province.....	Sept. 1-30.....	127	92	deaths, 549.
Cambodia Province.....	do.....	1	1	
Cochin China Province.....	do.....	15	8	
Saigon.....	Oct. 25-Nov. 28.....	4	3	
Do.....	Jan. 3-Apr. 2.....	7	3	
Tonkin Province.....	Sept. 1-30.....	670	448	
<b>Java:</b>				Oct. 15-Dec. 6, 1915: Cases, 86;
Batavia.....	Oct. 26-Dec. 27.....	55	36	deaths, 58.
Do.....	Jan. 11-Mar. 15.....	6	5	Apr. 14, 1916: Epidemic.
Brebes.....	Oct. 15-Dec. 9.....	10	10	
Cheribon.....	Dec. 28-Jan. 3.....	1	.....	Vicinity of Batavia.
Modjokerto.....	Feb. 26-Mar. 3.....	1	1	
<b>Persia:</b>				
Enzeli.....	Nov. 6-12.....		10	Nov. 22, 1915: Still present.
Do.....	Feb. 6-Mar. 2.....		11	Present.
Essaleme.....	Nov. 23.....		7	
Gazian.....	Nov. 6-12.....		4	
Karkhan-Roud.....	Nov. 28.....		38	And in vicinity.
Kazvin.....	Nov. 27.....		10	
f. esht.....	Nov. 24.....		.....	And vicinity: Present.
Do.....	Feb. 6.....		.....	Present.
<b>Philippine Islands:</b>				
Manila.....	Dec. 26-Jan. 1.....	1	1	
Do.....	Jan. 2-Mar. 4.....	25	12	
<b>Russia:</b>				
Moscow.....	Nov. 14-27.....	4	1	
<b>Siam:</b>				
Bangkok.....	Jan. 9-Mar. 18.....	5	6	
<b>Turkey in Asia:</b>				
Trebizond.....	Dec. 2-4.....	15	10	Dec. 1-31, 1915: Present.
Do.....	Jan. 8.....		.....	Present.

**PLAGUE.**

<b>Argentina:</b>				
Cordoba Province.....	Dec. 19-Jan. 22.....	49	11	In 10 localities.
<b>Brazil:</b>				
Bahia.....	Nov. 21-Feb. 19.....	18	11	
<b>Ceylon:</b>				
Colombo.....	Oct. 24-Dec. 25.....	37	31	
Do.....	Jan. 2-Mar. 25.....	49	48	
<b>China:</b>				
Hongkong.....	Nov. 7-Jan. 1.....	4	4	
Do.....	Jan. 2-Mar. 11.....	5	5	
<b>Ecuador:</b>				
Guayaquil.....	Nov. 1-30.....	1	1	

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—**  
Continued.

**Reports Received from Jan. 1 to May 26, 1916—Continued.**

**PLAGUE—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.	
<b>Egypt.</b>					
Alexandria.....	Dec. 23-31.....	2		Jan. 1-Dec. 31, 1915: Cases, 285; deaths, 120. Jan. 1-Apr. 20, 1916: Cases, 836; deaths, 411.	
Do.....	Apr. 11.....	1			
Assiout Province.....	Dec. 17-31.....	4	2		
Do.....	Jan. 2-Apr. 20.....	233	100		
Assouan Province.....	Mar. 17-30.....	2	1		
Beni-Souef Province.....	Mar. 23-Apr. 20.....	27	19		
Fayoum Province.....	Jan. 23-Apr. 20.....	279	118		
Garbi h Province.....	D. c. 6-28.....	6	48		
Do.....	Jan. 10-Feb. 13.....	2	1		
Girgeh Province.....	F. b. 18-Apr. 12.....	40	30		
Gliz h Province.....	D. c. 27.....	1	1		
Do.....	Mar. 5-Apr. 13.....	22	6		
Kenah Province.....	F. b. 15-22.....	4	3		
Mini h Province.....	Nov. 27-D. c. 31.....	13	9		
Do.....	Jan. 1-Apr. 20.....	133	64		
Port Said.....	Aug. 13-Nov. 1.....	3	2		
Do.....	Apr. 6-19.....	3	1		
Suez.....	Jan. 10.....	1		On s. s. Syria, from Bombay.	
<b>Greece:</b>					
Ath ns.....	D. c. 8-20.....		1		
Pir us.....	Jan. 29.....	7	5		
Syra Island.....	Jan. 16.....	16	10		
<b>India.</b>					
Akyab.....	Jan. 16-29.....		1	Oct. 31, 1915-Jan. 1, 1916: Cases, 40,533; deaths, 31,225. Jan. 2-Mar. 25: Cases, 96,582; deaths, 77,705.	
Bass in.....	D. c. 26-Jan. 1.....		3		
Do.....	Jan. 2-Mar. 18.....		67		
Bombay.....	Nov. 9-Jan. 1.....	53	51		
Do.....	Jan. 2-Apr. 8.....	1,004	706		
Calcutta.....	Nov. 21-27.....		1		
Do.....	Jan. 2-Mar. 25.....		10		
Henzada.....	Dec. 26-Jan. 1.....		1		
Do.....	Jan. 2-Mar. 18.....		275		
Karachi.....	Nov. 7-20.....	2	2		
Do.....	Mar. 25-Apr. 1.....	1	1		
Madras.....	Jan. 2-8.....	1			
Madras Presidency.....	Oct. 16-Nov. 5.....		118		Madras Presidency, Aug. 1, 1898, to June 30, 1915: Cases, 111,356; deaths, 109,095.
Do.....	Nov. 12-Jan. 1.....	1,839	1,288		
Do.....	Jan. 9-Apr. 8.....	4,863	3,382		
Mandalay.....	Oct. 24-Jan. 1.....		266		
Do.....	Jan. 2-Mar. 18.....		1,093		
Moulmein.....	Feb. 13-Mar. 18.....		43		
Myingyan.....	Jan. 30-Mar. 11.....		43		
Pakkokku.....	Mar. 12-18.....		1		
Pegu.....	Jan. 9-Mar. 18.....		72		
Prome.....	do.....		91		
Rangoon.....	Oct. 1-Dec. 18.....	68	66		
Do.....	Jan. 2-Mar. 18.....	697	655		
Toungoo.....	Jan. 10-Mar. 11.....		6		
<b>Indo-China.</b>					
Anam Province.....	Sept. 1-30.....	9	5	Sept. 1-30, 1915: Cases, 72; deaths, 65.	
Cambodia Province.....	do.....	20	19		
Cochin China Province.....	do.....	2	2		
Saigon.....	Oct. 25-Dec. 5.....	8	5		
Do.....	Jan. 3-Mar. 19.....	59	24		
Tonkin Province.....	Sept. 1-30.....	41	41		
<b>Java.</b>					
Kediri residency.....	Oct. 22-Dec. 30.....	527	507	Nov. 19-Dec. 30, 1915: Cases, 1,689; deaths, 1,638. Year 1915: Cases, 4,884; deaths, 4,182; among Chinese and natives, Jan. 1-Feb. 25, 1916: Cases, 775; deaths, 727.	
Do.....	Jan. 1-Feb. 25.....	163	159		
Madi en residency.....	Oct. 22-Nov. 11.....	1	1		
Do.....	Jan. 15-Feb. 25.....	37	17		
Paseroean residency.....	Oct. 22-Dec. 30.....	49	50		
Do.....	Jan. 1-Feb. 25.....	43	42		
Surabaya residency.....	Oct. 22-Dec. 30.....	24	24		
Do.....	Jan. 1-Feb. 25.....	68	68		
Surabaya.....	Nov. 5-Dec. 30.....	12	12		
Do.....	Jan. 1-Feb. 18.....	57	57		
Surakarta residency.....	Oct. 22-Dec. 16.....	1,085	1,056		
Do.....	Jan. 1-Feb. 25.....	454	441		
<b>Mauritius.</b>					
Do.....	Oct. 1-Dec. 30.....	8			
Do.....	Jan. 18-Feb. 12.....	2			
<b>Peru.</b>					
Ancaes Department.....	Jan. 1-Dec. 31, 1915.....	8	6	Jan. 1-Dec. 31, 1915: Cases, 455; deaths, 240. In addition, 13 cases, cause of disease unknown.	
Arequipa Department.....	do.....	23	15		
Callao Department.....	do.....	39	13		
Lambayeque Department.....	do.....	102	38		
Libertad Department.....	do.....	123	63		

## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER— Continued.

### Reports Received from Jan. 1 to May 26, 1916—Continued.

#### PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Peru—Continued.</b>				
Lima Department.....	do.....	104	63	
Piura Department.....	do.....	52	33	
Tumbes Province, Piura.....	do.....	4	9	
<b>Russia:</b>				
Siberia—				
Transbaikhal Province.....	October, 1914.....	16	13	
<b>Straits Settlements:</b>				
Penang.....	Nov. 28—Dec. 4.....	1	1	
Singapore.....	Oct. 31—Dec. 18.....	5	2	
Do.....	Feb. 20—26.....	1	1	
<b>Siam:</b>				
Bangkok.....	Nov. 14—20.....	1	1	
Do.....	Jan. 2—Mar. 18.....	191	179	
<b>Union of South Africa:</b>				
Orange Free State.....	Jan. 23—Mar. 19.....	36	22	
At sea.....	Dec. 29, 1915—Jan. 10, 1916.....	4	.....	On s. s. Syria from Bombay. Three cases left at Aden; 1 arrived Jan. 10 at Suez.

#### SMALLPOX.

<b>Algeria:</b>				
Algiers.....	Dec. 1—31.....	1	.....	
<b>Australia:</b>				
New South Wales.....				
Auburn.....	Jan. 21—Feb. 4.....	2	.....	Nov. 19—Dec. 30, 1915: Cases, 62. Jan. 7—Mar. 23, 1916: Cases, 28. Suburb of Sydney.
Bega district.....	Dec. 10—16.....	1	.....	
Bulahdelah district.....	Jan. 3—6.....	1	.....	Do.
Chatswood district.....	Feb. 4—10.....	1	.....	
Cundletown.....	Dec. 21—30.....	3	.....	On s. s. Yulgilbar from Sydney (case returned to Sydney). Nov. 19—Dec. 30, 1915: Cases, 53. Jan. 7—Mar. 23, 1916: Cases, 17.  Apr. 6, 1916, 1 case from s. s. Clan Maccorquodale from Marseille. Case in member of crew taken on at Colombo. Removed to North Head quarantine station.
Do.....	Jan. 7—13.....	2	.....	
Forster district.....	Jan. 21—27.....	1	.....	
Gloucester district.....	Dec. 10—16.....	1	.....	
Kempsey.....	Jan. 7—13.....	1	.....	
Newcastle district.....	.....	.....	.....	
Newcastle.....	Mar. 31—Apr. 13.....	7	.....	
Wallsend.....	Jan. 3—6.....	1	.....	
Rooty Hill district.....	Dec. 10—16.....	1	.....	
Singleton district.....	Feb. 4—24.....	2	.....	
Sydney.....	Dec. 3—19.....	10	.....	
Do.....	Jan. 3—6.....	1	.....	
Taree district.....	Jan. 7—13.....	2	.....	
Wyong district.....	Jan. 3—6.....	1	.....	
<b>Austria-Hungary:</b>				
Austria.....				
Prague.....	Jan. 9—15.....	1	.....	Nov. 7—Dec. 4, 1915: Cases, 3,600. Jan. 16—Feb. 12, 1916: Cases, 7,824.
Trieste.....	Feb. 20—26.....	2	.....	
Vienna.....	Dec. 10—Jan. 1.....	24	3	
Do.....	Jan. 2—Apr. 8.....	131	35	
Hungary—				
Budapest.....	Nov. 21—Dec. 31.....	373	.....	In addition, Jan. 1—8, 3 among troops.
Do.....	Jan. 1—Apr. 8.....	110	5	
<b>Brazil:</b>				
Rio de Janeiro.....	Nov. 14—Jan. 1.....	147	31	
Do.....	Jan. 2—Mar. 18.....	108	25	
<b>British East Africa:</b>				
Mombasa.....	Dec. 1—31.....	2	2	
Do.....	Jan. 1—31.....	.....	1	
<b>Canada:</b>				
Alberta—				
Calgary.....	Mar. 5—25.....	2	.....	
Manitoba—				
Winnipeg.....	Feb. 10—Apr. 29.....	13	.....	
Ontario—				
Fort William and Port Arthur.....	Dec. 19—25.....	2	.....	
Do.....	Jan. 16—Apr. 29.....	2	.....	
Niagara Falls.....	Mar. 19—Apr. 22.....	2	.....	

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—  
Continued.**

**Reports Received from Jan. 1 to May 26, 1916—Continued.**

**SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Canada—Continued.</b>				
Quebec—				
Montreal.....	Dec. 19-25.....	1		
Do.....	Jan. 16-May 13.....	5		
<b>Canary Islands:</b>				
Grand Canary.....	Nov. 23.....			
Arucas.....	Dec. 5-18.....			
Las Palmas.....	Jan. 3-9.....		1	Epidemic. Present.
<b>Ceylon:</b>				
Colombo.....	Oct. 24-Nov. 13.....	6	2	
Do.....	Jan. 30-Mar. 25.....	3		
<b>China:</b>				
Antung.....	Jan. 3-Mar. 25.....	2		
Chung ing.....	Feb. 27-Apr. 1.....			Do.
Foochow.....	Nov. 21-27.....			Do.
Do.....	Jan. 2-Mar. 18.....			Do.
Harbin.....	Nov. 15-Dec. 26.....	12		
Do.....	Jan. 3-Feb. 13.....	5		
Hong ong.....	Jan. 23-Apr. 8.....	59	50	
Nan ing.....	Nov. 7-Dec. 18.....			Do.
Do.....	Jan. 16-29.....			Do.
Shanghai.....	Feb. 13-Apr. 8.....	3		
Tientsin.....	Nov. 21-27.....		2	
Do.....	Feb. 27-Apr. 8.....	39	19	
<b>Colombia:</b>				
Siné.....	Jan. 23.....	9		50 miles from Cartagena.
<b>Cuba:</b>				
Guantanamo.....	Jan. 16.....	1		U. S. naval station. Case, mild varioid from U. S. S. Louisiana.
Do.....	Jan. 23-Feb. 8.....	1		U. S. naval station. Case, con- fluent form.
<b>Egypt:</b>				
Alexandria.....	Dec. 21-27.....	3		
Do.....	Mar. 5-11.....	1		
Cairo.....	Sept. 3-Dec. 31.....	9	1	
Port Said.....	Dec. 10-16.....	1		
<b>France:</b>				
Marseille.....	Feb. 1-Mar. 31.....		2	
Paris.....	Dec. 5-11.....	1		
Do.....	Apr. 19-25.....	3		
<b>Germany:</b>				
<b>Bavaria—</b>				
Munich.....	Dec. 19-25.....	1		
Berlin.....	Feb. 20-26.....	1		
Breslau.....	Dec. 12-18.....	1	1	
Do.....	Mar. 12-Apr. 8.....	3		
Bromberg, Govt. district.....	Jan. 2.....	1		
Düsseldorf.....	Dec. 5-11.....	1		
Gumbinnen, Govt. district.....	Jan. 2-8.....	1		
Hamburg.....	Dec. 26-Jan. 1.....	1		
Lüneburg, Govt. district.....	Feb. 13-19.....	1		
Oppeln, Govt. district.....	Nov. 21-Dec. 25.....	14		Of these, 8 in one institution.
Do.....	Jan. 2-8.....	1		
Saxony.....	Nov. 21-Dec. 25.....	1		
<b>Great Britain:</b>				
Bristol.....	Jan. 30-Feb. 5.....	1		On s. s. from Bombay.
Cardiff.....	Jan. 30-Apr. 29.....	35	1	
Liverpool.....	Mar. 19-Apr. 8.....	7		From vessels.
Manchester.....	Feb. 20-26.....	1		
South Shields.....	Mar. 5-Apr. 8.....	4	1	
<b>Greece:</b>				
Athens.....	May 9.....			Prevalent.
Piræus.....	Jan. 31.....			Present in virulent form.
<b>Guatemala:</b>				
Guatemala City.....	Jan. 9-Mar. 19.....			Present.
<b>India:</b>				
Bassein.....	Jan. 30-Feb. 5.....		1	
Bombay.....	Nov. 7-Jan. 1.....	103	67	
Do.....	Jan. 2-Apr. 8.....	1,342	705	
Calcutta.....	Nov. 7-Jan. 1.....		3	
Do.....	Jan. 9-Mar. 25.....		32	
Karachi.....	Jan. 30-Mar. 25.....	5	1	
Madras.....	Nov. 7-Jan. 1.....	46	20	
Do.....	Jan. 2-Apr. 8.....	809	263	

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—**  
Continued.

**Reports Received from Jan. 1 to May 26, 1916—Continued.**

**SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
India—Continued.				
Rangoon.....	Oct. 31—Dec. 11....	14	7	
Do.....	Jan. 2—Mar. 18....	314	67	
Toungoo.....	Dec. 5—11.....		1	
Indo-China:				
Saigon.....	Feb. 28—Apr. 2....	9	1	
Italy:				
Turin.....	Nov. 22—Dec. 5....	6		
Japan:				
Kobe.....	Apr. 17—23.....	12	1	
Yokohama.....	Jan. 17—Mar. 19....	12	2	
Java:				
Batavia.....	Nov. 9—Jan. 3....	36	13	Oct. 15—Dec. 30, 1915: Cases, 558; deaths, 118. Jan. 1—Mar. 15, 1916: Cases, 313; deaths, 74.
Do.....	Jan. 4—Mar. 15....	35	21	
Samarang.....	Nov. 12—22.....	2		
Do.....	Feb. 12—25.....	4	2	
Surabaya.....	Feb. 19—25.....	2	2	
Malta.....	Dec. 1—31.....	1		
Mancuria:				
Harbin.....	Nov. 15—28.....	5		See China.
Mexico:				
Aguascalientes.....	Dec. 13—Jan. 2....	11	7	
Do.....	Jan. 10—May 7....		334	
Campeche.....	May 3.....	4		
Chihuahua.....	Jan. 3—9.....	1	1	
Frontera.....	Nov. 21—Dec. 25....	86	24	Dec. 26—31, 1915: Present.
Do.....	Jan. 1—Apr. 8....		14	Present Jan. 1—Feb. 10; estimated number cases, 70.
Guadalajara.....	Dec. 5—25.....	21	7	
Do.....	Jan. 2—May 6....	170	55	
Hermosillo.....	Dec. 12—Mar. 4....	141	29	Feb. 13, from 50 to 100 (estimated) cases present within radius of 50 miles of city.
Juarez.....	Feb. 11—Mar. 19....	13		Including 53 cases brought, Feb. 9—15, from Sonora.
Laguna.....	May 3.....	10		Feb. 29, 2 cases on train from Mexico City to El Paso.
Mazatlan.....	Jan. 25—Apr. 25....	65	49	
Mexico City.....				
Monterey.....	Dec. 13—19.....	5	3	
Do.....	Jan. 3—May 7....	46	3	
Naco.....	Feb. 15.....	2		
Nogales.....	Feb. 7—Mar. 4....	27	3	
Piedras Negras.....	Jan. 10—May 6....	23	24	
Progreso.....	Dec. 5—18.....	2		
Salina Cruz.....	Jan. 1—15.....	1	1	
Tampico.....	Dec. 7—31.....		21	Jan. 14: Epidemic; estimated cases, 100.
Do.....	Jan. 1—Apr. 21....		111	
Vera Cruz.....	Dec. 13—Jan. 1....	34	29	
Do.....	Jan. 3—Apr. 23....	117	88	
Netherlands:				
Amsterdam.....	Jan. 15—Apr. 8....	34	3	
Persia:				
Teheran.....	Nov. 25—Dec. 10....		140	
Porto Rico:				
Arecibo.....	Apr. 29—May 19....	4		
Arroyo.....	do.....	1		
Barros.....	May 13—19.....	3		
Bayamon.....	do.....	1		
Caguas.....	do.....	1		
Carolina.....	Apr. 29—May 19....	2		
Cataño.....	do.....	2		
Fajardo.....	May 13—19.....	3		
Gurabo.....	Apr. 29—May 19....	8		
Humacao.....	do.....	1		
Juncos.....	May 13—19.....	5		
Loiza.....	Apr. 29—May 19....	39		
Mayaguez.....	May 13—19.....	2		
Río Piedras.....	Apr. 29—May 19....	6		
San Juan.....	do.....	70		
San Lorenzo.....	do.....	7		
Trujillo Alto.....	do.....	62	2	
Utua.....	May 13—19.....	3		
Vieques.....	do.....	1		
Portugal:				
Lisbon.....	Dec. 5—26.....	4		
Do.....	Feb. 13—Apr. 22....	14		
Russia:				
Moscow.....	Mar. 5—25.....	138	34	
Petrograd.....	Oct. 24—Dec. 25....	125	37	
Do.....	Jan. 2—Mar. 18....	316	112	

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—**  
Continued.

**Reports Received from Jan. 1 to May 26, 1916—Continued.**

**SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Russia—Continued.				
Riga.....	Nov. 14-Jan. 1.....	6		Aug. 1-31, 1915: Cases, 10; deaths, 1
Do.....	Mar. 19-25.....	1		
Siberia—				
Vladivostok.....	Dec. 29-Jan. 4.....	10	3	
Siam:				
Bangkok.....	Nov. 28-Dec. 4.....		1	
Spain:				
Cadiz.....	Dec. 1-31.....		1	
Madrid.....	No. 1-Dec. 31.....		41	
Do.....	Jan. 1-Mar. 31.....		106	
Seville.....	Dec. 1-31.....		7	
Do.....	Jan. 1-Mar. 31.....		21	
Tarazona.....	Feb. 13-19.....		1	
Valencia.....	No. 21-Jan. 1.....	141	10	
Do.....	Jan. 2-Apr. 22.....	129	9	
Straits Settlements:				
Penang.....	Dec. 26-Jan. 1.....	2	1	
Do.....	Jan. 2-Mar. 18.....	45	10	
Singapore.....	No. 28-Jan. 1.....	9	1	
Do.....	Jan. 16-Mar. 25.....	28	6	
Switzerland:				
Basel.....	Nov. 29-Dec. 25.....	43		Jan. 16-22 1916: Cases, 13; received out of date.
Do.....	Jan. 30-Mar. 11.....	53		
Turkey in Asia:				
Beirut.....	Oct. 10-Dec. 25.....	75	31	
Do.....	Jan. 9-Feb. 12.....	21	9	
Union of South Africa:				
Johannesburg.....	Oct. 17-23.....	2		
Do.....	Mar. 5-11.....	1		
Uruguay:				
Monteideo.....	Oct. 1-31.....	1		
Venezuela:				
Tachira, State.....	Mar. 12.....			Present.

**TYPHUS FEVER.**

Algeria:				
Algiers.....	Feb. 1-29.....	1	1	
Argentina:				
Rosario.....	Oct. 1-31.....		1	
Do.....	Jan. 1-31.....		1	
Austria-Hungary:				
Austria.....				Nov. 14-Dec. 1, 1915: Cases, 490. Jan. 9-Feb. 12, 1916: Cases, 1,580.
Trieste.....	Feb. 6-12.....	6		
Vienna.....	Jan. 23-29.....	12	2	
Hungary.....				Jan. 24-Feb. 6, 1916: Cases, 50; deaths, 4.
Budapest.....	Dec. 12-31.....	3	1	
Do.....	Jan. 1-Apr. 1.....	16		
Canary Islands:				
Santa Cruz de Tenerife.....	Mar. 19-Apr. 8.....		2	
China:				
Antung.....	Nov. 22-Dec. 5.....	2		
Do.....	Mar. 13-19.....	1		
Chefoo.....	Apr. 9-15.....	1	1	
Tientsin.....	Mar. 19-25.....		1	
Cuba:				
Habana.....	Feb. 1-10.....	2	1	Imported from Mexico.
Egypt:				
Alexandria.....	Nov. 12-Dec. 31.....	5	2	
Do.....	Jan. 1-Apr. 8.....	170	46	
Cairo.....	Aug. 13-Dec. 31.....	73	40	
Port Said.....	Nov. 19-Dec. 31.....	1	2	
Germany:				
Aix la Chapelle.....	Jan. 9-Mar. 18.....		3	Feb. 6-10, 1916: Cases, 69; deaths, 16; prisoners. Feb. 20-Mar. 4, 1916: Cases, 43; deaths, 1.
Barmen.....	Jan. 2-8.....	2		
Berlin.....	Nov. 21-Jan. 1.....		7	
Do.....	Jan. 30-Apr. 1.....		12	
Bremen.....	Nov. 28-Dec. 4.....	1	1	
Do.....	Jan. 23-Apr. 1.....	2	5	
Bromberg, Govt. district.....	Feb. 20-26.....	1	1	
Chemnitz.....	Jan. 23-Mar. 26.....		1	

**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—**  
Continued.

**Reports Received from Jan. 1 to May 26, 1916—Continued.**

**TYPHUS FEVER—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Germany—Continued.</b>				
Dortmund	Dec. 12-18.	1	1	
Erfurt	Dec. 19-25.	1	1	
Do.	Jan. 2-Mar. 4.	1	4	
Frankfurt on Main	Feb. 5-11.	1	2	
Hanover	Nov. 21-Dec. 25.	2	2	
Do.	Jan. 9-Mar. 27.	2	3	
Königsberg	Nov. 28-Jan. 1.	10	4	
Do.	Jan. 1-Apr. 15.	22	4	
Lübeck	Nov. 7-Dec. 31.	3	2	
Do.	Jan. 1-8.	1	1	
Marburg	Feb. 20-26.	1	1	
Merseburg, Govt. district	Dec. 26-Jan. 1.	1	1	
Cpjem, Govt. district	Jan. 23-29.	1	1	
Saxe-Coburg-Gotha	Dec. 5-18.	3	1	
Do.	Jan. 9-15.	1	1	
Saxony	Feb. 20-26.	37	1	
Stettin, Govt. district	Dec. 5-25.	1	6	
Do.	Jan. 9-26.	1	2	
Greece:	Mar. 27-Apr. 2.		2	
Salonica				
<b>Great Britain:</b>				
Cardiff	Apr. 23-29.	1		
Dundee	Dec. 12-18.	3		
Glasgow	Feb. 11-Mar. 1.	9		
Liverpool	Dec. 5-18.	3	2	
Do.	Mar. 5-11.	1	1	
Manchester	Jan. 23-29.	5	1	
<b>Greece:</b>				
Salonica	Oct. 24-Jan. 2.		186	Dec. 10: Present among troops.
Do.	Jan. 3-Apr. 2.		29	
Yehije-Vardar	Dec. 10.			Present among troops.
<b>Italy:</b>				
Palermo	Dec. 13-19.	3		
Do.	Jan. 3-9.	3		
<b>Japan:</b>				
Tokyo	Feb. 27-Apr. 23.	219		Jan. 1-Apr. 23, 1916: Cases, 299.
<b>Java:</b>				
Batavia	Oct. 26-Jan. 3.	25	13	Oct. 15-Dec. 30, 1915: Cases, 42; deaths, 28. Jan. 3-Mar. 3, 1916: Cases, 80, deaths, 24.
Do.	Jan. 3-Mar. 1.	63	13	
Kediri	Feb. 19-25.	1	1	
Sanatrang	Oct. 22-Dec. 7.	7	1	
Do.	Jan. 1-Feb. 25.	18	7	
<b>Mexico:</b>				
Agascalientes	Dec. 13-Jan. 2.		12	
Do.	Jan. 10-May 7.		96	
Guadalajara	Dec. 25-31.	6	2	
Do.	Feb. 6-May 6.	178	40	
Hermosillo	Feb. 4-22.	3	3	
Juarez	To Mar. 19.	5		
Mexico City	Dec. 23.			Prevalent.
Do.	Jan. 12.		1	Jan. 1-31, 1916: Cases, 2,001; deaths, 488.
Monterey	Jan. 3-9.	1		American.
Oaxaca	Dec. 9.		1	
Piedras Negras	Mar. 5-18.	2		
Queretaro	Dec. 16.			Prevalent. Estimated number cases, 500.
Salina Cruz	Dec. 16-21.	1		In person from Mexico City.
Do.	Feb. 1-15.	1		
Tampico	Dec. 1-31.		1	
Do.	Jan. 11-Apr. 10.		6	
Vera Cruz	Feb. 7-Apr. 16.		6	
<b>Russia:</b>				
Moscow	Dec. 7-27.	28	5	Nov. 23-Dec. 11, 1915: Cases, 22.
Do.	Jan. 2-Mar. 25.	1,239	128	
Petrograd	Oct. 24-Dec. 25.	34	6	
Do.	Jan. 2-Mar. 18.	67	17	
Riga	Nov. 14-20.	12		
Do.	Mar. 12-18.	2		
Vladivostok	Oct. 8-Nov. 13.	21	6	
<b>Spain:</b>				
Madrid	Nov. 1-30.		1	
Do.	Feb. 1-29.		1	
<b>Sweden:</b>				
Stockholm	Dec. 26-Jan. 1.	1		
Do.	Feb. 6-26.	5		



**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—**  
Continued.

**Reports Received from Jan. 1 to May 26, 1916—Continued.**

**TYPHUS FEVER—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Switzerland:				
Zurich .....	Jan. 16-22 .....	1		
Turkey in Asia:				
Aleppo .....	Oct. 26-Nov. 1 .....			Estimated deaths, 200 daily. Prevalent.
Bagdad district .....	Feb. 23 .....			
Beirut .....	Nov. 21-27 .....	7	3	
Do .....	Jan. 23-Feb. 12 .....	20	10	
Damascus .....	Feb. 1-29 .....	1,100	150	Estimated; among troops.
Mersina .....	Nov. 21-27 .....	3		

**YELLOW FEVER.**

Ecuador:				
Guayaquil .....	Nov. 1-30 .....	1	1	
Mexico:				
Frontera .....	Apr. 20 .....		1	

# SANITARY LEGISLATION.

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## COURT DECISIONS.

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### LOUISIANA SUPREME COURT.

#### An Ordinance Requiring all Structures in a City to be Rat Proofed Held to be Reasonable and Valid.

CITY OF NEW ORLEANS *v.* BECK. (Apr. 24, 1916.)

Ordinance No. 2512, Commission Council Series, of the city of New Orleans, providing for the rat proofing of all buildings and structures, etc., in said city, for the purpose of preventing the introduction and spread of bubonic plague, held by the court to be a constitutional and valid exercise of the police power of the State in the interest of the health of the people.

LAND, J.: The defendant was prosecuted for failing to have his premises and grocery rat proofed as required by city ordinance No. 2512, C. C. S. [This ordinance was published in the Public Health Reports July 30, 1915, p. 2273.]

\* \* \* \* \*

Defendant was found guilty and was sentenced to a fine of \$10 or to suffer 11 days' imprisonment in the parish prison. Defendant has appealed.

The defendant is prosecuted under a new ordinance adopted after the decision of this court in Sanford's case<sup>1</sup> (137 La., 623), and intended to conform to the views expressed in the opinion in that case. An analysis of said opinion discloses that this court found the health ordinance of 1914 *unreasonable* in not providing for *notice* to property owners; and in *delegating* certain powers to the health officer of such nature as to enable him to discriminate between individuals, as to work to be done and materials to be used.

The opinion concludes as follows:

Other grounds of nullity are argued by the accused, which we deem it unnecessary to notice, further than to say that we have found them to be without merit.

The city ordinance of 1915 provides for special previous notice of 30 days to property owners and confers on health officers no authority whatever to except or exempt persons or property from the equal operation of the regulations provided by the ordinance.

The trials of the first rat-proofing cases disclosed that there were many houses in this city that were used as grocery and feed shops and also as residences.

To meet this condition the new city ordinance provided that a building so used might, for the purpose of rat proofing, be treated as two structures, the part used as a grocery falling in class A and the part used as a residence

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<sup>1</sup> Public Health Reports, Oct. 29, 1915, p. 3248.

falling in class B, the two parts to be separated by the closing of all openings between them above or below the ground, or by constructing a new wall.

The ordinance might have required the rat proofing of the premises as a whole, but the commission council, in the interest of economy, provided for the separation of the premises as above stated.

Defendant's building, elevated above the ground, is used both as a grocery and as a residence. Groceries furnish free board and lodging to rats and a nidus for their propagation. That defendant's premises are not now infested with the vermin is no excuse for his noncompliance with the provisions of the ordinance, which must be enforced against all groceries or none of them.

Some of the objections urged by the defendant to the city ordinance in question challenge the power of the commission council to enact and enforce the rat-proofing ordinance.

The constitution provides that the general assembly shall create State, parish, and municipal boards of health and shall define the duties and prescribe the powers thereof. Article 296, section 2, of act No. 173 of 1912 amending section 7 of act 192 of 1898, empowers parish and municipal boards of health to pass health and sanitary ordinances for defining and abating nuisances dangerous to the public health; "to regulate the carrying on of trade and business injurious to the public health"; "to regulate the erection of buildings with due regard to the filling of lots and the grading thereof, and the arrangements of said buildings"; "for the vacation or demolishing of buildings when necessary for the protection of public health," etc. The same section provides that any persons violating any provision of any ordinance of said parish and municipal board of health shall, on conviction, be fined not less than \$10 nor more than \$25 or suffer imprisonment in the parish prison for not more than 30 days, or both. Section 7 of act 192 of 1898 conferred the same powers on parish and municipal boards of health.

If a board of health has the power to order the vacation or demolition of any building when necessary for the protection of the public health it surely possesses the *lesser* power to order any building to be put in such a condition as to prevent its becoming a focus of plague infection.

The law makes the board of health the judge of the necessity for the protection of the public health and of the means to be adopted for that purpose. That the bubonic plague prevailed in this city during the summer and fall of the year 1914 can not be disputed. The best medical experts of the Nation were called in to advise and assist our State and local boards in their fight against the pestilence which was stalking in our midst. These experts advised the boards and the public that the rat proofing of all buildings and structures in which rats might find food or shelter, or both, was absolutely necessary to check the spread of the bubonic plague and to finally eradicate the dread disease by the extirpation of rats within the limits of the city of New Orleans.

Pursuant to this advice the board of health of the city of New Orleans, on July 25, 1914, passed an ordinance to better protect the public health, and particularly to prevent the introduction and spread of bubonic plague by providing for the rat proofing of all premises and buildings in the city of New Orleans. The validity of this ordinance, as amended by ordinance adopted September, 1914, was passed upon by this court in the consolidated cases of the City of New Orleans *v.* Ricker and Beck, reported in One hundred and thirty-seventh Louisiana, page 843. In those cases this court held that the health ordinance was a valid and constitutional exercise of the police power of the State in the interest of the safety of the people; that every possible

presumption is in favor of the validity of such an ordinance until the contrary be shown beyond a reasonable doubt; and that whether the existence of bubonic plague in the city of New Orleans involved such a danger to the public health as to require the rat proofing of all the buildings and structures in said city was one of the fact and of public policy which belongs to the legislative department of the Government.

In the Sanford case,<sup>1</sup> reported in One hundred and twenty-seventh Louisiana, page 828, but decided several months after the cases of Ricker and Beck, no reference is made to these cases, but the decision was based on the invalidity of certain provisions of the health ordinance. This court did not hold, and would not have held, that the board of health of the city of New Orleans was without power to pass a rat-proofing ordinance free of the special defects pointed out in the opinion in the Sanford case. The decision in the Sanford case was construed by the profession, the board of health, and the public as holding that the city board of health had the power to pass a rat-proofing ordinance, uniform in its provisions and not discriminating in favor of or against any class of property owners. The city ordinance now in question was most carefully drafted by the able attorney for the board of health of the city of New Orleans to meet not only the ruling of this court in the Sanford case but other objections to the ordinance urged by counsel for the defendant.

The very able and ingenious counsel for the defendant in the present case has been driven to the necessity of assailing the ordinance as invalid, because it interferes with his client's property rights, in that it forces him to reconstruct his building erected about 12 years ago in accordance with the building ordinances of the city of New Orleans.

As the city board of health since 1898 has had the power to pass health and sanitary ordinances to regulate the erection and arrangement of buildings, and for their vacation and demolition when necessary for the protection of the public health, it follows that defendant constructed his building subject to the right of the board of health to exercise its powers over the structure to the point of demolition.

The necessity for and the extent of rat proofing required by the ordinance was one of fact and of public policy which belongs to the legislative department of the Government. (*City of New Orleans v. Ricker*, 137 La., 843; *Health Department of the City of New York v. Rector of Trinity Church*, 145 N. Y., 27, La. R. A., 710; *Powell v. Pennsylvania*, 127 U. S., 678.)

The parish of Orleans and the city of New Orleans embrace the same territory, and the commission council of the city is both a State and municipal agency for all purposes of local government.

In the Sanford case (137 La., 641-642) the power of the commission council to enact health ordinances and to enforce the same in the municipal courts having jurisdiction was affirmed. Counsel for defendant in those cases contended that "the proper authority to have legislated on the subject matter of the ordinance was the commission council of the city of New Orleans; that the board of health was without authority to do so." (*Id.*, 639.)

Act No. 139 of 1912, page 264, empowered the commission council "to adopt such ordinances and regulations as shall be necessary or expedient for the protection of health and to prevent the spread of disease and to maintain a good sanitary condition in the streets, public places and buildings, and on private premises." The same act, page 271, provides that "recorder shall have the power to enforce all valid city ordinances and to try, sentence, and punish all

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<sup>1</sup> Public Health Reports, Oct. 29, 1915, p. 3248.

persons who violate same." Article 141 of the constitution provides that recorder's courts in the city of New Orleans "shall have no jurisdiction, except for the trial of offenses against city ordinance."

The State law provides that any person violating any provision of any ordinance of a parish or municipal board of health shall, on conviction, suffer fine or imprisonment, or both. (Act 173 of 1912, p. 315.)

Hence, the contention of the defendant that he can not be prosecuted *criminally* for refusing to rat proof his premises is without merit.

The complaints that the ordinance divests the vested rights of the defendant and deprives him of his property without due process of law are wholly unfounded.

*Salus populi est suprema lex*, a maxim meaning "The health of the people is the first law." (35 Cyc., 714.)

The objection to the ordinance on the ground of the expense of rat proofing (not manifestly excessive) is without merit.

Judgment affirmed.

Sommerville, J., takes no part. O'Niell, J., concurs in decree.

CITY OF NEW ORLEANS *v.* MANGIARISINA. (Apr. 24, 1916.)

The accused was charged with violating the rat-proofing ordinance of the city of New Orleans, No. 2512, C. C. S. Public Health Reports July 30, 1915, page 2273. He was convicted in the second recorder's court, city of New Orleans.

PROVOSTY, J.:

\* \* \* \* \*

It will be noted that said ordinance requires the foundations of buildings to be of brick or stone, laid in cement or of concrete. The accused says that a property holder has the right to use for the foundation of his buildings any material equally impenetrable by rats as those here named, and that to restrict him of that right is unconstitutional. Perhaps so; but until someone has desired to use such other equally impenetrable material and has been prevented from doing so we do not see that there is any occasion for considering that question.

Accused says also that said ordinance is not based upon any health considerations, since it requires all premises to be rat proofed, irrespective of whether same are or are not in a sanitary condition.

The answer is that modern science has ascertained that, in a plague-stricken city, premises which may afford a harbor for rats are a menace to the public health, and in that sense are highly insanitary, no matter how sanitary they might be in the ordinary sense.

The ordinance requires that when there is space between the bottom of the sills of a building and the ground this space must be of not less than 18 inches. Accused says that this is arbitrary and unreasonable, forgetting that since 1879 (Ord. 8022, A. S. sec. 12; Ord. 7208, A. S. of July 12, 1881; Ord. 6712, N. C. S.; sec. 3 of Ord. 6533, C. S., 1892; sec. 23 of Ord. 6533, C. S.) buildings have been required to have a greater elevation than this. These ordinances were offered in evidence in the Beck case, this day decided. Moreover, accused is not concerned with that feature of the ordinance since it is not in that respect that he is charged with having violated the ordinance.

The next ground of complaint is that the city itself is not named among the property holders who are required to rat proof their premises.

The complaint here is not that the city does not rat proof her premises in the manner required by this ordinance, but that she has not specifically named herself in the ordinance and has not denounced a penalty against herself for failure to rat proof her premises. This point is so evidently without merit that we do not think it needs any discussion.

It is next said that the penalty is not certain or fixed because it is so much for each day. What more certainty and fixation is needed than this we can not imagine.

Next, it is said that the ordinance does not provide by what particular officer the 30 days' notice to rat proof shall be served or given.

The city of New Orleans is provided with officers for giving official notice; we do not see what more by way of notice a property holder could need than a notice emanating from, and served upon him by, them.

Next, it is said that bubonic plague is a contagious disease which might spread beyond the limits of the city and which is therefore a State-wide affair, and as such is cognizable only by the State board of health.

Here, again, is a point which we do not think needs discussion.

Judgment affirmed.

Summerville and O'Niel, JJ., take no part.

# MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

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## NEW BRITAIN, CONN.

### **Buildings and Premises—Insanitary Conditions to be Remedied. (Ord. Sept. 21, 1915.)**

SEC. 246a. *Dangerous and insanitary buildings.*—Whenever any building or part of any building used for human habitation or the surroundings thereof are, in the opinion of the board of health, in a condition which is or in its effect is insanitary or is dangerous or deleterious to life or health or out of repair, said board may declare that the same, to the extent specified by said board, is a public nuisance and may order the same to be repaired, painted, whitewashed, papered, altered, or otherwise improved or purified as the order may specify. If any such order of the board of health is not complied with or so far complied with as said board shall regard as reasonable within five days after the service of such order or within such shorter time as the said board shall reasonably designate, then the said board may forbid the use of such a house or premises for human habitation and the same shall be immediately vacated. Failure to comply with any order of the board of health issued under this ordinance shall be a misdemeanor, punishable by a fine not more than \$50 for each offense. This ordinance shall not be constructed [sic] to conflict with the State tenement-house law.

### **Water-Closets—Location and Number. (Ord. Sept. 21, 1915.)**

That section 349 of the ordinances be amended to read as follows:

SEC. 349. *Water-closets in cellars, how allowed.*—No water-closets shall be placed or allowed to remain in a cellar or in an unventilated room or compartment without a special permit from the board of health. Except by special permit of the board of health, each room or compartment in which a water-closet is located or allowed to remain shall be ventilated by a window of at least 3 square feet in area, opening to the outer air or upon a vent shaft having such openings at the top and bottom as meet with the approval of the board of health, or by a ventilating flue of noncorroding material at least 36 square inches in area and leading directly to the roof. In all buildings not otherwise covered by statute there shall be at least one water-closet for every two apartments of three rooms or less, each such closet to be conveniently located for the use of such apartments, and there shall be one such conveniently located water-closet for every apartment of four rooms or more.

## NEW CASTLE, PA.

### **Communicable Diseases—Notification of Cases—Placarding—Quarantine. (Ord. July 28, 1915.)**

SECTION 1. That section 9 of an ordinance, entitled "An ordinance relating to and providing for the better preservation and securing of the public health, preventing and prohibiting the maintenance of public nuisances, and preventing

the introduction and spread of communicable diseases," approved May 27, 1890, as the same was amended by ordinance No. 1011, approved March 15, 1898, which reads as follows:

"SEC. 9. The following diseases are declared to be communicable and dangerous to the public health, viz: Cholera, smallpox (variola or varioloid), scarlet fever, typhus fever, yellow fever, relapsing fever, diphtheria, diphtheritic croup, membranous croup, or leprosy," be, and the same is hereby, amended to read as follows:

"SEC. 9. The following diseases are hereby declared to be communicable and dangerous to the public health, viz: Actinomycosis, anthrax, bubonic plague, cerebrospinal meningitis (epidemic) (cerebrospinal fever, spotted fever), chicken-pox, Asiatic cholera, diphtheria (diphtheric croup, membranous croup, putrid sore throat), epidemic dysentery (bacillary or amebic dysentery), erysipelas, German measles, glanders (farcy), rabies (hydrophobia), leprosy, malarial fever, measles, mumps, pneumonia (true), puerperal fever, relapsing fever, scarlet fever (scarlatina, scarlet rash), smallpox (variola, varioloid), tetanus, trachoma, trichiniasis, tuberculosis in any form, typhoid fever, paratyphoid fever, typhus fever, whooping cough, yellow fever, anterior poliomyelitis, impetigo contagiosa, pellagra, scabies or uncinariasis, ophthalmia neonatorum, and any other disease or diseases declared to be communicable and dangerous to the public health by the State department of health.

"It shall be the duty of every physician practicing in said city who shall treat or examine any person suffering from, or infected with, any of the diseases above mentioned to forthwith make a report in writing to the health officer of said city, over his or her signature, stating the name of the disease, the name, age, sex, color, nationality, and occupation of the person suffering therefrom, together with the street and house number of the premises in which the said person may be located, or otherwise sufficiently designate the same, the date of onset of the disease, the name and occupation of the householder in whose family the disease may have occurred, the number of children in said household attending school, and the name or names of the school or schools so attended, together with such other information relating to the case as may be required by the health officer of said city."

SEC. 2. That section 15 of said ordinance which reads as follows:

"SEC. 15. Whenever a case of any communicable disease dangerous to the public health is reported to the health officer he shall immediately put up in some conspicuous place on the house wherein such case is a card stating the kind of disease; and no person shall remove, deface, or take down such card without permission from the health officer," be, and the same is hereby, amended to read as follows:

"SEC. 15. Upon the receipt by the health officer, of said city, of a report of the existence of a case of anthrax, bubonic plague, cerebrospinal meningitis (epidemic) (cerebrospinal fever, spotted fever), chicken-pox, Asiatic cholera, diphtheria (diphtheritic croup, membranous croup, putrid sore throat), German measles, glanders (farcy), leprosy, malarial fever, measles, mumps, relapsing fever, scarlet fever (scarlatina, scarlet rash), smallpox (variola, varioloid), typhoid fever, paratyphoid fever, typhus fever, whooping cough, or yellow fever, said health officer shall quarantine, or cause to be quarantined, the premises in or on which said disease exists, by posting, or causing to be posted in a conspicuous place, or places, upon the premises, in or on which said diseases may be located, a placard, or placards upon which shall be printed in conspicuous letters the name of the disease from which the person, or persons in said house, or premises, is or are suffering, with the warning that the said premises are quarantined, and that no person, or persons, other than the attending physi-



cian, or trained nurse, shall enter or leave the said house, or premises, except by permission of the health officer, which placard shall also state that any person, or persons, violating said quarantine shall be subject to a fine or penalty of not less than \$50 nor more than \$100 and costs of prosecution, or be imprisoned in the county jail for a period of not less than 10 nor more than 30 days, at the discretion of the court, and shall also be subject to the penalties provided by ordinance; and no person, or persons, shall remove, deface, take down, or in any manner interfere with such placard without permission of the health officer.

“Whenever a case of communicable disease dangerous to the public health is reported to the health officer, other than those hereinabove mentioned, he shall immediately put up a sign in some conspicuous place on the house, or the premises, where such case is, and shall state the kind of disease; and any person, or persons, who shall remove, deface, or take down, or in any manner interfere with any placard put up under the provisions of this ordinance, without the permission from the health officer, shall be subject to the penalties of this ordinance; and said diseases shall also be subject to quarantine by the health officer or other health authorities of said city.”

### NEW ORLEANS, LA.

#### Street Cars—Cleaning of. (Ord. 2569, July 13, 1915.)

SECTION 1. That from and after the promulgation of this ordinance any person operating street passenger railway cars within the limits of the city of New Orleans are hereby required to cause each car in use on said street railways to be thoroughly cleansed, inside, with disinfectants at least once a day.

SEC. 2. That at the end of each trip each car in use shall have removed with mop or other receptacle [sic], dipped in a disinfectant fluid, all evidence of sputum from floor, platform, or other parts of car.

SEC. 3. That sweeping of cars will not be permitted until a disinfectant fluid recommended or approved by the board of health for the parish of Orleans and the city of New Orleans shall be sprinkled on floors of cars.

SEC. 4. That the board of health for the parish of Orleans and the city of New Orleans be hereby invested with the authority and charged with the duty to enforce the provisions of this ordinance and to prosecute all persons charged with violating the same, and to that end its officers, members, agents, employees, inspectors, and appointees shall have the right to enter any premise or place, or any car, conveyance, or other vehicle in the city of New Orleans for the purpose of inspection for violation hereof.

SEC. 5. That for the purpose of enforcing the provisions of this ordinance the word “person” is hereby defined to mean an individual, an association of individuals, a copartnership, and a corporation. That when an association of individuals is charged with the violation of any provision of this ordinance, each individual of such association of individuals, or, if a foreign association of individuals, the local agent or person locally in charge thereof, shall be deemed to represent such association of individuals for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof; and when a firm is charged with such violation each member thereof, and if a foreign firm the local agent or person locally in charge of said firm, shall be deemed to represent such firm for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof; and when a corporation shall be charged with such violation, the president, or, in his absence, the vice president, or, in the absence of both, the officer or

individual in charge of such corporation, or, if a foreign corporation, the local agent or person locally in charge thereof, shall be deemed to represent such corporation for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof.

SEC. 6. That any person violating any of the provisions of this ordinance shall, on conviction, be punished by a fine of not less than \$10 nor more than \$25, or, in default of payment, by imprisonment in the parish jail for not less than 10 days nor more than 30 days, or both, in the discretion of the recorder having jurisdiction of the same.

#### **Foodstuffs—Protection of. (Ord. 2564, July 13, 1915.)**

SECTION 1. That it shall be unlawful for any person to sell or offer for sale or have in his possession or under his control for sale any candy, cakes, confections, dried figs, dates, or preserved, candied, or crystallized fruits of any kind, bread, cakes, pies and pastries of all kinds, meat, fruits, vegetables, and all foodstuffs of any kind, unless the same be then and there effectually wrapped, covered, or inclosed in a manner suitable to and approved by the board of health for the parish of Orleans and city of New Orleans, so as to protect it from dust, flies, or other insects and from all other contaminating influences.

SEC. 2. That the board of health for the parish of Orleans and the city of New Orleans is hereby invested with the authority and charged with the duty to enforce the provisions of this ordinance and to prosecute all persons charged with violating the same, and to that end its officers, members, agents, employees, inspectors, and appointees shall have the right to enter any premise or place, or any car, conveyance, or other vehicle in the city of New Orleans for the purpose of inspection for violations thereof.

SEC. 3. That for the purpose for enforcing the provisions of this ordinance the word "person" is hereby defined to mean an individual, an association of individuals, a copartnership, and a corporation. That when an association of individuals is charged with the violation of any provision of this ordinance, each individual of such association of individuals, or, if a foreign association of individuals, the local agent or person locally in charge thereof, shall be deemed to represent such association of individuals for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof; and when a firm is charged with such violation each member thereof, and if a foreign firm, the local agent or person locally in charge of said firm, shall be deemed to represent such firm for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof; and when a corporation shall be charged with such violation, the president, or, in his absence, the vice president, or, in the absence of both, the officer or individual in charge of such corporation, or, if a foreign corporation, the local agent, or person locally in charge thereof, shall be deemed to represent such corporation for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof.

SEC. 4. That any person violating any provision of this ordinance shall, on conviction, be punished by a fine of not less than \$10 nor more than \$25, or, in default of such fine, by imprisonment in the parish prison for not more than 30 days, or both, at the discretion of the court having jurisdiction.

**Foodstuffs—Sale or Storage of—Registration with Board of Health Required.  
Stables—Owners of Animals to Register with Board of Health. (Ord.  
2570, July 13, 1915.)**

SECTION 1. That it shall be the duty of every person engaged in the sale or storage of foodstuffs and every other thing susceptible of human consumption, as food, within the limits of the city of New Orleans, to, within 10 days after the promulgation of this ordinance, file in the office of the board of health for the parish of Orleans and the city of New Orleans, on a blank especially prepared for this purpose, the following information: Name of owner; business and residence address of owner; character of business carried on, and such other information as the board may deem necessary for the enforcement of proper sanitary regulations on premises.

SEC. 2. That after the promulgation of this ordinance it shall be unlawful for any person to engage in the sale or storage of foodstuffs or other things susceptible of human consumption, as food, within the city of New Orleans, without having previously obtained a permit to conduct such business from the board of health for the parish of Orleans and the city of New Orleans.

SEC. 3. That every person within the limits of the city of New Orleans, having one or more horses or mules housed or stabled within the city of New Orleans, shall file with the board of health for the parish of Orleans and the city of New Orleans, on a blank especially prepared for this purpose by the board of health, the following information: Name of owner; number and kind of animals housed or stabled on premises; address of place (street and number) where animals are stabled, and such other information as the board may deem necessary for the enforcement of proper sanitary regulations on the premises.

SEC. 4. That the board of health for the parish of Orleans and the city of New Orleans is hereby invested with the authority and charged with the duty to enforce the provisions of this ordinance and to prosecute all persons charged with violating the same, and to that end its officers, members, agents, employees, inspectors, and appointees shall have the right to enter any premise or place, or any car, conveyance, or other vehicle in the city of New Orleans for the purpose of inspection for violations thereof.

SEC. 5. That for the purpose of enforcing the provisions of this ordinance the word "person" is hereby defined to mean an individual, an association of individuals, a copartnership, and a corporation. That when an association of individuals is charged with the violation of any provision of this ordinance, each individual of such association of individuals, or, if a foreign association of individuals, the local agent or person locally in charge thereof, shall be deemed to represent such association of individuals for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof; and when a firm is charged with such violation each member thereof, and if a foreign firm the local agent or person locally in charge of said firm, shall be deemed to represent such firm for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof; and when a corporation shall be charged with such violation, the president, or, in his absence, the vice president, or, in the absence of both, the officer or individual in charge of such corporation, or, if a foreign corporation, the local agent, or person locally in charge thereof, shall be deemed to represent such corporation for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof.

SEC. 6. That any person violating any of the provisions of this ordinance shall, on conviction, be punished by a fine of not less than \$10 nor more than

**\$25, or, in default of payment, by imprisonment in the parish jail for not less than 10 days nor more than 30 days, or both, in the discretion of the recorder having jurisdiction of the same.**

**Foodstuffs—Name of Owner Must be Displayed in Buildings and on Vehicles Containing Foodstuffs or Substances which May Become Offensive. (Ord. 2566, July 13, 1915.)**

**SECTION 1.** That the owner or proprietor of every hotel, boarding, lodging, and rooming house, barroom, café, blacksmith shop, restaurant, ice-cream manufactory or shop, dairy and place where milk is kept or held for sale, storehouse, warehouse, cold-storage plant, bakery, confectionery, hide shop, tannery, distillery, brewery, laboratory, soap boiler, chandlery, rendering plant, candy store, fish, cake, crab, shrimp, game, poultry, meat, vegetable, flower, and plant store, stall, or stand, oyster shop, stable, vidanguer, undertaker, cannery, and every place, stand, and stall in markets, public and private, and all other places where any product or thing which may be used for public consumption, or anything which is or may become dangerous to public health, is stored, manufactured, canned, bottled, or otherwise put up, or held or exposed for sale, shall cause to be displayed in such establishment, store, shop, or place, in a conspicuous place, a sign, containing thereon, in large legible letters, the name of the owner or proprietor thereof.

**SEC. 2.** That the owner or proprietor of any wagon, dray, autocart, or other vehicle which is used, at any time, for the carriage or conveyance of any product or thing which may be used for human consumption, or anything which is or may become dangerous to public health, shall cause to be displayed on each such wagon, dray, autocart, or other vehicle, in a conspicuous place thereon, a sign, containing thereon, in large, legible letters, the name of the owner or proprietor of each such wagon, dray, autocart, or other vehicle.

**SEC. 3.** That should the owner or proprietor of such establishment, store, shop, or place, or vehicle, be a corporation, then the name of such corporation, with the name of its president or other responsible officer, shall be displayed on the signs hereinabove provided for.

**SEC. 4.** That any person, firm, or corporation who shall violate any of the provisions of this ordinance shall be subject to a fine of not less than \$10 nor more than \$25, or imprisonment in the parish prison for a term of not less than 5 or more than 30 days, or both, at the discretion of the recorder having jurisdiction of the same.

**SEC. 5.** That, for the purpose of enforcing this ordinance, any person who shall be found in charge in any establishment, store, shop, or place of any such product or thing that may be used for human consumption or anything which is or may become dangerous to the public health, whether in the raw state or cooked, and the driver of any wagon, dray, autocart, or other vehicle which is used at any time for the carriage or conveyance of any product or thing which is or may become dangerous to the public health, in the raw state or cooked, shall be deemed to be the owner thereof and shall be held responsible for any violations of this or any other law or ordinance enacted for the protection of the public health. That when a firm is charged with such violation each member thereof and, if a foreign firm, the local agent or person locally in charge of said firm shall be deemed to represent such firm for the purpose of enforcing this ordinance and shall be held responsible and punishable for each violation thereof; and when a corporation shall be charged with such violation the president, or, in his absence, the vice president, or, in the absence of both, the officer or individual in charge of such corporation, or, if a foreign corporation, the local

agent, or person locally in charge thereof, shall be deemed to represent such corporation for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof.

SEC. 6. That the board of health for the parish of Orleans and the city of New Orleans is hereby invested with the authority and charged with the duty to enforce the provisions of this ordinance and to prosecute all persons charged with violating the same, and to that end its officers, members, agents, employees, inspectors, and appointees shall have the right to enter any premise or place or any car, conveyance, or other vehicle in the city of New Orleans for the purpose of inspection for violations thereof.

**Bread—Wrapping of, to Prevent Contamination. (Ord. 2567, July 13, 1915.)**

SECTION 1. That all bakers and other manufacturers of bread shall wrap all bread baked by them and intended for sale in paraffin, grease-proof, glassine, or sulphite paper, each loaf or combination loaf to be wrapped separately in paraffin, grease-proof, glassine, or sulphite paper, and in such manner as to protect said bread from flies and dust, and each loaf to be so wrapped in paraffin, grease-proof, glassine, or sulphite paper within three hours after the same shall have been taken from the oven in which it is baked.

SEC. 2. That it shall be unlawful for any corporation, firm, or person, himself or by his servant, agent, or employee, or as the servant, agent, or employee of another, to sell, offer or expose for sale, or have in its, their, or his possession for sale any bread, unless each loaf of such bread is wrapped in paraffin, grease-proof, glassine, or sulphite paper in such manner as to protect same from flies and dust. The sulphite paper provided for herein to be of not less than 75 per cent sulphite, and to be heavily machine glazed on one side, and no paper of a basis less than 20 pounds shall be used for bread-wrapping purposes: *Provided*, That frog loaves of bread may be delivered to restaurants only, in paper bags containing not less than 50 loaves each, which paper bags shall be made of the paper provided for in this ordinance, except that same shall be of not less than a 60-pound basis, and shall be so sealed before leaving the bakery as to render the contents inaccessible to dust or flies, and shall be kept so sealed until delivered to said restaurants: *And provided further*, That the weight basis of 20 and 60 pounds hereinabove provided for shall be determined by the weight of a ream of 480 sheets of such paper, each sheet to measure 24 by 36 inches.

SEC. 3. That for the purpose of enforcing this ordinance the officers, inspectors, agents, and employees of the board of health for the parish of Orleans and the city of New Orleans are hereby authorized and directed to enter any place or premises, where such bread is made, stored, kept, sold or exposed for sale, and to inspect the bread and bread receptacles on any wagon or premises where such bread is made, stored, kept, sold or exposed for sale, and to inspect the bread and bread receptacles on any wagon or other vehicle delivering same, or any other place where the same usually is or may be kept, and wherever the same may be found.

SEC. 4. That when an association of individuals is charged with the violation of any provision of this ordinance, each individual of such association of individuals, or, if a foreign association of individuals, the local agent or person locally in charge thereof shall be deemed to represent such association of individuals for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof; and when a firm is charged with such violation each member thereof, and if a foreign firm the local agent or person locally in charge of said firm, shall be deemed to represent such firm for the purpose of enforcing this ordinance, and shall be held responsible and

punishable for each violation thereof; and when a corporation shall be charged with such violation, the president, or, in his absence, the vice president, or in the absence of both, the officer or individual in charge of such corporation, or, if a foreign corporation, the local agent, or person locally in charge thereof, shall be deemed to represent such corporation for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof.

SEC. 5. That whoever shall violate any of the provisions of this ordinance shall, on conviction, be punished by a fine of not less than \$10, nor more than \$25, or, in default of payment, by imprisonment in the parish jail for not less than 10 days nor more than 30 days, or both, in the discretion of the recorder having jurisdiction of the same.

**Privies—Required to be Fly Proof. (Ord. 2573, July 13, 1915.)**

SECTION 1. That pending sewer connections of premises within the limits of the city of New Orleans it shall be unlawful for any person, firm, or corporation to permit the existence of any privy connected with vault or cesspool unless same shall be made absolutely fly proof.

SEC. 2. That in order to comply with the provisions of section 1 of this ordinance, every inclosure, whether same be a house, shed, or room, containing a privy connected with vault or cesspool, must have a roof, a floor inclosed within four walls, and the part rising from the floor to the privy seat and all parts of seat so constructed as to eliminate all cracks or crevices through which flies may enter.

SEC. 3. That every such privy inclosure, house, shed, or room shall be provided with a tight-fitting, fly-proof, self-closing door, and shall have ample openings for light and ventilation, which opening or openings shall be screened for the exclusion of flies. All flues for ventilation of vaults shall be screened against ingress or egress of flies.

SEC. 4. That the seat in every privy connected with vault or cesspool shall be provided with a self-closing hinged cover of sufficient size to completely cover the opening or openings in the seat. Said cover shall be so constructed as to effectually prevent access of flies to contents of vault or cesspool.

SEC. 5. That no provisions of this ordinance shall be construed as giving consent or permission to reconstruct, repair or rebuild a defective vault, or as sanctioning the failure to connect privies with the public sewer system.

SEC. 6. That it shall be unlawful for any occupant of any premises to permit the propping open of any door, window, ventilator, or other opening in any such privy inclosure, house, shed, or room, or the permitting to remain open any cover or covers on privy seats.

SEC. 7. That the owner, or, in his absence, the agent or occupant of such premises, shall be liable for violations of provisions of sections 1, 2, 3, and 4 of this ordinance. The tenant or occupant of premises shall each be liable for violations of provisions of section 6. That any person living in such premises shall be deemed an occupant for the purpose of enforcing said section.

SEC. 8. That for the purpose of enforcing this ordinance the officers, inspectors, agents, and employees of the board of health of the parish of Orleans and the city of New Orleans are hereby authorized and directed to enter any place or premises wherein such privy inclosure, house, shed, or room exists.

SEC. 9. That whoever shall violate any provision of this ordinance shall, on conviction, be punished by a fine of not less than \$10 nor more than \$25, or, in default of payment, by imprisonment in the parish jail for not less than

10 days nor more than 30 days, or both, at the discretion of the recorder having jurisdiction of same, and each day's violation of same shall constitute a separate offense.

**Privies and Cesspools—Emptying of. (Ord. 2572, July 13, 1915.)**

SECTION 1. That from and after the passage of this ordinance it shall be unlawful for any corporation, firm, or person engaged in the business of emptying privy vaults or cesspools within the city of New Orleans to empty any privy vault or cesspool unless same be thoroughly and completely emptied.

SEC. 2. That the permit issued by the board of health for the parish of Orleans and city of New Orleans to such corporations, firms, or persons to excavate any privy vault or cesspool shall be issued only on condition that section 1 of this ordinance is to be fully complied with.

SEC. 3. That it shall be unlawful for any such corporation, firm, or person to place any filling in any privy vault or cesspool within the limits of the city of New Orleans without having previously obtained a permit, in writing, from the board of health of the parish of Orleans and city of New Orleans.

SEC. 4. That the board of health of the parish of Orleans and city of New Orleans, through its officers, agents, and inspectors, are charged with the authority and duty to enforce the provisions of this ordinance and to prosecute all persons, firms, or corporations violating same.

SEC. 5. That when any corporation shall be charged with the violation of any provision of this ordinance, the president, or, in his absence, the vice president, or in the absence of both, the officer or individual in charge of same, and if a foreign corporation, the agent, or person in charge thereof, shall be deemed to represent such corporation for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof. And when a firm is charged with such violation, each member thereof, and if a foreign firm, the agent or person in charge thereof, shall be deemed to represent such firm for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof.

SEC. 6. That any person who shall violate any provision of this ordinance shall, upon conviction, be punished by a fine of not less than \$10, nor more than \$25, or imprisonment in the parish prison for a period of not less than 10 days nor more than 30 days, or both, at the discretion of the court having jurisdiction of same.

**Deaths—Transportation of Dead Bodies—Regulations Governing. (Ord. 2763, Sept. 21, 1915.)**

SECTION 1. That from and after the promulgation of this ordinance it shall be unlawful for any common carrier or other vehicle of transportation to transport into the city of New Orleans any dead body, for burial or other disposition, unless and until the following requirements, governing same, are met and complied with.

SEC. 2. That no dead body shall be transported into the city of New Orleans by a common carrier or other vehicle of transportation for burial or other disposition, unless said body shall be accompanied by a transit or removal permit issued in accordance with the law and health regulations where the death occurred, and same shall be accepted by the local registrar in the city of New Orleans as a basis upon which may be issued a local burial permit, which burial permit shall be issued in compliance with provisions of existing ordinances regulating same.

**SEC. 3.** That no body which shall have died of an infectious or contagious disease shall be permitted transportation into the city of New Orleans by a common carrier or other vehicle of transportation, for burial or other disposition, unless, in addition to compliance with provisions of section 2 of this ordinance, the body be incased in a sealed metallic casket and notice having been sent by the most expeditious method to superintendent of public health at New Orleans by some one legally qualified to so do, advising the cause of death, the time, the train, boat, or vehicle, of transportation upon which the body may be expected at its designation.

**SEC. 4.** That all bodies, dead of noncontagious or noninfectious diseases, intended for transportation into the city of New Orleans by common carriers or other vehicle of transportation must, in addition to compliance with provisions of section 2 of this ordinance, be embalmed and be accompanied by a certificate of embalment issued at point of shipment by some one legally competent to issue same.

**SEC. 5.** That the exaction of compliance with the provisions of this ordinance will be incumbent on the officials of the common carrier or other vehicle of transportation, or in their absence the enforcement of its provisions will be exacted of their local representative, and for each and every violation of its provisions the offender shall be punished by a fine of not less than \$10 nor more than \$25, or by imprisonment in the parish prison for not less than 10 days nor more than 30 days, or both, at the discretion of the recorder having jurisdiction of same.

#### **Places of Public Amusement—Registration of, with Board of Health—Cleaning and Disinfection. (Ord. 2568, July 13, 1915.)**

**SECTION 1.** That any person operating any theater, moving-picture show, or other place of public amusement within the limits of the city of New Orleans shall, within 10 days after the promulgation of this ordinance, register in the office of the board of health for the parish of Orleans and the city of New Orleans the name of said theater, moving-picture show, or other place of amusement, the location of same, with the name of owner, if an individual, if a firm, the name of its members, and if a corporation, the name of the president.

**SEC. 2.** That each and every theater, moving-picture show, or other place of public amusement or recreation where the public congregate shall be cleansed daily and disinfected at least once each week, and at such other time as may be required, with a disinfectant and in a manner to be approved by said board of health, or such officer or inspector as may be designated by it.

**SEC. 3.** That the board of health for the parish of Orleans and the city of New Orleans is hereby invested with the authority and charged with the duty to enforce the provisions of this ordinance and to prosecute all persons charged with violating the same, and to that end its officers, members, agents, employees, inspectors, and appointees shall have the right to enter any premise or place in the city of New Orleans for the purpose of inspection for violations thereof.

**SEC. 4.** That for the purpose of enforcing the provisions of this ordinance the word "person" is hereby defined to mean an individual, an association of individuals, a copartnership, and a corporation; that when an association of individuals is charged with the violation of any provision of this ordinance, each individual of such association of individuals, or, of a foreign association of individuals, the local agent or person locally in charge thereof, shall be deemed to represent such association of individuals for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof; and when a firm is charged with such violation each member thereof,



and if a foreign firm, the local agent or person locally in charge of said firm, shall be deemed to represent such firm for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof; and when a corporation shall be charged with such violation, the president, or, in his absence, the vice president, or, in the absence of both, the officer or individual in charge of such corporation, or, if a foreign corporation, the local agent, or person locally in charge thereof, shall be deemed to represent such corporation for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof.

SEC. 5. That any person violating any of the provisions of this ordinance shall, on conviction, be punished by a fine of not less than \$10 nor more than \$25, or, in default of payment, by imprisonment in the parish jail, for not less than 10 days nor more than 30 days, or both, in the discretion of the recorder having jurisdiction of the same.

**Dry Sweeping and Dusting—Prohibited in Public Places. (Ord. 2571, July 13, 1915.)**

SECTION 1. That from and after the promulgation of this ordinance it shall be unlawful for any corporation, firm, or person within the limits of the city of New Orleans to sweep or to cause or permit the sweeping of any sidewalk, street, railway car, or public conveyance of any sort, the floor of any public building, hotel, hospital, store, shop, school, church, theater, or any other place to which the public have access without having first sprinkled the place to be swept with water, and cars, public conveyances, floors of public places with water, moist sawdust, or some such substance, in quantities sufficient to prevent raising of dust while sweeping.

SEC. 2. That it shall be unlawful for any corporation, firm, or person to sweep or to cause or to permit the sweeping of sidewalks between the hours of 8 a. m. and 6 p. m.

SEC. 3. That it shall be unlawful for any person, firm, or corporation within the limits of the city of New Orleans to use, or to cause or to permit dry dusting in any portion of any building that the public have access to.

SEC. 4. That the public of the city of New Orleans are enjoined and required to assist in the enforcement of this ordinance and to report any violation thereof to the board of health for the parish of Orleans and the city of New Orleans.

SEC. 5. That the board of health for the parish of Orleans and the city of New Orleans, through its officers, agents and inspectors, are charged with the authority and duty to enforce the provisions of this ordinance and to prosecute all persons, firms, or corporations violating the same.

SEC. 6. That when any corporation shall be charged with the violation of any provision of this ordinance, the president, or in his absence the vice president, or in the absence of both the officer or individual in charge of same, and if a foreign corporation, the agent, or person in charge thereof, shall be deemed to represent such corporation, for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof. And when a firm is charged with such violation, each member thereof, and if a foreign firm the agent or person in charge thereof, shall be deemed to represent such firm for the purpose of enforcing this ordinance, and shall be held responsible and punishable for each violation thereof.

SEC. 7. That any person who shall violate any provision of this ordinance shall, upon conviction, be punished by a fine of not less than \$10, nor more than \$25, or imprisonment in the parish prison for a period of not less than

10 days nor more than 30 days, or both, at the discretion of the court having jurisdiction of same.

NEW YORK, N. Y.

**Foodstuffs—Places where Handled, Stored, or Sold—Sanitary Regulation,  
Eggs. (Reg. Dept. of H., Mar. 30, 1915.)**

Regulations of the department of health of the city of New York, adopted March 30, 1915, effective April 1, 1915, relating to section 150 of the Sanitary Code, which provides as follows:

SEC. 150. *The care and sale of food and drink in stores regulated.*—No grocery store, butcher store, delicatessen store, confectionery store, bakery store, milk store, butter and egg store, fruit and vegetable store, fish store, or other place where food or drink is handled, stored, offered for sale, or sold, shall be conducted or maintained otherwise than in accordance with the regulations of the board of health.

GENERAL REGULATIONS GOVERNING THE CONDUCT OF ALL RETAIL STORES.

REGULATION 1. *Food and drink not to be stored in stables or other insanitary places.*—Food and drink shall not be handled, stored, offered for sale or sold in any stable; room used for sleeping purposes; or in any room or place which is dark, damp, poorly ventilated or insanitary.

REG. 2. *Water-closet compartments.*—Every water-closet compartment, except when provided with mechanical means of ventilation, shall have a window at least 1 foot by 3 feet between stop-beads opening to the external air, and the entire window shall be made so as to readily open, or an opening connected with the external air measuring at least 144 square inches for each water-closet or urinal, with an increase of 72 square inches for each additional water-closet or urinal. The door or doors of the water-closet compartment shall be self-closing. Where the water-closet is in direct communication with the room in which food or drink is handled, stored, offered for sale or sold, if required by the department of health, a suitable and properly lighted vestibule shall be provided. The door of the vestibule shall be self-closing. All water-closet fixtures, water-closet compartments and vestibules shall be maintained in a clean and sanitary condition and in good repair.

REG. 3. *Rubbish, useless or offensive material.*—No accumulation of rubbish, useless or offensive material shall be permitted in any room or place where food or drink is handled, stored, offered for sale or sold.

REG. 4. *Lighting.*—All rooms or places in which food or drink is handled, stored, offered for sale, or sold, shall be properly and adequately lighted so that all parts thereof may be readily inspected.

REG. 5. *Screening of doors, windows, and other openings.*—All doors, windows and other openings shall be properly screened from May 1 to October 31. Screen doors shall be provided with self-closing devices.

REG. 6. *Construction of walls and ceilings.*—Walls and ceilings shall be of a smooth, hard material, and must be kept clean and sanitary and in good repair.

REG. 7. *Construction of floors.*—Floors shall be smooth and must be kept clean and sanitary and in good repair.

REG. 8. *Counters, shelves, show cases, and windows.*—All show or display cases or windows, counters, or shelves, used in handling, keeping and displaying food or drink shall be kept clean and sanitary, free from dust, dirt, and other contaminating material, and in good repair.

REG. 9. *Drainage of refrigerators, ice boxes, etc.*—Waste water from refrigerators, ice boxes, refrigerated display cases, windows or counters, vats or tanks, or other containers, used in refrigerating and storing food or drink shall discharge into an open, water-supplied, properly trapped, sewer-connected sink.

REG. 10. *Refrigerators, ice boxes, etc.*—All refrigerators, ice boxes and appurtenances thereof used for the storage of food and drink shall be kept clean and sanitary and in good repair, and the compartment used for the storage of ice shall be lined with some proper metallic substance so as to be water-tight.

REG. 11. *Sinks.*—Suitable sinks with an adequate supply of running water shall be provided.

REG. 12. *Washing facilities for employees.*—Soap, running water, and fresh, clean, individual towels shall be provided for each employee, and the same shall be readily accessible to these employees. Use of common towel is prohibited.

REG. 13. *Discarded employees.*—No person who has any infectious or venereal disease shall be permitted to handle food or drink or any utensil used in dispensing same.

REG. 14. *Habits of employees.*—All persons handling food or drink shall be cleanly in their habits, and must wash their hands before beginning work and after visiting toilet.

REG. 15. *Clothing of employees.*—All persons handling food or drink shall wear clean, washable outer garments.

REG. 16. *Garbage receptacles.*—Suitable, water-tight, properly covered, galvanized-iron, or other sanitary metal cans for receiving and holding without leakage all garbage and other waste material shall be provided. A tight-fitting cover shall be provided for each can, and the can shall be kept covered. All garbage and other waste material shall be removed from the premises daily and shall not be allowed to become a nuisance.

REG. 17. *Disposition of food and drink unfit for human consumption.*—Food or drink which has become unfit for human consumption, shall be kept separate and apart from other foodstuffs which are held, kept, and offered for sale, properly denatured, marked "condemned" and removed daily.

REG. 18. *Spitting signs.*—Placards prohibiting spitting on floors shall be conspicuously posted.

REG. 19. *Cuspidors.*—A sufficient number of cuspidors shall be provided and shall be cleansed and disinfected daily.

REG. 20. *Refrigeration of perishable foodstuffs.*—All perishable food or drink shall be stored and kept refrigerated in properly constructed refrigerators.

REG. 21. *Cleanliness of utensils.*—All utensils used in the preparation, service, and sale of food or drink shall be properly cleansed with hot water after being used, and no utensil shall, under any circumstances, be used a second time unless it shall have been, after previous use thereof, so cleansed, and in such cleansing the use of water which has become insanitary by previous use is prohibited.

REG. 22. *Rusted or badly worn utensils prohibited.*—The use of any utensil used in the preparation, service, and sale of food or drink, which is badly worn or rusted, corroded, or in such condition that it can not be rendered clean and sanitary by washing, is prohibited.

REG. 23. *Coloring matter or preservatives.*—The presence in any part of an establishment of any prohibited coloring matter or preservative shall be deemed prima facie evidence of its use, and the presence of any such material may

be sufficient cause for the prosecution of the owners or proprietors of the establishment.

**REG. 24. *Exhibition and arrangement of foodstuffs.***—All foodstuffs shall be arranged and displayed in an orderly and systematical manner so as to improve the general appearance of the store and to facilitate cleaning and inspection of same.

**REG. 25. *Food not to be deposited or allowed to remain within 2 feet of the surface of any sidewalk, street, or floor, etc.***—No food intended for human consumption shall be deposited or allowed to remain within 2 feet of the surface of any sidewalk, street, alley, or public place, or the floor of any building where exhibited unless the same shall be contained in covered boxes or other covered receptacles so as to be protected from dogs and other animals and their excretions.

**REG. 26. *Protection of foodstuffs.***—All foodstuffs not protected by a fly and dust-proof wrapper when displayed for sale must be covered in cases of glass, metal, wood, or close-mesh wire screening so as to prevent contamination by dust, dirt, and flies.

**REG. 27. *Storing of food to be prima facie evidence of its use.***—The presence of any food, drink, or raw material in any part of the establishment shall be deemed prima facie evidence of its use for human food.

#### ADDITIONAL REGULATIONS GOVERNING THE CONDUCT OF BUTCHER SHOPS.

**REG. 31. *Construction of counters, workbenches, and pickling vats, etc.***—All counters, workbenches, pickling vats, refrigerated display cases, stationary trays, and appurtenances thereof used in the handling, displaying, and storing of meats and other foods shall be of a smooth, hard material, and constructed and arranged so as to permit of thorough cleansing and ready access.

**REG. 32. *Maintenance of counters, workbenches, and pickling vats, etc.***—All counters, workbenches, pickling vats, refrigerated display cases, stationary trays, and appurtenances thereof used in the handling, displaying, and storing of meats and other foods shall be kept clean and sanitary and in good repair and must be scrubbed with hot water and sal soda or other suitable cleansing agent at the close of each day's use.

**REG. 33. *Protection of meats, poultry, etc., when displayed for sale.***—All meats, poultry, game, fish, and similar products when displayed for sale shall be kept within closed refrigerated display cases or properly covered by close-mesh wire screening so as to prevent unwarranted human handling and contamination by dust, dirt, and flies: *Provided, however,* This regulation shall not apply to smoked meats, sausages, hams, or other similar products which are protected by a fly and dust-proof wrapper.

#### ADDITIONAL REGULATIONS GOVERNING THE CONDUCT OF FISH STORES.

**REG. 35. *Construction of counters, workbenches, display cases, etc.***—All counters, workbenches, refrigerated display cases, stationary trays, and appurtenances thereof used in the handling, displaying, and storing of fish and shell-fish shall be of a smooth, hard material, and constructed and arranged so as to permit of thorough cleansing and ready access, and shall be water-tight and properly drained.

**REG. 36. *Maintenance of counters, workbenches, display cases, etc.***—All counters, workbenches, refrigerated display cases, stationary trays and appur-

tenances thereof used in the handling, displaying, and storing of fish and shellfish, shall be kept clean and sanitary and in good repair, and must be scrubbed with hot water and sal soda, or other suitable cleansing agent, at the close of each day's use.

REG. 37. *Iced fish and shellfish to be stored so as not to cause a nuisance.*—All iced fish and shellfish stored in wooden boxes or barrels shall be kept or stored in such a manner as not to cause a nuisance.

REG. 38. *Refrigeration.*—All fish shall be kept properly chilled or refrigerated at all times.

REG. 39. *Protection of fish when displayed for sale.*—All fish and shellfish displayed for sale shall be kept within closed, refrigerated display cases or properly covered by close-mesh wire screening so as to prevent unwarranted human handling and contamination by dust, dirt, and flies.

ADDITIONAL REGULATIONS GOVERNING THE CONDUCT OF ICE CREAM AND CANDY STORES.

REG. 41. *Construction of soda-water fountains and ice-cream refrigerators.*—All soda-water fountains, ice-cream refrigerators, and appurtenances thereof shall be constructed and placed so as to permit of thorough cleansing. All such equipment shall be kept clean and sanitary and in good repair, and must be washed daily with hot water and sal soda or other suitable cleansing agent.

REG. 42. *Running hot and cold water to be provided.*—An adequate supply of running hot and cold water shall be provided.

REG. 43. *Sinks.*—All sinks used for the cleansing of utensils shall be equipped with an overflow.

REG. 44. *Protection of utensils.*—All utensils used in the service and sale of ice cream and soda water shall be protected against contamination by dust, dirt, and flies, or cleansed immediately before use.

REG. 45. *Cleansing of containers.*—All containers used in the storing, transporting, and distributing of ice cream, ices, and other frozen products shall be thoroughly cleansed immediately upon emptying.

REG. 46. *Use of rusted or badly worn containers prohibited.*—The use of any container for storing, transporting, and distributing of ice cream, ices, and other frozen products which is badly worn, rusted, corroded, or in such condition that it can not be rendered clean and sanitary by washing, is prohibited.

REG. 47. *Use of lead or other metallic faucet, tank, etc., that may affect liquids.*—No person shall use any tap, faucet, tank, fountain or vessel or any pipe or conduit in connection therewith, which shall be composed or made either wholly or in part of lead or other metal or metallic substance, that is or will be affected by a liquid so that dangerous, unwholesome, or deleterious compounds are formed therein or thereby or such that soda water, sirups, or other liquids, or any beverage, drink, or flavoring material drawn therefrom shall be unwholesome, dangerous, or detrimental to health.

REG. 48. *Protection of candy when displayed for sale.*—All candies transported, displayed, stored, offered for sale, or sold shall be covered with a covering of glass, wood, metal, pasteboard, paper, or other suitable material, so as to prevent unwarranted human handling and contamination by dust, dirt, and flies.

REG. 49. *Towels for drying dishes.*—All towels used for drying dishes, receptacles, and utensils shall be clean.

REGULATIONS GOVERNING THE HANDLING, STORING, CANDLING, OFFERING FOR SALE,  
AND SELLING OF EGGS FOR EDIBLE PURPOSES.

**REGULATION 1. Eggs not to be stored in stables or other insanitary places.**—Eggs shall not be handled, stored, offered for sale, or sold in any stable, room used for sleeping purposes, or in any room or place which is dark, damp, poorly ventilated, or insanitary.

**REG. 2. Water-closet compartments.**—Every water-closet compartment, except when provided with mechanical means of ventilation, shall have a window at least 1 foot by 3 feet between stop beads opening to the external air, measuring at least 144 square inches for each water-closet or urinal, with an increase of 72 square inches for each additional water-closet or urinal. The door or doors of the water-closet compartment shall be self-closing. Where the water-closet is in direct communication with the room in which eggs are handled, stored, offered for sale, or sold, if required by the department of health, a suitable and properly lighted vestibule shall be provided. The door of the vestibule shall be self-closing. All water-closet fixtures, water-closet compartments, and vestibules shall be maintained in a clean and sanitary condition and in good repair.

**REG. 3. Rubbish, useless or offensive material.**—No accumulation of rubbish, useless or offensive material shall be permitted in any room or place where eggs are handled, stored, candled, offered for sale, or sold.

**REG. 4. Lighting.**—All rooms in which eggs are handled, stored, candled, offered for sale, or sold shall be provided with adequate light, so that all parts may be readily inspected when required.

**REG. 5. Construction of walls and ceilings.**—Walls and ceilings shall be of a smooth, hard material and must be kept clean and sanitary and in good repair.

**REG. 6. Construction of floors.**—Floors shall be smooth and must be kept clean and sanitary and in good repair.

**REG. 7. Sinks and water supply.**—Suitable sinks, with an adequate supply of running hot and cold water, shall be provided.

**REG. 8. Garbage receptacles.**—Suitable, water-tight, properly covered, galvanized iron or other sanitary metal cans for receiving and holding without leakage all garbage, egg shells, and other waste material shall be provided. A tight-fitting cover shall be provided for each can. All garbage, egg shells, and other waste material shall be removed from the premises daily and shall not be allowed to become a nuisance.

**REG. 9. Marking of case eggs.**—All cases of candled eggs handled, stored, offered for sale, or sold shall be legibly stenciled "Candled (date of candling)."

**REG. 10. Sale of eggs at "case count" or "at mark."**—Where eggs are sold at "case count" or "at mark" and the loss is 50 per cent or more all the eggs shall be candled and the resultant loss shall be denatured and destroyed in accordance with the regulations.

**REG. 11. Denaturing of "spots" or "spot eggs."**—During the process of candling eggs for food purposes all eggs found to be "spots" or "spot eggs" shall be immediately denatured. The term "denatured" when used herein refers to the treatment of eggs with a substance, approved by the department of health, the presence of which on the eggs prevents their use for human food.

**REG. 12. Suitable receptacles for "spots" or "spot eggs" to be provided.**—Suitable receptacles for "spots" and "spot eggs" shall be provided in the candling room. Such receptacles shall at all times contain a sufficient quantity of a denaturant approved by the department of health and shall be stenciled with 2-inch block letters "Spot eggs denatured with \_\_\_\_\_," followed by the name of the denaturant.

**REG. 13. *Spitting signs.***—Placards prohibiting spitting on floors shall be conspicuously posted.

**REG. 14. *Cuspidors.***—A sufficient number of cuspidors shall be provided and shall be cleansed and disinfected daily.

**REG. 15. *Evidence of use.***—The presence of any eggs in any part of the establishment shall be deemed prima facie evidence of their use for human food.

**Foodstuffs—Separation and Sorting of Unwholesome Foodstuffs which Have Been Condemned. (Reg. Dept. of H., July 28, 1915.)**

Regulations of the department of health of the city of New York, adopted July 28, 1915, effective August 1, 1915, relating to section 137 of the Sanitary Code:

**REGULATION 1. *Separating and sorting unwholesome food from wholesome food.***—Whenever food is condemned by an inspector or other duly authorized representative of the department of health as unfit for human consumption, and such food is mingled, mixed, or packed with wholesome food, it shall be the duty of the owner or person in charge thereof to separate or sort the condemned food from the wholesome food and remove the condemned food in the manner and to the place designated by such inspector or representative.

**REG. 2. *Service of written notice.***—Upon any food being condemned by an inspector or other duly authorized representative of the department of health, which food is to be separated or sorted, such inspector or other representative shall serve a written notice on the person in charge thereof, directing that the condemned food be separated or sorted in accordance with the terms of such notification.

**REG. 3. *Condemned food to be placed in suitable containers.***—In separating or sorting food, held in accordance with regulation 2 of these regulations, the condemned food shall be placed in suitable and properly covered barrels, boxes, or other containers for removal. Such separating or sorting shall be performed so as not to cause a nuisance.

**REG. 4. *Condemned food not to become dangerous to public health.***—If condemned food, which is to be separated or sorted from wholesome food, is putrid or otherwise dangerous to public health, and the owner thereof fails to comply with the terms or conditions of the written notice specified in regulation 2 of these regulations, such food shall be destroyed and removed at the expense of the owner thereof.

**REG. 5. *Notification of completion of separation or sorting.***—When food, held in accordance with these regulations, has been separated or sorted, it shall be the duty of the owner or person in charge thereof to notify the department of health of such fact.

**REG. 6. *Food not to be removed until inspected and passed.***—No person shall remove or deliver, or cause to be removed, any food held for separation or sorting, until he shall have first received a written permit therefor from an inspector or other duly authorized representative of the department of health, and such food has been inspected and passed by such inspector or representative.

**Milk and Cream—Care and Sale—Sanitary Regulation of Stores. (Reg. Dept. of H., Mar. 30, 1915.)**

The following regulations relate to section 150 of the Sanitary Code:

**RULES AND REGULATIONS FOR THE SALE OF DIPPED MILK AND CREAM IN STORES IN THE CITY OF NEW YORK.**

**REGULATION 1.**—Milk or cream shall not be handled or sold in any room which is unduly crowded with goods, wares, or merchandise.

**REG. 2.**—Milk or cream shall not be dipped from cans stored in a room in which butter or cheese is manufactured.

**REG. 3.**—Milk or cream must be stored in a cooling or refrigerating room or ice chest, the construction of which has been approved by the department of health.

**REG. 4.**—Milk or cream shall not be dipped from cans stored in a milk booth.

**REG. 5.**—Milk shall be kept at a temperature of 50° F. or below at all times.

**REG. 6. *Equipment.***—Rooms in which milk or cream is handled or sold shall be well lighted.

**REG. 7.**—The floors, walls, and ceilings shall be smooth and must be kept clean and sanitary.

**REG. 8.**—All windows and doors shall be properly screened.

**REG. 9.**—An adequate supply of hot water shall be provided for the washing of utensils.

**REG. 10.**—A sufficient number of properly constructed ice tubs, or other adequate refrigerating facilities for cans of milk or cream shall be provided.

**REG. 11.**—All utensils used for dipping milk or cream shall be of the seamless sanitary type, heavily tinned.

**REG. 12. *Methods.***—No milk or cream shall be dipped from cans stored in any room in which rubbish or dirty material is allowed to accumulate or in which there are offensive odors.

**REG. 13.**—All cans or other receptacles used for milk or cream shall be cleaned thoroughly immediately upon emptying.

**REG. 14.**—The cans from which milk or cream is dipped shall be packed in ice and shall be kept covered as much as possible at all times.

**REG. 15.**—The ice tubs in which milk or cream is stored shall be painted inside and outside, and shall be kept clean at all times.

**REG. 16.**—A separate dipper shall be provided for each can from which the supply is being served, and such dipper shall remain in the can between dippings until all the milk in the can has been disposed of.

**REG. 17.**—All dippers, measures, or other utensils used in the handling of milk, condensed milk, or cream must be kept clean while in use and must be thoroughly cleaned with hot water and soda (sodium carbonate) and then with boiling water directly after each day's use.

**REG. 18.**—All goods sold in milk stores must be either in unbroken packages, or must be so placed, protected, and handled that no dust or odors therefrom can injuriously affect the milk.

**REG. 19.**—Dry sweeping and dusting in rooms in which milk or cream is dispensed is prohibited.

**REG. 20.**—The tags on cans of milk or cream must be kept on file in the store for at least two months for inspection by the department of health.

**REG. 21.**—The attendants shall wear clean, washable outer clothing.

**REG. 22.**—Only such persons shall be employed as are free from infectious disease which may be transmitted in the handling of milk.



## NEWARK, N. J.

**Communicable Diseases—Notification of Cases by Physicians. (Reg. Bd. of H., Aug. 3, 1915.)**

Every practicing physician in this city shall report in writing to the board of health the name of every patient he or she shall have affected with anthrax, chicken-pox, cholera, diphtheria or membranous croup, epidemic meningitis, epilepsy, erysipelas, glanders, infantile paralysis or poliomyelitis, leprosy, malaria, measles, mumps, ophthalmia neonatorum, plague, bronchial pneumonia, lobar pneumonia, rabies, scarlet fever, smallpox (including varioloid), tetanus, trachoma, trichinosis, tuberculosis (any form), typhoid fever, typhus fever, whooping cough, yellow fever, or any other contagious disease that may be hereafter publicly declared by this board to be dangerous to the public health, together with the precise locality where such patient may be found, immediately after such physician shall ascertain or suspect the nature of such disease. Any person or persons failing to comply with, violating, or offending against the provisions of this section shall, on conviction thereof, forfeit and pay a penalty of \$50.

**Whooping Cough—Prevention of Spread. (Reg. Bd. of H., July 6, 1915.)**

1. No parent or guardian of any infant under 10 years of age suffering from the disease commonly known as whooping cough shall permit any such infant to appear in the street or in any other public place within the city of Newark, unless such infant shall wear and expose upon the arm a band of yellow material bearing upon it the words "Newark Health Department. Whooping cough." The band shall be in a form to be prescribed and supplied by the board of health, and shall be worn for a period beginning with the earliest recognition of the disease and continued until danger of infection is over, but in no event less than six weeks.

2. No parent or guardian of any infant under the age of 10 years suffering from whooping cough shall permit any such infant to board any street car or other public conveyance or to visit any house, other than the house in which such infant resides, or any store, school, Sunday school, or building of public assembly.

3. Any parent or guardian violating any of the provisions of this ordinance [sic] shall be subject to a fine of \$10 for each offense.

[This regulation was effective Sept. 1, 1915.]

**Boarding Houses for Infants and Children and Lying-In Hospitals—Placing of Infants—License Required—Regulation of. (Reg. Bd. of H., July 6, 1915.)**

**SECTION 1.** That it shall be unlawful for any person, firm, corporation, or association to conduct or maintain a maternity hospital, a boarding house for infants, or a boarding home for children, or to engage in, or assist in conducting, a business of placing infants as herein defined, without having a written license therefor from the board of health: *Provided*, That nothing in this ordinance [sic] shall apply to any institution maintained and operated by the State of New Jersey nor by any municipality thereof, or to any incorporated charitable society for the placing of infants and children.

**SEC. 2.** The following terms used in this ordinance shall have the following meanings:

"Boarding house for infants" shall mean a house or other place conducted or maintained by anyone who advertises himself or holds himself out as conducting a boarding place for infants under 3 years of age, or who receives

illegitimate children under 3 years of age, or who has in his custody or control one or more infants under 3 years of age unattended by parents or guardians, for the purpose of providing such children with food or lodging, excepting children related to him by blood or marriage, or who have been legally adopted by him.

“Boarding home for children” shall mean any children’s home, orphanage, or other institution, association, organization, or individual engaged in receiving, caring for, and finding homes for orphans, dependent or neglected children.

“Maternity hospital” shall mean any house or hospital wherein the principal business carried on shall consist in the care of women prior to, during, and after childbirth.

The business of placing infants shall consist in finding or assisting to find homes for any infant under the age of 3 years with persons other than relatives; in procuring or assisting in procuring the adoption of any such infant; in disposing or assisting to dispose of any such infant in any other manner.

SEC. 3. No license above provided for shall be granted for a term exceeding one year. Every such license shall state the name of the licensee, the particular premises in or at which the business shall be carried on, and the number of inmates that may be treated, maintained, boarded, or cared for at any one time; and said license shall be posted in a conspicuous place in the house or other place at which the business is conducted. No greater number of inmates shall be kept at one time on the premises than is authorized in the license, and no inmates or infants shall be kept or disposed of within a building or place not designated in the license. The record of such license when issued shall be kept by the board of health. Said license shall be subject to revocation for violation of any of the provisions of this ordinance or whenever in the judgment of the board of health such boarding home is no longer needed. The board of health shall annually, or oftener if found desirable, visit and inspect, or designate persons to visit and inspect, the premises and investigate the manner of conducting the business licensed. Said board and such persons shall have the right to call for and examine the records required by this ordinance to be kept, and to inquire into all matters concerning such licensed premises and the women and children therein, and it shall be the duty of the licensee to give all information to such persons and afford them every reasonable facility for examining the records, inspecting the premises and seeing the inmates thereof.

SEC. 4. Every person, firm, corporation, or association conducting a maternity hospital, a boarding house for infants, or engaged in the placing of infants, as defined in this ordinance, shall keep a record in a form to be prescribed by the board of health, wherein shall be entered the name, age, sex, color, and religion of every child born on his premises, cared for or treated by him, or brought to him for placing, or finding a home for, or giving out for adoption, or otherwise disposing of, together with the name and address of each of the parents of said child; the name of every woman and of every child who dies while in his care, together with the date of such death; also the name and residence of the person with whom the child is placed or by whom it is adopted; this entry to be made within 24 hours after such child is given out, taken away, or disposed of in any manner. A true copy of such record shall be sent to the board of health at such times as the board of health shall require.

SEC. 5. Any person who shall violate any of the provisions of this ordinance, upon conviction thereof shall be punished by a fine of \$50.