

PUBLIC HEALTH REPORTS

VOL. 29

SEPTEMBER 4, 1914

No. 36

PLAGUE IN THE UNITED STATES.

Subsequent to the information contained in last week's issue, 2 cases of plague in man and 14 in rodents have been notified in New Orleans.

Detailed statements of the plague-eradication measures being carried out under the direction of the Federal Public Health Service at the three existing plague foci, namely, California, New Orleans, and Seattle, will be found on pages 2312-2316.

THE MAKING OF HEALTH OFFICERS.

THE POSSIBILITY OF STATE DEPARTMENTS OF HEALTH IMPROVING THE EFFICIENCY OF LOCAL HEALTH OFFICERS BY MEANS OF CORRESPONDENCE COURSES IN HEALTH ADMINISTRATION AND ALLIED SUBJECTS.

By JOHN W. TRASK, Assistant Surgeon General, United States Public Health Service.

In the United States at the present time one of the greatest handicaps to rational and effective health administration is the lack of knowledge of public-health work and of the control of disease on the part of many local health officials, and especially those of small cities, villages, and rural communities. This lack of knowledge is in most instances not due to unusual ignorance but rather to the fact that there are exceedingly few men with requisite training from among whom the thousands of local health officers can be appointed.

It would seem practicable, however, for the State health department, through a correspondence course, to give a very serviceable and quite satisfactory course of instruction to its local health officers. It would be possible in this way to use in villages and townships men who had had no medical training but who, after a year's correspondence course, would perform the duties of township or village health officer in a way superior to previous incumbents. Such a correspondence course might be arranged by the State health department sending out each week to the local health officers of the State a printed or multigraphed lesson on some single point in the control of disease. Such a lesson should not be so long that it would tax the patience or

the limits of concentration of the health-officer students. It should cover but a single circumscribed topic, so that each week the local health officer would learn some definite thing which would be useful to him in his work. The time taken for such a lesson would not be great. Lessons could be sent out at weekly intervals and thus spaced they would not crowd each other nor obliterate those previously learned. In a year's time the health-officer student would have learned 52 lessons and would have mastered 52 ideas regarding the control of disease. Most local health officers would in the course of one, two, or three years' instruction in this way become competent and efficient, and superior to most of those at present obtainable. Not only that, but those without previous medical training would, in townships and villages, become probably more efficient and satisfactory health officers than some of the physicians who are holding these positions at the present time, for the medical man without other training, be he never so capable as a physician, knows but little more about the community control of disease than the person without medical training. The nonmedical health officer would eliminate, too, the embarrassing complications arising from the unfortunate custom of making practicing physicians health officers in villages and rural districts where, in performing their official duties, they are placed in the position of interfering with the practice of competing practitioners.

Not only would such a correspondence course improve to a large degree the efficiency of local health officers, but it would constitute one more link to bind the various health units into an effective health organization.

In carrying on such a school it would be highly desirable to hold examinations at the end of the year on the lessons that had been sent out during the previous 12 months. These examinations could be held on the occasion of the annual conference of the local health officers of the State. Those passing a satisfactory examination might be given a certificate. The course should be progressive, each year taking up new subjects. The subjects treated the first year would serve for beginners year after year. The health officer who had taken the course for several years, had passed satisfactory examinations, and held certificates to that effect, would naturally make a much better health officer than those who had not had the course. Preference might be given to those holding such certificates.

The purpose of a correspondence course of this kind would be to have those acting as local health officers in small communities acquire some knowledge of public health administration without effort and without perceptible labor. There would, however, be many who would become interested and wish to go deeper into the subject. For these a well-selected course of reading would be an invaluable

supplement to the primary correspondence course. For those who undertook the reading course there might be available periodic (annual probably) examinations on the subjects dealt with in the volumes included. The satisfactory passing of this examination should naturally receive proper recognition, and a special certificate or diploma might be issued.

Undoubtedly many persons other than health officers would desire to take these correspondence courses because of their educational value. It would seem to be desirable to encourage this, and those thus taking the courses and passing satisfactory examinations might upon request be enrolled as members of a State Sanitary Reserve Corps. The members of such a corps would be frequently found of service and their enrollment would markedly add to their interest in local health affairs. They would be a source of strength to local health departments.

MOSQUITOES AND MALARIA.

REPORT ON A SHORT TRIP IN EASTERN NORTH CAROLINA.

By CH. WARDELL STILES, Professor of Zoology, United States Public Health Service.

Kinston, Moorehead City, and Jacksonville, all in eastern North Carolina, were visited to collect data in regard to the breeding places of mosquitoes, with special reference to malaria.

From both practical and theoretical points of view the mosquito problem of the places in question may be divided into an *external* and an *internal* problem.

The *internal problem* includes the mosquito-breeding places that are inside the town or in the immediate surroundings. The *external problem* includes the more distant breeding grounds, such as marshes, etc., from which mosquitoes may be blown into town under favorable conditions of wind, as light breezes from the direction of the marshes; or from which the mosquitoes may be brought in on railroad trains, or by persons driving in from the country.

The *internal problem* is, to a certain extent, dependent upon the *external problem*, for assuming that all of the mosquitoes in a town were to be killed off, the town might become infected again by mosquitoes blown in from the marshes or brought in on trains or in teams. Further, the importance of the *external problem* is dependent, to a great extent, upon the *internal problem*, for if mosquitoes are blown or brought into town, their invasion is a more serious matter in case they find in town places suitable for breeding than if the town presents no such breeding place.

It is difficult to state definitely the relative importance of the internal and the external problems in the places visited until the inter-

nal problem is solved, and thus eliminated from further consideration. The data collected prove, however, that in these three towns there is an easily remediable *internal* problem which, if not attended to, constitutes a serious menace to comfort and health, but which if properly handled can be practically solved; the solution will result in a great decrease of mosquitoes and malaria.

Intraurban Problem.

The internal mosquito problem of these three cities and towns consists (1) of a screening of the houses, and (2) a destruction of the local breeding places.

The subject of screening will not be discussed here except to take it for granted that every dwelling and every privy should be properly screened as a protection against flies and mosquitoes.

To a very large extent the local breeding places can be easily eliminated. To bring this point out it will be well to consider some of the more important breeding places noticed.

HOUSEHOLD PROBLEMS.

A considerable portion of the local mosquito problem centers at the home. Theoretically it might be expected that as soon as abuses are pointed out families would do away with them of their own accord. Practically, however, *education* in public-health measures—though not to be underestimated—will be utilized largely: (1) When the application of the knowledge in question can be shown to have a financial advantage, (2) when public health laws are properly enforced, or (3) when a practical application of the education does not involve much trouble or inconvenience.

(a) *Tin cans*.—From the number of empty tin cans observed in the towns in question, it may be assumed that the servant problem and the problem of purchasing fresh vegetables, fruits, and meats are not the least serious difficulties with which the housewife has to contend. After emptying the contents (meat, fruit, vegetables, fish, etc.) out of the cans, the average servant—and too often the housewife—throws the can out into the back yard, sometimes into a barrel, more commonly on the ground. Following a rain, these cans contain water and thus form breeding places for mosquitoes. In the case of a number of yards I examined, the housewife or the servant had in this manner provided the residences with an ample supply of mosquitoes. In some cans I found hundreds of mosquito larvæ and pupæ.

This particular element in the mosquito problem can be solved so easily that there is no excuse—except human nature—for its existence. When a can is opened and its contents emptied out, *the bottom of the can should be punctured or cut* with the can opener or with a

hatchet (and the can may be pressed flat by standing on it) so that it can not hold water, before it is thrown away. This simple precaution in the kitchen would reduce the mosquitoes in the three towns in question by hundreds of thousands. The importance of this reduction is seen when we consider that in these tin cans the mosquitoes are breeding close to the house.

In one instance I found thousands of mosquito larvæ and pupæ in an old tin can in a chicken house. Had this been emptied every day or week, when water was added, this source of mosquitoes would have been done away with.

Tin-can mosquitoes were found, for instance, as follows:¹

Kinston.—*Aedes calopus* ² (seu *Stegomyia fasciata*) in the back yard of a physician. October 13, 1913.

Aedes calopus (seu *Stegomyia fasciata*) and *Culex pipiens* at side of a railroad track close to several houses. October 13, 1913.

Culex pipiens L. and *C. quinquefasciatus* Say, in back yard of tenement house. October 13, 1913.

Culex pipiens L. at side of railroad track, near freight station, from which or to which mosquitoes might be carried long distances in freight cars. October 14, 1913.

Jacksonville.—*Aedes calopus* Meig. (seu *Stegomyia fasciata*) in chicken coop.

At Moorehead City the public-school children were organized into a band of tin-can eradicators, and in two weeks' time the white school children collected and destroyed 36,202 cans.

(b) *Tin buckets.*—Old discarded paint pots were found in several instances near houses or along the railroad track, breeding mosquitoes by the thousands. If old paint pots were punctured before they are "thrown over the fence" this source of discomfort could be easily eliminated. The following is an instance of a small discarded tin paint pot:

Anopheles sp. (? *punctipennis* or ? *quadrimaculatus*), *Aedes calopus* (seu *Stegomyia fasciata*) and *Culex pipiens* L., in can at side of railroad track, near several houses. The can was literally swarming with the "wiggie-tails." Kinston, October 13, 1913.

(c) *Other tin receptacles.*—In one instance, in a back yard, there was a baby's bathtub containing water and furnishing hundreds of mosquitoes to the house about 20 feet away.

Culex pipiens, *Aedes calopus* (seu *Stegomyia fasciata*), and Psychodid larvæ. Jacksonville, October 16, 1913.

(d) *Bottles.*—Discarded bottles are numerous in these three towns. Many of these have caught water in one way and another and in a number of instances mosquito larvæ and pupæ were found. This part of the mosquito problem is of easy solution, namely, collect the bottles and destroy them or dispose of them in some other way.

¹ The notes in the smaller type show the kind of mosquitoes found in each instance.

² All of the mosquitoes collected were forwarded to Dr. L. O. Howard, at whose request they were determined by Mr. F. Knab. This occasion is utilized to express my appreciation of their kindness.

In towns like the three under discussion, where many children go barefooted, especially in summer, the indiscriminate breaking of bottles in back yards, in lots, and in the streets would of course be a dangerous method of procedure. On account of the risk of cuts from broken glass this portion of the municipal problem should be handled by the municipality rather than by the families.

(e) *Kegs, barrels, and boxes.*—In a number of instances, kegs, barrels, and water-tight boxes in yards were found to be breeding mosquitoes. Some of the cases found were interesting.

In one instance, a store was bothered by mosquitoes. The proprietor had screened carefully and had, apparently, looked around to destroy the breeding places around his store. He had, however, overlooked a small keg in the yard, in which mosquitoes were breeding literally by the thousands, the following being found:

Aedes calopus, *Culex pipiens*, and *C. quinquefasciatus*. Jacksonville, October 16, 1913.

In another instance, two barrels were found in the yard of a store belonging to one of the town officials. The barrels held water and were breeding mosquitoes by the thousands.

Culex pipiens. Jacksonville, October 16, 1913.

The proprietor and town official in question well illustrates one of the most difficult parts of the mosquito problem, namely, the apathy of some persons in their duty toward other people. The fact that the conditions in the filthy yard back of his store and abutting several residences were furnishing thousands of mosquitoes to the neighborhood seemed to him to be a matter of superlative insignificance, but he showed some little irritation when the barrel was turned over by one of his neighbors to let out the water and kill the mosquitoes. Men of his type, with a mental horizon of very short radius, are of necessity a serious drawback to public-health work, especially when they hold office.

Several fire buckets and barrels in lumber yards and mills were breeding numerous mosquitoes.

Culex pipiens and *Aedes calopus* (*Stegomyia fasciata*). Kinston, October 14, 1913.

In a fire barrel at a certain cotton gin, mosquitoes were breeding by the thousands. When this fact was pointed out to the man in charge, he innocently remarked that this was of no consequence, as the water was not used for drinking purposes.

Culex pipiens. Kinston, October 13, 1913.

(f) *Old iron safes and stoves.*—In one yard there was an old iron safe, door side up, containing water, but a search for mosquitoes was negative. In a nearby vacant lot, however, there was another discarded old iron safe, door side up, and nearly full of water; here mosquitoes were breeding by the thousands. This one safe alone

was capable of furnishing an abundant supply of mosquitoes to all of the neighboring buildings.

Culex pipiens and *Aedes calopus* (seu *Stegomyia fasciata*).

In two instances, old discarded iron stoves were found. One of these was in a yard and did not happen to contain water. The other had been thrown into the street, close to a negro hut; it contained from 1 to 2 quarts of water which was swarming with thousands of mosquito larvæ and pupæ.

Culex pipiens. Moorehead City, October 15, 1913.

(g) *Open surface wells*.—In the one discarded open surface well examined mosquitoes were not found. This was doubtless merely a matter of chance.

(h) *Drainable standing water*.—In one yard several standing pools of water were found which seemingly presented ideal breeding places for mosquitoes, but a very careful search failed to reveal either larvæ or pupæ, although adults were seen flying. It seemed so incredible that such ideal breeding ground should not be utilized by the mosquitoes that the situation was studied more in detail, with the following result: These pools of water were on ground that was slightly higher than a creek that flowed through the yard; the configuration of the land was such that rainfall sufficient to raise the water in the pools by, say, one-half to 1 inch would inevitably result in making the pools overflow into the creek; the water would naturally carry with it substances floating on its surface; further, following any rain, water would of necessity drain from higher ground into the pools and from there into the creek; thus a rain would actually wash the pools out and mosquito larvæ and pupæ would be carried away in the overflow to the creek, which contained fish. We had here, therefore, an instance in which a rainfall would naturally result in a temporary decrease of mosquitoes, and since these pools seemed exceedingly favorable to the breeding of anopheline mosquitoes, the anomalous possibility was presented that a rainfall might actually result in a decrease of malaria. This line of reasoning is in harmony with an observation of the man who lived at the near-by house to the effect that this was an unfavorable time to find wiggle-tails there because the pools had been washed out by the rain.

General considerations.—In general the foregoing portions of the local mosquito problem depend upon the families, and right here lies one of the greatest difficulties in the eradication of mosquitoes and of malaria, because the average American family has very little interest in an improvement in public-health conditions. Families have been accustomed to these conditions for years, as were their fathers and their grandfathers. The average American father may be aware

of the fact that mosquitoes are breeding at his very door, but except in face of an epidemic he is not sufficiently interested in the subject to give himself a little trouble to do away with the nuisance. Furthermore, public-health sentiment is not sufficiently developed in the average American town to compel people to keep their premises free from nuisance. In other words, the average American man has a very irresponsible conscience when it comes to the expenditure of either personal effort or personal money to better the conditions in his own back yard as a factor in the general betterment of sanitary conditions in his community. Public-health advancement in the United States, at least in those portions with which I am acquainted, has been the result of determined persistency on the part of a few persons (who have made themselves unpopular by their efforts) rather than the result of either the general education or the general demand of the average citizen.

Because of this peculiarity on the part of the average American father the municipality has an important rôle to play in the household mosquito problem by inspecting premises to see that insanitary conditions are not permitted to continue. Education, in the sense of instruction, as to sanitary matters has accomplished about as much as can be expected of it, so far as the average adult American male citizen is concerned; as soon as a sufficient proportion of the younger generation, with higher sanitary ideals than their parents, gain sufficient power in local governments to enable them to carry on sanitary education in the police courts, by imposing fines, and thus by touching the average American father in a tender spot, more rapid improvement may be expected than we are experiencing to-day.

MUNICIPAL PROBLEMS.

It is impossible, either theoretically or practically, to draw a distinct line between the household problems and the municipal problems. As the individuals make up the household, the health of the individuals make up the health of the household, and as the separate households make up the municipality, the health and the sanitary surroundings of the separate families make up the health and sanitation of the municipality.

(a) *Drainable standing water.*—In one instance, close to a public school, there was an open lot in which was found a pool breeding numerous mosquitoes. (*Anopheles*, *Culex salinarius*, *Aedes trivittatus* Say. Moorehead City, October 15, 1913.) This case is slightly different from the pools in the backyards, in so far that no family is living on the premises, although families are living very close by. When a pool exists in the yard of an inhabited house, it is a little difficult to assume that the family is not aware of the fact, but the

owner of a vacant lot may live miles away and may be absolutely innocent of the fact that his lot is furnishing mosquitoes to near-by houses. Accordingly a greater obligation devolves upon the local officials to inspect such premises. In this particular case the pool in question required filling in and such treatment did not seem to present difficulties.

In another instance a sheet of standing water extended under several buildings and across an alley, the latter, according to information obtained, belonging to the city. Thousands upon thousands of mosquitoes were breeding here; in fact, this one breeding ground was sufficient to give a plentiful supply of mosquitoes to the entire neighborhood. This depression should be filled in, as it clearly constitutes a nuisance. Yet as long as the municipality permits its alley to be part of this sheet of water, it is a somewhat delicate matter to force the adjoining property owners (one a nonresident) to fill in their land.

Across the railroad track in front of a hotel in one of these towns is a depression with standing water. Abundant mosquitoes were breeding here to feed on the guests at the hotel. In fact, it was current comment that there was bitter complaint on the part of the guests because of the mosquitoes. It is not claimed that this was the only breeding place furnishing mosquitoes to this hotel, but rather that the possibilities here for mosquito breeding were sufficient to ruin the reputation of any hotel. According to the information obtained both the hotel and its near-by mosquito-breeding ground belong to the same corporation, hence it is a little difficult to understand why the one was permitted to continue to the detriment of the other. It would be an easy matter to fill in the depression or to drain it to a barrel sunken at its deepest point; the barrel (with side holes) could be kept supplied with kerosene or with small fishes; possibly the latter plan would be better than kerosene prophylaxis in this particular case, as surface water is said to be reached at this point at a depth of 1 to 2 feet, so that the fish could probably be kept alive almost indefinitely, and these would eat the larvæ and pupæ.

In another instance, in an inclosed field near a public school, there was a very slowly running—almost still-standing stream of water—in which mosquitoes were breeding. (*Anopheles* and *Culex territans* Walker. Jacksonville, October 16, 1913.) Very little work would have sufficed to clear this stream so that it would run more rapidly, to drain the field, and thus do away with this breeding ground.

(b) *Obstructed street gutters*.—In two of the three towns there were obstructed gutters in which thousands of mosquitoes were breeding. In both of these towns mosquitoes were breeding in gutters directly in front of public schools. In one gutter the number of mosquito larvæ was almost incredible. In another gutter, obstructed by grass

and within 15 feet of a residence, anopheline larvæ were found. In every one of these instances a slight interest, a slight intelligence, and a slight expenditure of energy would have done away with the existing nuisances.

(c) *Obstructed gutters at side of railroad tracks.*—In several instances excellent mosquito breeding grounds were found in the gutter-like depressions each side of railroad tracks.

The indignation, on the part of the inhabitants, against the railroad for permitting these conditions was nothing less than amusing. Persons who were absolutely blind to the nuisances they personally were maintaining in their own yards, and local officials who were absolutely blind to the example the municipality was setting to the inhabitants of the town, were vociferous in their denunciation of the railroad for the "outrage," etc., perpetrated on the community by permitting water to stand along the track and thus causing mosquitoes to defame the fair name of the town.

My field experience is to the effect that even the greatest obstructionist to public-health improvement in his own back yard, on his own property, or in his own town, is a natural-born orator when it comes to criticizing the railroads for their public-health shortcomings.

(d) *Boats.*—In two of the three towns small boats were found to be breeding large numbers of mosquitoes.

In one instance a rowboat had been drawn up on the shore and was about one-fourth filled with rain water, which was simply swarming with wiggle tails.

In another instance in the same town a small boat had been drawn up on the shore and had been left there about four to five months, according to the information obtained from boys in the neighborhood. This boat also was supplying mosquitoes to the near-by homes.

In other instances boats that were moored were found to contain water in which there were wiggle tails. (*Culex pipiens* in boat. Moorehead City. October 15, 1913.)

The Extraurban Problem.

In addition to the foregoing intraurban problems these towns (like other cities and towns) are faced by certain extraurban problems in connection with mosquitoes that are blown in from the marshes or brought in on railroad trains or in teams (carriages, wagons, etc.). It was, however, both interesting and significant to note that the average person with whom I discussed mosquitoes saw only the extraurban marsh problem.

(a) *Marshes.*—There are two points in particular that I desire to emphasize in connection with the marsh problem:

First. Without wishing to be interpreted as minimizing the importance of the marshes as breeding places for mosquitoes, I would sub-

mit (1) that it is impossible to give even a relatively approximate guess as to the degree of this importance until the intraurban mosquito problem is eliminated; (2) if the intraurban breeding places are eliminated—as they easily can be—the extraurban problem will be greatly decreased in importance, for the imported mosquitoes that do not find breeding places will be much less important than imported mosquitoes that do find breeding places; (3) so far as the three towns under consideration are concerned, the intraurban mosquito-breeding places are sufficient to keep up a goodly supply of mosquitoes independent of any extraurban supply; (4) the elimination of the intraurban breeding places (or at least most of them) in these three towns is a very simple matter dependent only upon intelligence, cooperation, persistency, a little physical effort, a relatively small expenditure of money, and the enforcement of rational local ordinances.

(b) *Agricultural and economic versus medical aspect of problem.*—The solution of the extraurban mosquito-breeding places is at present much more of an agricultural, engineering, and economic question than a public-health problem.

With the present relatively low density of population outside the towns in the rural districts visited, it is much more feasible to fight malaria and mosquitoes with quinine prophylaxis, by thoroughly screening against mosquitoes, by wearing light colored (white or yellow) clothing (instead of blues and black), and by eliminating the intraurban breeding places, than it is by draining the swamps which in some instances are extensive.

In its ultimate solution, the question of draining these swamps will depend upon (a) the economic question as to how much such draining will increase their money value from an agricultural point of view, and (b) the engineering question as to how feasible the draining is from an engineering point of view.

As neither of these questions is of zoological nature, I prefer not to express an opinion on them, but rather to insist that purely from the standpoint of protection against malaria and mosquitoes, drainage is neither the most feasible nor the only method at hand.

Kinds of Mosquitoes Collected.

While collecting the larvæ and pupæ, time was taken only to determine whether they were anopheline or culicine. They were all sent to Dr. L. O. Howard, and, at his request, were determined by Mr. F. Knab. In studying any given locality, specimens were taken only at a few of the many breeding places found. Arranged (1) by species, (2) by localities, and (3) by breeding places, the following insects were collected.

(1) MOSQUITOES ARRANGED BY SPECIES.

Aedes calopus Meigen (seu *Stegomyia fasciata*):

(a) In tin cans—

Jacksonville. In chicken house. October 16, 1913.

Kinston. In back yard of a physician. October 13, 1913.

At side of railroad track. October 13, 1913.

(b) In old tin paint pot—

Kinston. At side of railroad track, near houses. October 13, 1913.

(c) In discarded baby's bathtub—

Jacksonville. In back yard of home. October 16, 1913.

(e) In kegs, barrels, buckets, and boxes—

Jacksonville. In keg in yard of store. October 16, 1913.

Kinston. In barrel, at sawmill. October 16, 1913.

(f) In discarded old iron safe or stove—

Jacksonville. In open lot. October 16, 1913.

Aedes sollicitans Walker. Collected at Moorehead City. Breeding place not recorded.
October 15, 1913.*Aedes trivittatus* Say:

(h) In standing water—

Jacksonville. In pool near school. October 15, 1913.

Anopheles (? *punctipennis* or ? *quadrimaculatus*):

(b) In old tin paint pot—

Kinston. At side of railroad track. October 13, 1913.

(e) In buckets, etc.—

Moorehead City. In bucket, near shore. October 16, 1913.

(h) In standing water—

Jacksonville. In green, very slowly running, almost stagnant, streamlet,
back of school. October 16, 1913.

Kinston. In street gutter. October 14, 1913.

Moorehead City. In pool, close to school. October 15, 1913.

Culex pipiens L.:

(a) In tin cans—

Kinston. At side of railroad track. October 13, 1913.

In back yard of tenement house. October 13, 1913.

At side of railroad track. October 14, 1913.

(b) In old tin paint pot—

Kinston. At side of railroad track. October 13, 1913.

(c) In discarded baby's bathtub—

Jacksonville. In back yard of home. October 16, 1913.

(e) In kegs, barrels, buckets, and boxes—

Jacksonville. In keg, in yard of store. October 16, 1913.

Kinston. In barrel at cotton gin. October 14, 1914.

In barrel at sawmill. October 14, 1913.

Moorehead City. In bucket near shore. October 15, 1913.

(f) In old iron safes and stoves—

Jacksonville. In safe, in open lot. October 16, 1913.

Moorehead City. In stove, in street. October 15, 1913.

(h) In standing water:

Jacksonville. In pool, near river. October 16, 1913.

Kinston. In street gutter. October 14, 1913.

(i) In boats:

Jacksonville. In old boat on shore. October 16, 1913.

Culex quinquefasciatus Say.

(a) In tin cans:

Kinston. In back yard of tenement house. October 13, 1913.

(e) In kegs, barrels, and boxes:

Jacksonville. In yard of store. October 16, 1913.

(h) In standing water:

Kinston. In street gutter. October 14, 1913.

Culex restuans Theobald.

(h) In standing water:

Kinston. In street gutter. October 14, 1913.

Culex salinarius Coq.

(h) In standing water:

Kinston. In street gutter. October 14, 1913.

Moorehead City. In pool, close to school. October 15, 1913.

Culex territans Walker.

(h) In standing water:

Jacksonville. In green, very slowly running, almost stagnant streamlet; back of school. October 16, 1913.

Psorophora (Janthinosoma) columbiae.

(h) In standing water:

Kinston. In street gutter. October 14, 1913.

Stegomyia fasciata see *Aedes calopus*.

(2) MOSQUITOES ARRANGED BY LOCALITY.

Jacksonville, Onslow County, N. C.—*Aedes calopus* (seu *Stegomyia fasciata*), *A. trivittatus*, *Anopheles*, *Culex pipiens*, *C. quinquefasciatus*, *C. territans*.

Kinston, Lenoir County, N. C.—*Aedes calopus* (seu *Stegomyia fasciata*), *Anopheles*, *Culex pipiens*, *C. quinquefasciatus*, *C. restuans*, *C. salinarius*, *Psorophora (Janthinosoma) columbiae*.

Moorehead City, Carteret County, N. C.—*Aedes sollicitans*, *Anopheles*, *Culex pipiens*, *C. salinarius*.

(3) MOSQUITOES ARRANGED BY BREEDING PLACES.

(a) In tin cans.—*Aedes calopus* (seu *Stegomyia fasciata*), *Culex pipiens*, *C. quinquefasciatus*.

(b) In old tin paint pot.—*Aedes calopus* (seu *Stegomyia fasciata*), *Anopheles* sp., *Culex pipiens*.

(c) In other old tin receptacles.—*Aedes calopus* (seu *Stegomyia fasciata*), *Culex pipiens*.

(e) In barrels, boxes, buckets, or kegs.—*Aedes calopus* (seu *Stegomyia fasciata*); *Anopheles* sp., *Culex pipiens*, *C. quinquefasciatus*.

(f) In discarded old iron safe or stove.—*Aedes calopus* (seu *Stegomyia fasciata*); *Culex pipiens*.

(g) In stagnant water.—*Aedes trivittatus*, *Anopheles* sp., *Culex pipiens*, *C. quinquefasciatus*, *C. restuans*, *C. salinarius*, *C. territans*, *Psorophora (Janthinosoma) columbiae*.

(h) In boats.—*Culex pipiens*.

PLAGUE-ERADICATIVE WORK.

California.

The following report of plague-eradivative work in California for the week ended August 8, 1914, has been received from Surg. Long, of the United States Public Health Service, in charge of the work:

San Francisco, Cal.

Premises inspected.....	1,275
Premises destroyed.....	18
Nuisances abated.....	205
Poisons placed.....	18,300
Average number of traps set daily.....	1,734

Maintenance of a squirrel-free zone.

Work on private lands, labor and material being furnished by owners:

Alameda County.—189 acres of land were treated with the squirrel destructors. (Holes per acre average 25.05.)

Contra Costa County.—2,550 acres of land were covered with poisoned grain.

Report 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 of rodents found infected since May, 1907.
Cities:				
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.
Counties:				
Alameda (exclusive of Oakland and Berkeley).....	Sept. 24, 1909	Oct. 17, 1909, wood rat.	July 22, 1914	285 squirrels, 1 wood rat.
Contra Costa.....	May 17, 1914	None.....	July 13, 1914	1,556 squirrels.
Fresno.....	None.....	do.....	Oct. 27, 1911	1 squirrel.
Merced.....	do.....	do.....	July 12, 1911	5 squirrels.
Monterey.....	do.....	do.....	Apr. 10, 1914	6 squirrels.
San Benito.....	June 4, 1913	do.....	July 3, 1914	35 squirrels.
San Joaquin.....	Sept. 18, 1911	do.....	Aug. 28, 1911	18 squirrels.
San Luis Obispo.....	None.....	do.....	Jan. 29, 1910	1 squirrel.
Santa Clara.....	Aug. 31, 1910	do.....	July 23, 1913	25 squirrels.
Santa Cruz.....	None.....	do.....	May 17, 1910	3 squirrels.
Stanislaus.....	do.....	do.....	June 2, 1911	13 squirrels.

RATS COLLECTED AND EXAMINED FOR PLAGUE.

San Francisco:

Found dead.....	2
Collected.....	562
Examined.....	583
Found infected.....	None.

RATS IDENTIFIED.

<i>Mus norvegicus</i>	294
<i>Mus rattus</i>	97
<i>Mus alexandrinus</i>	78
<i>Mus musculus</i>	93

RATS TAKEN FROM STEAMERS (NOT INCLUDED ABOVE).

Steamer *Pennsylvania*:

<i>Mus alexandrinus</i>	28
<i>Mus rattus</i>	21

Steamer *Olson & Mahoney*:

<i>Mus alexandrinus</i>	22
<i>Mus rattus</i>	29

Schooner *Sehome*, *Mus norvegicus*.....

28

Squirrels collected and examined for plague.

County.	Shot.	Examined.	Found infected.
Contra Costa.....	321	321	None.
Alameda.....	214	214	Do.
San Benito.....	47	47	Do.
Santa Clara.....	34	34	Do.
Total.....	616	616	None.

OTHER ANIMALS COLLECTED AND EXAMINED FOR
PLAGUE.

Alameda County.....	2 rabbits.
Contra Costa County.....	1 coyote.
	1 weasel.

RANCHES INSPECTED AND HUNTED OVER.

Alameda County.....	27
Contra Costa County.....	43
San Benito.....	8
Santa Clara.....	3
Total.....	81

OPERATIONS ON WATER FRONT.

Vessels inspected for rat guards.....	28
Reinspections made on vessels.....	17

OPERATIONS ON WATER FRONT—continued.

New rat guards procured.....	31
Rats trapped on wharves and water front..	35
Rats trapped on vessels.....	11
Traps set on wharves and water front.....	187
Traps set on vessels.....	144
Vessels trapped on.....	15
Vessels searched for dead rats after fumiga- tion.....	6
Dead rats found on vessels after fumigation.	128
Poisons placed on water front (pieces).....	9,200
Amount of bread used on poisoning water front (loaves).....	31
Pounds of poison used on water front.....	15½

Operations are being carried on under Federal supervision on the following-named properties, labor and material being furnished by owners:

Poisoned grain and destructors.

Names.	Location.	Acres treated.		Holes treated.
		Pumps.	Grain.	
Tormey ranch.....	Contra Costa County.....		850	
Souza ranch.....	do.....		100	
Hooper Co.....	do.....		351	
Moraga Co.....	do.....		475	
Stewart ranch.....	Alameda County.....		1,170	
McLaughlin Land Co.....	do.....		800	
Southern Pacific Co.....	Merced County.....	17½	17½	1,414

½ Miles.

Three thousand and forty acres of land in Alameda County and 7½ miles in Merced County inspected.

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

Louisiana—New Orleans.

The following reports of plague-eradication work in New Orleans for the weeks ended August 15 and August 22, 1914, have been received from Asst. Surg. Gen. Rucker, of the United States Public Health Service, in charge of the work:

WEEK ENDED AUG. 15, 1914.

OUTGOING QUARANTINE.		FIELD OPERATIONS—continued.	
Number of vessels fumigated.....	101	Premises inspected.....	4,166
Pounds of sulphur burned.....	12,705	Notices served.....	1,524
Outgoing freight inspected (tons).....	12,304	Number of abatements.....	1,449
Clean bills of health issued.....	21	Number of dead inspected.....	117
Foul bills of health issued.....	7		
OVERLAND FREIGHT INSPECTION.		LABORATORY OPERATIONS.	
Cars inspected.....	6,510	Rats examined.....	9,001
Cars rat-proofed.....	1,403	Mus norvegicus.....	8,703
Cars condemned.....	5	Mus alexandrinus.....	111
Rodents killed in cars.....	1	Mus rattus.....	61
		Mus musculus.....	1,350
FIELD OPERATIONS.		Mus unclassified, putrid.....	125
Number of rats trapped.....	10,262	Total rodents received at laboratory.....	10,351
Premises fumigated.....	33	Number of suspicious rats.....	37
Poisons placed.....	57,955	Plague rats confirmed.....	17

Plague rats.

Case No.	Place.	Trapped.	Diagnosis confirmed.	Treatment of premises.
39	Richard and South Franklin.....	Aug. 9	Aug. 9	Disinfection; rat-proofing.
40	Thalia Street landing.....	do.	do.	Intensive trapping and poisoning.
41	536 Madison Street.....	Aug. 10	Aug. 10	Rat-proofing initiated; intensive trapping and poisoning.
42	532 Howard Street.....	Aug. 3	do.	Do.
43	1300 Tulane Avenue.....	Aug. 6	do.	Do.
44	1837 Marais Street.....	Aug. 10	do.	Do.
45	Ninth Street platform, Harmony Street wharf.....	do.	do.	Intensive trapping; 7 poisoning.
46	918 Toulouse Street.....	Aug. 4	do.	Disinfection; rat-proofing; intensive trapping and poisoning.
47	2043 Dryades Street.....	Aug. 11	Aug. 11	Rat-proofing initiated; intensive trapping and poisoning.
48	3211 Dryades Street.....	Aug. 6	do.	Do.
49	Warehouse Ninth and Tchoupitoulas.....	Aug. 11	do.	Do.
50	2124 Erato Street.....	Aug. 5	Aug. 12	Do.
51	359 South Rampart Street.....	Aug. 6	do.	Do.
52	2861 Baronne Street.....	Aug. 8	Aug. 13	Do.
53	3225 Dryades Street.....	Aug. 12	do.	Do.
54	625 Commerce Street.....	Aug. 10	Aug. 15	Do.
55	1535 St. Thomas Street.....	Aug. 15	do.	Do.

Human plague cases.

Suspicious human cases examined.....	8
Human plague cases.....	4

Case No.	Name and place of infection.	Date suspicious.	Diagnosis confirmed.	Treatment of premises.
15	Mrs. J. B., 1836 Iberville Street.....	Aug. 11	Aug. 12	Disinfection; rat-proofing.
16	H. S., 1836 Iberville Street.....	Aug. 13	Aug. 15	Do.
17	A. G., 1817 Carondelet Walk.....	Aug. 12	Aug. 13	Do.
18	C. S., 916 Toulouse Street.....	Aug. 15	Aug. 15	Fumigation; rat-proofing.

Summary.

Necropsies.....	4
Total rodents examined, July 8 to Aug. 15.....	44,135
Total human cases to Aug. 15.....	18
Total rodent cases to Aug. 15.....	55

WEEK ENDED AUG. 22, 1914.

OUTGOING QUARANTINE.

Number of vessels fumigated.....	98
Number of vessels fumigated with carbon monoxide.....	18
Pounds of sulphur burned.....	5,981
Outgoing freight inspected (tons).....	19,912
Clean bills of health issued.....	29
Foul bills of health issued.....	3

OVERLAND FREIGHT INSPECTION.

Cars inspected.....	5,889
Cars rat-proofed.....	1,280
Cars condemned.....	10
Rodents killed in cars.....	1

FIELD OPERATIONS.

Number of rats trapped.....	9,630
Premises fumigated.....	4
Premises disinfected.....	92

FIELD OPERATIONS—continued.

Premises inspected.....	3,482
Poisons placed.....	88,316
Notices served.....	1,450
Number of abatements.....	675
Number of dead inspected.....	117

LABORATORY OPERATIONS.

Rats examined.....	7,850
Mus norvegicus.....	7,590
Mus alexandrinus.....	80
Mus rattus.....	55
Mus musculus.....	1,476
Mus unclassified, putrid.....	122
Total rodents received at laboratory.....	9,329
Number of suspicious rats.....	15
Plague rats confirmed.....	9

Plague rats.

Case No.	Address.	Trapped.	Diagnosis confirmed.	Treatment of premises.
56	Ninth Street platform, Harmony Street Wharf.	Aug. 10	Aug. 16	Intensive trapping and poisoning.
57	527 Dumaine Street.....	do.	do.	Rat-proofing initiated. Intensive trapping and poisoning.
58	841 Burgundy Street.....	Aug. 17	Aug. 17	Do.
59	931 St. Ann Street.....	do.	do.	Do.
60	1318 South Derbigny Street.....	Aug. 18	Aug. 18	Do.
61	799 South Franklin Street.....	Aug. 19	Aug. 19	Do.
62	Toulouse Street shed.....	Aug. 1	Aug. 20	Intensive trapping and poisoning.
63	909 St. Charles Street.....	Aug. 21	Aug. 21	Rat - proofing initiated. Intensive trapping and poisoning.
64	Esplanade and Bourbon.....	do.	do.	Do.

Human plague cases.

Suspicious human cases examined.....	6
Number of human plague cases.....	2

Case No.	Name and place of infection.	Date suspicious.	Diagnosis confirmed.	Treatment of premises.
19	M. H., 1905 Bienville St.....	Aug. 14	Aug. 16	Fumigation; rat proofing initiated.
20	L. W., 1905 Bienville St.....	Aug. 17	Aug. 18	Do.

Summary.

Necropsies.....	3
Total rodents trapped to Aug. 22.....	54,885
Total rodents examined July 8 to Aug. 22.....	51,985
Total human cases to Aug. 22.....	20
Total rodent cases to Aug. 22.....	64

Washington—Seattle.

The following report of plague-eradivative work in Seattle for the week ended August 8, 1914, has been received from Surg. Lloyd, of the United States Public Health Service, in charge of the work:

RAT PROOFING.		WATER FRONT—continued.	
New buildings inspected.....	55	Rat guards installed.....	31
Floors concreted (7).....sq. ft..	52,000	Port sanitary statements issued.....	59
Basements concreted (10).....do....	10,164		
Sidewalks concreted (3).....do....	1,890		
Total concrete, new buildings.....do....	64,054		
New buildings elevated.....	2		
Old buildings inspected.....	3		
Premises rat proofed, old buildings.....	12		
Basements concreted, old building (1), sq. ft.....	1,874		
Doors rat proofed.....f.....	4		
Openings screened.....	246		
Rat holes cemented.....	87		
Rat holes screened or closed.....	140		
Buildings razed.....	4		
WATER FRONT.		LABORATORY AND RODENT OPERATIONS.	
Vessels inspected and histories recorded....	6	Dead rodents received.....	11
Vessels fumigated.....	None.	Rodents trapped and killed.....	325
		Total.....	336
		Rodents examined for plague infection.....	269
		Rodents proven plague infected.....	1
		Human bodies examined for plague.....	1
		Number pounds poison used and distributed..	50
		CLASSIFICATION OF RODENTS.	
		Mus rattus.....	20
		Mus alexandrinus.....	73
		Mus norvegicus.....	202
		Mus musculus.....	41

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

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.

IN CERTAIN STATES AND CITIES.

SMALLPOX.

Miscellaneous State Reports.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Iowa (May 1-31): ¹			Mississippi (July 1-31):		
Counties—			Counties—		
Crawford.....		1	Attala.....	2	
Story.....		1	Covington.....	1	
Total.....		2	Jones.....	4	
Iowa (July 1-31):			Kemper.....	1	
Counties—			Lauderdale.....	7	
Adams.....	3		Lee.....	2	
Blackhawk.....	1		Leflore.....	3	
Davis.....	20		Lowndes.....	2	
Henry.....	3		Monroe.....	1	
Jasper.....	1		Perry.....	1	
Jefferson.....	1		Sharkey.....	1	
Linn.....	1		Sunflower.....	3	
Lyon.....	10		Tippah.....	2	
Marion.....	1		Total.....	30	
Plymouth.....	1		North Dakota (July 1-31):		
Polk.....	9		Counties—		
Pottawattamie.....	21		Bottineau.....	2	
Union.....	1		Cass.....	1	
Warren.....	1		Morton.....	1	
Webster.....	2		Total.....	4	
Total.....	76		Vermont (July 1-31): ²		

¹ Not in report, p. 1765.

² No case.

City Reports for Week Ended Aug. 15, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Charleston, S. C.....	2		Milwaukee, Wis.....	7	
Cleveland, Ohio.....	1		Portland, Ore.....	3	
Duluth, Minn.....	1		St. Louis, Mo.....	1	
Kansas City, Kans.....	2		Toledo, Ohio.....	2	
Louisville, Ky.....	2				

TYPHOID FEVER.

State Reports for July, 1914.

Places.	New cases reported.	Places.	New cases reported.
Mississippi:		Mississippi—Continued.	
Adams County.....	6	Perry County.....	1
Alcorn County.....	11	Pike County.....	4
Amite County.....	3	Pontotoc County.....	17
Attala County.....	23	Prentiss County.....	14
Benton County.....	1	Scott County.....	7
Bolivar County.....	35	Sharkey County.....	4
Calhoun County.....	11	Simpson County.....	10
Carroll County.....	4	Smith County.....	2
Chickasaw County.....	13	Sunflower County.....	31
Choctaw County.....	6	Tallahatchie County.....	19
Claiborne County.....	2	Tate County.....	43
Clarke County.....	7	Tippah County.....	8
Clay County.....	20	Tishomingo County.....	10
Coahoma County.....	24	Tunica County.....	6
Copiah County.....	33	Union County.....	15
Covington County.....	9	Warren County.....	8
De Soto County.....	1	Washington County.....	41
Forrest County.....	7	Wayne County.....	4
Franklin County.....	20	Wilkinson County.....	3
George County.....	3	Winston County.....	15
Greene County.....	4	Yalobusha County.....	16
Grenada County.....	4	Yazoo County.....	9
Harrison County.....	2	Walthall County.....	3
Hinds County.....	10		
Holmes County.....	40	Total.....	878
Issaquena County.....	1		
Itawamba County.....	9	North Dakota:	
Jackson County.....	7	Benson County.....	1
Jasper County.....	9	Golden Valley County.....	1
Jefferson County.....	1	Williams County.....	2
Jefferson Davis County.....	7	Bottineau County.....	1
Jones County.....	38	McLean County.....	2
Kemper County.....	2	Burleigh County.....	6
Lafayette County.....	7	Dickey County.....	10
Lamar County.....	8		
Lauderdale County.....	30	Total.....	23
Lawrence County.....	9		
Leake County.....	1	Oregon:	
Lee County.....	25	Benton County.....	1
Leflore County.....	18	Clackamas County.....	1
Lincoln County.....	6	Gilliam County.....	1
Lowndes County.....	3	Lane County.....	2
Madison County.....	6	Lincoln County.....	1
Marion County.....	3	Union County.....	2
Marshall County.....	19		
Monroe County.....	14	Total.....	8
Montgomery County.....	11		
Neshoba County.....	8	Vermont:	
Newton County.....	9	Caledonia County.....	1
Noxubee County.....	12	Franklin County.....	1
Oktibbeha County.....	8	Lamoille County.....	1
Panola County.....	7		
Pearl River County.....	6	Total.....	3

TYPHOID FEVER—Continued.

City Reports for Week Ended Aug. 15, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Alameda, Cal.	1		Lynn, Mass.	5	
Albany, N. Y.	1		Manchester, N. H.	1	
Altoona, Pa.	1		Milwaukee, Wis.	2	1
Atlantic City, N. J.	1		Mobile, Ala.	4	2
Aurora, Ill.	2		Moline, Ill.	2	
Baltimore, Md.	27	2	Muscatine, Iowa	1	1
Beaver Falls, Pa.	1		Nashville, Tenn.	8	
Boston, Mass.	11		Newark, N. J.	6	2
Braddock, Pa.	1		New Castle, Pa.	1	
Bridgeport, Conn.	2		New Orleans, La.	2	3
Brockton, Mass.	1		Newton, Mass.	2	
Buffalo, N. Y.	10	1	New York, N. Y.	62	4
Cambridge, Mass.	2	1	Norfolk, Va.	4	1
Cambridge, Ohio	2		Norristown, Pa.	2	
Camden, N. J.	2		North Adams, Mass.	2	
Charleston, S. C.	3		Oakland, Cal.	1	
Chelsea, Mass.	1		Pawtucket, R. I.	1	1
Chicago, Ill.	32	2	Philadelphia, Pa.	27	1
Cincinnati, Ohio.	2		Pittsfield, Mass.	2	
Cleveland, Ohio.	15	1	Portland, Oreg.	3	
Colfeysville, Kans.	1		Portsmouth, Va.	4	
Columbus, Ohio.	19	2	Providence, R. I.	10	1
Cumberland, Md.	2		Reading, Pa.	6	
Dayton, Ohio.	6		Richmond, Va.	9	
Detroit, Mich.	11	2	Rochester, N. Y.	6	
Evansville, Ind.	3		Sacramento, Cal.	4	
Everett, Mass.	2		St. Louis, Mo.	9	1
Florence, S. C.	2		San Francisco, Cal.	1	
Harrisburg, Pa.	2		Saratoga Springs, N. Y.	1	1
Hartford, Conn.	1	1	Schenectady, N. Y.	2	
Jersey City, N. J.	2	2	Seattle, Wash.	1	
Kansas City, Kans.	3		South Bend, Ind.	1	
Kokomo, Ind.	3		Springfield, Ill.	1	
La Crosse, Wis.	1		Springfield, Mass.	3	
Little Rock, Ark.	4		Toledo, Ohio.	15	3
Los Angeles, Cal.	2		Trenton, N. J.	4	
Louisville, Ky.	4	3	Wilkes-Barre, Pa.	2	
Lowell, Mass.	3		Wilmington, N. C.	2	1
Lynchburg, Va.	6		York, Pa.	1	

CEREBROSPINAL MENINGITIS.

State Reports for July, 1914.

Places.	New cases reported.
Iowa:	
Woodbury County	2
Mississippi:	
Hinds County	1
Warren County	1
Total	2

City Reports for Week Ended Aug. 15, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Chicago, Ill.	4	2	Philadelphia, Pa.	1	
Cleveland, Ohio.	1		San Francisco, Cal.	1	1
New York, N. Y.	4	2	Tacoma, Wash.	1	1

POLIOMYELITIS (INFANTILE PARALYSIS).**State Reports for July, 1914.**

Places.	New cases reported.	Places.	New cases reported.
Mississippi:		North Dakota:	
Bolivar County.....	1	Adams County.....	1
Hinds County.....	1		
Itawamba County.....	2	Vermont:	
Lincoln County.....	1	Orleans County.....	5
Lowndes County.....	1		
Yazoo County.....	2		
Total.....	8		

City Reports for Week Ended Aug. 15, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Ann Arbor, Mich.....	1	.....	Orange, N. J.....	1	.....
Boston, Mass.....	1	.....	Providence, R. I.....	1	.....
Evansville, Ind.....	1	1	San Francisco, Cal.....	1	1
Haverhill, Mass.....	1	.....	South Bend, Ind.....	3	.....
New York, N. Y.....	3	.....	Wilksburg, Pa.....	1	.....

ERYSIPELAS.**City Reports for Week Ended Aug. 15, 1914.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Ann Arbor, Mich.....	1	.....	Newark, N. J.....	.....	2
Boston, Mass.....	.....	1	New York, N. Y.....	.....	1
Buffalo, N. Y.....	2	.....	Oakland, Cal.....	.....	1
Chicago, Ill.....	4	.....	Philadelphia, Pa.....	5	1
Cleveland, Ohio.....	3	.....	St. Louis Mo.....	1	.....
Galveston, Tex.....	.....	1	San Francisco, Cal.....	4	1
Hartford, Conn.....	2	.....	Schenectady, N. Y.....	.....	1
Los Angeles, Cal.....	2	.....	Superior, Wis.....	.....	1
Milwaukee, Wis.....	2	.....	York, Pa.....	1	.....

PELLAGRA.**City Reports for Week Ended Aug. 15, 1914.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Los Angeles, Cal.....	1	.....	Richmond, Va.....	.....	.....
Mobile, Ala.....	.....	1	Wilmington, N. C.....	.....	1
Nashville, Tenn.....	6	.....	Worcester, Mass.....	1	.....
New Orleans, La.....	1	.....			

PLAGUE.**Louisiana—New Orleans.**

During the two weeks ended August 22, 1914, 6 cases of plague in man and 26 cases in rats were reported in New Orleans, La.

PNEUMONIA.**City Reports for Week Ended Aug. 15, 1914.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.....		10	New York, N. Y.....		35
Boston, Mass.....		12	North Adams, Mass.....		1
Buffalo, N. Y.....		3	Oakland, Cal.....		2
Charleston, S. C.....		1	Pasadena, Cal.....	2	2
Chicago, Ill.....	47	28	Philadelphia, Pa.....	7	19
Cincinnati, Ohio.....		1	Portsmouth, Va.....		2
Cleveland, Ohio.....	2	5	Pottstown, Pa.....		1
Danville, Ill.....		1	Providence, R. I.....		3
Detroit, Mich.....		2	Reading, Pa.....		1
Duluth, Minn.....	1	1	Richmond, Va.....		2
Evansville, Ind.....		1	Rochester, N. Y.....		4
Haverhill, Mass.....		1	San Diego, Cal.....	1	1
Kansas City, Mo.....	2	4	San Francisco, Cal.....	3	7
Lancaster, Pa.....	2		Schenectady, N. Y.....	2	1
Los Angeles, Cal.....	10	5	Seattle, Wash.....		1
Louisville, Ky.....		2	South Omaha, Nebr.....		1
Nashville, Tenn.....		4	Trenton, N. J.....		6
New Bedford, Mass.....		1	Wilkes-Barre, Pa.....		1
Newburyport, Mass.....		1	Wilmington, N. C.....		1
New Orleans, La.....		4			

TETANUS.**City Reports for Week Ended Aug. 15, 1914.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
New York, N. Y.....	1	2	St. Louis, Mo.....	1	1
Philadelphia, Pa.....	1	1	Wilkes-Barre, Pa.....		1
Richmond, Va.....		2			

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.**State Reports for July, 1914.**

States.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.
Iowa.....	33		21
Mississippi.....	65	416	9
North Dakota.....	26	15	19
Oregon.....	23	22	49
Vermont.....	17	44	38

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

City Reports for Week Ended Aug. 15, 1914.

Cities.	Population as of July 1, 1914 (estimated by United States Census Bureau).	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tubercu- losis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.	579,590	202	10	1	2	.....	15	2	18	23
Boston, Mass.	733,802	188	37	4	29	2	8	1	34	22
Chicago, Ill.	2,393,325	582	112	11	24	2	24	1	220	65
Cleveland, Ohio.	639,431	169	24	1	3	.....	9	.....	46	18
Detroit, Mich.	537,650	161	20	.....	.....	.....	5	1	9	6
New York, N. Y.	5,333,539	1,423	160	9	126	5	62	2	353	165
Philadelphia, Pa.	1,657,810	470	27	3	11	.....	11	.....	103	55
St. Louis, Mo.	734,667	198	28	1	2	.....	17	2	36	10
From 300,000 to 500,000 inhabitants:										
Buffalo, N. Y.	454,112	117	20	.....	7	.....	8	.....	33	15
Cincinnati, Ohio.	402,175	82	10	1	1	.....	3	.....	.....	12
Los Angeles, Cal.	438,914	93	1	1	6	.....	5	.....	45	12
Milwaukee, Wis.	417,054	98	10	.....	3	.....	3	1	19	6
Newark, N. J.	389,106	120	10	1	7	.....	9	1	31	13
New Orleans, La.	361,221	118	12	1	.....	.....	2	.....	24	16
San Francisco, Cal.	448,502	.....	5	.....	39	.....	6	.....	13	18
From 200,000 to 300,000 inhabitants:										
Columbus, Ohio.	204,567	52	2	.....	1	.....	2	.....	1	5
Jersey City, N. J.	293,921	82	12	2	1	.....	5	.....	24	7
Kansas City, Mo.	281,911	.....	2	.....	.....	.....	1	.....	1	2
Louisville, Ky.	235,114	78	1	.....	3	1	.....	.....	10	47
Portland, Oreg.	260,601	33	2	.....	1	.....	.....	.....	4	3
Providence, R. I.	245,090	65	10	.....	1	1	1	.....	.....	6
Rochester, N. Y.	241,518	54	.....	.....	3	.....	3	1	4	2
Seattle, Wash.	313,029	60	.....	.....	1	.....	.....	.....	14	2
From 100,000 to 200,000 inhabitants:										
Albany, N. Y.	102,961	25	1	.....	.....	.....	26	.....	2	4
Bridgeport, Conn.	115,289	45	4	1	.....	.....	3	1	3	3
Cambridge, Mass.	110,357	27	1	1	1	.....	.....	.....	5	3
Camden, N. J.	102,465	.....	.....	.....	.....	.....	.....	.....	4	.....
Dayton, Ohio.	123,794	26	4	.....	.....	.....	1	.....	4	2
Hartford, Conn.	107,038	25	5	1	.....	.....	1	.....	2	.....
Lowell, Mass.	111,004	27	2	.....	7	.....	2	.....	7	3
Nashville, Tenn.	114,899	29	.....	.....	1	.....	4	.....	4	1
New Bedford, Mass.	111,230	30	2	.....	2	.....	1	.....	11	5
Oakland, Cal.	183,002	30	1	.....	5	.....	1	.....	4	4
Reading, Pa.	103,361	34	.....	.....	.....	.....	4	.....	2	2
Richmond, Va.	134,917	40	2	1	.....	.....	.....	.....	3	2
Springfield, Mass.	100,375	22	1	.....	.....	.....	1	.....	4	1
Toledo, Ohio.	184,126	57	7	.....	2	.....	.....	.....	18	4
Trenton, N. J.	106,831	51	1	.....	1	.....	2	.....	5	4
Worcester, Mass.	157,732	51	7	1	.....	.....	1	.....	4	4
From 50,000 to 100,000 inhabitants:										
Altoona, Pa.	56,553	11	1	.....	.....	.....	1	.....	.....	3
Atlantic City, N. J.	53,952	11	1	.....	.....	.....	.....	.....	2	.....
Bayonne, N. J.	65,271	.....	2	.....	.....	.....	5	.....	5	.....
Berkeley, Cal.	52,105	9	.....	.....	5	.....	.....	.....	3	.....
Binghamton, N. Y.	52,191	17	1	.....	2	.....	1	.....	2	1
Brockton, Mass.	64,043	12	4	.....	.....	.....	2	.....	3	1
Charleston, S. C.	60,121	28	2	.....	.....	.....	.....	.....	.....	3
Duluth, Minn.	89,331	20	2	.....	1	.....	3	1	1	.....
Evansville, Ind.	71,284	14	3	.....	2	.....	.....	.....	.....	.....
Harrisburg, Pa.	69,493	21	.....	.....	1	.....	.....	.....	2	2
Hoboken, N. J.	74,504	.....	2	.....	1	.....	.....	.....	3	.....
Johnstown, Pa.	64,642	20	1	2	1	.....	3	.....	.....	1
Kansas City, Kans.	94,271	.....	.....	.....	.....	.....	.....	.....	3	1
Little Rock, Ark.	53,811	10	.....	.....	2	.....	.....	.....	1	.....
Lynn, Mass.	98,207	18	.....	.....	.....	.....	5	.....	2	.....
Manchester, N. H.	75,635	23	1	.....	3	.....	.....	.....	.....	.....
Mobile, Ala.	55,573	19	.....	.....	.....	.....	.....	.....	.....	3
Norfolk, Va.	86,540	.....	1	.....	.....	.....	.....	.....	2	.....
Passaic, N. J.	66,270	18	1	.....	2	.....	1	.....	1	1
Pawtucket, R. I.	56,501	13	.....	.....	.....	.....	1	.....	.....	1
Schenectady, N. Y.	90,503	16	3	.....	3	.....	.....	.....	.....	.....
South Bend, Ind.	65,114	16	.....	.....	1	.....	.....	.....	.....	.....
Springfield, Ill.	57,972	11	.....	.....	.....	.....	1	.....	3	3
Springfield, Ohio.	30,058	10	1	.....	.....	.....	.....	.....	.....	.....
Wilkes-Barre, Pa.	73,660	24	7	1	2	.....	.....	.....	3	2

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

City Reports for Week Ended Aug. 15, 1914—Continued.

Cities.	Population as of July 1, 1914 (esti- mated by United States census Bureau).	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis		
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
From 25,000 to 50,000 inhabitants:											
Alameda, Cal.	26,330	3									
Chelsea, Mass.	32,452	10	1				1			1	
Chicopee, Mass.	28,057	9	2						1	1	
Danville, Ill.	30,847	11			1					1	
East Orange, N. J.	39,852		1		1				1		
Everett, Mass.	37,381	7	2							1	
Fitchburg, Mass.	40,507	7							1		
Galveston, Tex.	40,289	13	1							2	
Haverhill, Mass.	47,071	17					1		2	2	
La Crosse, Wis.	31,367	10	1							1	
Lancaster, Pa.	49,685		2						1		
Lexington, Ky.	38,819	15		1	2		1		4	1	
Lynchburg, Va.	31,830	6			1		1		2		
Malden, Mass.	48,979	7	2						1	1	
Medford, Mass.	25,240	3	1								
Moline, Ill.	26,402	6	1							1	
New Castle, Pa.	39,569		1								
Newton, Mass.	42,455								4	1	
Niagara Falls, N. Y.	35,127	11	1		1				1	1	
Norristown, Pa.	30,265	5	1								
Orange, N. J.	31,968	7	1				1			3	
Pasadena, Cal.	40,880	10							1		
Pittsfield, Mass.	36,531	14	2				1			4	
Portsmouth, Va.	37,569	11							2	3	
Racine, Wis.	44,528	8									
Roanoke, Va.	40,574	9								2	
Sacramento, Cal.	62,717	9	1		7				1	1	
San Diego, Cal.	48,900		1						5	1	
South Omaha, Nebr.	26,368	8		1							
Superior, Wis.	44,344	6					1				
Taunton, Mass.	35,631	14							1	2	
Waltham, Mass.	29,688	1							2		
West Hoboken, N. J.	40,647	8	5	1			5		4		
Wilmington, N. C.	27,781	10	1								
York, Pa.	49,430		1						1		
Less than 25,000 inhabitants:											
Ann Arbor, Mich.	14,948	6	1		1				4		
Braddock, Pa.	20,935				1		1				
Cairo, Ill.	15,392	6								1	
Cambridge, Ohio.	12,640	1									
Clinton, Mass.	13,075	1								1	
Columbus, Ind.	9,103	3							1	1	
Concord, N. H.	22,291	9			2						
Cumberland, Md.	23,846	10	1						5	1	
Florence, S. C.		4									
Grand Haven, Mich.		1									
Kearney, N. J.	21,967	4									
Key West, Fla.	21,150	4								1	
Kokomo, Ind.	19,694	7							1	1	
Manitowoc, Wis.	13,553		1						4	4	
Melrose, Mass.	16,887	3					1				
Montclair, N. J.	21,782	7					1		3	1	
Muncie, Ind.	24,969	6			2						
Muscatine, Iowa	17,074	4									
Nanticoke, Pa.	21,756	8	2								
Natchez, Miss.	11,791								1		
Newburyport, Mass.	16,147	6									
New London, Conn.	20,557	7							1		
North Adams, Mass.	22,019	8			2				1		
Northampton, Mass.	19,766	7									
Palmer, Mass.	8,955	1									
Palo Alto, Cal.					1				1		
Pascagoula, Miss.					4						
Plainfield, N. J.	22,755	5			7						
Pottstown, Pa.	16,408	11								1	
Rutland, Vt.	14,417	4									
Saratoga Springs, N. Y.	12,813	4								1	
Steelton, Pa.	15,126	1							1		
Vineyard Haven, Mass.		1									
Weymouth, Mass.	13,564	6									
Wilksburg, Pa.	21,701	6					3			2	

IN INSULAR POSSESSIONS.

HAWAII.

Plague—Paauhau.

Surg. Trotter, of the Public Health Service, reported by telegraph that a case of plague at Paauhau, Hawaii, had resulted fatally August 17, 1914.

Examination of Rats and Mongoose.

Rats and mongoose have been examined in Hawaii as follows: Hilo, week ended July 25, 1914, 2,256; Honolulu, week ended August 1, 1914, 293. No plague-infected animal was found.

(2324)

FOREIGN REPORTS.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended Sept. 4, 1914.

[From medical officers of the Public Health Service, American consuls, and other sources.]

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
India:				
Bassein.....	June 14-20.....	1	1	
Calcutta.....	June 28-July 11....		10	
Negapatam.....	June 14-20.....	6	6	
Straits Settlements:				
Singapore.....	June 21-July 5.....	13	13	
Turkey in Europe:				
Constantinople ¹	July 15.....	1		

¹ Bulletin Quarantenaire d'Egypte, July 23, 1914.

PLAGUE.

China:				
Hongkong.....	July 12-18.....	11	8	
Egypt.....				Jan. 1-July 21: Cases, 167; deaths, 90.
Alexandria.....	July 12-20.....	3	2	
Port Said.....	July 16-21.....	4	3	
Hawaii:				
Pauahau.....	Aug. 17.....	1	1	
India:				May 31-July 4: Cases, 7,831; deaths, 7,124.
Bassein.....	June 14-20.....	3	3	
Calcutta.....	June 28-July 11....		20	
Moulmine.....	June 14-20.....	10	10	
Indo-China:				
Saigon.....	July 14-20.....	12	2	

SMALLPOX.

Australia:				
New South Wales—Sydney.....				July 3-23: Cases, 41 in the metropolitan area, and 15 cases in the country district.
Brazil:				
Pernambuco.....	May 16-July 15....		15	
China:				
Hongkong.....	July 12-18.....	1	1	
Egypt:				
Alexandria.....	July 16-22.....	4	1	
Cairo.....	July 9-15.....	9	8	
Italy:				
Turin.....	July 20-26.....	2		
Mexico:				
Mexico.....	Jan. 17-Feb. 21....	99	16	
Monterey.....	Aug. 10-16.....		1	
Turkey in Asia:				
Beirut.....	July 12-18.....	8	3	
Jerusalem.....	June 14-30.....	3	2	
Do.....	June 5-25.....	19		
Turkey in Europe:				
Saloniki.....	July 12-Aug. 1....	7		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 27 to Aug. 28, 1914.****CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo.....	June 14-20.....	1	1	Present in Kumbalagamuwa and the neighboring tea estates.
Uda Fusselawa, district.....	June 7-13.....			
China:				
Hankow.....	July 12-18.....	1		From up-country districts.
Chaochow fu.....	July 4.....			Present.
Canton.....	Jan. 1-Apr. 30.....	4		
Hongkong.....	May 17-23.....	1	1	
Dutch East Indies:				
Java—				
Batavia.....	Aug. 28-July 4....	1	1	
Moluccas—				
Menado.....	June 21-27.....	42	14	In Bali and Lombok.
Sunda Islands.....	June 6-13.....	44	23	
India:				
Bassein.....	Apr. 26-June 13....	81	63	
Bombay.....	May 17-July 11....	85	45	
Calcutta.....	May 10-June 27....		225	Aug. 17, present.
Madras.....	May 31-July 18....	57	42	
Moulmine.....	June 7-13.....	1	1	
Negapatam.....	May 14-June 13....	11	11	
Rangoon.....	Apr. 1-May 31....	8	7	
Indo-China.....				Jan. 1-May 10: Cases, 125; deaths, 64. May 21-June 20: Cases, 22.
Battambang.....	June 11-20.....	4		
Saigon.....	June 2-29.....	23	9	
Persia:				
Anzali.....	June 15.....	1		
Philippine Islands:				
Manila.....	July 4-11.....	3	2	
Russia:				
Podolia—				
Letichev.....	July 10.....	2	2	
Siam:				
Bangkok.....	Apr. 19-June 13....		253	
Straits Settlements:				
Singapore.....	May 10-June 20....	70	61	
Turkey in Europe:				
Adrianople.....	May 14-19.....		2	

YELLOW FEVER.

Brazil:				
Bahia.....	May 10-July 25....	16	13	
Pernambuco.....	May 1-15.....		1	
Ecuador:				
Guayaquil.....	May 1-31.....	3	1	
Venezuela:				
Caracas.....	June 1-30.....	1	1	Present in light form. No cases since.
Maracaibo.....	June 15.....			

PLAGUE.

Brazil:				
Bahia.....	May 17-July 25....	6	6	
Pernambuco.....	May 1-15.....		2	
Ceylon:				
Colombo.....	May 19-July 11....	82	78	Jan. 1-Apr. 30, present in Hokschan, Shuntak, Tangsching, and Tungkun. Apr. 3-17, present in Kan-lai and Sao-hu, 20 miles distant from Pakhoi. June 6, still present in vicinity of Swatow. June 20, improving in the Chaochow and Punning districts.
China.....				
Amoy.....	June 20-July 4....			Present. July 13, still present, and present in inland villages.
Kulangsu.....	May 20.....	1		
Canton.....	Jan. 1-Apr. 30.....	378		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 27 to Aug. 28, 1914—Continued.****PLAGUE—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
China—Continued.				
Chinchew.....	May 30-June 6....			Present 30 miles north from Amoy.
Fatshan.....	May 13.....			Present.
Hongkong.....	May 10-July 11....	883	725	Total, Jan. 4-July 11: Cases, 2,102; deaths, 1,658.
Cuba.....				Total, Mar. 5-Aug. 14: Cases, 43; deaths, 9.
El Caney.....	Aug. 4.....	2		In vicinity.
Santiago.....				June 30-Aug. 14: Cases, 14; deaths 3. Including previous reports.
Dutch East Indies:				
Provinces.....				Total, Apr. 1-May 31: Cases, 2,482; deaths, 2,220.
Kediri.....	Apr. 1-May 30....	472	454	
Madison.....	do.....	173	151	
Paserocean.....	do.....	1,699	1,486	
Surabaya.....	do.....	138	129	
Ecuador:				
Guayaquil.....	May 1-June 30....	6	3	
Egypt.....				Total, Jan. 1-July 13: Cases, 159; deaths, 85.
Alexandria.....	June 2-July 11....	18	7	
Port Said.....	June 2-July 15....	13	5	
Provinces—				
Assiout.....	May 25-June 20....	5	1	
Charkish.....	July 13.....	1	1	
Fayoum.....	May 27-July 5....	7	2	
Gizeh.....	May 27-June 24....	6	3	
Menouf.....	June 17.....	1		
Minieh.....	May 23-July 12....	10	5	
German East Africa:				
Dar es Salaam.....	May 2-June 10....	7	3	
Muanza.....	Feb. 21-Mar. 18....	7	5	
Great Britain:				
Liverpool.....	Aug. 8-12.....	9	2	
India.....				Total, Apr. 27-May 30: Cases, 38,124; deaths, 33,374.
Bassein.....	Apr. 26-June 6....	28	26	
Bombay.....	May 17-July 18....	492	409	
Calcutta.....	May 10-June 27....		120	
Karachi.....	May 24-July 18....	28	27	
Moulmine.....	Apr. 26-June 13....	47	46	
Rangoon.....	Apr. 1-May 31....	397	376	
Indo-China.....				Total, Jan. 1-Apr. 10: Cases, 1,249; deaths, 1,114. May 11-June 20: Cases, 121.
Cholon.....	May 11-June 20....	17		
Phum Penh.....	do.....	24		
Saigon.....	May 19-June 29....	55	21	
Japan.....				Total, Jan. 1-May 31: Cases, 39; deaths, 34.
Hodogaya.....	June 9-July 3....	3		Near Yokohama.
O-No district.....	June 9-15.....	1		
Taiwan (Formosa)—				
Kagi.....	May 3-July 19....	283	253	
Tokyo.....	June 22-July 25....	13	4	
Yokohama.....	July 5-Aug. 1.....	2	3	Total, Apr. 18-July 25: Cases, 45. And vicinity. Total May 23-Aug. 1: Cases, 21; deaths, 18.
Mauritius.....	Apr. 17-23.....	2		
Peru:				
Ancachs.....				No report of deaths received.
Chimbote.....	Mar. 23-May 2....			Present.
Quarhuay (Huaylas).....	do.....			Do.
Samanca.....	do.....			Do.
Arequipa—				
Mollendo.....	Mar. 23-June 7....	12		
Cahamarca.....				
Contumaza.....	Mar. 23-May 2....	3		
Lambayeque—				
Chiclayo.....	do.....	3		
Guadalupe.....	do.....	1		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 27 to Aug. 28, 1914—Continued.****PLAGUE—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Peru—Continued.				
Libertad—				
Huacamarca (Otzuco)...	Mar. 23-May 30....	.....	.....	Present.
Pichipampa (Otzuco)...	Mar. 24-30.....	4	.....	
Salaverry.....	Mar. 23-May 2.....	1	.....	
San Pedro.....	do.....	8	.....	From Pacasmayo.
Unigambal (Santiago de Chuco).....	do.....	16	.....	
Trujillo.....	Mar. 22-June 7....	16	.....	
Lima—				
Lima.....	do.....	15	.....	
Surco (Matucana).....	Mar. 23-May 30....	4	.....	July 7, still present.
Piura—				
Catacaos.....	Mar. 23-May 2....	3	.....	
Piura.....	Mar. 23-May 30....	7	.....	
Philippine Islands:				
Manila.....	May 17-30.....	3	3	May 17, 1 case from s. s. Taisang; from Amoy, May 23, 1 case from s. s. Linan from Amoy, June 12-20, a fatal case from s. s. Linan from Amoy; June 17 a fatal case in the Philippine General Hospital.
Cebu.....				May 20, 1 case on s. s. Rubi from Hongkong.
Russia:				
Astrakhan, government—				
Arstanskoje-Tebe.....	May 25-June 22....	8	2	
Bulanai.....	May 25-June 14....	10	10	7 of these cases pneumonic.
Senegal:				
Dakar.....	May 15.....	12	.....	May 17-23, 5 deaths daily among natives.
Siam:				
Bangkok.....	Apr. 19-June 13....	.....	9	
Straits Settlements:				
Singapore.....	May 10-16.....	2	2	
Turkey in Asia:				
Basra.....	June 24-July 19....	16	8	
Beirut.....	June 16-July 6....	2	.....	
Jaffa.....	June 5-27.....	4	3	

SMALLPOX.

Algeria:				
Departments—				
Algiers.....	Mar. 1-May 31....	7	.....	
Constantine.....	do.....	7	.....	
Oran.....	do.....	57	.....	
Arabia:				
Aden.....	June 10-16.....	.....	1	
Australia:				
New South Wales—				
Sydney.....				Total May 8-July 2: Cases, 113 in the metropolitan area and 30 cases in the country districts.
Western Australia—				
Bunbury quarantine station.	May 5-June 12....	8	1	From s. s. Kilchattan from Bombay, including previous report.
Austria-Hungary:				
Galicia.....	May 17-23.....	10	.....	
Upper Austria.....	do.....	3	.....	
Belgium:				
Liege.....	June 1-6.....	.....	3	
Brazil:				
Bahia.....	June 1-July 25....	9	.....	
Para.....	May 24-30.....	.....	1	
Pernambuco.....	May 1-15.....	.....	12	
Rio de Janeiro.....	May 10-July 18....	790	98	
Canada:				
Manitoba—				
Winnipeg.....	June 14-July 25....	8	.....	
Ontario—				
Niagara Falls.....	July 15-21.....	1	.....	
Ottawa.....	July 26-Aug. 1....	1	.....	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 27 to Aug. 28, 1914—Continued.****SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
Prince Edward Island— Charlottetown.....	July 16-22.....	1		
Quebec— Quebec.....	July 11-Aug. 8.....	2		
Canary Islands: Teneriffe— Santa Cruz.....	June 28-Aug. 1.....		7	
Ceylon: Colombo.....	May 19-23.....	1		
Uva district— Passara.....	June 7-13.....	39	11	Among coolies from India.
China.....				May 16-23, present in Kaying and increasing in Choa Chow.
Amoy.....	May 17-June 13.....			Present.
Canton.....	Jan. 1-Apr. 30.....	21		
Chungking.....	May 23.....			Endemic.
Dairen.....	June 7-July 4.....	2		
Hongkong.....	May 10-July 4.....	14	11	Total Jan. 4-May 30: Cases, 93; deaths, 65.
Nanking.....	May 23.....			Always prevalent.
Newchwang.....	June 13.....			Do.
Pakhoi.....	Apr. 17.....			Present, and in San-hu, 20 miles distant.
Shanghai.....	May 18-July 12.....	10	13	Deaths among natives.
Tientsin.....	June 6.....	1		
Tsingtau.....	May 19-June 20.....	19	3	
Dutch East Indies:				
Borneo.....	May 17-June 27.....	301	63	In the western part.
Java.....				In the western part. May 3-July 4; Cases, 1,090; deaths, 202, including Batavia.
Batavia.....	May 3-July 4.....	121	41	
Egypt:				
Alexandria.....	June 4-July 8.....	8	6	
Cairo.....	May 21-July 15.....	15	56	
Port Said.....	May 21-June 6.....	4		
France:				
Bordeaux.....	June 7-July 11.....		4	
Marseille.....	May 1-31.....		2	
Paris.....	May 24-July 11.....	23	1	
Germany:				May 31-July 11: Cases, 9.
Hamburg.....	June 7-27.....	5		
Kohl.....	May 1-31.....		1	
Gibraltar.....	June 8-27.....	1	1	
Great Britain:				
Leeds.....	June 6-July 18.....	4		
Southampton.....	June 29-July 4.....	1		
Greece:				
Athens.....	July 6-12.....		1	
India:				
Bombay.....	May 19-July 18.....	65	41	
Calcutta.....	May 10-June 27.....		173	
Karachi.....	May 24-July 4.....	10	2	
Madras.....	May 17-July 18.....	18	10	
Rangoon.....	Apr. 1-10.....	7	1	
Indo-China:				
Saigon.....	May 12-18.....	2		
Japan.....				Total Jan. 1-May 31: Cases, 238; deaths, 55.
Kobe.....	June 19-23.....	1		
Nagasaki.....	May 18-July 26.....	54	13	
Taiwan (Formosa).....	May 3-July 11.....	13	6	
Yokohama.....	June 23-29.....	1		
Mexico:				
Chihuahua.....	May 18-Aug. 9.....		32	
Juarez.....	Aug. 1.....	2		
Mazatlan.....	June 17-30.....	2	1	
Monterey.....	June 30-July 26.....		7	
Tampico.....	May 11-July 31.....		70	
Vera Cruz.....	June 1-July 25.....	15	6	
Norway:				
Trondhjem.....	June 1-July 31.....	12		
Peru:				
Callao.....	June 22.....			Decreased.
Lima.....	do.....			Do.
Portugal:				
Lisbon.....	June 14-July 25.....	5		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from June 27 to Aug. 28, 1914—Continued.****SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Batum.....	Feb. 1-Apr. 30....	7	.....	
Moscow.....	May 10-July 4....	33	7	
Odessa.....	May 10-Aug. 4....	6	.....	
Riga.....	May 31-July 11....	12	.....	
St. Petersburg.....	May 24-July 4....	75	19	
Vladivostok.....	Apr. 22-May 13....	8	1	
Warsaw.....	Feb. 1-Apr. 25....	92	44	
Servia:				
Belgrade.....	May 25-July 19....	12	2	
Spain:				
Barcelona.....	June 14-July 31....	.....	28	
Cadiz.....	May 1-31.....	.....	5	
Madrid.....	June 1-30.....	.....	5	
Valencia.....	June 7-Aug. 1....	32	11	
Switzerland:				
Basel, Canton.....	May 31-June 20....	14	.....	
Grisons, Canton.....	June 7-13.....	1	.....	
Turkey in Asia:				
Beirut.....	June 1-27.....	25	10	
Damascus.....	Mar. 15-July 11....	570	277	
Jerusalem.....	May 3-June 13....	11	.....	
Smyrna.....	May 13-June 13....	.....	5	
Trebizond.....	May 19-June 27....	.....	.....	Present.
Turkey in Europe:				
Constantinople.....	June 14-July 11....	.....	3	
Saloniki.....	May 31-July 11....	8	32	June 6: Present in a mild form among 20,000 refugees from Asiatic Turkey, Chio, and Mitylene.
Union of South Africa:				
Pretoria.....	May 9-23.....	1	.....	

SANITARY LEGISLATION.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

NEW YORK.

Labor Camps—Sanitary Regulation of.¹ (Reg. Industrial Board, Dept. of Labor, June 1, 1914.)

CONSTRUCTION.

RULE 200. *Roof, walls, and floors.*—The roof and the walls of every dwelling, shack, tenement, barracks, or living quarters of any kind or description must be so constructed as to be watertight.

RULE 201. In new structures the floor of every room used for sleeping purposes must be built of wood, asphalt, or concrete with smooth finish of nonabsorbent cement; if built of wood it must be raised at least one foot from the ground and the boards used therefor must be planed, tongued and grooved, and at least seven-eighths inch in thickness; if built of asphalt or concrete, it must be laid on a solid foundation other than earth, and must be at least 2 inches in thickness. All such work must be executed in a thorough workmanlike manner.

RULE 202. In existing structures the floor, if built of wood, must be raised above the ground a sufficient distance to allow free circulation of air beneath it.

RULE 203. The floor of all such living quarters must be kept in good repair. If any floor is broken or has such cracks or knotholes that it can not be kept in a dry and sanitary condition, it must be repaired or replaced by a new floor.

RULE 204. *Interior partitions.*—In every existing structure the interior partitions must be at least 10 feet in height or must extend to the ceiling or roof. In every structure hereafter erected, every such interior partition must extend to the ceiling or roof. Every interior partition must be solid and without open cracks or knot holes.

RULE 205. *Air space and windows.*—In every room used for sleeping purposes there must be provided not less than 400 cubic feet of air space for each person except that not less than 200 cubic feet may be provided for each child under 14 years of age.

¹ The following provision is contained in chapter 559, New York Laws, 1913 (Public Health Reports, Oct. 3, 1913, pp. 2082-2083): "Each sanitary inspector, under the direction of the commissioner of health, and subject to the provisions of the sanitary code, shall * * * perform the following duties: * * * 8. Inspect from time to time all labor camps within his district and enforce the regulations of the public health council in relation thereto. * * *"

Chap. 195, Laws of 1913, contains the following section:

"Sec. 98. *Labor camps.*—Every employer operating a factory and furnishing to the employees thereof any living quarters at any place outside the factory, either directly or through any third person by contract or otherwise, shall maintain such living quarters and every part thereof in a thoroughly sanitary condition. The industrial board shall have power to make rules and regulations to provide for the sanitation of such living quarters. The commissioner of labor may enter and inspect any such living quarters."

RULE 206. All living quarters other than tents must be built with windows. Every room must have at least one window opening directly to the outer air. Every window must be set with glass and so constructed that it can be easily opened. Every window opening must have an area of at least 4 square feet and must be at least 1 foot high. Every window opening must be protected by mesh, wire netting or other screening to prevent the entrance of any person, but not to interfere with the free circulation of air.

(NOTE.—This rule is to prevent trespass while encouraging the opening of windows for ventilation.)

RULE 207. In every existing room used for sleeping purposes having not more than one window a transom opening not less than 2 feet by 6 inches must be cut to the outer air. Such transom opening must be kept open to admit air but may be covered with wire netting or other screening.

RULE 208. In every structure hereafter erected, unless ventilation through the roof is provided, there must be a window or door opening in at least two walls of every room, one of which may open upon a hall or passageway opening to the outer air.

RULE 209. *Kitchen and dining room.*—There must be maintained in connection with all living quarters kitchen and dining-room accommodation under shelter, which shall have seats for at least 50 per cent of all persons dwelling in such living quarters, who are not otherwise provided with such accommodations under shelter separate from their sleeping rooms.

RULE 210. *Beds.*—Beds, cots, or bunks must be provided in every room used for sleeping purposes, in sufficient numbers for the occupants of the room. Every such bed, cot, or bunk must be raised at least 12 inches from the floor. No bed or bunk may be placed one above the other.

RULE 211. No bed, cot, or bunk may be placed at any time nearer than 2 feet from the side of any other bed, cot, or bunk in the same room.

RULE 212. *Privies and water-closets.*—Separate privies or water-closets must be provided for each sex, and at the entrance clearly marked "Men" or "Women," in English and the principal native languages of the persons living in the camp. No person shall be allowed to use or frequent a privy or water-closet assigned to the opposite sex.

RULE 213. No privy may be located less than 25 feet distant from any living quarters, and the entrance to every privy must be not less than 20 feet distant from the entrance to a privy assigned to the opposite sex. One privy or water-closet which is readily accessible must be supplied for every 20 persons of each sex occupying the living quarters. For more than 100 persons, one privy or water-closet may be supplied for every 25 persons.

RULE 214. The entrance to every privy or water-closet compartment must be screened by a vestibule or by a stationary screen at least 2 feet wider than the entrance door, extending to a height of at least 6½ feet.

RULE 215. Every privy vault must be water-tight and fly proof and the walls of every privy vault hereafter built must extend not less than 12 inches above the surface of the surrounding ground.

RULE 216. Every privy must be ventilated by an unobstructed opening to the outer air, other than the door, which has an area of at least 144 square inches. Every privy must be provided with a door. Every window and ventilating opening of a privy must be protected by metal screens which will prevent the entrance of flies, and every door must be provided with a self-closing device to keep it closed.

RULE 217. *Water supply.*—Water must be supplied for drinking and washing purposes in every camp. It must be obtained from a source and in quantities satisfactory to the commissioner of labor. Every employer must furnish such water at the living quarters provided for his employees.

RULE 218. Where there is no stream or lake accessible for bathing, and no baths are provided for the use of the camp, shacks or sheds, separate for each sex, removed from each other and at all times accessible, must be provided for bathing purposes.

RULE 219. Tubs and water for laundry purposes must be provided in or adjacent to all living quarters.

RULE 220. Drainage.—The premises and surrounding ground of all living quarters and areas or passageways connected therewith must be kept thoroughly drained so that no stagnant water can collect or remain thereon.

RULE 221. Readily accessible slop sinks must be provided to carry off all liquid waste. The pouring of such waste upon the ground near the living quarters is prohibited. All waste must be disposed of in such a way as not to contaminate the water supply of the camp, and in accordance with any rules of the State department of health and regulations of the public health council relating thereto.

MAINTENANCE.

RULE 222.—Housing.—No room located more than one floor above the ground floor in any house of frame construction may be used for sleeping quarters without the written consent of the commissioner of labor.

RULE 223. At least two rooms must be provided for every family composed of husband and wife and one or more children above the age of 10 years.

RULE 224. Sleeping accommodations must be provided in rooms which shall be separate for each sex for all males and females other than those who are housed together with their own immediate families.

RULE 225—Beds and bedding.—At the beginning of every season all living quarters and all beds, cots or bunks, mattresses, pillows and covers must be entirely clean and free from all vermin. The commissioner of labor may at any time thereafter order the immediate cleansing and disinfection of such premises and articles, or destruction of such articles.

RULE 226—Refuse and garbage receptacles.—Metal, sheet-iron or sheet-iron lined receptacles, or other receptacles of solid construction, with covers so constructed and arranged as to prevent the entrance of flies and other insects, must be placed adjacent and convenient to all living quarters. All refuse and garbage must be placed therein, and at least every other day, or whenever the receptacle is full, must be destroyed by fire, or removed to a safe distance from any building or dwelling and so deposited as not to create a nuisance.

RULE 227—Privies.—Every privy vault must be emptied at least once a month, and at more frequent intervals if necessary. In no case must it be allowed to overflow. Removable metal receptacles or cans may be used instead of privy vaults if they are water-tight and emptied whenever necessary to prevent overflowing. Dry sand, fine dry earth, lime, or sawdust must at all times be provided in a receptacle in every privy and used at frequent intervals to deodorize the contents of the vault.

RULE 228. Every privy must be cleaned by the thorough removal of all excreta to a safe distance from any building or dwelling, and such excreta must be so deposited and so disposed of on or beneath the surface of the ground as not to create a nuisance or permit the collection of flies or other insects.

RULE 229—Cleanliness.—Every dwelling, shack, tenement, barracks, or living quarters of any kind or description and every part thereof and all the premises, slop sinks and privies connected therewith, must at all times be kept in a clean and sanitary condition and free from dirt, filth, garbage and rubbish.

RULE 230. Caretaker.—In every camp composed of 10 or more persons there must be at least 1 employee whose specific duty it shall be to enforce the rules as to cleanliness and the removal of dirt, filth, garbage, rubbish, and excreta.

RULE 231. *Duties of employer.*—Every employer operating a factory and furnishing to the employees thereof any living quarters shall be responsible for the enforcement of every rule herein contained.

RULE 232. *Duties of employees.*—Every person living in any living quarters to which these rules apply shall also be responsible for the carrying out of all provisions which immediately concern or affect his conduct.

SECTION 1275 OF THE PENAL LAW.

Violations of provisions of the industrial code.—Any person who violates or does not comply with any provision of the * * * industrial code * * * is guilty of a misdemeanor, and, upon conviction, shall be punished * * * for a first offense by a fine of not less than \$20 nor more than \$50; for a second offense by a fine of not less than \$50 nor more than \$250, or by imprisonment for not more than 30 days, or by both such fine and imprisonment; for a third offense by a fine of not less than \$250, or by imprisonment for not more than 60 days, or by both such fine and imprisonment.

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

BRADDOCK, PA.

Board of Health—Appointment, Powers, and Duties—Secretary—Health Officer. (Ord. 393, Apr. 10, 1914.)

ARTICLE 1. From and after the passage of this ordinance a board of health shall be established and maintained in the borough of North Braddock, in conformity with the act of Assembly of the Commonwealth of Pennsylvania, approved the 12th day of June, 1913,¹ Public Laws, 471.

ART. 2. *Duties of the president of council and the borough council.*—SECTION 1. The president of the borough council shall appoint a board of health in accordance with the provisions of section 2 of the act of assembly of June 12, 1913, Public Laws, 471, and it shall be the further duty of the president and members of the borough council to maintain the board of health from time to time by the appointment of new members to fill vacancies caused by the expiration of terms, death, removal from the borough, resignation, or other cause.

SEC. 2. Upon receiving from the board of health at the beginning of any fiscal year an estimate of the necessary expenses of the board of health for the ensuing year, it shall be the duty of the borough council to thereupon make an appropriation to the work of the board of health, which shall be sufficient to provide for the proper performance of their duties. If by reason of epidemic or other unforeseen causes such appropriation should in any year prove insufficient, it shall be the duty of the borough council, upon application of the board of health, to make such further additional appropriations for the expense of the board of health as may be necessary for the full and proper protection of the health of the people of the borough.

SEC. 3. All additional rules and regulations which may from time to time be adopted by the board of health shall, upon their request, be carefully considered and enacted as ordinances of the borough, unless good and sufficient reasons, which shall be entered on the records of the actions of the borough council, shall warrant their disapproval.

ART. 3. *Powers and duties of the board of health.*—SECTION 1. It shall be the duty of each of the members of the board of health immediately after their appointment to take and subscribe to the oath provided for borough officers.

SEC. 2. Immediately after the members of the board have been appointed and qualified, they shall meet for organization in accordance with section 3 of the act of assembly of June 12, 1913, Public Laws, 471, and shall elect a secretary and a health officer, neither of whom shall be members of the board, who shall serve for a period of one year, and shall from time to time elect their successors, and shall fix their compensation.

SEC. 3. The board of health shall meet regularly at a stated time and place at least once each month, and shall hold such other special meetings as the health conditions of the borough may require, and shall meet annually for the purpose of reorganization and election of officers.

¹ Public Health Reports, Nov. 28, 1913, p. 2583.

SEC. 4. The board of health from time to time may adopt such rules and regulations, not in any way abridging the laws of the Commonwealth or the rules and regulations of the State department of health, which may be needful for the protection of the health of the people of the borough, which rules and regulations suggesting penalties for violation thereof, shall be presented to the borough council with the request that they be enacted into ordinances of the borough, and the said board of health shall have power and it shall be their duty to comply with the further provisions of section 4 of the act of June 12, 1913, Public Laws, 471.

SEC. 5. The board of health shall have general supervision of the sanitary conditions of the borough, and it shall be their duty to abate nuisances in accordance with the provisions of sections 7 and 8 of the act of June 12, 1913, Public Laws, 471, and the further provisions of this ordinance and such other ordinances as may be hereafter enacted for the protection of the public health.

SEC. 6. It shall be the duty of the board of health to submit annually to the council, before the commencement of the fiscal year, an estimate of the probable expenditures of the board during the ensuing year; and council shall then proceed to make such appropriation thereto as may be necessary; and the said board shall, in the month of January of each year, submit a report in writing, to council, of its operations and expenditures for the preceding year, together with such other information on subjects relative to the sanitary conditions or requirements of the borough as may be necessary, and council shall publish the same in its official journal. (Sec. 9 of the act of June 12, 1913, Public Laws, 471.)

SEC. 7. It shall be the duty of the board of health to report annually to the State department of health the names and addresses of the members of the board of health, together with the names and addresses of the secretary and health officer, the number of cases of communicable disease which have existed within the borough during the year, the number of houses that have been quarantined and disinfected, the method of disinfection, and such other information as may be required by the commissioner of health.

SEC. 8. It shall be the duty of the board of health to provide the necessary minute books and books of records for the proper performance of the duties of the secretary of the board, and also to provide placards, notices, circulars of instruction, utensils and ingredients for disinfection, for the use of the health officer in the performance of his duties, and also to provide cards for the reporting of communicable diseases to the board of health, and cards for report of recovery or death and request for disinfection, which cards shall be furnished to the physicians practicing within the borough.

ART. 4. *Duties of secretary.*—SECTION 1. It shall be the duty of the secretary of the board of health to keep careful and accurate minutes of all proceedings of the board, to keep accurate accounts of the expenditures of the board, to draw and certify under the seal of the board of health all orders upon the treasurer of the borough for the payment of moneys on account of the board of health, and present same to the president of the board for his approval; to render statements of expenditures to the board at each stated meeting or as frequently as they may require, to prepare under the direction of the board the annual report to the borough council, together with the estimate of appropriations needed for the ensuing year, and to perform such other and further duties as the board may require.

ART. 5. *Duties of health officer.*—SECTION 1. It shall be the duty of the health officer to act as the executive officer of the board of health. He shall attend all stated and special meetings of the board, and shall at all times be ready and available for the prompt performance of his official duties.

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SEC. 6. It shall be the duty of the health officer to make stated sanitary inspections of the streets and alleys and premises in the borough at such time as the board of health may direct, and to report to the board of health all nuisances detrimental to

public health. He shall also at the direction of the board of health, upon complaint of citizens or property owners or otherwise, make special investigations of alleged nuisances and report concerning the same to the board of health. He shall serve all notices of abatement issued by the board of health and perform such other duties regarding the abatement of nuisances as the board may direct.

SEC. 7. Under direction of the board of health the health officer, in his official capacity, shall act as prosecutor in all cases of violation of health laws, ordinances, or rules and regulations, or any prosecutions for the abatement of nuisances detrimental to public health.

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ART. 14. *Salaries and official bonds.*—SECTION 1. The secretary of the board of health and the health officer shall receive such salaries as may be fixed by the board and ratified by the borough council, and shall serve for a period of one year, or until such time thereafter as their successors may be elected to qualify, and they shall severally give bond in the sum of \$1,000 to the Commonwealth of Pennsylvania for the use of the borough for the faithful discharge of the duties of their offices.

ART. 15. *Penalties.*—SECTION 1. Any president of council or councilmanic body, or majority thereof who shall refuse or neglect to comply with the provisions of article 2 of this ordinance shall, upon quo warranto proceeding or other proper legal action instituted by the attorney general of the Commonwealth, be subject to dismissal from office.

SEC. 2. Any member of the board of health who shall without sufficient cause or without having been excused from attendance by the board of health fail to attend the stated meetings of the board of health, or otherwise neglect his duties as a member of the board of health for a period of six months, shall be considered to have withdrawn from membership in the said board, and the president of council of the said borough shall proceed to fill the vacancy thus created in accordance with article 2 of this ordinance.

SEC. 3. Any secretary of the board of health or health officer who shall refuse or neglect to perform his duty in accordance with articles 4 and 5 of this ordinance shall, after hearing upon charges preferred, be dismissed from office at the discretion of the burgess.

Communicable Diseases—Notification of Cases—Quarantine—Placarding—School Attendance. (Ord. 393, Apr. 10, 1914.)

ART. 4. SEC. 2. It shall be the duty of the secretary of the board of health to report to the State department of health at the end of each week, and for the fraction of each week occurring at the end of each month, upon blanks supplied by the department of health for that purpose, a list of the cases of communicable diseases mentioned in section 1 of the act of May 14, 1909, they being the diseases which physicians are required by law to report to the health authorities, which have been reported to the board of health during said period, which report shall contain the names of each person suffering therefrom, respectively, and his or her age, sex, color, and nativity, together with the name of the disease and the date of the onset thereof; and in the event of no reports of any of said diseases having been received by the board of health during the said period, that fact shall be reported to the State department of health. (Sec. 23, act of May 14, 1909, Public Laws, 855.)

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ART. 5. SEC. 2. Upon the receipt of a report from a physician of a case of communicable disease, which under the laws of the Commonwealth, the rules and regulations of the State department of health or the rules and regulations of the local board of health is required to be under quarantine, he shall forthwith place the premises upon which such contagious disease exists under quarantine together with any person or persons who has or have been exposed thereto, in the manner provided by

the laws of the Commonwealth, the rules and regulations of the State department of health and the rules and regulations of the local board of health, and shall post upon the premises in which said disease may be located a placard upon which shall be printed in conspicuous letters the name of the disease from which the person or persons is or are suffering, with the warning that the said premises are quarantined, and shall so remain until the quarantine is removed by the health authorities, that no person shall be permitted to enter or leave or take any article from the house under quarantine without written permission from the health authorities, excepting physicians, nurses, or clergymen, and that no person or persons shall deface, cover up, or destroy the placard, and citing the penalty provided by law and by ordinance for violation of the quarantine restrictions.

SEC. 3. It shall be the duty of the health officer upon the receipt of information from any source that a case or cases of quarantinable disease exists on any premises to go to such premises and make an investigation concerning such report. If it is admitted by the householder that there is a case or cases of quarantinable disease on the premises, he shall immediately placard and quarantine the premises in the manner provided in section 2 of this article. If it is admitted that the disease exists and the house is quarantined, or if it is not admitted, and the health officer has reason to believe that the case of quarantinable disease may exist on the premises, it shall be his duty to take with him on the premises the physician of the board of health, or some other physician deputed by the board of health, who shall make an investigation and diagnosis, and if a case of quarantinable or reportable disease is found upon the premises, said physician shall thereupon regularly report the case to the board of health in the manner required by law, and if quarantinable and not already placed under quarantine, the health officer shall thereupon immediately quarantine the premises in accordance with the provisions of section 2 of this article.

SEC. 4. Quarantine restrictions shall be maintained for scarlet fever and smallpox for a period of at least 30 days from the date of onset of the last case on the premises; for chicken pox, diphtheria, measles, German measles, and mumps for a period of at least 21 days from the date of onset of the last case on the premises; and for whooping cough, erysipelas, and all other quarantinable diseases until complete recovery of the last patient afflicted.

SEC. 5. It shall be the duty of the health officer to thoroughly acquaint himself with the provisions of the act of May 14, 1909, Public Laws, 855, the rules and regulations of the State department of health, the ordinances of the borough for the protection of the public health, and the rules and regulations of the local board of health, and to perform such other and further duties regarding the quarantining and disinfecting of premises and persons, and the isolation of children from the public and other schools, as may be required by the aforesaid laws, regulations, and ordinances. He shall promptly notify the principal, superintendents, teachers, and other persons in charge of the public, private, parochial, Sunday, or other schools of the borough of all cases of communicable diseases occurring within the borough for which isolation from school is required by law, giving the names of all pupils or other persons suffering from such disease, or having been in contact therewith, and further giving notification that such pupils or other persons shall be excluded from school, and shall only be readmitted upon certificate signed by the health officer or a physician authorized so to do by the board of health.

ART. 6. *Duties of physicians.*—SECTION 1. Every physician practicing within the limits of this borough who shall treat or examine any person suffering from or afflicted with any communicable disease which under the provisions of section 1 of the act of May 14, 1909, Public Laws, 855, the rules and regulations of the State department of health, or the rules and regulations of the board of health of this borough, is required to be reported to the health authorities, shall forthwith report each and every such

case to the board of health of this borough on report cards furnished to them for such purpose, and for any failure to so report shall upon conviction thereof before the Burgess be liable to the penalty provided by section 24 of the act of May 14, 1909, Public Laws, 855.

SEC. 2. Every physician practicing within this borough who shall have in his charge any case of communicable disease which has been placed under quarantine shall notify the board of health in writing of the recovery or death of the person afflicted, and request that disinfection be performed, provided that such disinfection and request shall conform to the time specified by this ordinance and by the laws of the Commonwealth, the rules and regulations of the State department of health, or the local board of health for the duration of the quarantine period of such disease.

SEC. 3. No physician practicing within the limits of this borough shall conceal or in any way aid, abet, or encourage the concealment of any case of quarantinable disease, or in any way hinder or interfere with the health officer or health authorities in the proper performance of their duties.

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ART. 8. *Duties of school authorities.*—SECTION 1. It shall be the duty of the principal, superintendent, teachers, or other person in charge of the public, private, parochial, Sunday, or other schools of this borough, to refuse admission to the schools of any pupil or other person, who by reason of the provisions of sections 3, 4, 5, 6, or 7 of the act of May 14, 1909, Public Laws, 855, are excluded from attendance at said schools, and to readmit such pupils or other person only upon presentation of a certificate such as is provided in section 8 of said act, signed by the health officer of the borough or other physician or person duly authorized by the local board of health to sign such certificate.

SEC. 2. It shall be the duty of every principal, superintendent, teacher, or other person having charge of any public, private, parochial, Sunday, or other school, who may have reason to suspect that any pupil or other person in attendance at such school may be suffering from a communicable disease for which school exclusion is required to forthwith report each and every such case to the board of health of the borough, and to exclude such pupil or other person from the school, pending an examination and report from the health authorities.

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ART. 13. *Duties of citizens.*—SECTION 1. No head of a family, boarding house or hotel keeper, or other person shall secrete or otherwise keep on their premises, unknown to the board of health, any person suffering from a communicable disease which is required to be quarantined under the laws of this Commonwealth, the rules and regulations of the State department of health, or the regulations of the local board of health.

SEC. 2. No head of a household or other person shall refuse to admit the health officer or a physician deputized by the board of health to their premises at any time, or shall in any way interfere with or hinder any representative of the board of health in the performance of their duties in making investigation of a suspected case of contagious disease or of a nuisance, or any other matter which might be a menace to the public health.

* * * * *

ART. 15. SEC. 4. Any physician who shall violate the provision of section 2 or section 3 of article 6 of this ordinance shall, upon conviction thereof before the Burgess or any justice of the peace of the borough, be sentenced to pay a fine of not more than \$20 and costs, and in default thereof be imprisoned in the county jail for a period of not less than 5 or more than 20 days, or either or both, at the discretion of the court. Said fine to be paid to the treasurer of the borough.

SEC. 5. Any principal, superintendent, or other person in charge of any school who shall violate the provisions of section 1 of article 8 of this ordinance shall, upon conviction thereof before the burgess or any justice of the peace, be subject to the penalty provided by section 24 of the act of May 14, 1909, Public Laws, 855, and any principal, superintendent, teacher, or other person in charge of a school who shall violate section 2 of article 7 of this ordinance shall, upon conviction thereof before the burgess or any justice of the peace of the borough, be subject to a fine of not more than \$20, payable to the treasurer of the borough, and in default thereof shall be sentenced to the county jail for a period of not less than 5 or more than 20 days, or both, at the discretion of the court.

Burial. (Ord. 393, Apr. 10, 1914.)

ART. 7. *Duties of undertaker.*—SECTION 1. It shall be the duty of all undertakers who shall receive and prepare for burial the bodies of any persons who have died within the limits of this borough of any of the diseases set forth in section 17 of the act of May 14, 1909, Public Laws, 855, to strictly observe the provisions set forth in sections 17, 18, 19, 20, 21, and 22 of the said act, as well as any further rules and regulations of the State department of health or of the local board of health. The undertaker, or any person acting in such capacity, shall be responsible for any violation of such provisions and shall be subject to the penalties provided in section 24 of said act.

Milk—License Required for Sale. (Ord. 393, Apr. 10, 1914.)

ART. 9. *Milk.*—SECTION 1. No person, firm, or corporation shall sell milk or cream either wholesale or retail, either by vending or from a fixed place of business, without a license from the board of health first having been obtained, the number of which shall be conspicuously displayed on his wagon or at his place of business as required by law.

SEC. 2. All licenses shall be valid for the term of 1 year, subject, however, to revocation by the board of health for any violation of the laws of the Commonwealth or the ordinances of the borough or the regulations of the health authorities regulating the sale of milk.

SEC. 3. All licenses for the sale of milk shall be granted without fee or charge, but no applicant shall be entitled to receive such license until he shall have conformed to the requirements of the board of health and shall have furnished full information concerning the source of his milk supply and the method by which it shall be handled.

Foodstuffs—Protection. (Ord. 393, Apr. 10, 1914.)

ART. 10. *Sale of food and food products.*—SECTION 1. No person, firm, or corporation who shall conduct any store, shop, stand, or delivery wagon within the limits of this borough, for the sale of meat, fish, butter, eggs, fruit, vegetables, bread, or any other article of food, which is subject to decay, mould, or decomposition, shall have or keep in or about such store, shop, stand, or wagon, any meat, fish, butter, eggs, fruit, vegetables, bread, or other articles of food which is decayed, decomposed, or spoiled, as to render it unwholesome, offensive, or otherwise unfit for human consumption.

SEC. 2. All stores, shops, stands, and wagons from which articles of food are vended or sold, must at all times be kept clean and in a sanitary condition, free from offensive odors or any accumulation or decomposed animal or vegetable matter, and shall at all times be open to the inspection of the health officer of the borough or other authorized agent of the board of health.

SEC. 3. No person, firm, or corporation selling meat, fish, fruit, or vegetables, shall expose them on sidewalks or on or outside counters at stores, shops, or on stands, or in wagons, unless they shall be at least 2½ feet from the ground, pavement, or floor, and shall be thoroughly screened and protected from flies.

Domestic Animals—Disposal of Dead Bodies—Keeping of Hogs Prohibited. (Ord. 393, Apr. 10, 1914.)

ART. 11. *Dead animals.*—SECTION 1. The carcass of any animal which shall have died within the limits of the borough shall be removed within 24 hours and properly disposed of by the owner of the animal, if the owner be known, or by the owner of the property on which the dead animal is found, or in case the ownership is unknown and the carcass is found on a street, alley, or other public place, it shall be removed by the board of health at the expense of the borough. The disposal of all dead animals shall be under the direction of the board of health, and in accordance with the laws of the Commonwealth.

ART. 12. *Hog pens.*—SECTION 1. No hog pens shall be constructed or maintained within the limits of this borough, and no hogs shall be kept within the limits of the borough.

Nuisances. (Ord. 393, Apr. 10, 1914.)

ART. 13. Sec. 3. No person shall maintain or permit to be maintained on any property owned or occupied by him or her within this borough any condition productive of a nuisance detrimental to the public health or which may be so declared by the board of health, and upon receipt of a notice from the board of health that such a condition exists on the property owned or occupied by him or her it shall be his or her duty to abate the nuisance created thereby to the satisfaction of the board of health within the time limit specified in said notice.

SEC. 4. No person shall install or use any system of disposal of sewage, either by privy vaults, cesspools, or by connection with a municipal sewer system, except such method be in accordance with a regularly adopted system which has been planned by a competent sanitary engineer and approved by the commissioner of health. All cesspools, privy vaults, and sewer connections must be constructed and maintained in accordance with the system so approved and adopted.

SEC. 5. No person shall place upon any public street or alley of this borough any tin cans, broken glass, or other objectionable refuse or organic matter subject to decomposition, either vegetable or animal, or shall allow kitchen waste from any property owned or occupied by him or her to run into any alley or street, or any open gutter along any street or alley, or to accumulate upon the surface of the ground at any place in such manner as to be offensive, or to constitute a menace to health.

SEC. 6. No person shall spit on any sidewalk, in any street car, public conveyance, or on the floor of any public hall or building.

CANTON, OHIO.

Foodstuffs—Production, Care, and Sale. (Ord. 947, Apr. 6, 1914.)

SECTION 1. It shall be unlawful for any person to expose for sale, sell, or offer to sell, on the outside or on the inside of any building, or in any opening, window, or doorway, or on any sidewalk, street, alley, or thoroughfare within the limits of the city of Canton, any breadstuffs, cake, pastry, candy, confectionery, dried fruits, shelled nuts, or other food products, to be eaten unpeeled or uncooked, unless the articles so exposed for sale, sold, or offered for sale, shall be covered in such a manner as to protect them from dust, dirt, vermin, and flies.

SEC. 2. It shall be unlawful within the limits of the city of Canton for any person to sell, offer for sale, or have in his possession with intent to sell, any unripe, overripe, decayed, or unwholesome fruits or vegetables. The health officer and all officers of the department of health of the city of Canton are hereby authorized and directed to immediately confiscate and destroy any such fruits or vegetables when exposed or offered for sale.

SEC. 3. It shall be unlawful for any person who has tuberculosis, scrofula, or any venereal disease, or any communicable or loathsome skin disease, to work in any bakery, restaurant, meat market, confectionery, or other place where food articles are prepared or sold, or to knowingly require, permit, or allow any person with any of the above-enumerated diseases to work in or be employed at such place.

SEC. 4. The health officer and the duly authorized inspectors of the department of health of the city of Canton are hereby authorized and given the right at any and all times to enter any bakery, restaurant, meat market, confectionery, or other place where food articles are prepared or sold, for the purpose of making an inspection of said place, to ascertain whether or not the provisions of this ordinance are being complied with.

SEC. 5. The foregoing sections are declared to be orders and regulations of the board of health of the city of Canton, made in pursuance to the provisions of the laws of the State of Ohio, and anyone convicted of violating any of the provisions of the foregoing sections, shall be fined in any sum not to exceed \$50 for the first offense, and not less than \$50 nor more than \$100 for the second offense and the prosecution under this ordinance shall always be as and for the first offense unless the affidavit on which the prosecution is instituted shall contain the allegation that the offense is a second offense.

CEDAR RAPIDS, IOWA.

Tuberculosis and Typhoid Fever—Notification of Cases. (Ord. 1099, Dec. 26, 1913.)

SECTION 1. *Reports of tuberculosis and typhoid fever required.*—It shall be the duty of every physician in the city of Cedar Rapids, Iowa, to report in writing to the board of health of said city within 24 hours after the disease is recognized, on forms to be provided by said board of health, the name, age, sex, color, occupation, and address of every person under his care in said city who in his opinion has typhoid fever or is afflicted with pulmonary or other communicable form of tuberculosis.

SEC. 2. *Registration.*—The health officer of said city shall cause all cases showing presence of tubercle bacilli to be recorded in a register of which he shall be the custodian, which register shall not be opened to inspection by anyone except the health officer of said city, and said health officer shall not permit the record contained therein to be divulged in such manner as to disclose the identity of the person to whom it relates except as it may be necessary in carrying out the provisions of this ordinance.

SEC. 3. *Notice of death or removal.*—In case of death from pulmonary or other communicable form of tuberculosis, or the removal from any apartment or premises of a person or persons so afflicted, it shall be the duty of the attending physician or, if such physician be absent, of the occupant or other person in charge of said apartment or premises to notify the board of health in writing of such death or removal within 24 hours thereafter.

SEC. 4. *Other board of health rules applicable.*—Every person afflicted with tuberculosis and every person in attendance upon anyone afflicted therewith, and the authorities of public and private institutions of said city must observe and enforce all other sanitary rules and regulations of the board of health of the city of Cedar Rapids, and all ordinances applicable thereto for preventing the spread of the disease.

SEC. 5. *Pena'j.*—Any person, firm, or corporation violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in a sum not to exceed \$100 or imprisoned not to exceed 30 days.

Ice—Inspection, Cutting, and Storage. (Ord. 1103, Feb. 6, 1914.)

SECTION 1. Every person, firm, or corporation engaged in the business of cutting, preparing, transporting, or selling ice at wholesale or retail, within the city of Cedar Rapids, Iowa, shall be governed by the rules and regulations hereinafter set out.

SEC. 2. Before the storing of any ice in any house or other place, all slush ice, snow ice, or dirty and unclean ice shall be scraped away and removed therefrom.

SEC. 3. All offal or other foreign, unhealthful, and injurious substances shall be thoroughly removed from the ice.

SEC. 4. No person engaged in the work of cutting or preparing ice for sale, whether as employer or employee, shall expectorate or commit any other nuisance, whether on the ice field or in the storehouse, upon the ice which is being prepared for future sale.

SEC. 5. All ice dealers shall exercise the utmost care and caution to select, sell, and deliver only the purest and most wholesome and healthful ice, and to that end shall adopt and use all effective means and ways of cutting, preparing, and transporting ice.

SEC. 6. The board of health of Cedar Rapids shall have the power and authority to appoint an ice inspector, whose duties shall be to inspect all ice which is being cut and stored and to see that all the provisions of this ordinance, in so far as they relate to the cutting and storing of ice, are fully complied with. Such ice inspector shall report all violations of the rules and regulations herein contained immediately to the chairman of the board of health. He shall receive as compensation for his services the sum of \$3 per day while he is engaged as ice inspector, and shall be employed only during the season of cutting and storing of ice.

SEC. 7. It shall be the duty of the sanitary police officer of said city to render such services in the inspection of ice as the board of health may from time to time direct and which shall be necessary to protect the public health of said city.

SEC. 8. Any person, firm, or corporation who shall violate any provision of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in a sum not exceeding \$100 or imprisoned not exceeding 30 days.

CHARLOTTE, N. C.

Milk and Milk Products—Production, Care, and Sale. (Ord. Feb. 6, 1914.)

SECTION 1. The term "milk" as used in this ordinance shall be construed to include all fluid derivatives thereof, wherever such construction of the term is applicable.

SEC. 2. No person shall engage in the sale, handling, or distribution or production of milk for sale in the city of Charlotte, nor shall any person ship any milk into the city of Charlotte until he has obtained a permit therefor from the health authorities of said city. This permit shall be renewed on or before the first day of July of each year, and may be suspended or revoked at any time for cause. Each person applying for a permit shall pay to the city tax collector the sum of \$1 for obtaining said permit, and the sum of \$1 for each renewal thereof. The application for the permit shall include the following statements:

- (1) Kind of milk to be handled or sold.
- (2) Name of producers, with their addresses and permit number.
- (3) Names of middlemen, with their addresses.
- (4) Names and addresses of all stores, hotels, factories, and restaurants at which milk is delivered.
- (5) A statement of the approximate number of quarts of milk, cream, buttermilk, and skim milk sold per day.
- (6) Source of the water supply at farms and bottling plants.
- (7) Permission to inspect all local and out-of-town premises on which milk is produced and handled.

All manure shall be removed at least once daily, and disposed of so as not to be a source of danger to the milk, either as furnishing a breeding place for flies or otherwise.

Horse manure shall not be used in the cow stable for any purpose. This section shall not be construed to mean that no person or persons shall be allowed to keep a horse and a cow under the same shed.

(2) *Milk room.*—Every milk farm shall be provided with a milk room that is clean, light, and well screened. It shall be used for no other purpose than for the cooling, bottling, and storage of milk and the operations incident thereto.

It shall have no direct connection with any stable or dwelling.

The floors shall be of cement or other impervious material, properly graded and drained.

It shall be provided with a sterilizer, unless the milk be sent to a bottling plant, in which case the cans shall be sterilized at the plant.

Sterilizing shall be construed to mean exposure to live steam or boiling for 15 or 20 minutes.

Cooling and storage tanks shall be drained and cleaned at least twice a week.

All drains shall discharge at least 100 feet from any milk house or cow stable.

(3) *Cows.*—A physical examination of all cows shall be made at least once every six months by a veterinarian approved by the health authorities and paid for by the city or State.

Every diseased cow shall be removed from the herd at once, and no milk from such cow shall be offered for sale.

Tuberculin test shall be applied at least once a year by a veterinarian.

All cows which react shall be removed from the herd at once, and no milk from such cows shall be sold as raw milk.

No new cows shall be added to a herd until they have passed a physical examination and the tuberculin test.

Cows, especially the udders, shall be clean at the time of milking.

No milk that is obtained from a cow within 15 days before or 5 days after parturition, nor any milk that has an unnatural odor or appearance, shall be sold.

No unwholesome or slop foods shall be used.

Every producer shall allow a veterinarian employed by the city to examine his herd at any time under penalty of having his supply excluded.

Certificates showing the results of all examinations shall be filed with the health authorities within 10 days of such examinations.

Charts showing the results of all tuberculin tests shall be filed with the health authorities within 10 days of the date of such test.

(4) *Employees.*—All employees connected in any way with the production and handling of milk shall be personally clean and shall wear clean outer garments.

The health authorities shall be notified at once of any communicable diseases in any persons that are in any way connected with the production or handling of milk; or of the exposure of such person to any communicable disease.

Milking shall be done only with dry hands.

The hands shall be washed immediately before each milking in order to avoid conveyance of infection to the milk.

The health authorities shall have the power to require a health certificate from any employee or to examine such employee at their discretion.

(5) *Utensils.*—All utensils and apparatus with which milk comes in contact shall be thoroughly washed and sterilized, and no milk utensil or apparatus shall be used for any other purpose than that for which it was designated.

The owner's name, license number, or other identification mark, the nature of which shall be known to the health authorities, shall appear in a conspicuous place on every milk container.

No bottle or can shall be removed from a house in which there is, or in which there has recently been, a case of communicable disease until permission in writing has been granted by the health authorities.

All metal containers and piping shall be in good condition at all times. All piping shall be sanitary milk piping in couples short enough to be taken apart and cleaned with a brush.

Small-top milking pails shall be used.

All cans and bottles shall be cleaned as soon as possible after being emptied.

Every conveyance used for the transportation or delivery of milk, public carriers excepted, shall bear the owner's name, milk-license number, and business address, in uncondensed gothic characters at least two inches in height.

(6) *Milk*.—It shall not be strained in the cow stable, but shall be removed to the milk room as soon as it is drawn from the cow.

It shall not be adulterated by the addition to or the subtraction of any substance or compound, except for the production of the fluid derivatives allowed by law.

It shall not be tested by taste at the bottling plant, milk house, or any place, in any way that may render it liable to contamination.

It shall be bottled only in a milk room or bottling plant for which a license or permit has been issued.

It shall be delivered in bottles, or single service containers, with the exception that 20 quarts or more may be delivered in bulk in the following cases:

(a) To establishments in which milk is to be consumed or used on the premises.

(b) To infant-feeding stations that are under competent medical supervision.

It shall not be stored in or sold from a living-room, or from any other place which might render it liable to contamination.

It shall be cooled to 60° F. or below; provided said parties furnishing milk to said city are fully equipped with cooling plants, and where such person or persons or corporation are not so equipped, then said milk shall be reduced to as near 60° as circumstances and conditions will permit.

It shall contain no visible foreign material.

(7) *Receiving stations, bottling plants, and pasteurizing plants*.—They shall be clean, well screened and lighted, and shall be used for no other purpose than the proper handling of milk and the operations incident thereto, and shall be open to inspection by the health authorities at any time.

They shall have smooth, impervious floors, properly graded and drained.

They shall be equipped with hot and cold water and steam.

Ample provision shall be made for steam sterilization of all utensils, and no empty milk containers shall be sent out until after such sterilization.

All utensils, piping, and tanks shall be kept clean, and shall be sterilized daily.

Containers and utensils shall not be washed in the same room in which milk is handled.

(8) *Stores*.—All stores in which milk is handled shall be provided with a suitable room or compartment in which the milk shall be kept. Said compartment shall be clean, and shall be so arranged that the milk will not be liable to contamination of any kind.

Milk shall be kept at a temperature not exceeding 60° F.

Milk to be consumed off the premises may be sold from stores only in the original unopened package.

(9) *General regulations*.—The United States Bureau of Animal Industry score card shall be used. Dairies from which milk is to be sold in a raw state shall score at least 80 points.

Every place where milk is produced or handled and every conveyance used for the transportation of milk shall be clean.

All water supplies shall be from uncontaminated sources and from sources not liable to become contaminated.

The license or permit shall be kept posted in a conspicuous place in every establishment for the operation of which a milk license or permit is required.

No milk license or permit shall at any time be used by any person other than the one to whom it was granted.

No place for the operation of which a license or permit is granted shall be located within 100 feet of a privy or other possible source of contamination, nor shall in contain or open into a room which contains a water-closet.

No skim milk or buttermilk shall be stored in or sold from cans or other containers unless such containers are permanently and conspicuously labeled in letters at least 2 inches high "Skim milk" or "Buttermilk," as the case may be.

No container shall be used for any other purpose than that for which it is labeled.

Ice used for cooling purposes shall be clean and uncontaminated.

(10) *Subnormal milk*.—Natural milk, that contains less than 3.25 per cent but more than 25 per cent milk fat, and contains of solids not fat not less than 8.5 per cent, and that complies in all other respects with the requirements above set forth, may be sold, provided the percentage of fat does not fall below a definite percentage, that is stated in a conspicuous manner on the container, and further provided that such container is conspicuously marked "Substandard milk."

(11) *Cream*.—It shall be obtained from milk that is produced and handled in accordance with the provisions hereinbefore set forth for the production and handling of milk.

Standards for milk—Raw milk.—That raw milk shall be divided into two grades—Grade A raw milk, and grade B raw milk.

Grade A raw milk shall contain not more than 100,000 bacteria per cubic centimeter.

Grade B raw milk to contain not more than 500,000 bacteria per cubic centimeter for the first six months, 400,000 for the next six months, 300,000 for the next six months, 200,000 for the next six months, and 100,000 thereafter.

It shall contain not less than 3.25 per cent of milk fat.

It shall contain not less than 8.5 per cent solids, not fat.

(13) *Standards for cream*.—The bacterial count for cream shall not exceed five times the standard for milk of the grade from which it is produced.

It shall contain not less than 18 per cent milk fat, and shall be free from all constituents foreign to normal milk.

(14) *Standards for skim milk*.—It shall contain not less than 8.75 per cent milk solid.

Control of sale of skim milk: Whether skim milk is sold in wagons or in stores, all containers holding skim milk shall be prominently and legibly marked "Skim milk." When skim milk is placed in the buyer's container, a label or tag bearing the words "Skim milk" should be attached.

(15) *Standards for buttermilk*.—Buttermilk shall contain not less than 8.5 per cent of milk solid.

When milk is skimmed, soured, or treated so as to resemble buttermilk, it shall be designated by some distinctive name.

Sec. 4. (1) *Pasteurized milk*.—Pasteurized milk, as used in this ordinance, shall mean milk that has been heated to a temperature of not less than 145° F. for 30 minutes. Said milk shall be cooled immediately to 60° F. or below, and kept at or below that temperature.

Requirements for the production of pasteurized milk are the same as the production of raw milk, with the exception of the sections relating to the tuberculin test.

Milk for pasteurization.—There shall be also the following requirements for milk to be pasteurized in the the city of Charlotte, or shipped into the city for pasteurizing:

It shall not be adulterated by the addition to or the subtraction of any substance or compound, except for the production of the fluid derivatives allowed by law.

It shall not be tested by taste at any bottling plant, milk house, or other place, in any way that may render it liable to contamination.

It shall be bottled only in the milk room or the bottling plant for which a license or permit has been issued.

It shall be delivered in bottles or single service containers, with the exception that 20 quarts or more may be delivered in bulk in the following cases:

To establishments in which milk is to be consumed or used on the premises.

It shall not be stored in or sold from a living room or from any other place which might render it liable to contamination.

It shall be cooled to 60° F. or below within two hours after it is drawn from the cow, and it shall be held at or below that temperature until it is pasteurized. After pasteurization it shall be held at a temperature not exceeding 60° F. until delivered to the consumer.

No milk shall be repasteurized after 24 hours.

Pasteurized milk shall be distinctly labeled as such, and the grade of pasteurized milk.

(2) *Standards for pasteurized milk.*—Pasteurized milk shall be of two grades—Grade "A" and Grade "B."

Grade "A" shall contain not more than 500,000 bacteria per cubic centimeter before pasteurization, and not over 25,000 when delivered to consumer.

Grade "B" shall contain not more than 1,000,000 bacteria per cubic centimeter before pasteurization, and not over 50,000 when delivered to consumer.

The standards for the percentage of milk fat and of total solids shall be the same as for raw milk.

Dairies producing milk that is to be pasteurized shall be scored on the United States Bureau of Animal Industry card, and shall score at least 65 points.

Milk from cows that have been rejected by the tuberculin test, but which show no physical signs of tuberculosis, may be sold, provided that it is produced and handled in accordance with all the other requirements herein set forth for pasteurized milk.

Ice used for cooling purposes shall be clean.

The process of pasteurization shall be under the supervision of the city health department.

(3) *Pasteurized cream.*—It shall be obtained only from milk that could be legally sold as milk under the requirements hereinbefore set forth.

Pasteurized cream, or cream separated from pasteurized milk, shall be labeled in the manner herein provided for the labeling of pasteurized milk.

(4) *Standards for pasteurized cream.*—No cream shall be sold that is obtained from pasteurized milk that could not legally be sold under the provisions herein set forth, nor shall any cream that is pasteurized after separation contain an excessive number of bacteria.

The percentage of milk fat shall be the same as for raw cream.

The bacterial standard for pasteurized cream shall be not more than five times that designated for pasteurized milk of the same grade.

SEC. 5. The term "certified milk" shall not be used, and no milk shall be so labeled, and no milk wagons so marked, unless said milk is produced in conformity with methods and standards for the production and distribution of "certified milk" adopted by the American Association of Medical Milk Commissioners, May 1, 1912.

SEC. 6. All ordinances in conflict herewith are hereby repealed.

SEC. 7. Nothing in this ordinance shall be construed to prevent the owner of two cows from disposing of his surplus milk, provided such milk is not peddled or vended.

SEC. 8. Any person violating this ordinance shall be subject to a penalty of \$10 for each violation. This section shall not apply to any person or persons owning not more than two cows.

SEC. 9. That whenever any dairyman shall notify the proper city authorities that he has purchased a cow or cows that it shall be the duty of the city inspector to proceed at once to the owner of said cow or cows and make an inspection, and when said inspector shall fail, refuse, or neglect to comply with said request, said inspector shall immediately forfeit his position.

This ordinance shall be in force from and after the 1st day of March, 1914.

Bread and Breadstuffs—Manufacture, Care, and Sale. (Ord. July 30, 1914.)

1. All persons, firms, and corporations, baking, making, manufacturing, or selling bread and prepared breadstuffs, shall be required to keep and maintain their premises, apparatus, appliances, and cooking utensils in a clean and sanitary condition, and screened.

2. All bread and breadstuff, when cooked, or handled for sale shall be kept in a clean and sanitary place, and as soon as cooled and before being sent out to the public, shall be wrapped in a clean paper and delivered in clean baskets or packages.

3. All employees of said persons, firms, or corporations shall be required to wash their hands thoroughly and properly dry same before engaging in making or handling said bread or breadstuff, and shall also keep their clothes and persons in a clean and sanitary condition.

4. It shall be unlawful for any owner, employer, or person in charge of said places to employ or keep in service any person with any infectious, contagious, or communicable disease.

5. It shall be the duty of the city food inspector to inspect all such premises at least once each week; and it shall be unlawful for any person to interfere with said inspector while inspecting said premises.

6. Any person, firm, or corporation violating any provision or requirement of this ordinance shall be subject to and shall pay a penalty of \$50 for each offense, and each day that any violation is allowed to continue shall constitute and be a separate and distinct offense.

Ice Cream, Ices, Soda Water, and Soft Drinks—Sale of. (Ord. July 30, 1914.)

1. That all persons, firms, or corporations selling ice cream, or other kinds of ices, soda water, or other soft drinks, shall keep the counters over which they are served in a clean and sanitary condition, shall screen the store in which they are sold, and shall wash the spoons, glasses, saucers, or other articles in which they are served or with which they are eaten in clean running water so that no such article shall come in contact with any refuse from any other article: *Provided, however*, That any person using sanitary paper cups which are used one time shall not be required to wash such cups: *And provided further*, That this ordinance shall not apply to the sale of soft drinks in bottles when no glasses or spoons are used.

2. That all persons handling such ices or soft drinks shall keep their hands and clothes in a clean and sanitary condition, and shall not touch with their persons or clothes such ices or soft drinks.

3. That no person who has any contagious or infectious disease shall knowingly be allowed by any person, firm, or corporation to sell any such soft drinks or ices.

4. Any person, firm, or corporation violating any provision or requirement of this ordinance shall be subject to and shall pay a penalty of \$10 for each offense, and each day that any violation is allowed to continue shall constitute and be a separate and distinct offense.

Hotels, Restaurants, and Eating Houses—Sanitary Regulation. (Ord. July 30, 1914.)

1. That all persons, firms, or corporations, when granted license or permit by the city to operate or keep a hotel, restaurant, inn, eating house, or lunch counter, shall be required to have same thoroughly screened, so as to keep out all flies;

2. And they shall be required to keep said places in a clean and sanitary condition;

3. All employees at said places shall wear clean and sanitary clothes and keep their hands and persons clean and sanitary;

4. And it shall be unlawful for any owner, employer, or person in charge of said places knowingly to employ or keep in service any person with any infectious, contagious, or communicable disease;

5. It shall be the duty of the city food inspector to inspect all such places once every week; and it shall be unlawful for any person to interfere in any way with said inspector in the discharge of his duties;

6. Any person, firm, or corporation violating any provision or requirement of this ordinance shall be subject to and shall pay a penalty of \$50 for each offense; and each day that any violation is allowed to continue shall constitute and be a separate and distinct offense.

DANVILLE, VA.

Foodstuffs—Manufacture, Care, and Sale. (Ord. Dec. 13, 1913.)

1. That the owner or occupant of any store, restaurant, eating house, bakery, confectionery, ice cream plant, hotel, fruit stand, milk station, or any other place where fresh fish, fresh meat, butter, bread, cakes, pies, cheese, confectionary, figs, berries, dates, grapes, milk, sugar, bananas broken from the stem, cut melons, peaches, apricots, pears and other fruits, and any other article of food ready to be eaten without further preparation, are prepared, stored or kept for sale, shall have such room or building properly screened, unless such foodstuff is otherwise protected from contamination; from May 1 to November 1 of each year, so as to prevent the contamination of such foods by flies. Such foods shall be sold only when protected.

2. All of the above-named foodstuffs sold in the city of Danville shall be properly protected so as to prevent their contamination by dust or dirt.

3. No foodstuff shall be placed upon or near the sidewalk or floor of any place of business where it is liable to be contaminated by dogs or other animals unless such foodstuff is in a container which will protect it from such contamination.

4. All meats, bread, pies, cakes, and other foodstuffs shall be properly protected from contamination by dust, dirt, or flies while being transported through the city.

5. All foodstuffs shall be at all times handled in a cleanly manner, and all persons engaged in the preparation, handling, or selling of foodstuffs shall keep themselves and their clothing in a cleanly condition.

6. All booths, pushcarts, rooms, and stores in which foodstuffs are prepared, stored, or kept for sale or eaten shall be maintained in a cleanly condition.

7. No water-closet or other receptacle for human excreta shall be maintained in any place of business where foodstuffs are prepared, stored, or kept for sale, except when, in the opinion of the health officer, such closet is so located as not to contaminate the foodstuffs.

8. No person having typhoid fever, tuberculosis, diphtheria, scarlet fever, smallpox, venereal disease, whooping cough, measles, mumps, or other dangerous, contagious, or infectious disease shall be employed in any place of business where foodstuffs are manufactured, stored, or kept for sale. No person who has recovered from any of the above named diseases, and who is employed in any place of business where foodstuffs are stored, may return to his or her employment until, in the opinion of the health officer, it is safe to do so. No person so employed who has been constantly exposed to any case of dangerous, contagious, or infectious disease shall return to his or her work except at the direction of the health officer.

9. There shall be, from time to time, a systematic inspection by the health officer or his assistants of all places in the city where foodstuffs are manufactured, stored, or kept for sale.

10. Any foodstuff found in a decayed or contaminated condition, so that it is unfit for food for human consumption, shall be condemned by the inspector, and any such foodstuff so condemned shall be destroyed by the owner.

11. Upon inspection the attention of the owner or occupant of any store shall be called to any defects which are found to exist, and he shall be given a reasonable time in which to remedy such defects. If, upon reinspection, it is found that the provisions

of this ordinance have not been complied with, the inspector or health officer shall order the place closed. Any place so closed shall not be reopened until placed in a sanitary condition.

12. Any person who fails to comply with any of the preceding sections of this ordinance shall be fined not less than \$2 nor more than \$10 for each offense, each day such offender remains in default to constitute a separate offense.

Privies—Removal of Contents. (Ord. Apr. 18, 1914.)

That section 208 (b) of the general ordinances of said city [Danville, Va.] be amended and reordained so as to read as follows:

SEC. 208 (b) 1. On and after May 1, 1914, it shall be unlawful for any person other than those employed by the committee on health for the purpose to empty, remove, or bury the contents of the excretal container of any privy in the city of Danville, Va.

2. Any person who shall violate the provisions of the preceding section shall be liable to a fine of not less than \$10 nor more than \$25 for each offense.

3. The committee on health shall have control and charge of the work herein provided for, and shall employ a foreman, who shall be subject to the control of said committee, and collect all fees and charges for services rendered by the city herewith and make report and return thereof to the city treasurer every two weeks. To secure the faithful performance of his duties, he shall give bond in the penalty of \$500 with surety to be approved by the committee and with condition to faithfully perform his duties and collect and return all moneys received by him when and as required by law.

The committee shall employ such additional help as will be needed to carry on the work, and any person so employed may be discharged by the committee at any time for cause.

4. All animals used in this work by the city shall be kept at the city stables.

5. The privy-box contents may be dumped at such place as the health committee may direct.

6. All privies in the city shall be cleaned once each week from April 1 to November 1, and once every two weeks from November 1 to April 1.

7. The charge for the removal of the excreta shall be 10 cents each week for cleaning each closet from April 1 to November 1, and 15 cents for every two weeks from November 1 to April 1. For schools, warehouses, and other places where closets are temporarily erected for the convenience of workmen, and all other places where closets are used by a number of people, the charge shall be 25 cents for each removal of excreta.

8. It is hereby declared a nuisance for the occupant of any house having a privy upon the premises to fail or refuse to have such privy cleaned as above directed, and any person who fails or refuses to comply herewith shall be fined not less than \$2 nor more than \$10 for each offense.

The sum of \$2,000 is hereby appropriated for the purchase of animals and carts necessary for carrying on this work.

Sewers—Connections with, Required. (Ord. Mar. 27, 1914.)

Be it ordained by the council of the city of Danville, Va., That section 228 of the general ordinances of said city be amended and reordained so as to read as follows:

SEC. 228. Every owner of an improved lot fronting on a street along which a public sewer and water main are laid shall, within sixty days after the laying of such sewer and a branch to the line between such lot owner's property and the street, make for his premises connection with such sewer by placing thereon a suitable water-closet, and in all dwellings and restaurants a kitchen sink shall also be provided. All closets

and sinks are to be supplied by water under pressure and connected with the public sewer.

(a) Any person failing to make the connection herein required within the time herein prescribed and in the manner prescribed in this section, shall be liable to a fine of \$5 for every day he is in default in making such connection.

(b) It is hereby declared a nuisance for the occupant of any house which has been connected with the city sewer and city water to fail to have city water turned on such closet so as to properly flush the hopper of same. Any person who violates this section shall be liable to a fine of \$5 for each offense.