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MARINE HOSPITALS AND QUARANTINE STATIONS.

MADE AVAILABLE FOR THE CARE OF THE SICK AND WOUNDED OF ARMY AND NAVY.

[Bureau Circular Letter No. 36.]

TREASURY DEPARTMENT,
BUREAU OF THE PUBLIC HEALTH SERVICE,
Washington, April 25, 1914.

To medical officers of the Public Health Service:

The United States marine hospitals and quarantine stations are hereby made available for the reception of the sick and wounded of either the United States Army or the United States Navy, and you are hereby directed upon a written request of the proper military or naval authority to receive and care for said patients, the service to be reimbursed the actual cost of maintenance.

RUPERT BLUE,
Surgeon General.

Approved.

W. G. MCADOO, *Secretary.*

THE WHITE HOUSE, *April 27, 1914.*

Approved.

WOODROW WILSON.

EXPLOITATION OF THE SICK.

ALLEGED CURES FOR PELLAGRA BEING ADVERTISED AND SOLD.

From time to time there have appeared upon the market in the Southern States preparations advertised as cures for pellagra. These preparations have usually sold at prices that would be exorbitant even for remedies of value in the treatment of the disease. When one considers that most pellagra patients are found among people of small means and frequently of comparatively little experience and education, the advantage taken of the sick and unfortunate by the manufacturers of these nostrums appears in its true light.

The Public Health Service has examined several of these preparations. Those examined were received put up in packages containing usually a bottle of liquid and a box of tablets or capsules, sufficient in amount to last the patient for a short time (two to four weeks), and were marked to sell, some for $5 and one for $10 a package. The preparations upon examination were found to contain inexpensive inorganic salts, such as iron, magnesium, lime, and sulphur. One consisted mainly of copperas, charcoal, and small amounts of quinine.

Nothing was found in these preparations which, so far as the scientific world has been able to learn through the laborious investigations of trained workers, has any value in the treatment of pellagra. Some of the ingredients might be of service at times to relieve some of the symptoms. On the other hand, some of the ingredients would undoubtedly aggravate other symptoms, so that these preparations on the whole are probably not only not beneficial but really do harm to the sick.

Pellagra is a disease in which the patient has times when he is quite ill, followed in many cases by periods of weeks, maybe months, when he feels comparatively well. Then, too, some cases of pellagra get better regardless of the drugs or medicines they may take. Among those who have taken the nostrums above referred to are, naturally, patients who have improved, some who have gotten well, and some who have died, the same as among pellagrins who have not taken these preparations. Owing to the natural tendency to give credit for recovery to that medicine or drug which one happens to be taking, a number of pellagrins undoubtedly sincerely believe they have been helped by the taking of these nostrums with the result that the manufacturers have no difficulty in obtaining testimonials as to their beneficial effects.

The proprietors of these alleged pellagra cures have done their advertising largely in newspapers throughout the South. The advertising and sale of these preparations can hardly be considered otherwise than as a simple fraud, and those newspapers which carry the advertisements appear as parties thereto. Without the advertising aid of these newspapers the sale of such preparations would in most cases be comparatively restricted.

PLAGUE IN CUBA.

ITS EFFECTIVE CONTROL WITHOUT BURDENSOME RESTRICTIONS TO PASSENGER TRAVEL.

HABANA, CUBA, *April 18, 1914.*

With the sanitary measures being carried out in Habana and the perfect cooperation between the Cuban health authorities and the

officers of the United States Public Health Service it has been possible to lessen the restrictions placed upon passenger travel between Cuba and the United States.

Some misconception has arisen in the minds of residents of Habana as a result of the lessened restrictions. Not the least of the erroneous deductions has been that which gives rise to the deprecation of the work of the Cuban authorities in combating the spread of the plague, through the contention that the United States Government has "lifted the quarantine." There has been no "lifting of the quarantine" by the United States authorities.

A study of recent epidemics of plague has demonstrated that human beings do not transmit plague; that only the rat and the fleas that infest the rat are responsible for the spread of the infection.

There is no inconsistency between the efforts of the United States Public Health Service in preventing the transmission of the infection from Habana to United States ports and the work of the Cuban health authorities in their eradicative measures.

Plague is primarily a disease of rats; only secondarily and accidentally do human beings contract the disease.

When a rat dies of plague, the fleas leave the dead animal, and by preference attach themselves to other rats. They will attack human beings, if there are no rats to which to attach themselves. The rat flea is a species different from that which generally bites human beings, and prefers the rat as a host and infests rats and rat burrows. It will bite man or any other warm-blooded animal, but it does not infest the person of man nor his clothing as it does the rat. It therefore follows "No rats no plague."

The Cuban Department of Sanitation and the United States Public Health Service are working along the same lines. The former is killing rats and rat fleas in the buildings of Habana, in the coast-wise shipping and in the cargo outward bound from Habana. The United States officials are devoting the same attention to ridding all ships and cargo bound to United States ports of rats.

No restriction is exercised by the Cuban authorities against people leaving Habana, by land or sea, to other ports of the island. Likewise there is no detention of passengers bound from Cuba to United States ports. There is no inconsistency between the work of suppressive measures on land and the preventive measures in shipping. The efforts are parallel. No false sense of security should be engendered by the recent modification of maritime quarantine.

The plague situation in Habana is serious and merits the heartiest cooperation of all citizens to prevent the spread of the disease.

R. H. CREEL,
Passed Assistant Surgeon.

TYPHUS FEVER IN NEW MEXICO.

A REPORTED OUTBREAK AMONG THE NAVAJO INDIANS.

Dr. L. C. Day, of the United States Indian Service, made the following report from Albuquerque, N. Mex., April 23, of an outbreak of typhus fever among the Navajo Indians, 40 miles west of Albuquerque:

I wish to report a recent epidemic of typhus fever among the Navajo Indians, at Canoncito Cojo, about 40 miles west of here.

The first case occurred about January 1. The patient died without consulting the physician. I saw her daughter, who contracted the disease from the mother, on January 31. My diagnosis at this time was typhoid fever, though not confirmed by a Widal examination, for which I had no facilities at my disposal. March 5 I saw nine more cases, at which time I made the diagnosis of typhus fever, basing my diagnosis on the characteristic eruption appearing on the chest and abdomen and sometimes on unexposed portions of the extremities, but never on the face or hands or other exposed portions; also on the hemorrhagic condition of the mucous membrane and the characteristic ending of the fever by crisis in the case which had recovered. I now placed all the people in quarantine who were exposed to the contagion or then sick and began a campaign against the lice which infected the camp.

March 27, assisted by Supt. P. T. Lonergan, I clipped the hair of all exposed and infected cases and covered their bodies with a mixture of coal oil, lard, and sulphur. All fomites were either destroyed or sterilized and new quarters provided. No new cases developed, even among those previously exposed.

The quarantine was raised April 15. The total number of cases was 27—11 adults and 16 children. There were 4 deaths—2 children and 2 adults. Whooping cough was a complication with the children. It was my observation that, as a rule, the children ran a milder course than the adults, although nearly all the cases were seriously ill for a short time, at least, and all had a very marked eruption.

The first source of this infection was an old Mexico Mexican, who seemed ill on a visit to the camp about two weeks before the first case. Whence he came and whither he went no one was able to say, and it is a mere conjecture that he was the source of infection. However, the old woman who first became ill had been a washerwoman for old Mexico Mexicans, railroad employees a few miles from her home, and had a reputation as a wanderer in Mexican camps and Indian villages.

TYPHUS FEVER.

A BRIEF NOTE ON ITS PREVENTION.

By JOSEPH GOLDBERGER, Surgeon, United States Public Health Service.

Up to 1912 American physicians, if they gave the disease any consideration at all, regarded typhus as an exotic plague, and as a sort of medical curiosity having little more than historic interest. In that year the studies made by Anderson [1] and the writer clearly demonstrated that this disease was endemic in the city of New York at least. Since that time there have been reports of cases of apparently local origin in several of the larger American cities, such as

[1] Anderson and Goldberger, Public Health Reports, Washington, Feb. 2, 1912.

Philadelphia, Atlanta, Milwaukee, Chicago, and Boston. These developments have given to this ancient disease a new importance for the American clinician and sanitarian. Recently this interest has been further emphasized by its threatened invasion from abroad.[1] Since November 19, 1913, at least 19 cases have been discovered in immigrants arriving at Atlantic ports from Europe. Seven of these arrived at Providence from Marseilles and Naples, and 12 at the New York quarantine mainly from southern European ports.

In view of the foregoing, it seems timely to summarize briefly our knowledge relating to the method of spread and of prevention of this disease:

Typhus fever, sometimes also known as "camp fever" and "jail fever," is one of the great epidemic diseases. As has already been indicated, it is endemic in at least the larger of the American cities, but no epidemic has been recognized in the United States since 1891-92. It is a disease of temperate and cold climates. Because of its widespread prevalence in certain areas of Mexico, some writers have been led to include it among the diseases of the tropics. It does not occur, however, except as an imported disease, in any portion of Mexico which has a tropical climate. It is to be found only in the elevated (6,000 feet and above) plateau region of Mexico, and more particularly in the larger cities, such as Puebla, Mexico City, San Luis Potosi, Aguascalientes, and Saltillo.

Its association with poverty and filth is well known. It spares no age, though its manifestations in children are "atypical," that is, they differ in some respects from the manifestations in the adult, in being somewhat milder in children.

The knowledge that we have gained of this disease as the result of clinical studies, chiefly those of Brill, clearly shows that the older opinions as to its fatality must be somewhat revised. Although outbreaks with a fatality rate of 30 to 50 per cent and more have been reported, it is important to bear in mind that the disease even in the adult may be relatively benign, and have a fatality rate well under 10 per cent.[2]

Both the older and the more recent history of the disease testify to its great clinical likeness to typhoid. From a sanitary point of view it is important to recall the important differential points.

As a rule, the onset of typhus is decidedly more abrupt than that of typhoid. It is common in typhus to obtain a history of well-being on going to bed and of arising in the morning with a severe headache and malaise, which within a few hours compels a return to bed.

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[1] Public Health Reports, vol. 29, No. 16, Apr. 27, 1914, p. 927.

[2] There was but 1 death among the 255 cases observed by Brill in New York city between 1896 and 1910.—Editor.

Chilliness or a distinct chill are common at the onset in typhus, very much more so than in typhoid. Headache with or without chilliness and with or without much malaise almost invariably marks the invasion of typhus. Indeed the patient may complain of little else, either at the beginning or throughout the course of the disease. It is well to bear this point in mind.

In marked contrast to typhoid, the face is flushed and the conjunctivæ are congested in the first few days, as the result of a capillary congestion not unlike that seen at the onset of dengue or of yellow fever.

The temperature rises rapidly, very abruptly indeed, and with it the pulse rate; in typhoid the evolution of the fever takes longer as a general thing, and the rise in the pulse rate is sluggish and not in proportion to the fever.

Other points of distinction relating to the fever must be noted. Although it rises abruptly, it does not as a general thing range at high levels. In this as well as in some of the features of its onset, typhus strikingly resembles yellow fever. The duration of the fever is about twice that of yellow fever, and about half that of typhoid, namely, about 14 to 16 days. The defervescence also suggests yellow fever, except that it is not infrequently critical in typhus. Some of the older descriptions of typhus give the impression that a critical defervescence is invariable; this has not been the writer's experience with the disease, as he has seen it in Mexico.

An important distinction relates to the eruption. The eruption of typhus appears within 3 to 5 days after the onset, therefore, earlier than is the rule in typhoid; it is general, sparing only palms and soles; its evolution is rapid, being fully out within 24 to 36 hours, and is permanent, in marked contrast to the typhoid eruption which appears in *successive crops*. It is important also to recall that the macules constituting the typhus eruption are polymorphic. They have not the regularity of outline or the uniformity of size and appearance of the typhoid rose spots. Moreover, while most or all of the lesions may fade markedly on pressure in the early stages, some fade little if at all, and the proportion of these may and usually does rapidly increase, the eruption becoming petechial as it becomes older.

Blood and fecal cultures in typhus are negative, the former being sterile, as a rule; in typhoid it may be possible to recover the bacillus of Eberth. Of the laboratory tests the blood culture is the most valuable, as it is most helpful when most needed—i. e., early.

Although a disease clinically well known for many generations, its mode of transmission has been known only since 1909. In that year Nicolle and his associates, working in Tunis, reported success

in transmitting this disease by means of the body louse. This was very quickly confirmed and firmly established by the studies of Ricketts and Wilder, and Goldberger and Anderson, working in the city of Mexico. As a result of these studies we now know that typhus fever is transmitted from person to person by means of the body louse (*Pediculus vestimenti*). It is possible, as the work of Goldberger and Anderson would suggest, that the head louse (*Pediculus capitis*) may also at times serve as the propagating agent, but this is not positively established. From a consideration of the well-established epidemiological features of this disease it seems reasonably certain that it is transmitted in no way other than by the bite of an infected louse. As to the details of the mechanism of transmission, knowledge is as yet largely lacking. The virus circulates in the blood of the human host throughout the febrile period and for perhaps 24 to 36 hours after defervescence, and it is probable that the louse may become infected by feeding on the patient at any time during this period. How soon the louse itself becomes infective and how long it remains so are points that await further study and definite determination.

The discovery of the part played by the louse in the transmission of this disease has cleared up all the important epidemiological characteristics of the disease and has made plain many points that had appeared obscure or mysterious. We now understand why typhus has been peculiarly associated with misery and poverty, why it has been a vagabond's disease, a disease of jails and army camps—in brief, a disease of poverty, of filth, and overcrowding.

Prevention of the Disease.

Having clearly in mind the important rôle played by the louse in the transmission of the disease, the fundamental rules on which prevention is based may be readily deduced. In general terms it may be stated that association with a case of typhus fever in the absence of the transmitting insect, the louse, is no more dangerous than is association with a case of yellow fever in the absence of the yellow-fever mosquito. Danger threatens only when the insect appears on the scene.

We may say, therefore, that to prevent infection of the individual it is necessary for him only to avoid being bitten by the louse. In theory this may readily be done, for we know that the body louse infests and attaches itself almost entirely to the body linen, and that boiling kills this insect and its eggs. Individual prophylaxis is based essentially, therefore, on the avoidance of contact with individuals likely to harbor lice. Practically, however, this is not always as easy as it may seem, especially under the conditions of such intimate

association as is imposed by urban life. Particularly is this the case in places such as some of the large Mexican cities, where a large proportion of the population harbors this vermin. Under such circumstances it will be well to avoid crowds or crowded places, such as public markets, crowded streets, or public assemblies at which the "peon" gathers.

Community prophylaxis efficiently and intelligently carried out is, from a certain point of view, probably easier and more effective in protecting the individual than is the individual's own effort to guard himself. Typhus emphasizes, perhaps better than any other disease, the fact that fundamentally sanitation and health are economic problems. In proportion as the economic condition of the masses has improved—that is, in proportion as they could afford to keep clean—this notorious filth disease has decreased or disappeared. In localities where it still prevails its further reduction or complete eradication waits on a further improvement in, or extension of, the improved economic status of those afflicted. Economic evolution is a very slow process, and, while doing what we can to hasten it, we must take such precautions as existing conditions permit looking to a reduction in or complete eradication of the disease.

When possible, public bath houses and public wash houses, where the poor may bathe and do their washing at a minimum or without cost, should be provided. Similar provision should be made in military and construction camps. Troops in the field should be given the opportunity as frequently as possible to wash and *scald* or *boil* their body linen.

Lodging houses, cheap boarding houses, night shelters, hospitals, jails, and prisons, are important factors in the spread and frequently constitute foci of the disease. They should receive rigid sanitary supervision, including the enforcement of measures to free all inmates of such institutions of lice on admission.

So far as individual foci of the disease are concerned these should be dealt with by segregating and keeping under observation all exposed individuals for 14 days—the period of incubation—from the last exposure, by disinfecting (boiling or steam) the suspected bedding, body linen, and clothes, for the destruction of any possible vermin that they may harbor, and by fumigating (with sulphur) the quarters that may have been occupied.

It will be noted that nothing has been said as to the disposition of the patient. So far as the patient is concerned, he should be removed to "clean" surroundings, making sure that he does not take with him any vermin. This may be done by bathing, treating the hair with an insecticide (coal oil, tincture of larkspur), and a complete change of body linen. Aside from this, the patient may be

treated or cared for in a general hospital ward or in a private house, provided the sanitary officer is satisfied that the new surroundings to which the patient has been removed are "clean," that is, free from vermin. Indeed, it is reasonably safe to permit a "clean" patient to remain in his own home if this is "clean," for as has already been emphathized there can be no spread in the absence of lice. This is a common experience in native families of the better class and in Europeans in Mexico City.

Similarly the sulphur fumigation above prescribed may be dispensed with as unnecessary in this class of cases.

MALARIAL FEVERS.

PREVALENCE AND GEOGRAPHIC DISTRIBUTION IN ALABAMA.

By R. H. von Ezdorf, Surgeon, United States Public Health Service.

The regions in the State in which malaria prevails to the greatest extent, are apparently in the Tennessee Valley belt which extends across the northern part of the State and also in the central prairie region known as the "Black Belt." The Black Belt is so named from the character of its soil, which consists of a heavy dark clay with greenish or yellowish subsoil, underlaid with rotten limestone. It has also a large black or colored population of 62½ per cent and over. The disease also prevails to a large extent in counties scattered over the State, particularly in the southernmost counties of Washington and Mobile. Bibb County has also, apparently, a large proportion of cases.

The counties having the largest populations are Jefferson, Montgomery, and Mobile, where the largest cities of the State are located, namely, Birmingham, Montgomery, and Mobile, respectively. In these counties the largest number of deaths have occurred.

The general reports show, and the consensus of opinion of physicians is, that malarial fevers prevailed to a less extent in all parts of the State during the year 1913 than in 1912. This has also been the experience at this station in Mobile.

A study of the meteorological conditions is here of interest. The meteorological reports of the Weather Bureau, Department of Agriculture, which have been furnished this station every month since 1909, by Mr. Albert Ashenberger, local forecaster for Mobile, were reviewed, and the table following was prepared, which shows the mean temperature and the total precipitation for each month during the past five years.

Month.	Normal for month.		1909		1910		1911		1912		1913	
	Mean temperature.	Precipitation.	Mean temperature.	Precipitation.	Mean temperature.	Precipitation.	Mean temperature.	Precipitation.	Mean temperature.	Precipitation.	Mean temperature.	Precipitation.
January	49.8	4.85	56	1.50	52	2.63	57	1.82	48	4.01	57	4.29
February	53.2	5.36	55	4.08	52	6.40	61	2.09	49	5.50	54	3.40
March	59.1	7.17	63	2.39	65	1.93	64	4.07	59	6.62	60	10 58
April	66.0	4.35	66	9.04	67	1.54	69	13.40	68	17.32	66	4.16
May	73.6	4.00	71	12.10	72	2.29	75	5.08	75	7.70	74	1.59
June	79.1	5.95	80	10.44	78	6.49	83	2.36	77	4.63	79	3.88
July	80.5	7.04	83	8.28	80	11.70	80	7.53	81	6.79	81	4.41
August	79.7	6.81	83	5.63	83	5.10	81	8.81	81	8.25	82	5.61
September	76.5	5.02	79	5.42	80	1.07	82	4.09	79	5.76	77	15.50
October	67.1	3.18	70	1.60	70	7.45	73	2.89	70	11.21	66	1.70
November	57.5	3.74	65	.50	59	2.08	57	5.74	57	3.91	61	3.75
December	51.5	4.57	49	7.50	51	3.78	57	10.02	54	8.16	54	2.55
Total	793.6	62.04	820	68.48	809	52.46	839	67.90	798	89.86	811	61.42
Average	66.1	5.17	68.3	5.70	67.4	4.37	69.9	5.66	66.5	7.49	67.6	5.12

It will be seen that the precipitation for the year 1912 was 89.86 inches, and for 1913, 61.42 inches. This shows an average monthly precipitation during 1912 of 2.32 inches more than the normal, and that an excess of rainfall occurred during the spring months. It was also a year when the rivers and streams were high, overflowing many lands during the early spring, so that upon the receding of the waters many mosquito breeding places were probably created. These conditions may, in a measure, explain the greater prevalence of malaria during 1912 over that of 1913.

Prevalence of the Disease.

Circular franked postal cards were mailed by me to every physician in the State, calling for certain information on the reply cards for the months of May, June, August, September, October, and November. The following table gives a summary of the reports received each month:

	May.	June.	August.	September.	October.	November.
Cards mailed	2,286	2,400	2,325	2,325	2,320	2,320
Cards returned unclaimed	40	19	16	20	9	9
Replies received	348	333	351	291	259	234
Percentage of replies received	15.4	14.9	15.2	12.6	11.2	10.12
Counties represented in replies	67	64	66	66	62	62
Counties not heard from	.....	3	1	1	5	5
Towns or cities represented in replies	216	218	242	230	189	161
Cases of malaria reported	2,162	2,734	2,846	2,466	1,016	812
Whites	1,462	1,646	1,661	1,428	600	518
Colored	710	1,088	1,185	1,038	416	294
Average number of cases per physician reporting	6	8	8	8	3	3
Cases of malaria confirmed microscopically:						
Tertian	(?)	(?)	229	134	73	42
Quartan	(?)	(?)	39	24	10	1
Estivo-autumnal	(?)	(?)	58	36	29	10
	609	646	326	194	112	53
Chronic cases of malaria reported	(?)	(?)	448	413	186	143
Cases under 15 years of age	(?)	(?)	764	662	364	275
Physicians using microscope	64	84	68	55	33	19

The percentages of replies received for the year 1912 were much better than those received during the year 1913.

The following is a comparative table showing by color and months the total number of cases for which reports were received for the years 1912 and 1913:

Months.	1912				1913		
	Whites.	Colored.	Not stated.	Total.	Whites.	Colored.	Total.
May					1,462	719	2,181
June					1,646	1,088	2,734
July							
August					1,661	1,185	2,846
September	6,146	4,863	255	11,264	1,428	1,038	2,466
October	3,511	2,392	360	6,263	600	416	1,016
November	1,800	1,433	86	3,319	518	294	812
Total	11,457	8,688	701	20,846	7,315	4,740	12,055

The percentages of replies and the numbers of cases reported for the months of September, October, and November for the two years show that over two and one-half times as many cases were reported for the year 1912 as were reported for the same period during 1913.

The morbidity reports indicate that the disease exists in every county in the State, the tertian type being most prevalent.

The following table is a summary of all reports received each month, giving the number of cases by color in the different counties:

Name of county.	May.		June.		August.		September.		October.		November.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Autauga	13	4	7	14	5	17	10	10	3	2	2	9
Baldwin	1	1	5	4	9	20	5	8	2	1		
Barbour	26	31	9	8	3	11	25	17	4	6	25	7
Bibb	8	3	17	9	9	5	48	54	16	1	11	3
Blount	30	3	63	16	19	12	15	6	8	4	1	0
Bullock	4	19	7	21	18	15	7	14	1	4	2	13
Butler	3	0	8	7	5	0	6	10	4	8		
Calhoun	73	10	32	11	26	8	13	9	10	9	0	2
Chambers	1	0	2	0			11	1	2	0		
Cherokee	12	3	8	0	56	18	34	11	(1)	(1)		
Chilton	7	0	55	27	40	12	37	12	27	13	17	10
Choctaw	2	3	15	8	4	11	17	24			(1)	(1)
Clarke	70	26	64	39	38	25	10	7	15	6	16	12
Clay	6	0	4	0			6	0			2	0
Cleveland			(1)	(1)			0	0	0	0	0	0
Coffee	13	1	12	6	18	0	3	1	0	0		
Colbert	37	9	6	4	32	15	43	30	14	5	1	2
Conecuh	5	0	2	0	12	8	18	9	(1)	(1)	1	1
Coosa			6	4	2	1	6	0	0	0	0	0
Covington	33	7	10	9	29	33	16	5	19	7	17	12
Crenshaw	35	35	4	5	13	8	26	33	0	0		
Cullman	34	4	24	10	4	1	11	0	16	0	2	0
Dale	10	1	15	8	5	3	21	26	8	11	1	2
Dallas	69	30	28	64	53	57	32	63	19	35	5	16
Dekalb	20	0	6	1	24	0	2	0	15	0	1	0
Elmore	8	9	13	10	(1)	(1)	36	14	10	17	3	7
Escambia	28	2	42	13	11	4	10	4	4	6	8	4
Etowah	39	5	65	17	24	18	31	5	5	6	5	4
Fayette	13	1	43	1	84	24	43	10	33	2	38	2
Franklin	21	8	22	3	11	3			5	0		

(1) No report.

Name of county.	May.		June.		August.		September.		October.		November.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Geneva	23	6	12	10	65	20	203	25	35	7	82	7
Greene	5	3	3	12	10	26	3	17	(1)	(1)	3	10
Hale	45	72	11	31	20	38	2	24	10	16	5	4
Henry	12	0	(1)	(1)	3	2	5	2	(1)	(1)	6	0
Houston	31	11	78	47	53	32	34	17	20	2	(1)	(1)
Jackson	19	3	42	0	20	1	7	0	.....	.....	.....	.....
Jefferson	111	57	100	54	139	53	45	30	39	23	27	17
Lamar	22	11	10	5	30	8	10	3	0	0	.....	.....
Lauderdale	48	10	34	8	46	12	26	3	16	3	5	2
Lawrence	10	20	115	73	8	10	(1)	(1)	25	5	50	14
Lee	.....	.....	2	0	7	3	4	1	0	0	0	0
Limestone	29	15	23	9	70	36	25	8	5	1	9	6
Lowndes	9	13	21	83	15	58	14	89	6	15	.....	.....
Macon	2	5	13	18	1	2	23	10	1	6	(1)	(1)
Madison	19	10	52	20	47	29	31	15	4	1	10	5
Marengo	0	1	26	31	35	58	39	38	7	3	4	9
Marion	6	2	24	1	0	0	13	2	2	0	6	1
Marshall	26	6	30	0	28	0	20	0	9	0	9	0
Mobile	22	45	44	47	39	75	69	98	31	54	24	49
Monroe	14	7	54	33	14	17	46	50	1	9	18	9
Montgomery	15	0	16	62	50	75	8	38	16	39	20	9
Morgan	81	32	67	46	16	3	22	9	14	3	14	8
Perry	4	2	(1)	(1)	18	29	.....	.....	(1)	(1)	(1)	(1)
Pickens	24	20	48	40	22	15	23	26	10	1	.....	.....
Pike	21	12	12	6	19	15	11	7	5	0	13	9
Randolph	10	0	5	0	2	1	2	0	4	0	5	0
Russell	15	15	12	18	5	4	6	2	(1)	(1)	3	2
Shelby	9	1	21	3	24	15	7	1	5	9	.....	.....
St. Clair	10	0	.....	.....	25	11	1	0	1	0	(1)	(1)
Sumter	12	16	28	21	45	60	26	44	(1)	(1)	8	12
Talladega	13	7	13	1	22	12	17	6	15	15	25	5
Tallapoosa	13	0	7	1	7	6	5	4	5	0	0	0
Tuscaloosa	10	14	22	10	51	40	24	25	13	25	4	4
Walker	62	27	47	13	23	9	55	25	22	6	3	0
Washington	10	4	5	2	25	27	29	12	15	9	(1)	(1)
Wilcox	69	57	48	64	39	54	13	24	22	21	4	6
Winston	.....	.....	7	0	4	0	18	0	2	0	3	0
	1,462	719	1,646	1,088	1,661	1,185	1,428	1 038	600	416	518	294

[1] No report

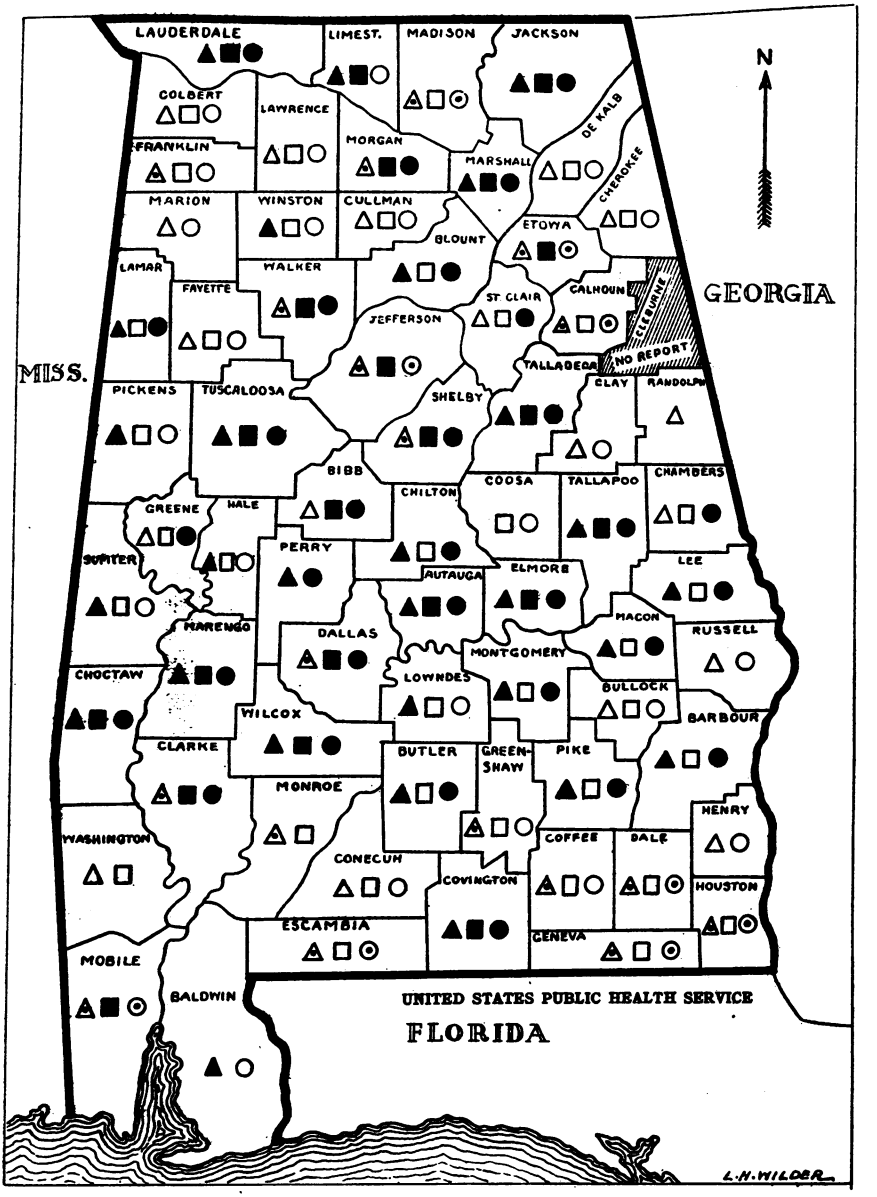
Types of Infection.

The tertian or benign type of infection prevails. The number of counties in which the types of infection were stated, and those reported confirmed for the period, are here summarized:

Types.	Number of counties.		Total.
	Not confirmed.	Confirmed microscopically.	
Tertian	22	43	65
Quartan	37	22	59
Estivo-autumnal	27	36	65

Map No. 1 has been prepared, showing by symbols the different types reported and those confirmed for the entire period of six months. This map also shows the types which were confirmed microscopically at this station, from specimens submitted by physicians for examination.

MAP 1.



△=TERTIAN: □=QUARTAN: O=AESTIVO-AUTUMNAL.

MAP 1.—*Alabama.*—Showing the types of malaria reported present in the several counties of Alabama during 1913. The solid black symbols indicate the forms of malaria reported by correspondents to have been confirmed microscopically. The symbols with dots in the center indicate the counties in which the presence of the disease was confirmed microscopically from specimens forwarded to the author for examination.

Diagnoses Confirmed Microscopically.

The following table gives the number of physicians who report using the microscope, the number of counties represented, and the number of cases in which the diagnosis was confirmed microscopically, as shown in the reports received each month:

Month.	Number of physicians.	Counties represented.	Number of cases.
May	64	30	609
June	84	37	646
August	68	34	326
September	55	32	194
October	33	17	112
November	19	13	53

Circular letters were addressed to physicians in each county in the State of Alabama, Mobile County excepted, requesting them to send blood smears from active and chronic cases, and stating that slides, slide boxes, and history blanks, calling for name, age, sex, color, place of birth, address, length of residence at present address, previous history of malaria, and remarks as to clinical diagnosis, size of spleen, and if quinine had been taken, with date, together with frank for return of slides and histories, would be furnished. There was a total of 427 circulars mailed, to which 108 physicians in 54 counties replied that they would be glad to cooperate and forward specimens as requested. To those replying favorably, material, together with letter of instructions for making thin and thick blood smears, was sent.

Blood smears were received from 36 physicians, and examined microscopically, a report of the results of the examinations being made to the respective physicians.

The counties in which the different types of infection were confirmed are shown in map No. 1, indicated by symbols with dots in the center, and are as follows:

Tertian type of infection was found in specimens received from the counties of Bibb, Clarke, Coffee, Crenshaw, Dallas, Franklin, Monroe, Morgan, Shelby, and Walker, and

Tertian and estivo-autumnal types in the counties of Calhoun, Dale, Etowah, Escambia, Geneva, Houston, and Madison; also in specimens obtained at the marine hospital at Mobile and by index work in Jefferson County.

Malarial Index and Surveys.

Surveys were made at four different points in the State, comprising an examination of breeding places for mosquitoes, and a malarial blood index of a representative number of persons. These surveys

were made at different times of the year, viz: Plateau in June, Anniston in August, and Leeds and Montevallo in December.

A table giving the places, number of persons examined, by color, and the results of the blood examinations, together with types of infection found, is here given:

Place.	Examined.		Total.	Number infected.		Per cent.	Types.	
	White.	Colored.		White.	Colored.		Tertian.	Estivo-autumnal.
Anniston	131	15	146	10	2	8.22	8	4
Plateau	8	104	112	.....	2	1.80	1	1
Leeds	209	.....	209	4	.....	1.91	4	.....
Montevallo	197	.....	197	7	.....	3.55	7	.....
	545	119	664	21	4	3.76	20	5

Chronic Malaria.

A summary of the reports made of chronic cases of malaria each month is here given:

Month.	Number of physicians.	Counties represented.	Number of cases.
May	151	46	(1)
June	113	59	(1)
August	139	53	448
September	114	53	413
October	72	40	186
November	56	34	143

[1] Not stated.

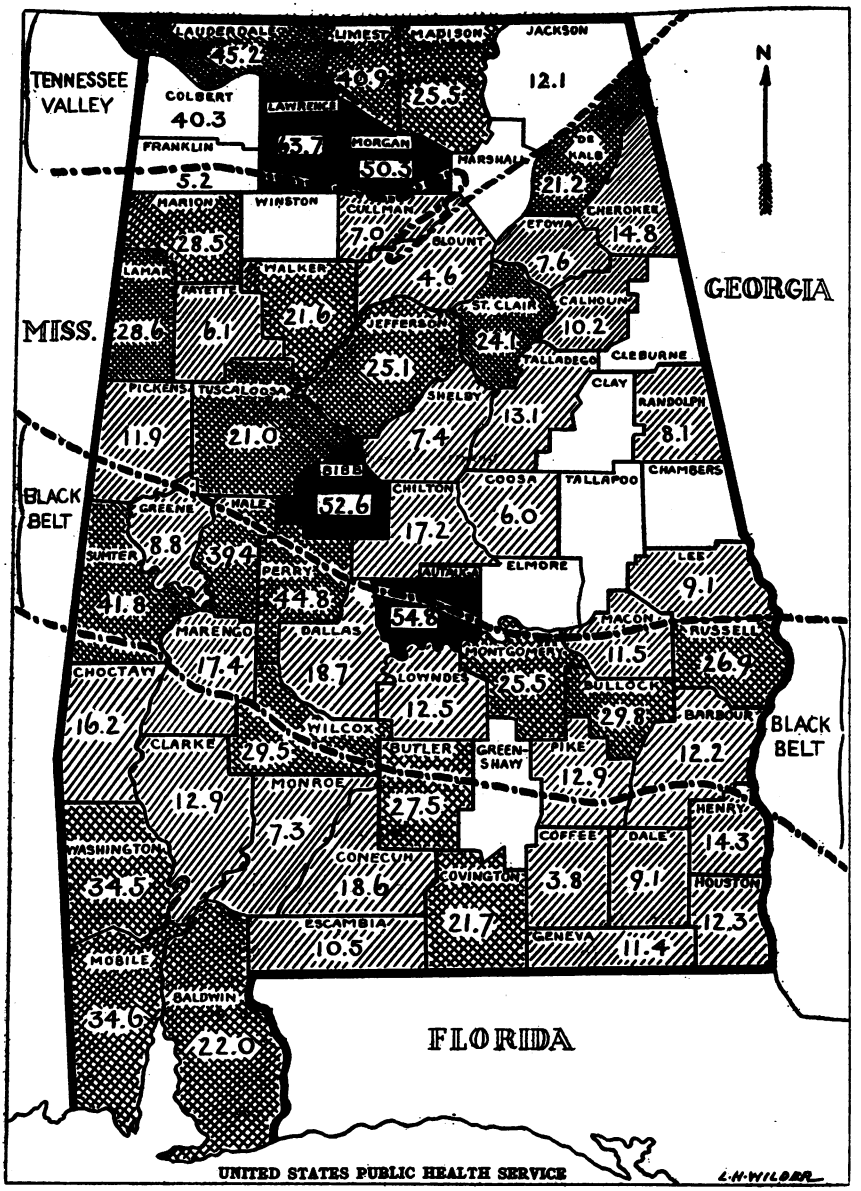
Effect on Children.

Reports were received of 12,055 cases of malaria for the six months. For the months of August, September, October, and November, 7,140 cases were reported. Of these, 2,065 cases occurred among children under 15 years of age, representing 34.6 per cent.

No reports were received for the months of May and June as to the number of cases occurring in children under 15 years of age, but there were 185 physicians in 60 counties for May and 182 physicians in 61 counties for June, reporting the occurrence of cases in children under 15 years of age.

For the month of May, 73 physicians from 40 counties; for June, 86 physicians from 42 counties; for August, 56 physicians from 36 counties; for September, 52 physicians from 38 counties; for October, 41 physicians from 26 counties; and for November, 40 physicians from 29 counties, reported knowing of children undeveloped, mentally and physically, on account of chronic malaria.

MAP 2.



= No deaths from malaria reported.

= More than 50 deaths reported as due to malaria per 100,000 population.

= Between 20 and 50 deaths reported as due to malaria per 100,000 population.

= Less than 20 deaths reported as due to malaria per 100,000 population.

MAP 2.—*Alabama.*—Showing the counties in which no deaths were reported as due to malaria, and the relative number of deaths per 100,000 population reported as due to malaria in the other counties, 1913. Colbert, Franklin, and Jackson counties should be shaded, as deaths from malaria were reported in each, as indicated by the figures on the map.

Reported Deaths from Malaria.

A visit was made to the State board of health office, where the records of reported deaths were obtained through the courtesy of the State health officer, Dr. W. H. Sanders. These records are compiled from reports received from the county health officers by Dr. H. G. Perry, registrar of vital and mortality statistics.

From these records a map, "No. 2," has been prepared, showing the relative number of deaths reported in each county during the year 1913 per 10,000 population.

It will be seen that no deaths from malarial fevers were reported in 8 of the 67 counties in the State, as follows: Clay, Cleburne, Crenshaw, Elmore, Marshall, Tallapoosa, and Winston.

The reports of deaths from all causes for the year 1913 were as follows:

White males	5,589
White females	4,942
Colored males	5,580
Colored females	5,405
Total	21,516

The reported deaths from malarial fevers total 434 for the year 1913, which is equal to 2 per cent of the reported deaths from all causes, and is at the rate of 20.3 per 100,000 population.

The deaths reported as due to malarial fevers, arranged according to age, sex, and color, and months of decease, were as follows:

	Whites.		Colored.		Total.
	Male.	Female.	Male.	Female.	
AGES.					
Under 1 year	11	8	10	6	35
1 to 2 years	10	3	7	8	28
2 to 5 years	7	11	8	9	35
5 to 10 years	4	4	10	9	27
10 to 15 years	6	5	8	9	28
15 to 20 years	4	6	9	9	28
20 to 30 years	9	13	22	24	68
30 to 40 years	10	8	8	18	44
40 to 50 years	7	6	10	15	38
50 to 60 years	10	2	12	8	32
60 to 70 years	10	9	10	7	36
70 to 80 years	5	3	4	4	16
80 to 90 years	3	1	4	3	11
Over 90 years	.....	.....	1	1	2
Not stated	.....	2	.....	4	6
	96	81	123	134	434
MONTHS.					
January	2	5	4	1	12
February	8	2	6	3	19
March	4	6	7	4	21
April	2	6	4	12	24
May	10	2	10	10	32
June	6	8	14	12	40
July	11	12	13	19	55
August	13	17	19	26	75
September	15	11	16	18	60
October	10	7	16	15	48
November	11	2	7	8	28
December	4	3	7	6	20
	96	81	123	134	434

The number of deaths among the colored exceeded those among the white, the proportion being 1.45 colored to 1 white.

The number of deaths occurring among children during the first decade of life was 125, or 28.8 per cent of the total malarial deaths for the year. The reports further show that 41.7 per cent of the total malarial deaths occurred during the first two decades of life. This may be compared with that of previous years.

The average percentage for the three years, 1910, 1911, and 1912, was 32.7 per cent for the first decade of life and for the first and second decades of life together 44.6 per cent of the total number of deaths from malarial fevers reported for those years.

Deaths were reported for every month. It appears from the mortality records for the past four years that the months of greatest mortality are August, September, and October. The reported deaths begin to increase in number in the month of April, reaching a maximum in September, subsiding slightly in October, and rapidly in November, and average about the same for the months of December to March, inclusive.

The following table gives the number of deaths from malarial fevers, arranged according to the months of occurrence for the years 1910, 1911, 1912, and 1913:

Months.	1910	1911	1912	1913
January	11	10	9	12
February	6	3	9	19
March	9	10	9	21
April	16	12	20	24
May	26	28	20	32
June	24	32	27	40
July	47	42	59	55
August	98	66	82	75
September	89	75	114	60
October	82	104	101	48
November	44	37	59	28
December	15	18	37	20
	467	437	546	434

Mosquitoes.

Circular letters were mailed to 230 physicians in 66 counties in the State, requesting them to forward specimens of mosquitoes prevalent in their respective localities, for which containers, with franks for return, were furnished.

The following is the result of the examination and determination of species of mosquito specimens received, by counties:

County.	Species.	County.	Species.
Autauga	Culex.	Etowah	Anopheles quadrimaculatus and Culex.
Baldwin	Culex and Megarrhinus.	Franklin	Culex.
Barbour	Anopheles, A. quadrimaculatus, Culex, C. solicitans, Stegomyia (Aedes) calopus.	Geneva	Do.
		Henry	Culex and Stegomyia (Aedes) calopus.
Bibb	Culex and Stegomyia (Aedes) calopus.	Houston	Do.
Blount	Stegomyia (Aedes) calopus.	Jackson	Culex.
Bullock	Culex and Stegomyia (Aedes) calopus.	Lamar	Do.
		Lawrence	Do.
Butler	Anopheles, Culex, and Stegomyia (Aedes) calopus.	Lee	Do.
		Lowndes	Anopheles, Culex, and Stegomyia (Aedes) calopus.
Calhoun	Culex and Stegomyia (Aedes) calopus.	Macon	Culex and Stegomyia (Aedes) calopus.
Chambers	Anopheles punctipennis and Culex.	Madison	Culex.
		Marengo	Anopheles crucians and Culex.
Cherokee	Culex solicitans.	Morgan	Culex.
Chilton	Anopheles quadrimaculatus and Culex.	Pickens	Do.
		Randolph	Do.
Clarke	Culex and Stegomyia (Aedes) calopus.	St. Clair	Do.
		Sumter	Anopheles, Culex, and Stegomyia (Aedes) calopus.
Colbert	Anopheles and Culex.		
Covington	Anopheles, A. crucians, Culex, and Stegomyia (Aedes) calopus.	Tuscaloosa	Culex and Stegomyia (Aedes) calopus.
		Walker	Anopheles, Culex, Stegomyia (Aedes) calopus, and Megarrhinus.
Crenshaw	Culex and Stegomyia (Aedes) calopus.		
		Washington	Culex.
Cullman	Anopheles, A. crucians, Culex, and Megarrhinus rutilus.	Wilcox	Anopheles crucians and Stegomyia (Aedes) calopus.
Dale	Culex and Stegomyia (Aedes) calopus.		
Dallas	Do.		
Elmore	Do.		
Escambia	Do.		

While in the northern part of the State I found breeding places of Anopheles and collected larvæ in 10 counties, viz, Marion, Walker, Fayette, Tuscaloosa, Jefferson, Pickens, Green, Hale, Sumter, and Choctaw.

Mosquitoes were reported to be present in every county in the State. In 46, Anopheles have been reported.

The postal reports on the species of mosquitoes were as follows:

Species.	May.	June.	August.	September.	October.	November.
Anopheles	22	10	17	13	14	10
Anopheles and Culex	7	21	22	27	12	11
Anopheles, Culex and Stegomyia (Aedes) calopus	.....	3	4	4	2	1
Anopheles and Stegomyia (Aedes) calopus	.....	.....	1	2	.....	.....
Stegomyia (Aedes) calopus and Culex	.....	.....	1	.....	2	.....
Stegomyia (Aedes) calopus	1	1	.....	.....	1	1
Culex	2	2	2	2	.....	2
Unknown	34	26	18	17	25	32
None	1	1	1	1	.....	1
No report	.....	3	1	1	5	5
Not stated	.....	.....	.....	.....	6	4
	67	67	67	67	67	67

Swamps and poorly drained lands were reported to exist in every county in the State.

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.

RECIPROCAL NOTIFICATION.

Minnesota.

Cases of communicable diseases referred during March, 1914, to other State health departments by the division of epidemiology of the Minnesota State Board of Health.

Disease.	Notified at—	Referred to health authority of—	Why referred.
Scarlet fever....	Seeley township, Faribault County.	Kanawha, Hancock County, Iowa.	Resident of Kanawha, Iowa.
	Austin, Mower County....	Chamberlin, Brule County, S. Dak.	Resident of Chamberlin, S. Dak.
Smallpox.....	St. Paul, Ramsey County.	Aberdeen, Brown County, S. Dak.	Came from Aberdeen, S. Dak.
	Minneapolis, Hennepin County.	Valley Junction, Polk County, Iowa.	Probably infected at Valley Junction, Iowa.
Tuberculosis....	Pokegama Sanatorium, Pokegama, Pine County.	Chicago, Cook County, Ill...	Resident of Chicago, Ill.
		Pierpont, Day County, S. Dak.	Resident of Pierpont, S. Dak.
		Excelsior Richland County, Wis.	Resident of Excelsior, Wis.
		Alcester, Union County, S. Dak.	Returning to Alcester, S. Dak.
		Ambrose, Divide County, N. Dak.	Returning to Ambrose, N. Dak.

SMALLPOX.

Indiana—Evansville.

Surg. Oakley, of the Public Health Service, reported by telegraph that during the week ended April 25, 1914, 16 cases of smallpox had been notified in Evansville, Ind.

Texas—Galveston.

Surg. Bahrenburg, of the Public Health Service, reported by telegraph that during the week ended April 24, 1914, 7 cases of smallpox had been notified in Galveston, Tex.

SMALLPOX—Continued.

State Reports for March, 1914.

Places.	Number of new cases reported during month.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
California:						
Alameda County—						
Oakland	2					2
Calaveras County	4			1		3
Colusa County	9				1	8
Fresno County—						
Coalinga	1				1	
Imperial County	4			1	3	
Calexico	1			1		
Kern County	1					1
Taft	1					1
Kings County	1				1	
Lake County	1					1
Los Angeles County	1				1	
Los Angeles	2			1	1	
Monrovia	6				6	
Long Beach	1				1	
Madera County	2				2	
Nevada County—						
Nevada City	1				1	
Grass Valley	3			1	2	
Placer County—						
Auburn	6				3	3
San Bernardino County						
Redlands	1					1
San Diego County—						
San Diego	1				1	
San Francisco County—						
San Francisco	13					13
San Joaquin County—						
Stockton	5			1	4	
San Mateo County—						
South San Francisco	2			1	1	
Santa Cruz County—						
Boulder Creek	2				2	
Santa Cruz	4				3	1
Tulare County	1				1	
Total	76			7	35	34
Minnesota:						
Beltrami County—						
Baudette	2					2
Nymore	1				1	
Wabanaca Township	1					1
Blue Earth County—						
South Bend Township	1				1	
Lake Crystal	1					1
Mankato	5			3	2	
Carlton County—						
Barnum	1					1
Blackhoff Township	2					2
Cass County—						
Cass Lake	1				1	
Clay County—						
Moorhead	10				6	4
Clearwater County—						
Greenwood Township	1				1	
Leon Township	1				1	
Pine Lake Township	4			1	3	
Cottonwood County—						
Rose Hill Township	2					2
Crow Wing County—						
Ironton	2					2
Riverton	4				2	2
Faribault County—						
Emerald Township	1					1
Fillmore County—						
Harmony	1					1
Freeborn County—						
Minda Township	1					1
Hennepin County—						
Minneapolis	19			5	14	

SMALLPOX—Continued.

State Reports for March, 1914—Continued.

Place.	Number of new cases reported during month.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain
Minnesota—Continued.						
Hubbard County—						
Akeley	3				2	1
Jackson County—						
Heron Lake	1					1
Kandiyohi County—						
Pennock	3				3	
Willmar	2				1	1
Koochiching County—						
International Falls	1					1
McLeod County—						
Hutchinson	5				4	1
Meeker County	5				2	3
Morrison County—						
Elmsdale Township	1				1	
Mower County—						
Austin	5				5	
Murray County—						
Dorray Township	1					1
Nobles County—						
Worthington	3					3
Norman County—						
Fossum Township	2					2
Olmsted County—						
Rock Dell Township	1				1	
Cascade Township	1				1	
Kalmar Township	1				1	
Rochester	12				12	
Salem Township	1				1	
Otter Tail County—						
Oak Valley Township	1				1	
Polk County—						
Crookston	2			2		
Ramsey County—						
St. Paul	7				5	2
Redwood County—						
North Hero Township	1				1	
Walnut Grove	3					3
Rice County—						
Faribault	1			1		
Walcott Township	1				1	
Rock County—						
Luverne	2					2
Mound Township	1				1	
St. Louis County—						
Chisholm	2				2	
Duluth	42		1	5	36	
Fayal Township	4		1		3	
Hibbing	1					1
Meadowland Township	1					1
Mountain Iron	1					1
Virginia	1					1
Sherburn County—						
Becker Township	7				5	2
Stearns County—						
Ashley Township	1					1
St. Cloud	1					1
Washington County—						
Stillwater	1				1	
Marine Mills	1					1
Watonwan County—						
Lewisville	1				1	
Wilkin County—						
Breckenridge	14			1	2	11
Wright County—						
Rockford	3			2	1	
Waverly	1			1		
Total	210		2	21	126	61

SMALLPOX—Continued.

Miscellaneous State Reports.

Places.	Cases.	Deaths.
Iowa (Mar. 1-31):		
Counties—		
Allamakee	2	
Appanoose	1	
Audubon	4	
Benton	3	
Boone	44	
Bremer	1	
Buchanan	7	
Buena Vista	3	
Butler	2	
Carroll	3	
Cass	5	
Clarke	1	
Clay	4	
Clinton	11	
Dallas	3	
Davis	3	
Des Moines	3	
Dickinson	3	
Fayette	14	
Franklin	1	
Greene	24	
Hamilton	3	
Hardin	4	
Harrison	5	
Henry	7	
Jasper	28	
Jefferson	4	
Johnson	4	
Keokuk	4	
Kossuth	4	
Linn	9	
Louisa	12	
Lucas	2	
Lyon	3	
Madison	1	
Mahaska	1	
Marion	10	
Monona	2	
Monroe	16	
Muscatine	44	
O'Brien	1	
Osceola	7	
Palo Alto	5	
Polk	176	
Pottawattamie	15	
Poweshiek	2	
Scott	11	
Shelby	13	
Sioux	37	
Story	13	
Wapello	1	
Warren	2	
Wayne	15	
Webster	14	
Woodbury	4	
Wright	5	
Total	626	
Kansas (Mar. 1-31):		
Counties—		
Allen	15	
Barton	9	
Brown	16	
Butler	12	
Chase	1	
Chatauqua	2	
Cherokee	6	
Clark	2	
Clay	27	
Cloud	37	
Cowley	7	
Crawford	23	
Ellsworth	3	
Franklin	1	
Geary	1	
Kansas (Mar. 1-31)—Contd.		
Counties—		
Greenwood	1	
Harper	13	
Harvey	1	
Labette	9	
Leavenworth	4	
Linn	1	
Lyon	14	
Marshall	4	
McPherson	2	
Mitchell	4	
Montgomery	30	
Neosho	10	
Ottawa	8	
Pawnee	2	
Republic	1	
Sedgwick	12	
Shawnee	27	
Smith	1	
Sumner	6	
Wilson	5	
Woodson	1	
Wyandotte	87	
Total	405	
North Dakota (Mar. 1-31):		
Counties—		
Cass	4	
Cavalier	1	
Eddy	10	
Grand Forks	5	
Griggs	1	
McLean	1	
Pierce	3	
Ramsey	6	
Richland	1	
Sheridan	1	
Stutsman	10	
Towner	4	
Traill	15	
Walsh	3	
Ward	2	
Wells	2	
Total	69	
Vermont (Mar. 1-31):		
County—		
Chittenden	1	
Virginia (Mar. 1-31):		
Counties—		
Albemarle	3	
Amherst	1	
Appomattox	8	
Bedford	39	
Campbell	24	
Craig	5	
Dickenson	2	
Dinwiddie	6	
Fairfax		4
Farquier	4	
Fluvanna	3	
Franklin	11	1
Frederick	1	
Halifax	4	
Henrico	13	
Henry	12	
Isle of Wight	11	
King and Queen	2	
King William	7	
Lancaster	7	
Loudon	12	
Mathews	8	
Mecklenburg	4	
Montgomery	14	

SMALLPOX—Continued.

Miscellaneous State Reports—Continued.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Virginia (Mar. 1-31)—Con.			Virginia (Mar. 1-31)—Con.		
Counties—			Counties—		
Nansemond	27	1	Russell	108	
Nelson	1		Shenandoah	78	
Norfolk	34		Spottsylvania	2	
Northampton	14		Southampton	58	
Orange	1		Sussex	3	
Patrick	7		Tazewell	8	
Prince George	8		Washington	31	1
Prince Edward	2		Warwick	3	
Pittsylvania	17		Warren	1	
Princess Anne	9		Wise	7	
Prince William	3				
Roanoke	11		Total	639	7
Rockingham	5				

City Reports for Week Ended Apr. 11, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md	10		Nashville, Tenn	6	
Butte, Mont	3		New Orleans, La	2	
Cincinnati, Ohio	6		Niagara Falls, N. Y	1	
Coffeyville, Kans	4		Passaic, N. J	1	
Columbus, Ohio	1		Portland, Oreg	4	
Detroit, Mich	10		Portsmouth, Va	2	
Evansville, Ind	19		Racine, Wis	1	
Hoboken, N. J	2		Rutland, Vt	2	
Kansas City, Kans	32		St. Louis, Mo	4	
Kearny, N. J	1		San Francisco, Cal	1	
Knoxville, Tenn	9		Seattle, Wash	2	
Lexington, Ky	1	1	Spokane, Wash	7	
Little Rock, Ark	3		Superior, Wis	4	
Los Angeles, Cal	1		Toledo, Ohio	9	
Lynchburg, Va	14		Washington, D. C	2	
Marinette, Wis	2		York, Pa	1	
Milwaukee, Wis	19		Zanesville, Ohio	2	
Moline, Ill	1				

TYPHOID FEVER.

State Reports for March, 1914.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
California:		California—Continued.	
Alameda County—		Sacramento County—	
Alameda	2	Sacramento	7
Berkeley	2	San Diego County—	
Oakland	5	San Diego	1
Pleasanton	1	San Bernardino County	1
Butte County	1	Colton	1
Bishop	9	San Francisco County—	
Lassen County	1	San Francisco	25
Los Angeles County	3	San Mateo County—	
Los Angeles	26	San Mateo	1
Azusa	1	Santa Clara County—	
Pomona	1	Los Gatos	2
Watts	2	Shasta County	1
Monterey County	1	Redding	1
Monterey	1	Solona County	3
Nevada County	1	Tulare County—	
Orange County—		Exeter	1
Anaheim	2		
Riverside County—		Total	106
Corona	2		
Riverside	1		

TYPHOID FEVER—Continued.

State Reports for March, 1914—Continued.

Places.	Number of new cases reported during month.
Kansas:	
Atchison County—	
Atchison	1
Barton County	1
Bourbon County	1
Chase County	2
Chautauqua County	2
Cherokee County	1
Clay County	1
Cowley County	1
Crawford County	1
Greenwood County	2
Jefferson County	1
Labette County—	
Parsons	1
Lyon County	1
Marshall County	5
Meade County	1
Montgomery County	1
Ottawa County	1
Rice County	1
Sedgwick County	1
Sumner County	3
Wyandotte County	1
Total	30
Minnesota:	
Aitkin County—	
Aitkin Township	2
Aitkin	2
Beltrami County—	
Baudette	3
Brown County—	
New Ulm	1
Carlton County—	
Cloquet	4
Crow Wing County—	
Brainerd	1
Dakota County—	
West St. Paul	1
South St. Paul	1
Goodhue County—	
Cannon Falls	2
Hennepin County—	
Robbinsdale	1
Hassan Township	1
Minneapolis	12
Kittson County—	
St. Vincent Township	1
Koochiching County—	
Big Falls	1
Lyon County—	
Cottonwood	1
Marshall County—	
Eagle Point	2
Viking Township	1
Morrison County—	
Little Falls	1
Mower County—	
Austin	1
Olmsted County—	
Rochester	7
Otter Tail County—	
Inman Township	1
Polk County—	
Crookston	2
Fisher Township	1
Pope County—	
Lowry Township	1
Ramsey County—	
St. Paul	3
Rice County—	
Faribault	4

Places.	Number of new cases reported during month.
Minnesota—Continued.	
St. Louis County—	
Duluth	1
Fall Lake	1
Hibbing	1
Virginia	3
Eveleth	2
Stearns County—	
St. Cloud	1
Yellow Medicine County—	
Normania Township	2
Total	69
North Dakota:	
Barnes County	1
Billings County	1
Burleigh County	2
Grand Forks County	4
Nelson County	1
Pierce County	1
Williams County	2
Total	12
Vermont:	
Addison County	11
Bennington County	1
Chittenden County	1
Franklin County	7
Grand Isle County	1
Rutland County	1
Windham County	3
Total	25
Virginia:	
Albemarle County	1
Alleghany County	2
Augusta County	2
Bedford County	1
Botetourt County	9
Brunswick County	1
Buckingham County	1
Campbell County	4
Caroline County	1
Carroll County	3
Charlotte County	4
Clarke County	1
Culpeper County	1
Dinwiddie County	3
Elizabeth City County	2
Fairfax County	2
Fauquier County	1
Floyd County	5
Franklin County	1
Giles County	2
Halifax County	4
Hanover County	4
Henrico County	4
Henry County	2
Isle of Wight County	2
Lee County	1
Louisa County	1
Loudoun County	5
Lunenburg County	1
Mecklenburg County	1
Montgomery County	1
Nansemond County	1
Norfolk County	3
Nottoway County	1
Page County	1
Prince George County	1
Pittsylvania County	1

TYPHOID FEVER—Continued.

State Reports for March, 1914—Continued.

Places.	Number of new cases reported during month.
Virginia—Continued.	
Powhatan County	1
Roanoke County	1
Rockingham County	1
Rockbridge County	2
Russell County	6
Scott County	1
Smyth County	2
Spotsylvania County	1
Southampton County	1
Tazewell County	2
Washington County	3
Warren County	1
Wise County	5
Wythe County	3
York County	3
Total	114

City Reports for Week Ended Apr. 11, 1914.

Places.	Cases.	Deaths.
Atlantic City, N. J.	1	
Ann Arbor, Mich.	1	
Baltimore, Md.	1	
Bayonne, N. J.		1
Beaver Falls, Pa.	1	
Binghamton, N. Y.	1	
Boston, Mass.	6	1
Braddock, Pa.	2	
Brockton, Mass.	3	1
Brookline, Mass.	2	
Buffalo, N. Y.	8	1
Camden, N. J.	1	
Chicago, Ill.	27	2
Cincinnati, Ohio	2	
Cleveland, Ohio	4	
Danville, Ill.		2
Dayton, Ohio	1	
Dunkirk, N. Y.	5	1
Evansville, Ind.	1	1
Fall River, Mass.	2	
Grand Rapids, Mich.	7	2
Harrisburg, Pa.	1	
Jersey City, N. J.	1	1
Lowell, Mass.	2	1
Lexington, Ky.		1
Los Angeles, Cal.	11	2
Lynn, Mass.	1	
Milwaukee, Wis.	1	
Newark, N. J.	3	
New Castle, Pa.	1	
New Bedford, Mass.	1	
Newburyport, Mass.	1	
New Orleans, La.	2	
Northampton, Mass.	1	
Orange, N. J.	2	
Pawtucket, R. I.		1
Philadelphia, Pa.	13	2
Pittsburgh, Pa.	3	
Pottstown, Pa.	1	
Reading, Pa.	1	1
Richmond, Va.	1	
Rochester, N. Y.	1	
Sacramento, Cal.	3	1
Saginaw, Mich.	9	1
St. Louis, Mo.	1	
San Francisco, Cal.	8	2
Schenectady, N. Y.	1	
Seattle, Wash.	5	
South Bethlehem, Pa.	1	
Superior, Wis.		1
Toledo, Ohio	1	
Washington, D. C.	5	
Wilkes-Barre, Pa.	2	

CEREBROSPINAL MENINGITIS.

State Reports for March, 1914.

Places.	Number of new cases reported during month.
California:	
Alameda County—	
Berkeley	1
Los Angeles County	3
Los Angeles	5
San Francisco County—	
San Francisco	5
Total	14
Iowa:	
Cedar County	1
Fayette County	1
Pottawattamie County	1
Wright County	1
Total	4

CEREBROSPINAL MENINGITIS—Continued.

State Reports for March, 1914—Continued.

Places.	Number of new cases reported during month.
Kansas:	
Crawford County—	
Pittsburg	2
Douglas County	1
Sedgwick County—	
Wichita	1
Wyandotte County—	
Kansas City	2
Total	6
Minnesota:	
Stearns County—	
Melrose	1
Grove Township	6
St. Wendell Township	2
Total	9

City Reports for Week Ended Apr. 11, 1914.

Places.	Cases.	Deaths.
Boston, Mass	1	
Buffalo, N. Y	1	1
Cambridge, Mass	2	1
Chelsea, Mass	1	
Chicago, Ill	4	2
Cleveland, Ohio	1	1
Clinton, Mass	1	
Dunkirk, N. Y		1
Fall River, Mass		1
Kansas City, Kans	2	3
Lexington, Ky		1
Los Angeles, Cal		1
Lowell, Mass		1
Milwaukee, Wis	1	
Nashville, Tenn		1
Newark, N. J	1	1
New Bedford, Mass		1
New Orleans, La	1	1
Passaic, N. J	1	
Pittsburgh, Pa		1
Richmond, Va		2
St. Joseph, Mo	1	
St. Louis, Mo		1
San Francisco, Cal	1	
Seattle, Wash	1	
Wilmington, N. C		1
Yonkers, N. Y	1	

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for March, 1914.

Places.	Number of new cases reported during month.
California:	
Alameda County—	
Oakland	1
Los Angeles County—	
Long Beach	1
Placer County—	
Lincoln	1
Total	3
Minnesota:	
Winona County—	
Norton Township	1
Virginia:	
Alleghany County	1
Bedford County	1
Virginia—Continued.	
Campbell County	1
Dickenson County	1
Fairfax County	1
Floyd County	1
Franklin County	1
Halifax County	1
Middlesex County	1
Orange County	1
Page County	3
Patrick County	1
Rockingham County	1
Russell County	1
Total	16

ERYSIPELAS.

City Reports for Week Ended Apr. 11, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.	.....	2	Passaic, N. J.	1	.....
Binghamton, N. Y.	3	.....	Philadelphia, Pa.	18	2
Brockton, Mass.	1	1	Pittsburgh, Pa.	12	1
Cincinnati, Ohio.	3	1	Reading, Pa.	3	.....
Dayton, Ohio.	1	.....	Rochester, N. Y.	4	2
Hartford, Conn.	4	.....	St. Louis, Mo.	9	.....
Jersey City, N. J.	.....	1	South Bethlehem, Pa.	1	.....
Lancaster, Pa.	1	.....	Superior, Wis.	2	.....
Milwaukee, Wis.	3	.....	Trenton, N. J.	.....	1
Montclair, N. J.	2	.....	Wilmington, N. C.	.....	1
Newark, N. J.	.....	2	Wilkes-Barre, Pa.	.....	1

LEPROSY.

California—Los Angeles County.

Senior Surg. Brooks reported, April 14, that a leper (suspect) had been notified to the Los Angeles health department April 7. The patient, a Chinaman 18 years old, had been removed to the Los Angeles County Hospital.

With him at the county hospital are also confined two other male lepers. Surg. Brooks reports that during the week ended April 14 two lepers had escaped from this hospital and were still at large. The place where the male lepers are isolated is reported to consist of comfortable quarters, with attached flower and vegetable gardens.

There is also a female leper in the person of an Italian woman, who is isolated in a small room of the building for contagious diseases. This woman wishes to return to Italy and has sufficient money for the expenses of the journey, but the difficulties attending transportation are such that the trip has not been undertaken.

PLAGUE.

California—Squirrels Collected and Examined.

Ground squirrels have been examined in California for plague infection as follows: Week ended April 4, 1914, Contra Costa County, 6 squirrels; San Benito County, 15 squirrels. Week ended April 11, 1914, Alameda County, 42 squirrels; Contra Costa County, 195; Merced County, 11; Monterey County, 55; San Benito County, 91; San Joaquin County, 13; Santa Clara County, 14. No plague-infected squirrel was found.

Maintenance of a Squirrel-Free Zone.

During the week ended April 4, 1914, 77 acres of land in Alameda County, 582 in San Joaquin County, and 60 in Stanislaus County were treated with squirrel destructors. During the week ended April 11, 1914, 80 acres of land in Alameda County, 310 in San Joaquin County, and 529 in Stanislaus were treated with squirrel destructors.

PLAGUE—Continued.

Washington—Seattle—Plague-Infected Rat Found.

Surg. Lloyd, of the Public Health Service, reported April 16, 1914, the finding of a plague-infected rat at Seattle, Wash.

Rats Collected and Examined.

Places.	Week ended—	Found dead.	Total collected.	Examined.	Found infected.
California:					
Cities—					
Oakland	Apr. 4, 1914	27	483	368	.....
Berkeley	.....do.....	2	137	110	.....
San Francisco	.....do.....	15	1,600	1,218	.....
Oakland	Apr. 11, 1914	13	192	158	.....
San Francisco	.....do.....	30	1,294	992	.....

PNEUMONIA.

City Reports for Week Ended Apr. 11, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Alameda, Cal.	1	.....	New Castle, Pa.	5	.....
Auburn, N. Y.	3	.....	Newport, Ky.	4	4
Beaver Falls, Pa.	1	.....	Norristown, Pa.	1	1
Bennington, Vt.	1	.....	Philadelphia, Pa.	54	108
Binghamton, N. Y.	4	.....	Pittsburgh, Pa.	25	41
Braddock, Pa.	2	.....	Plainfield, N. J.	16	1
Chicago, Ill.	224	132	Rochester, N. Y.	11	16
Cleveland, Ohio	37	21	Rutland, Vt.	1	1
Erie, Pa.	4	.....	San Diego, Cal.	1	1
Galesburg, Ill.	1	1	San Francisco, Cal.	14	8
Grand Rapids, Mich.	3	2	Saratoga Springs, N. Y.	1	.....
Harrisburg, Pa.	2	7	Schenectady, N. Y.	3	5
Kansas City, Kans.	3	15	South Bethlehem, Pa.	2	.....
La Crosse, Wis.	1	1	South Omaha, Nebr.	2	.....
Lancaster, Pa.	1	.....	Steelton, Pa.	1	1
Los Angeles, Cal.	4	4	Wilkinsburg, Pa.	1	1
Manchester, N. H.	5	5	York, Pa.	3	.....

RABIES.

California—San Francisco—Rabies in Animals.

Surg. Long, of the Public Health Service, reported by telegraph that during the week ended April 25, 1914, 1 case of rabies in a dog had been reported in San Francisco, Cal.

Washington—Seattle—Rabies in Animals.

Surg. Lloyd, of the Public Health Service, reported by telegraph that during the week ended April 25, 1914, 4 cases of rabies in dogs had been reported in Seattle, Wash.

ROCKY MOUNTAIN SPOTTED FEVER.

Oregon—Grant County.

Dr. J. H. Fell, health officer of Grant County, Oreg., reported April 19 that there had been a number of cases of Rocky Mountain spotted fever in the county.

TETANUS.

During the week ended April 11, 1914, tetanus was notified by cities as follows: Chicago, Ill., 1 death; La Crosse, Wis., 1 case with 1 death; Nanticoke, Pa., 1 case; St. Louis, Mo., 1 case with 1 death.

TYPHUS FEVER

New York—Swinburne Island Hospital.

The health officer of the port of New York reported by telegraph April 27, 1914, that a fatal case of typhus fever had occurred at Swinburne Island Hospital April 25, 1914, in a third-class passenger detained in quarantine from the steamship *Madonna*.

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS.

Duluth, Minn.—Scarlet Fever.

Acting Asst. Surg. Cheney, of the Public Health Service, reported by telegraph that during the week ended April 25, 1914, 20 cases of scarlet fever had been notified in Duluth, Minn.

Memphis, Tenn.—Measles.

Surg. Kalloch, of the Public Health Service, reported by telegraph that during the period from April 20 to 27, 1914, 60 cases of measles had been notified in Memphis, Tenn., making a total of 484 cases reported since April 1, 1914.

State Reports for March, 1914.

States.	Cases reported.		
	Scarlet fever.	Measles.	Diphtheria.
California	221	527	131
Indiana	662	1,977	186
Iowa	150	.....	108
Kansas	159	839	79
Michigan	306	1,464	339
Minnesota	1,357	475	445
Mississippi	9	4,769	33
North Dakota	140	68	17
South Carolina	14	1,470	45
Vermont	61	23	13

City Reports for Week Ended Apr. 11, 1914.

Cities.	Population, United States census 1910.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md	558,485	227	13	2	23	.....	24	.....	34	28
Boston, Mass	670,585	241	46	3	104	1	122	1	67	22
Chicago, Ill	2,185,283	821	126	16	127	3	97	10	232	109
Cleveland, Ohio	560,663	169	32	.....	43	.....	12	.....	37	18
Philadelphia, Pa	1,549,008	592	60	7	370	2	68	4	124	66
Pittsburgh, Pa	533,905	210	22	4	28	1	74	7	49	18
St. Louis, Mo	687,029	246	52	5	156	4	27	6	35	29

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

City Reports for Week Ended Apr. 11, 1914—Continued.

Cities.	Population, United States census 1910.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 300,000 to 500,000 inhabitants:										
Buffalo, N. Y.	423,715	151	11	1	28	.....	26	.....	17	10
Cincinnati, Ohio	364,463	130	14	2	4	.....	16	.....	36	17
Detroit, Mich.	465,766	184	28	3	.....	1	35	.....	.....	15
Los Angeles, Cal.	319,198	113	9	.....	13	.....	9	.....	38	25
Milwaukee, Wis.	373,857	109	15	1	46	.....	30	1	19	25
Newark, N. J.	347,469	107	32	.....	206	1	54	.....	26	14
New Orleans, La.	339,075	143	21	1	50	.....	1	.....	16	23
San Francisco, Cal.	416,912	136	17	.....	63	2	13	.....	32	15
Washington, D. C.	331,069	141	3	1	19	.....	.....	.....	20	11
From 200,000 to 300,000 inhabitants:										
Jersey City, N. J.	267,779	82	9	1	40	1	33	1	22	10
Kansas City, Mo.	248,381	96	6	1	4	.....	3	.....	2	11
Portland, Oreg.	207,214	.....	1	.....	47	.....	2	.....	3	.....
Providence, R. I.	224,326	71	12	1	23	.....	13	2	3	6
Rochester, N. Y.	218,149	68	6	2	125	.....	31	2	3	2
Seattle, Wash.	237,194	55	4	.....	9	.....	7	.....	6	6
From 100,000 to 200,000 inhabitants:										
Cambridge, Mass.	104,829	37	8	.....	40	.....	14	.....	13	8
Columbus, Ohio	181,548	69	.....	.....	35	.....	11	.....	5	10
Dayton, Ohio	116,577	.....	4	1	11	1	4	.....	.....	1
Fall River, Mass.	119,295	42	2	1	.....	.....	8	.....	5	5
Grand Rapids, Mich.	112,571	35	1	.....	12	.....	3	.....	1	2
Lowell, Mass.	106,294	30	1	.....	24	.....	.....	.....	2	2
Nashville, Tenn.	110,364	44	.....	.....	7	.....	.....	.....	4	8
Richmond, Va.	127,628	63	.....	.....	20	.....	4	.....	4	5
Spokane, Wash.	104,402	.....	.....	.....	56	.....	3	.....	1	.....
Toledo, Ohio	168,497	64	2	.....	19	.....	9	.....	27	7
Worcester, Mass.	145,986	53	4	.....	6	1	3	.....	7	1
From 50,000 to 100,000 inhabitants:										
Altoona, Pa.	52,127	17	2	1	4	.....	2	.....	.....	1
Bayonne, N. J.	55,545	10	3	.....	11	.....	2	.....	4	1
Brockton, Mass.	56,878	19	3	1	24	.....	8	.....	5	1
Camden, N. J.	94,538	.....	3	.....	16	.....	5	.....	4	.....
Erie, Pa.	66,525	35	6	.....	14	.....	.....	.....	1	.....
Evansville, Ind.	69,647	27	.....	.....	8	.....	5	.....	.....	.....
Harrisburg, Pa.	64,186	30	2	.....	19	.....	8	.....	.....	1
Hartford, Conn.	98,915	41	8	1	11	1	5	.....	5	2
Hoboken, N. J.	70,324	.....	5	1	12	.....	.....	.....	17	2
Johnstown, Pa.	55,482	25	2	.....	5	1	2	.....	.....	1
Lynn, Mass.	89,336	19	10	.....	1	.....	11	.....	4	.....
Manchester, N. H.	70,063	26	2	.....	1	.....	12	.....	1	1
New Bedford, Mass.	96,652	40	2	1	.....	.....	7	1	7	5
Passaic, N. J.	54,773	30	1	.....	13	.....	1	.....	1	1
Pawtucket, R. I.	51,622	.....	3	1	.....	.....	1	.....	.....	2
Portland, Me.	58,571	.....	1	.....	.....	.....	4	.....	.....	.....
Reading, Pa.	96,071	49	1	.....	6	.....	11	.....	4	2
Saginaw, Mich.	50,510	28	3	.....	.....	.....	3	.....	2	.....
St. Joseph, Mo.	77,403	29	2	1	7	.....	2	.....	.....	4
Schenectady, N. Y.	72,826	26	.....	.....	1	.....	7	1	1	3
South Bend, Ind.	53,684	16	1	1	2	.....	2	.....	.....	1
Springfield, Ill.	51,678	24	.....	.....	.....	.....	.....	.....	.....	3
Springfield, Mass.	88,926	32	5	1	5	.....	3	.....	6	2
Trenton, N. J.	96,815	47	2	.....	1	.....	31	2	2	3
Wilkes-Barre, Pa.	67,105	26	4	1	66	1	2	1	1	1
Yonkers, N. Y.	79,803	19	7	.....	5	.....	14	.....	6	1
From 25,000 to 50,000 inhabitants:										
Atlantic City, N. J.	46,150	12	2	.....	3	.....	5	.....	.....	.....
Auburn, N. Y.	34,668	9	.....	.....	30	.....	5	.....	.....	2
Aurora, Ill.	29,807	18	.....	.....	.....	.....	.....	.....	.....	2
Binghamton, N. Y.	48,443	16	.....	.....	61	1	1	.....	1	2
Brookline, Mass.	27,792	7	.....	.....	7	.....	1	.....	.....	.....
Butte, Mont.	39,165	.....	1	.....	4	.....	5	.....	.....	5
Chelsea, Mass.	32,452	18	2	.....	6	.....	9	.....	2	2
Chicopee, Mass.	25,401	4	2	.....	.....	.....	.....	.....	1	1
Danville, Ill.	27,871	18	1	.....	.....	.....	.....	.....	.....	2
East Orange, N. J.	34,371	4	2	.....	37	.....	8	.....	.....	3
Elmira, N. Y.	37,176	12	1	.....	3	.....	.....	.....	1	.....

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

City Reports for Week Ended Apr. 11, 1914—Continued.

Cities.	Population, United States census 1910.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabitants—Continued.										
Everett, Mass.	33,484	10	3	1	2		5			
Fitchburg, Mass.	37,826	10	1		2		3			1
Haverhill, Mass.	44,115	12					8		8	3
Kalamazoo, Mich.	39,437	19	1		96		2		2	3
Knoxville, Tenn.	36,346				10					
La Crosse, Wis.	30,417	8								
Lancaster, Pa.	47,227		2		1		3		2	
Lexington, Ky.	35,099	17	1	1	38		3			1
Little Rock, Ark.	45,941	16			48		2		3	
Lynchburg, Va.	29,494	10			5		2			1
Newcastle, Pa.	36,280		1		1		1		1	
Newport, Ky.	30,309	15					4		3	3
Newport, R. I.	27,149	7	2				1			
Newton, Mass.	39,806	9			15		3		2	
Niagara Falls, N. Y.	30,445	11								
Norristown, Pa.	27,875	5			39		3		1	1
Orange, N. J.	29,630	10	1		33		1	1	4	1
Pasadena, Cal.	30,291	10					1			
Pittsfield, Mass.	32,121	15	1				7		2	2
Portsmouth, Va.	33,190	13			1		3			2
Racine, Wis.	38,002	10	1				1		2	
Roanoke, Va.	34,874	6			49	1	4		1	
Sacramento, Cal.	44,696	19	2		3	1	1			3
San Diego, Cal.	39,578	2	1						1	1
South Omaha, Nebr.	26,259	13	1				1		1	
Superior, Wis.	40,384	17		1			3	4		1
Taunton, Mass.	34,259	13	1		1		2			
Waltham, Mass.	27,834	14			10		1		3	1
West Hoboken, N. J.	35,403		2						1	
Wheeling, W. Va.	41,641	19	1	1	1				4	4
Wilmington, N. C.	25,748	14	3		7					1
York, Pa.	44,750		1		1				2	
Zanesville, Ohio.	28,026		1						1	
Less than 25,000 inhabitants:										
Alameda, Cal.	23,383	5			8					
Ann Arbor, Mich.	14,817	10							5	
Beaver Falls, Pa.	12,191	1	1	1			4			
Bennington, Vt.	8,698	2			1					
Braddock, Pa.	19,357				10					
Cambridge, Ohio.	11,327	3			1		1			
Clinton, Mass.	13,075				1		1			
Coffeyville, Kans.	12,687		1		12				3	
Columbus, Ind.	8,813	3								
Concord, N. H.	21,497	7					1			1
Cumberland, Md.	21,839	5			9		9			1
Dunkirk, N. Y.	17,221	3	1		1					
Galesburg, Ill.	22,089	5								
Harrison, N. J.	14,498	4					1		3	
Kearny, N. J.	18,659	8	1				4			
Kokomo, Ind.	17,010	7			1		3			
Marinette, Wis.	14,610	3								
Masillon, Ohio.	13,879	3								
Medford, Mass.	23,150	7	1	1	1		10		1	
Melrose, Mass.	15,715	4					1			
Moline, Ill.	24,199									2
Montclair, N. J.	21,550	4			31				1	
Muncie, Ind.	24,005	7	1				3			
Nanticoke, Pa.	18,877	10	1						2	
Newburyport, Mass.	14,949	4								
North Adams, Mass.	22,019	10		1			1		1	1
Northampton, Mass.	19,431	10							1	
Palmer, Mass.	8,610	3								
Plainfield, N. J.	20,550	11	1		7		1		4	
Pottstown, Pa.	15,599	2								
Rutland, Vt.	13,546	5					1			
Saratoga Springs, N. Y.	12,693	4			3		1			
South Bethlehem, Pa.	19,973	8	2	1	3	1	1		1	
Steelton, Pa.	14,246	3					1			
Wilkinsburg, Pa.	18,924	6					10		1	1
Woburn, Mass.	15,308	6								

FOREIGN REPORTS.

BRAZIL.

Yellow Fever—Bahia.

During the period from April 1 to 21, 1914, 24 cases of yellow fever with 17 deaths were notified at Bahia, Brazil.

CHILE.

Dengue—Iquique.

An epidemic of dengue was reported present at Iquique, Chile, March 23, 1914. The outbreak began in January, 1914. There has been no fatality from the disease except among children.

CHINA.

Plague—Hongkong.

During the week ended April 29, 1914, 193 cases of plague were notified at Hongkong.

Plague-Infected Rats—Shanghai.

During the two weeks ended March 29, 1914, 885 rats were examined at Shanghai for plague infection. Thirteen plague-infected rats were found.

CUBA.

Plague—Habana.

Two cases of plague were notified at Habana April 28 and 1 case April 30, 1914, making a total of 15 cases notified since March 5, 1914.

Communicable Diseases—Habana.

APR. 1-10, 1914.

Diseases.	New cases.	Deaths.	Remaining.	Diseases.	New cases.	Deaths.	Remaining.
Diphtheria	18		10	Plague			8
Leprosy		2	262	Scarlet fever	30	1	45
Malaria	2		3	Typhoid fever	12	8	25
Measles	46	2	132	Varicella	37		30
Paratyphoid fev r	1		1				

GERMANY.

Mortality from Chicken Pox.

The following statement, dated April 7, 1914, in regard to chicken pox in Germany, was received from Consul General Skinner at Berlin:

The president of the imperial health bureau in Germany states in a communication to this consulate general that statistics relating to deaths from chickenpox in the German Empire have been collected only since the year 1905 and that the available statistics are exclusive of the Grand Duchies of Mecklenburg-Schwerin and Mecklenburg-Strelitz. The figures, thus far available, appear in the following table:

Mortality from chicken pox in Germany, exclusive of Mecklenburg-Schwerin and Mecklenburg-Strelitz.

Year.	Ages.				Source of information.
	0–5	1–15	Over 15.	Total.	
1905	85	25	.....	110	Medical Statistics, vol. 11, p. 131.
1906	94	43	.....	137	Medical Statistics, vol. 12, p. 87.
1907	.....	.....	.....	116	Medical Statistics, vol. 13, p. 186.
1908	103	31	.....	134	Medical Statistics, vol. 14, p. 158.
1909	100	35	.....	135	Medical Statistics, vol. 16, p. 175.
1910	79	33	.....	112	
1911	74	24	3	101	Medical Statistics, vol. 17, p. 38.
1912	.....	.....	.....	121	Publications of the imperial health bureau, 1914, p. 133.

JAPAN.

Plague and Typhus—Tokyo.

From April 18 to 27, 1914, 17 cases of plague were notified in Tokyo.

The total number of cases of typhus fever notified in Tokyo from March 20, to April 27, 1914, was 2,820.

Communicable Diseases.

Communicable diseases have been notified in Japan, exclusive of the island of Taiwan (Formosa), as follows:

MONTH OF FEBRUARY, 1914.

Diseases.	Cases.	Deaths.	Diseases.	Cases.	Deaths.
Diphtheria	1,784	508	Scarlet fever	127	6
Dysentery	57	10	Smallpox	15	3
Paratyphoid fever	218	35	Typhoid fever	[1] 1,326	247

[1] Many of these cases were later determined to be typhus fever.

JAVA.

Status of Plague.

Plague has been notified in east Java, as follows:

MONTH OF FEBRUARY, 1914.

Provinces.	New cases.	Deaths.
Kediri	198	188
Madioen	154	135
Pasoeraoean	715	658
Surabaya	57	49
Total	1.124	1,011

MEXICO.

Smallpox—Cerebrospinal Meningitis—Vera Cruz.

During the two weeks ended April 11, 1914, 11 cases of smallpox with 4 deaths were notified at Vera Cruz.

Cerebrospinal meningitis has been present among troops in garrison at Vera Cruz during the past year. No spread of the disease has occurred.

TURKEY IN ASIA.

Typhus Fever.

Consul Masterson at Harput, Turkey, reports that during the summer of 1913 there were persistent reports of the spread of typhus fever among the troops stationed at several posts to the eastward of Harput. Conditions were reported to be most serious among the troops at Mush, Bitlis, and Van, and it was estimated that the disease had caused 300 deaths among them. Typhus fever persisted during the autumn, and during the winter of 1913 and 1914, attacking both the civil and military population. An outbreak occurred in the city of Harput, in a German orphan asylum, during the month of January, 1914, 24 cases with 1 death being notified. Dr. Clarence D. Ussher, an American medical missionary at Van, reported February 23, 1914, that many deaths from typhus fever had occurred at Van among troops, that a larger number of deaths from the disease were estimated to have occurred at Mush, and several hundred at Bitlis, all among troops.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended May 1, 1914.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Galle	Feb. 9	1		
China:				
Hongkong	Mar. 16–22	5	3	
India:				
Bombay	Mar. 8–21	3	2	
Calcutta	Mar. 8–14		123	
Moulmine	Jan. 4–Feb. 28	23	23	
Indo-China				Year 1913: Cases, 432; deaths, 313. Total Jan. 1–Feb. 10: Cases, 16; deaths, 13.
Cholon	Jan. 21–31	1		
Phanri	Jan. 1–Feb. 10		3	
Philippine Islands:				
Manila				Fourth quarter, 1913: Cases, 107; deaths, 104.
Turkey in Europe:				
Constantinople	Feb. 16–Mar. 25	2		Total, Jan. 1–Mar. 21: Cases, 30; deaths, 14.

YELLOW FEVER.

Brazil:				
Bahia	Mar. 22–28	4	5	Apr. 1–21: Cases, 24; deaths, 17.
Pernambuco	Mar. 1–15		17	

PLAGUE.

Brazil:				
Bahia	Mar. 22–28		1	
Pernambuco	Feb. 16–28		1	
China:				
Hongkong	Mar. 8–21	104	72	Apr. 23–29: Cases 193.
Chile:				
Iquique	Mar. 1–28	5	3	
Cuba:				
Habana	Apr. 28–30	2		Total, Mar. 5–Apr. 30: Cases, 15; deaths, 2.
Dutch East Indies:				
Java				Total, Feb. 1–28: Cases, 1,124; deaths, 1,011.
Provinces—				
Kediri	Feb. 1–28	198	188	
Madioen	....do	154	136	
Pasoeroean	....do	715	638	
Surabaya	....do	57	49	
India:				
Bombay	Mar. 8–21	221	194	
Calcutta	Mar. 8–14	15		
Karachi	Mar. 15–21	98	87	
Indo-China				Year 1913: Cases, 4,038; deaths, 3,805. Jan. 1–Feb. 10: Cases, 330; deaths, 303.
Saigon	Mar. 10–16	4		
Japan:				
Taiwan—				
Kagi	Mar. 15–21	16	15	
Philippine Islands:				
Manila				Fourth quarter, 1913: Case, 1; death, 1.
Morocco:				
Fedala	Mar. 25	1		
Singapore:				
Kedah, province	Feb. 4			Present.

SMALLPOX.

Australia				Feb. 25–Mar. 3: Two cases in the metropolitan area of Sydney and 1 case at Singleton.
Canada:				
Montreal	Apr. 12–18	8		
Toronto	Mar. 30–Apr. 4	2		

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

Reports Received During Week Ended May 1, 1914—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
China:				
Antung	Mar. 23-29		1	
Tsingtau	Feb. 8-28	2		
Cuba:				
Habana	Apr. 15	1		From s. s. Virginie, from Bordeaux, via ports in Spain and the Canary Islands.
France:				
Marseille	Jan. 1-31		1	
Japan				Total Feb. 1-28: Cases, 15; deaths, 3.
Mexico:				
Acapulco	Mar. 29-Apr. 4	5	1	
Chihuahua	Apr. 6-16		2	
Juarez	Mar. 29-Apr. 4	1		
Vera Cruz	Mar. 29-Apr. 11	11	4	
Peru:				
Mollendo	Apr. 4			Present.
Salaverry	Mar. 17	2		
Truillo	do			15 cases in hospital.
Philippine Islands:				
Manila				Fourth quarter, 1913: Cases, 18.
Portugal:				
Lisbon	Mar. 15-Apr. 4	2		
Russia:				
Odessa	Mar. 15-28	2		
Riga	Mar. 29-Apr. 4	13		
Warsaw	Dec. 29-Jan. 3	9	5	
Spain:				
Madrid	Mar. 1-31		12	
Valencia	Mar. 22-Apr. 11		11	
Sweden:				
Malmo	Mar. 22-28	13		
Switzerland:				
Basel	Mar. 15-28	8		
Turkey in Europe:				
Constantinople	Mar. 22-Apr. 4		4	
Saloniki	Mar. 29-Apr. 4		3	

Reports Received from Dec. 27, 1913, to Apr. 24, 1914.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Bosnia-Herzegovina—				
Brod	Nov. 13-18	2		
Kostjnica	do	1		
Novigrad	Oct. 26-Nov. 5	1		
Sjekocac	Nov. 6	1		
Travnik, district	Dec. 10-16	6		
Vranduk	Nov. 20	1		
Zenica	Oct. 20-Nov. 19	9	2	
Croatia-Slavonia—				
Pozenga	Nov. 18-Dec. 1	2		
Syrmien—				
Adasevci	do	6	2	
Semlin	do	1	1	
Vitrovica—				
Dobrovic	do	2	2	
Hungary				Total, Sept. 1-Dec. 29: Cases, 729; deaths, 372; Dec. 29, free.
Bacs-Bodrog, district	Nov. 9-Dec. 29	52	31	
Jasz-Nagy-Kun-Szolnok—				
Szolnok	Nov. 9-15	2	2	
Maramaros	Nov. 30-Dec. 6	1	1	
Pest Pilis—				
Soroksar	Nov. 9-22	2	1	
Szaboles—				
Nyiregyhaza	Nov. 9-15	1	1	
Temes—				
Varasliget	do		1	
Torontal	Nov. 9-Dec. 13	27	19	

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

Reports Received from Dec. 27, 1913, to Apr. 24, 1914—Continued.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary—Continued.				
Ung—				
Jasza	Nov. 9–15	1	1	
Ceylon:				
Colombo	Nov. 9–Jan. 17	33	19	
China:				
Hongkong	Nov. 9–Feb. 14	5	1	
Dutch East Indies:				
Java—				
Batavia and Tanjong Priok.	do	47	35	
Do	Jan. 18–24	1	1	
Samarang	Nov. 30–Dec. 27	47	25	
Sumatra—				
Padang	Dec. 1–Jan. 24	136	101	
India:				
Bassein	Feb. 1–28	14	12	
Bombay	Nov. 10–Feb. 21	20	9	
Calcutta	Nov. 9–Mar. 7		889	
Madras	Nov. 16–Mar. 7	14	5	
Negapatam	Jan. 4–Feb. 28	106	87	
Rangoon	Nov. 1–Dec. 31	5	1	
Do	Jan. 1–31	2	1	Feb. 1–4: 11 cases with 8 deaths.
Indo-China:				
Laos (Shan States)	Jan. 1–10	10		Along the upper Mekong River.
Saigon	Jan. 13–Feb. 23	3		
Phillippine Islands:				
Manila	Nov. 9–Mar. 14	86	56	Total, Aug. 23–Jan. 24: Cases, 186; deaths, 124. Third quarter, 1913: Cases, 14; deaths, 6. Jan. 3, 1 fatal case on s. s. Sigismund from Rabal, New Guinea. At the necropsy pathological lesions of cholera and beriberi were found.
Provinces				Total, Aug. 23–Dec. 27: Cases, 148; deaths, 94.
Bulacan—				
Bulacan	Dec. 14–20			Present in vicinity.
Meycauayan	do			Present.
Capiz				Total, Dec. 17–23: Cases, 26; deaths, 18. Feb. 21, still present.
Banga	Dec. 17–20			Present.
Capiz	Jan. 28			Do.
Calivo	Dec. 17–Jan. 24			1 death daily.
New Washington	do			Present.
Cavite—				
Santa Cruz	Nov. 13–19			Do.
Cebu—				
Cebu	do			Do.
Opon	Nov. 19	1		On Mactan Island.
Pampanga	Dec. 7–Jan. 28			Present in Guagua, Macabebe, San Fernando, and other places.
Pangasinan	Dec. 19–29			Present in Dagupan, Lingayen, San Carlos, and Urdaneta.
Rizal—				
Las Pinas	do	1		
Pasig	Nov. 19			Present.
Pateros	Jan. 28			Do.
Rizal	do			Do.
Roumania				Total, Nov. 14–Dec. 7: Cases, 18; deaths, 15.
Russia:				
Bessarabia—				
Ismail	Oct. 26–Nov. 8	6	1	
Ekaterinoslav	do	1		
Kherson	do	6	9	
Taurida—				
Dneiper district	do	1	2	
Servia				Nov. 10–24: 8 cases with 2 deaths in the districts Podrigne and Pojarevatz.
Siam:				
Bangkok	Nov. 2–Feb. 21		115	
Straits Settlements:				
Singapore	Nov. 2–Mar. 7	22	20	

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

Reports Received from Dec. 27, 1913, to Apr. 24, 1914—Continued.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Turkey in Asia:				
Aivali	Jan. 10–23	9	6	
Beirut	Dec. 23	2	1	From among troops on the s. s. Bahr Amer from Rodosto.
Smyrna	Dec. 16–Jan. 8	11	4	
Trebizond	Dec. 9–Jan. 24	22	16	Dec. 9–16: 6 cases among troops from s. s. Guldjemal. Jan. 17, 1 case in the city.
Turkey in Europe:				
Adrianople	Feb. 28–Mar. 2	99	38	Among the military.
Constantinople	Nov. 25–Feb. 15	141	56	Total, Aug. 2–Feb. 15: Cases, 216; deaths, 96. Mar. 24, 1 fatal case.
Dardanelles	Jan. 9–20	10	9	
Gallipoli	Jan. 1–3	2	2	
Pera	Jan. 3–10	5	.....	
Rodosto	Dec. 21–Jan. 9	22	.....	

YELLOW FEVER.

Brazil:				
Bahia	Nov. 23–Mar. 21	18	21	
Ceara	Nov. 1–30	.....	2	
Ecuador:				
Guayaquil	Nov. 1–Dec. 31	9	6	
Do	Jan. 1–Feb. 15	12	3	
Milagro	Jan. 1–Feb. 28	6	4	
Naranjito	Jan. 1–31	3	2	
Mexico:				
Merida	Dec. 10–11	1	1	From Campeche.
Do	Jan. 4–10	1	1	Do.
Southern Nigeria:				
Lagos	Oct. 20–Dec. 28	5	1	Among Europeans from a vessel. Feb. 26, present.
Do	Feb. 13–14	2	.....	
Omitsha	Jan. 24	1	.....	
Togo:				
Lome	Sept. 12	1	.....	
Trinidad:				
Brighton	Dec. 30	1	.....	Total, Nov. 22–Dec. 30: Cases, 10; deaths, 3. Mar. 26, 1 case, 3½ miles distant.
Labrea	Mar. 27	1	.....	
Venezuela:				
Caracas	.....	.....	.....	Feb. 28, 1 case.

PLAGUE.

Arabia:				
Debai	Mar. 7	.....	.....	Present.
Australia:				
Thursday Island Quarantine Station.	May 21	5	.....	Pestis minor from s. s. Taynan from Hongkong to Townsville.
Azores:				
Terceira—				
Angra-Heroismo	Dec. 21	.....	1	
Brazil:				
Bahia	Nov. 23–Mar. 21	26	17	
Pernambuco	Dec. 16–31	.....	1	
Do	Jan. 1–15	.....	1	
Rio de Janeiro	Nov. 16–22	1	1	
British East Africa:				
Kisumu	Sept. 12–Oct. 13	2	.....	Jan. 14–Nov. 15, 1913: Cases, 26; deaths, 22.
Mombasa	Sept. 12–Dec. 15	31	16	Feb. 6–Dec. 15: Cases, 200; deaths, 173, including previous reports.
Nairobi	Sept. 12–Nov. 15	3	3	
Ceylon:				
Colombo	Jan. 25–Mar. 14	56	45	
Kandy	Jan. 25–Feb. 7	1	.....	From Colombo.
Chile:				
Iquique	Nov. 9–Jan. 31	18	9	
Do	Jan. 11–Feb. 28	14	9	
Santiago	Mar. 11–15	.....	2	

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

Reports Received from Dec. 27, 1913, to Apr. 24, 1914—Continued.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
China				Mar. 14, present in Ampo and Tah-tau-po.
Amoy	Feb. 18		5	Present in the island. Mar. 7, still present in Amoy.
Hongkong	Nov. 2–Mar. 7	140	123	Apr. 9–16: Cases, 139. Apr. 17–21, cases, 116.
Shanghai	Oct. 1–7	1		Apr. 22, 1 case.
Cuba:				
Artemisa	Apr. 23	1		
Habana	Mar. 5–Apr. 23	12	2	
Dutch East Indies:				
Java				Total in East Java, year 1913: Cases, 11,218; deaths, 10,556.
Provinces—				
Kediri	Nov. 1–Dec. 31	547	481	
Do	Jan. 1–31	208	192	
Madioen	Nov. 1–Dec. 31	151	140	
Do	Jan 1–31	130	115	
Malang	Nov. 1–Dec. 31	1,550	1,463	
Do	Jan. 1–31	766	657	
Surabaya	Nov. 1–Dec. 31	93	93	
Do	Jan. 1–31	42	41	
Ecuador:				
Babahoyo	Nov. 1–Dec. 31	1		
Duran	Dec. 1–31	1		
Do	Jan. 1–31	1	1	
Guayaquil	Nov. 1–Dec. 31	349	157	
Do	Jan. 1–Feb. 28	71	32	
Manta	Dec. 1–31	8		
Milagro	Nov. 1–Dec. 31	2	1	
Naranjito	do	3	1	
Yaguachi	Nov. 1–30	2	2	
Do	Jan. 1–31	1	1	
Egypt				Jan. 1–Dec. 24, 1913: Cases, 654; deaths, 304. Jan. 1–Feb. 18: Cases, 15; deaths, 7.
Alexandria	Feb. 19	1	1	
Cairo	Feb. 13–22	2		
Port Said	Feb. 10	2	2	
Provinces—				
Assiout	Jan. 5	1	1	
Assouan	Dec. 10	1		
Do	Jan. 5	1	1	
Fayoum	Feb. 10	1		
Garbieh	Dec. 11	1		
Do	Jan. 15–17	7	2	
Minieh	Dec. 9–24	3	1	
Do	Jan. 8–29	2	2	
German East Africa: [1]				
Dar es Salaam	Mar. 13	1	1	Pneumonic.
Hawaii:				
Kukuihaele	Apr. 18		1	
India				Total Jan. 1, 1913–Jan. 3, 1914: Cases, 238,198; deaths, 198,875. Jan. 4–31: Cases, 34,714; deaths, 28,061.
Bassein	Jan. 4–Feb. 28	130	109	Total, Jan. 1, 1913–Jan. 3, 1914: Cases, 304; deaths, 283.
Bombay	Nov. 9–Mar. 7	300	253	
Calcutta	Nov. 2–Feb. 28		32	
Karachi	Nov. 9–Mar. 7	332	312	
Madras	Nov. 16–Feb. 14	5	3	
Moulmine	Jan. 4–24		18	Jan. 1, 1913–Jan. 3, 1914: Cases, 574; deaths, 576.
Negapatam	Feb. 1–28	32	32	
Rangoon	Oct. 26–Dec. 31	74	68	
Do	Jan. 1–Feb. 14	202	196	
Indo-China				Total Jan. 1–Dec. 31: Cases, 3,961; deaths, 3,742.
Saigon	Nov. 11–Mar. 9	24		
Japan				Total Jan. 1–Dec. 31: Cases, 27; deaths, 20; exclusive of Taiwan.
Kobe	Dec. 1–7	1		
Taiwan—				
Kagi	Feb. 1–Mar. 14	53	44	
Tokyo				Apr. 18, 5 cases in the vicinity.
Yokohama	Jan. 4–10	1	1	Total Sept. 19–Jan. 10: Cases, 22; deaths, 18.

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

Reports Received from Dec. 27, 1913, to Apr. 24, 1914—Continued.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Mauritius	Jan. 1–Mar. 29	20	10	Total year 1913: Cases, 305; deaths, 183.
Morocco:				
Casablanca	Jan. 7	1	1	
El-Araish (Larache)	Sept. 17	1	.....	Among the military.
Fedala	Mar. 16	2	1	
New Caledonia:				
Bourail	Sept. 1–Oct. 14	8	2	In a school of the tribe of the Azaren.
Peru	.....	.....	.....	Deaths not reported.
Ancachs—				
Casma	Feb. 9–15	2	.....	Dec. 1–Feb. 8, present.
Nepena	Nov. 1–Jan. 18	.....	.....	Do.
Arequipa—				
Mollendo	Dec. 1–Feb. 22	14	.....	
Cajamarca—				
Contumaza	Jan. 19–24	12	.....	Feb. 8, present.
Callao—				
Callao	Jan. 19–Feb. 22	7	.....	
Lambayeque—				
Chiclayo	Dec. 1–Feb. 15	72	.....	
Ferrenaje	Dec. 1–Feb. 8	18	.....	
Guadalupe	Dec. 1–Feb. 22	21	.....	Dec. 1–Feb. 8, present.
Pacasmayo	Jan. 25–Feb. 15	5	.....	
Libertad—				
San Pedro	Dec. 1–Feb. 8	34	.....	
Salaverry	Feb. 16–22	3	.....	Mar. 2–10: Cases, 2.
Trujillo	Dec. 1–Feb. 22	73	.....	
Lima	Dec. 1–Jan. 18	6	.....	
Lima	Dec. 1–Feb. 22	48	.....	
Pisco	Dec. 1–Jan. 18	2	.....	
Monsefu	....do	2	.....	
Piura—				
Catacaos	Dec. 1–Feb. 15	13	.....	
Piura	Dec. 1–Jan. 24	10	.....	Feb. 8, present.
Philippine Islands:				
Manila	Nov. 23–Mar. 14	12	11	Third quarter, 1913: Cases, 2; deaths, 1.
Russia:				
Saratov	Feb. 11	1	.....	
Ural, territory	.....	.....	.....	Total Oct. 20–Nov. 10: Cases, 212; deaths, 170; and 2 fatal cases from Issum Tube.
Djakisabevsk district—				
Djumarta	Nov. 9–10	5	1	
Djantayu	Nov. 8–10	2	2	
Kizilu	Nov. 8	1	1	
Fourteenth village	Nov. 7–9	6	.....	
Sarbas	Nov. 8–10	13	7	
Kaziljar district	Nov. 5–10	39	24	In Assaukurt, Baitchurek, Biskuduk, and Djamankuduk.
Lbistchensky district—				
Issum Tube	Oct. 20–Nov. 10	138	127	
Kaimikov	Nov. 4–10	6	6	
Siam:				
Bangkok	Nov. 2–Feb. 21	.....	20	
Tripoli:				
Bengazi	Jan. 31	.....	.....	Present.
Turkey in Asia:				
Beirut	Dec. 10–23	2	2	
Jiddah	Feb. 2–Mar. 11	5	2	
Venezuela:				
Caracas	Apr. 12	1	.....	
Zanzibar	Dec. 31–Jan. 21	5	3	On s. s. Prasident from Dar-es-Salaam.

SMALLPOX.

Algeria:				
Departments—				
Algiers	Sept. 1–Dec. 31	10	.....	
Constantine	Oct. 1–Dec. 31	15	.....	
Oran	Sept. 1–Nov. 30	216	.....	Feb. 1–28: Cases, 5; deaths, 4.
Arabia:				
Aden	Nov. 25–Mar. 9	6	6	
Maskat	Nov. 30–Dec. 6	10	.....	Dec. 20; present.
Matarah	Dec. 23–Jan. 10	9	.....	Nov. 30, present; Mar. 7, still present.

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

Reports Received from Dec. 27, 1913, to Apr. 24, 1914—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Argentina:				
Buenos Aires	Nov. 1-30		1	
Rosario	Dec. 1-31	1		
Australia:				
New South Wales				Total July 1, 1913-Jan. 31, 1914: Cases, 1,078.
Sydney, metropolitan area				July 1, 1913-Jan. 8, 1914: Cases, 1,032. Feb. 1-24: 10 cases in the metropolitan area of Sydney and 6 cases at Singleton.
Western Australia—				
Fremantle				Dec. 2: 1 fatal case on R. M. S. Malwa, from London via Port Said, Aden, and Colombo.
Victoria—				
Melbourne				At Point Napean quarantine station, Jan. 19: 1 case from F. M S. Caledonian from Noumea via Sydney.
Austria-Hungary:				
Coastland—				
Trieste	Jan. 25-31	3		
Galicia	Feb. 15-21	1		
Krain	Mar. 1-14	4		
Lower Austria—				
Vienna	Jan. 4-24	6		
Moravia	Jan. 18-Feb. 21	5		
Silesia	Feb. 15-18	1		
Tyrol and Vorarlberg	Nov. 23-Feb. 21	6		
Upper Austria	Dec. 14-Feb. 21	20		
Belgium:				
Liege	Mar. 1-7		6	
Brazil:				
Bahia	Nov. 23-Mar. 21	33		
Para	Dec. 1-Mar. 28	80	77	
Pernambuco	Nov. 1-Feb. 15		76	
Rio de Janeiro	Nov. 9-Mar. 14	506	95	
Canada:				
Manitoba—				
Winnipeg	Feb. 14-Apr. 4	21		
Ontario—				
Cornwall	Feb. 26-Apr. 4	1		
Fort William	Feb. 24-Mar. 2	1		
Hamilton	Jan. 1-Mar. 31	30		
Ottawa	Dec. 7-Apr. 4	23		
Toronto	Dec. 7-Mar. 28	12	1	
Quebec—				
Montreal	Dec. 7-Apr. 11	83		
Quebec	Jan. 24-31	1		
Canal Zone:				
Panama				Nov. 1-30: Santo Tomas hospital, 1 case from a vessel from Callao.
Ceylon:				
Colombo	Nov. 30-Dec. 6	1		
China:				
Amoy	Dec. 14-Jan. 10			Present.
Antung	Jan. 4-Mar. 15	5	1	
Chefoo	Feb. 22-Mar. 7	2	1	
Dairen	Dec. 7-Mar. 14	19	4	
Hankow	Nov. 2-Feb. 28	14	1	
Hongkong	Dec. 14-Mar. 7	15	11	
Mukden	Mar. 8-15	3	1	
Nanking	Jan. 24			Do.
Shanghai	Dec. 8-Mar. 15	14	18	Deaths among natives.
Tientsin	Nov. 9-15		1	
Ting Chow	Jan. 5			Epidemic, 130 miles from Amoy.
Tsing Tau	Jan. 15-31	2		
Tong An	Dec. 27			Present, 20 miles from Amoy.
Cuba:				
Sagua la Grande	Feb. 1-28	1	1	
Dutch East Indies:				
Java				Dec. 13-Feb. 21: 322 cases with 91 deaths in the western part, and 100 cases with 63 deaths in the interior.
Batavia	Nov. 27-Jan. 11	66	69	
Besoeki	Oct. 19-29	227	47	
Madioen	Oct. 19-28	36	12	
Surabaya	Oct. 28-Jan. 31	6		
Surakarta	Oct. 19-Dec. 6	481	91	

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

Reports Received from Dec. 27, 1913, to Apr. 24, 1914—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies—Continued.				
Sumatra—				
Padang	Jan. 1-31			Present.
Egypt:				
Alexandria	Nov. 26-Mar. 25	29	13	
Cairo	Nov. 19-Mar. 11	160	84	
Port Said	Dec. 3-Mar. 4	7	1	
France:				
Bordeaux	Mar. 8-14		1	
Marseille	Nov. 1-Feb. 28		113	
Nantes	Feb. 1-Mar. 28	5	2	
Nice	Nov. 1-Dec. 31	2		
Paris	Nov. 23-Mar. 21	40		
St. Etienne	Nov. 16-Mar. 14	12	4	
Germany				Dec. 7-Mar. 28: Cases, 26.
Berlin	Feb. 8-14	2		
Bremen	do	1		
Breslau	do	1		
Hamburg	Dec. 11-25	4		
Kehl	Jan. 1-31		1	
Lubec	Feb. 15-21	1		
Gibraltar	Dec. 1-Mar. 22	6		
Great Britain:				
Aberdeen	Feb. 22-Mar. 21	6	1	
Cardiff	Feb. 16-21	1		
Edinburgh	Mar. 1-7		1	
Liverpool	Mar. 15-21	1		From a vessel.
London	Jan. 18-Mar. 22	6		
Nottingham	Dec. 21-27	28		
Southampton	Feb. 2-28	1		
Greece				Jan. 28-Feb. 12: Present in the barracks at Athens and at the surrounding country.
Achaia and Elis, Province	Mar. 8-14	7	5	Jan. 29, present.
Piraeus	Jan. 18-Feb. 12	19	11	
Grenada	Mar. 18	3		In St. Andrews Parish, 20 miles from St. Georges.
St. Georges	Mar. 22-28	4		
Guadeloupe:				
Pointe a Pitre quarantine station, Islet a Cosson.	Feb. 16-23	10	1	From among returned troops from s. s. Perou from Havre, via Bordeaux and Santander.
India:				
Bombay	Nov. 23-Feb. 28	78	35	
Calcutta	Nov. 2-Mar. 7		142	
Karachi	Nov. 2-Mar. 14	25	5	
Madras	Nov. 2-Mar. 21	53	16	
Indo-China:				
Saigon	Nov. 11-24	1	1	
Italy:				
Genoa	Mar. 1-15	1	1	
Leghorn	Dec. 21-27	1		
Naples	Jan. 3	1		
Turin	Dec. 22-28	1		
Japan				Total Jan. 1-Dec. 31: Cases, 108; deaths, 39, exclusive of Taiwan.
Fukuoka ken	Dec. 1-31	2		
Nagasaki	Jan. 1-Mar. 22	3	1	Feb. 1-Mar. 8: 15 cases, 2 deaths.
Tokyo	Nov. 1-Mar. 7	10		
Yokohama	Jan. 6-12	1	1	
Mauritius	Oct. 2-25	60	4	
Mexico:				
Acapulco	Dec. 6-Mar. 14		3	
Aguascalientes	Dec. 1-Mar. 29		112	
Chihuahua	Dec. 29-Apr. 6		15	
Cruz	Apr. 2			Epidemic in vicinity.
Durango	Apr. 1-May 31		77	
Guadalajara	Jan. 11-Feb. 14	89	46	
Imuris	Dec. 29-Jan. 4	5		
Juarez	Feb. 15-28		4	
Llano	Jan. 17	8		
La Paz	Jan. 16-22	3	1	
Manzanillo	Mar. 21-27	2		
Mexico	Oct. 26-Jan. 17	129	40	
Monterey	Nov. 17-Mar. 14	5	4	
Salina Cruz	Jan. 18-24	1	1	
San Luis Potosi	Nov. 2-Jan. 24	4	7	
Tampico	Dec. 24-Mar. 10	200	58	Feb. 1-24, 22 cases with 16 deaths.
Vera Cruz	Dec. 6-Mar. 28	57	26	

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

Reports Received from Dec. 27, 1913, to Apr. 24, 1914—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Morocco:				
Casablanca	Mar. 7			Present.
Netherlands, The	Feb. 8–14	1	1	
New Zealand				Apr. 8, 1913, to Jan. 7, 1914: Cases, 2,000, including report, p. 2863, vol. 28.
Norway:				
Trondhjem	Nov. 1–Feb. 28	19		
Peru:				
Callao	Jan. 26			Still epidemic, Mar. 7, improving.
Lima	do			Do.
Philippine Islands:				
Manila				Third quarter, 1913: Cases, 15.
Portugal:				
Lisbon	Nov. 16–Feb. 28	19		
Russia:				
Moscow	Dec. 14–Mar. 21	67	18	
Odessa	Nov. 16–Mar. 14	40	2	
Riga	Jan. 1–31	30	4	Feb. 22–Mar. 28: Cases, 18.
St. Petersburg	Nov. 23–Mar. 21	84	24	
Vladivostok	Dec. 22–Jan. 28	5		
Warsaw	Oct. 5–Dec. 28	64	38	
Servia:				
Belgrade	Nov. 7–Mar. 28	142	50	
Siam:				
Bangkok	Jan. 25–Feb. 21		3	
Spain:				
Almeria	Nov. 1–Jan. 31		9	
Barcelona	Nov. 30–Mar. 14		101	
Madrid	Nov. 1–Feb. 28		98	
Seville	do		2	
Valencia	Dec. 1–Mar. 14	13		
Straits Settlements:				
Penang	Nov. 2–Dec. 6	13	1	
Singapore	Nov. 2–22	2		
Switzerland:				
Canton—				
Basel	Nov. 23–Mar. 7	115		
Genoa	Nov. 23–29	3	1	
Turkey in Asia:				
Adana	Jan. 10–24	2		Dec. 28, epidemic.
Beirut	Nov. 23–Mar. 21	318	137	
Jaffa	Dec. 6–Feb. 28	25	6	
Jerusalem	Feb. 1–28	1		
Mersina	Jan. 4–Mar. 7	3	3	
Smyrna	Nov. 16–Mar. 14		176	
Tarsus	Dec. 28–Feb. 8			Still present.
Trebizond	Jan. 11–24			Present.
Tripoli	Jan. 25–Mar. 14	93	6	
Turkey in Europe:				
Constantinople	Nov. 20–Mar. 21		19	
Saloniki	Dec. 1–Mar. 14		90	

SANITARY LEGISLATION.

COURT DECISIONS.

DISTRICT OF COLUMBIA COURT OF APPEALS.

Health Department—Liability for Negligence of Employees—Acts Performed Outside of the Municipality.

COATES v. DISTRICT OF COLUMBIA, 42 Washington Law Reporter, 248. Decided April 6, 1914.

A municipal corporation is not liable for damage caused by the negligence of employees of the health department in the performance of their duties, because those duties are of a public or governmental character, for the general public welfare.

The plaintiff, a farmer living and maintaining a dairy in the State of Maryland, sued the District of Columbia for damages which he alleged were caused by the negligence of employees of the District of Columbia health department. He had a license to sell milk to customers in the District of Columbia, and charged that under the rules and regulations of the health department of the District he "was compelled to submit to the disinfecting of the stable or barn on his said farm to be occupied by his herd of cows," and that owing to carelessness on the part of employees of the health department his herd of cattle was injured by mercurial poisoning.

No evidence was taken in the case, as it was argued on demurrer. The court decided that the District of Columbia was not liable, even if the plaintiff could prove that the injury was caused by the negligence of the employees of the health department, saying that in the cases cited a "distinction was noted between the two kinds of powers and duties with which municipal corporations are charged; the one merely municipal for special local purposes and benefits; the other of a public or governmental character for the general public welfare. For negligence in the performance of the former there is liability; for negligence of agents in the performance of the latter there is no liability. * * * There is no occasion for further discussion of the general question.

"The duties imposed upon the health department of the District are to be considered public and governmental in their nature, and by the great weight of authority municipal corporations are not liable in damages for the negligent acts of the employees of such a department in the performance of their duties. * * *

"There is, perhaps, another ground upon which the demurrer might be sustained without regard to the foregoing, but as it has not been presented or argued we will merely suggest the point without deciding it. The dairy where the acts complained of were committed is in the State of Maryland. Officers of the District of Columbia are without power beyond its boundaries, and if they undertake to exercise it the District could not be held liable for their acts. We are advised of no act of Congress that attempts even to authorize their exercise of the power of disinfection of a dairy beyond the boundary, even if such power could be conferrred."

NORTH DAKOTA SUPREME COURT.

Quarantine—Liability of Quarantined Person for Expenses Incurred by the Board of Health in Sending Supplies—Validity of Order of Board Authorized by Telephone.

PLYMOUTH TOWNSHIP v. KLUG, 145 N. W., 130. Decided January 20, 1914.

Quarantine established without a regular meeting of the township board of health, but authorized by the members after conversations over the telephone, is valid, though three days' notice of meetings of the board is required.

Under the laws of North Dakota a person who has been quarantined, if financially responsible, may be required to reimburse the township for expense incurred in transporting supplies to him while his house was under quarantine.

The decision is printed in full:

BURKE, J. The plaintiff is an organized township in Grand Forks County and the defendant is a farmer residing within the township. In April, 1910, some of defendant's children and a hired man became sick, and upon calling a physician the same was pronounced to be scarlet fever, a contagious disease. The doctor immediately called upon the clerk of the township board and notified him of the existence of the disease, but did not post any written notice of the quarantine until some days later, for the reason that he happened to have no placards with him. Upon receiving the notice from the doctor, the clerk telephoned to the chairman of the town board, who in turn called up the other members of the board individually upon the telephone and discussed the situation. After such a discussion the chairman called up the clerk and directed him to post quarantine notice upon the defendant's farm, which was immediately done. Defendant obeyed the quarantine notice, and a day or two later called upon the chairman of the board and asked him, inasmuch as he was under quarantine and could not go to town for groceries, to send the stuff out to him. A day or two after this, the town board had a meeting, whereat upon motion the board authorized the clerk to hire a drayman to furnish provisions to the defendant, and under this arrangement the township expended the sum of $15 for delivering groceries, etc., to the defendant. The goods were delivered by a drayman of the village of Niagara, who presented a bill of $15 to the township and received his pay. When the township presented the bill to the defendant, however, he refused payment, and this suit resulted. In appellant's brief it is stated: "The matter presented to this court is the broad question: Under these undisputed facts, can the township recover of the defendant? If it can, the judgment must stand; if it can not, the defendant is entitled to judgment." It is conceded that the township board took no action at its regular meeting relative to the establishment of the quarantine, as they considered the matter had been fully cared for in the conversation held over the telephone.

Appellant contends that the quarantine established by conversations over the telephone instead of at a regular meeting was invalid and a nullity, and reasons therefrom that all expenses incurred by the township were likewise invalid, and not a charge against the defendant. The respondent, on the other hand, insists that the question of the validity of the quarantine is immaterial insomuch as the defendant personally requested the township board to furnish the services for which the charge is made, and that in effect he is liable, under an implied promise, to pay for the services, and besides is estopped, by reason of his said request, to now deny the existence of the quarantine. We think that the township is correct in its contention. The defendant believed that he was under quarantine, and requested the township to transport his groceries to him. While it is possibly his construction of the law that this was a township charge, yet he is chargeable with knowledge that the expense in turn could be charged against him if he were financially responsible, and he has not alleged the contrary in this case. Thus his situation is very similar to what it would have been had he called up the drayman himself and asked him to deliver his goods to

the farm. Of course it can not be contended in such case that the invalidity of the quarantine would prevent the drayman from recovering. Having requested the township to render him the same services, why is he not as liable to them? If appellant says in answer to this question that the township had established a pretended quarantine, and that therefore they were themselves responsible for the expense, the answer can be made that, even though irregular, the quarantine was established in good faith, and the expenses incurred in the same manner, and we are of the opinion that the defendant is estopped to claim any irregularity unless he can show some bad faith upon the part of the township.

Moreover, we think the quarantine was in fact regular. The powers of the township board are prescribed by law, and among others we find section 282, R. C. 1905: "It shall be the duty of each local board of health, whenever it shall come to its knowledge that a case of * * * contagious disease exists within its jurisdiction, immediately to examine into the facts of the case and, if such disease appears to be of the character herein specified, such board shall adopt such quarantine and sanitary measures as in its judgment tend to prevent the spread of such disease. * * *" While it is true that the meetings of the township board must be upon three days' notice, yet we do not believe the statute contemplated the delay of a regular meeting when such an emergency as a contagious disease is presented. To require the board to act in this deliberate manner would defeat the very object of a quarantine law. Besides the law as above quoted says that the board shall "immediately" examine, etc.

In Rae *v.* Flint (51 Mich., 526; 16 N. W., 887) "the city of Flint did not see fit to create a board of health as a distinct agency, but elected the policy authorized by the statute of 1879. The whole duty and the whole authority remain, therefore, in the common council. No part of either was transferred. The duty to guard the public health and prevent the spread of contagion was imperative, and the power of the common council was commensurate with the duty. Neither the power nor the obligation could be lessened by the failure to designate a subagency."

We think it was the duty of the clerk to establish the quarantine in this case without waiting for the formality of a three days' notice meeting. The trial court took this view of the law and directed a verdict for the plaintiff, and the same is accordingly affirmed.

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

DANVILLE, VA.

Connection with City Water Supply Required when Wells are Unsafe. (Ord. Aug. 26, 1913.)

The owners of all improved and occupied property fronting upon a street along which water mains are laid and maintained by the city or to which property city water is available and is offered to be supplied by the water committee of the city council shall be required, whenever in the opinion of the city health officer the well or spring water available is unsafe for human consumption, to connect the premises in question with and use the water supply provided by the city. Written notice shall be given to such owner by the health officer hereunder, and the owner shall be allowed 20 days after such notice in which to make the connection. When such connections have been made with the city water supply, all such wells shall be filled after like notice from the health officer.

Any persons failing to comply with any of the provisions of this ordinance shall be fined not less than $2 nor more than $10 for each day he shall be in default after the expiration of such notice.

LONG BRANCH, N. J.

Milk and Milk Products—Production, Care, and Sale. (Ord. Aug. 26, 1913.)

SEC. 28A. *Classification of milk.*—All milk produced, handled, kept, offered for sale, or delivered in the city of Long Branch shall be graded and labeled in conformity with the following requirements, rules, and regulations:

Grade A—Raw milk.—1. Milk of this grade shall be produced from healthy cows, as determined by the tuberculin test and physical examination by a qualified veterinarian.

2. Milk of this grade shall be produced from dairies that score not less than 70 on the following score card:

SCORE CARD.

Owner or lessee of farm.....P. O. Address.....State.....
Total number of cows.....No. milking.....Gallons of milk produced daily.....
Product is sold by producer in families, hotels, restaurants, stores, to.....dealer.
For milk supply of.....Permit No.....Date of inspection.....191...
Remarks: .....
.....
.....
.....

(Signed) .....
Inspector.

EQUIPMENT.

	Score.	
	Perfect.	Allowed
Cows.		
Health	6	
Apparently in good health	1	
If tested with tuberculin within a year and no tuberculosis is found, or if tested within 6 months and all reacting animals removed	5	
(If tested within a year and reacting animals are found and removed	3)	
Food (clean and wholesome)	1	
Water (clean and fresh)	1	
Stables.		
Location of stable	2	
Well drained	1	
Free from contaminating surroundings	1	
Construction of stable	4	
Tight, sound floor and proper gutter	2	
Smooth, tight walls and ceiling	1	
Proper stall, tie, and manger	1	
Provision for light; 4 square feet of glass per cow	4	
(3 square feet, 3; 2 square feet, 2; 1 square foot, 1; deduct for uneven distribution.)		
Bedding	1	
Ventilation	7	
Provision for fresh air, controllable flue system	3	
(Windows hinged at bottom, 1.5; sliding windows, 1; other openings, 0.5.)		
Cubic feet of space per cow: 500 feet, 3; less than 500 feet, 2; less than 400 feet, 1; less than 300 feet, 0.		
Provision for controlling temperature	1	
Utensils.		
Construction and condition of utensils	1	
Water for cleaning	1	
(Clean, convenient, and abundant.)		
Small-top milking pail	5	
Milk cooler	1	
Clean milking suits	1	
Milk room or milk house.		
Location: Free from contaminating surroundings	1	
Construction of milk room	2	
Floor, walls, and ceiling	1	
Light, ventilation, screens	1	
Separate rooms for washing utensils and handling milk	1	
Facilities for steam	1	
Total	40	

METHODS.

Cows.		
Clean	8	
(Free from visible dirt	6)	
Stables.		
Cleanliness of stables	6	
Floor	2	
Walls	1	
Ceiling and ledges	1	
Mangers and partitions	1	
Windows	1	
Stable air at milking time	5	
Freedom from dust	3	
Freedom from odors	2	
Cleanliness of bedding	1	
Barnyard	2	
Clean	1	
Well drained	1	
Removal of manure daily to 50 feet from stable	2	
Milk room or milk house.		
Cleanliness of milk room	3	

METHODS—Continued.

	Score.	
	Perfect.	Allowed.
Utensils and milking.		
Care and cleanliness of utensils	8	
Thoroughly washed 2		
Sterilized in steam for 15 minutes 3		
(Placed over steam jet, or scalded with boiling water 2)		
Protected from contamination 3		
Cleanliness of milking	9	
Clean, dry hands 3		
Udders washed and wiped 6		
(Udders cleaned with moist cloth, 4; cleaned with dry cloth or brush at least 15 minutes before milking 1)		
Handling the milk.		
Cleanliness of attendants in milk room	2	
Milk removed immediately from stable without pouring from pail	2	
Cooled immediately after milking each cow	2	
Cooled below 50° F	5	
(51° to 55°, 4; 56° to 60° 2)		
Stored below 50° F	3	
(51° to 55°, 2; 56° to 60° 1)		
Transportation below 50° F	2	
(51° to 55°, 1; 56° to 60° 1)		
(If delivered twice a day, allow perfect score for storage and transportation.)		
Total	60	

Equipment.....Methods.....Final score.

NOTE 1.—If any exceptionally filthy conditions are found, particularly dirty utensils, the total score may be further limited.

NOTE 2.—If the water is exposed to dangerous contamination, or there is evidence of the presence of a dangerous disease in animals or attendants, the score shall be 0.

3. All persons who come in contact with the milk must exercise scrupulous cleanliness and must not harbor the germ of typhoid fever, tuberculosis, diphtheria, or other infectious diseases liable to be conveyed by milk.

4. Unless otherwise authorized by resolution of the board of health the milk shall be delivered to the consumer only in bottles or single-service containers.

5. It shall contain less than 100,000 bacteria per cubic centimeter.

6. The caps or labels of all containers holding milk of this grade shall be white and contain the words "Grade A, raw inspected" in large, bright black type.

7. All milk of this class shall contain not less than 3 per cent of milk fats and 11.50 of total solids.

Grade B—Raw inspected milk.—1. Milk of this grade shall be produced from healthy cows, as determined by the tuberculin test and physical examination by a qualified veterinarian.

2. Milk of this grade shall be produced from dairies that score not less than 60 on the score card hereinbefore set forth.

3. All persons who come in contact with the milk must exercise scrupulous cleanliness and must not harbor the germs of typhoid fever, tuberculosis, diphtheria, or other infectious diseases liable to be conveyed by milk.

4. Unless otherwise authorized by resolution of the board of health in writing, milk shall be delivered to the consumer only in bottles or single-service containers.

5. It shall contain not over 300,000 bacteria per cubic centimeter.

6. The caps or labels of all containers holding milk of this grade shall be white and contain the words "Grade B, raw inspected," in large, bright green type.

7. All milk of this class shall contain not less than 3 per cent of milk fats.

Grade C—Raw inspected milk.—Milk of this grade shall conform to all the requirements of grade B—Raw inspected milk, except that the bacteria count shall be between 300,000 and 600,000.

Grade B—Pasteurized milk.—1. Milk of this grade shall be produced from cows free from diseases as determined by physical examination.

2. Milk of this grade shall be produced from dairies that score not less than 60 on score card adopted herein.

3. Milk of this grade after pasteurization shall be placed in sterilized containers (if not pasteurized in such containers) and shall be cooled at once to 60° F. and kept at or below that temperature until delivered to the consumer; provided, however, that this paragraph shall not affect this temperature at which milk while in transportation by the common carrier is kept, if refrigerator cars are not provided.

4. Milk of this grade shall not contain more than 1,000,000 bacteria per cubic centimeter before pasteurization and more than 50,000 bacteria per centimeter after pasteurization, when delivered to the consumer.

5. Pasteurized milk shall be delivered to the consumer within less than 36 hours after pasteurization.

6. The repasteurization of milk is prohibited.

7. Milk shall be pasteurized according to the rules and regulations relating to pasteurized milk as set forth in section 28P of this ordinance.

8. The caps and labels of all containers holding grade B pasteurized milk shall be white and shall contain the word "Pasteurized" in large, green type, together with the hour and the day when pasteurization was completed, the place where pasteurization was performed, and the name of the person, firm, or corporation performing the pasteurization.

9. Unless otherwise authorized by resolution of the board of health, milk shall be delivered to the consumer only in bottles or single-service containers.

SEC. 28B. *Classification of cream.*—All cream produced, handled, kept, or offered for sale or delivered in the city of Long Branch shall be graded and labeled in conformity with the following requirements, rules, and regulations:

Grade A.—1. Cream of this grade shall be produced in accordance with the requirements for grade A inspected milk.

2. Cream of this grade shall contain less than 300,000 bacteria per cubic centimeter.

3. The caps or labels of all containers holding cream of this grade shall be white and contain the words "Grade A cream" in large, black type.

Grade B.—1. Cream of this grade shall be produced in accordance with the requirements for grade B milk.

2. Cream of this grade shall contain less than 900,000 bacteria per cubic centimeter.

3. The caps or labels of all containers holding cream of this grade shall be white and contain the words "Grade B cream" in large, bright green type, and when pasteurized shall be labeled "Pasteurized."

Any person violating any of the provisions of this section shall, upon conviction thereof, forfeit and pay a penalty of $25 for each offense.

SEC. 28C. The grade into which a milk falls shall be determined bacteriologically by at least five consecutive bacterial counts, taken over a period of not less than one week nor more than one month, and at least 80 per cent of the test must fall below the limit set for the grade for which the classification is desired: *Provided, however,* That the failure of the inspector in first instance to make such tests shall not prohibit the dealer from selling such milk.

SEC. 28D. *General provisions.*—1. No person shall bring into the city for sale, or shall sell, offer for sale, expose, or deliver any milk kept at a temperature exceeding 60° F.: *Provided, however,* That this paragraph shall not affect the temperature at which milk while in transportation by the common carrier is kept if refrigerator cars are not provided.

2. Any person violating any of the provisions of this section shall, upon conviction thereof, forfeit and pay a penalty of $25 for each offense.

SEC. 28E. *Cream.*—1. No person shall bring into the city for sale, or shall sell, offer for sale, or expose or deliver any cream unless such cream is produced from milk which must conform to all the rules and regulations of this code relating to milk, nor unless such cream be kept at or below 60° F., free from foreign substances and sediment: *Provided, however,* That this paragraph shall not affect the temperature at which milk while in transportation by the common carrier is kept if refrigerator cars are not provided.

2. Any person violating any of the provisions of this section shall, upon conviction thereof, forfeit and pay a penalty of $25 for each offense.

SEC. 28F. *Skimmed milk.*—1. No person shall bring into the city for sale, or shall sell, or offer, or expose for sale any so-called skimmed milk containing less than 8.25 per cent of milk solids.

2. Any person violating any of the provisions of this section shall, upon conviction thereof, forfeit and pay a penalty of $25 for each offense.

SEC. 28G. *Licenses.*—1. That section 28 of sanitary code be amended by adding the words "and cream" after the word "milk."

2. The grade or grades of milk to be handled or sold shall be specified in the written application for license.

3. Every conveyance used for the storage and delivery of milk to the common public shall bear the owner's name, milk license number, and business address in uncondensed gothic characters at least 2 inches in height so that they may be seen on either side of the conveyance.

4. 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.

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

6. Revocation of a permit may ensue for violation of any of the rules and regulations of the department of health.

Any person violating any of the provisions of this section shall, upon conviction thereof, forfeit and pay a penalty of $25 for each offense.

SEC. 28H. *Sanitary requirements for production of raw milk; cow stables.*—1. No person shall sell or deliver or have in possession for sale or delivery or offer or expose for sale with intent to sell any milk or cream unless the same be produced, stored, and transported in accordance with the requirements as hereinafter set forth.

2. Cow stables shall be used for no other purpose than for the keeping of cows, and shall be light, well ventilated, and clean.

3. The floors, sidewalks, and ceilings shall be tight, and clean, and free from cobwebs and dirt.

4. The gutters shall be water-tight.

5. The stable and surroundings shall be kept free from manure and all accumulations that may have any injurious effects upon the milk therein produced.

6. All manure shall be removed daily from stable 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.

7. Horse manure shall not be used in the cow stable for any purpose.

SEC. 28I. *Milk room.*—1. 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.

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

3. It shall be provided with a means for sterilization of bottles, cans, and utensils unless the milk is sent to a bottling plant, in which case the container shall be sterilized at the plant.

4. The storage tanks and water contained therein shall be kept clean at all times.

SEC. 28J. *Cows.*—1. A physical examination of all cows shall be made at least once every 12 months by a competent veterinarian.

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

3. The tuberculin test, except as qualified in section 28P, paragraph 2, shall be applied at least once every six months by a competent veterinarian unless on the last previous test no tuberculosis was present in the herd or herds from which new cows were obtained, in which case the tests may be postponed an additional six months.

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

5. Cows shall be clean at time of milking.

6. Certificates and charts showing the results of all physical examinations of cows and tuberculin tests shall be filed with the Long Branch board of health within 10 days of such examinations.

SEC. 28K. *Employees.*—1. All employees connected in any way with the production and handling of milk shall be personally clean and shall wear clean outer garmets.

2. Milking shall be done only with dry hands.

SEC. 28L. *Utensils.*—1. All utensils, containers, and apparatus with which milk comes in contact shall be thoroughly washed and then sterilized, and no milk utensil or apparatus shall be used for any other purpose than that for which it was designed.

2. All metal containers and piping shall be maintained in clean condition at all times; the piping shall be smooth on the inside, and in sections short enough to be taken apart and cleaned with a brush.

3. No milking pails with openings greater than 8 inches in diameter shall be used.

4. In any dwelling where communicable disease exists no milk in bottles or cans shall be delivered, but shall be transferred to closed receptacle furnished by consumer.

SEC. 28M. *Milk.*—1. It shall not be strained in the cow stables, but shall be removed to the milk room as soon as it is drawn from the cow.

2. 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.

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

4. It shall contain no visible foreign material.

5. The first streams (fore milk) from each test shall be rejected.

6. No bottle shall be filled, capped, or recapped outside the building regularly used for this purpose.

7. The revocation of a permit may ensue upon repeated conviction of the holder thereof of the violation of any section of the Sanitary Code relating to the adulteration of milk of any grade or designation.

SEC. 28N. *Receiving stations and bottling plants.*—1. They shall be clean, well screened and light, and shall be used for no other purpose than the proper handling of milk and the operations incident thereto.

2. They shall have smooth, impervious floors, properly graded and drained, of some material.

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

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

5. All utensils, piping, and receptacles in which milk is contained or kept shall be kept clean and shall be streilized daily.

SEC. 28O. *General regulations.*—1. Local score card shall be used, and no milk from a dairy that scores below 60 on such card shall be sold in the city of Long Branch.

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

3. 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.

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

5. Scalding with boiling water or steaming steam shall be deemed sterilization within the meaning of this ordinance.

6. Ice used for cooling purposes shall be clean and uncontaminated.

SEC. 28P. *Pasteurization of milk.*—1. Milk to be pasteurized shall be heated to a temperature of not less than 140° F. and not more than 150° F. for not less than 20 minutes. Said milk shall be cooled immediately to 60° F., or below and kept at or below that temperature.

2. Requirements for the production of milk for pasteurization are the same as for the production of raw milk, except section 28J, paragraph 3, relating to the tuberculin test, which shall not apply to cows from which pasteurized milk is supplied.

Any person violating any of the provisions of sections 28H, 28I, 28J, 28K, 28L, 28M, 28N, 28O, and 28P shall, upon conviction thereof, forfeit and pay a penalty of $25 for each offense.

SEC. 28Q. The word "person" whenever used in this ordinance shall mean a person, company, or corporation; an act of any agent or servant shall be deemed to be the act of the principal or employer.

LOS ANGELES, CAL.

Milk Depots—Location of. (Ord. 26826 N. S., Jan. 29, 1913.)

SECTION 1. It shall be unlawful for any person, firm, or corporation to erect, construct or maintain, or to cause or permit to be erected, constructed, or maintained, any milk depot or any building or other structure used or intended to be used for the purpose of receiving, storing, exchanging, delivering, or selling any milk, cream, buttermilk, skimmed milk, pasteurized milk, condensed or evaporated milk, or condensed or evaporated skimmed milk in that portion of the city of Los Angeles established and declared to be a residence district by the provisions of ordinance No. 22798 (new series), approved June 17, 1911.

SEC. 2. For the purpose of this ordinance a milk depot is defined to be any lot or parcel of land, or any building or other structure which is used wholly or principally for the purpose of receiving, storing, exchanging, delivering, or selling, in any form or manner, any milk, cream, buttermilk, skimmed milk, pasteurized milk, condensed or evaporated milk, or condensed or evaporated skimmed milk, which milk, cream, buttermilk, skimmed milk, pasteurized milk, condensed or evaporated milk, or condensed or evaporated skimmed milk, or any of which is not produced upon such premises.

SEC. 3. 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 punishable by a fine of not more than $500 or by imprisonment in the city jail for a period not exceeding six months, or by both such fine and imprisonment.

Each such person, firm, or corporation shall be deemed guilty of a separate offense for every day during any portion of which any violation of any provision of this ordinance is committed, continued, or permitted by such person, firm, or corporation, and shall be punishable therefor as provided by this ordinance.

Meat—Inspection at Slaughterhouses Required. (Ord. 27657 N. S., May 29, 1913.)

SECTION 1. That section 1 of ordinance No. 24982 (new series), entitled "An ordinance regulating slaughterhouses, the slaughtering of animals for food, and the sale of meats," approved May 1, 1912, be, and the same is hereby, amended so as to read as follows:

"SECTION 1. It shall be unlawful for any person, firm, or corporation to sell, have, keep, or expose for sale for human food, or to have in possession the flesh of any

cattle, calves, sheep, swine, or goats, unless the same shall have been slaughtered in an official establishment under the supervision of a United States Government inspector, in accordance with the regulations relating to the inspection of meat, as prescribed by the Department of Agriculture of the United States, or under inspection recognized and accepted by the said Department of Agriculture of the United States, or under the supervision of the health commissioner, or a meat inspector of the city of Los Angeles, in accordance with the provisions of this ordinance."

Slaughterhouses—Issuance and Suspension of Permits. (Ord. 26,768 N. S., Jan. 21, 1913.)

SECTION 1. That section 3 of ordinance No. 24,982 (new series), entitled "An ordinance regulating slaughterhouses, the slaughtering of animals for food, and the sale of meats," approved May 1, 1912, be and the same is hereby amended so as to read as follows:

"SEC. 3. Any person, firm, or corporation desiring to slaughter any of the animals mentioned in sections 1 and 2 hereof for use for food purposes in the city of Los Angeles, shall, before engaging in such business, make application in writing to the health commissioner of the city of Los Angeles for a permit so to do, which application shall be signed by the person, firm, or corporation making the same and shall specify the location of the house or place where it is proposed to slaughter such animals. Upon the filing of such application the health commissioner, or an inspector designated by him, shall inspect said slaughterhouse, and if the same shall be found to comply with the provisions of this ordinance relative to the construction and equipment of slaughterhouses, he shall issue the permit applied for and cause a record thereof to be kept in the health department: *Provided, however,* That such permit shall be granted only on the express condition that the same shall be subject to suspension for a period not exceeding six months by the said health commissioner in his discretion, upon proof to the satisfaction of said health commissioner of a violation by the holder thereof, or his servant, employee or agent, of any of the provisions of this ordinance, or of any rule of the health department relating to the inspection and sanitary condition of slaughter houses.

"No such permit shall be suspended until after a hearing shall have been had by the health commissioner, notice of which hearing shall be given in writing and served at least three days prior to the date of hearing upon the holder of such permit or upon his or its manager or agent. Such notice shall state the ground of complaint against the holder of such permit and shall also state the time when and place where such hearing will be had. Such notice shall be served upon the holder of such permit by delivering the same to such person, firm, or corporation, or to his or its manager of agent, or to any person of suitable age and discretion in charge of or employed in the place of business of such person, firm, or corporation; or if such person has no place of business, then at his place of residence; or by leaving such notice at the place of residence of such person with some person of suitable age and discretion. If the holder of such permit can not be found and service of such notice can not be made upon him or it in the manner herein provided, then a copy of such notice shall be mailed, postage fully prepaid, addressed to such holder of such permit at such place of business or residence at least three days prior to the date of such hearing: *Provided, however,* That the health commissioner shall have power and he is hereby authorized to suspend any such permit at any time when he shall ascertain that any provision of this ordinance or any such rule of the health department is being violated by the holder of such permit, or his servant, employee, or agent.

"If any such permit shall be suspended by the health commissioner, it shall be unlawful, during the period of such suspension, for the holder of such permit to slaughter any cattle, calves, sheep, swine, or goats in any slaughterhouse designated in such suspended permit for use for food purposes in said city of Los Angeles.

"Every such permit shall be good until the same is suspended as provided by this ordinance, or until the holder of such permit changes the location of his place of business, or conveys or otherwise disposes of the same.

"Nothing herein contained shall be construed to require any person, firm, or corporation to obtain a permit under the provisions of this ordinance if such person, firm, or corporation has, prior to the adoption of this ordinance, obtained a permit under the provisions of ordinance No. 14,351 (new series), and such permit has not been revoked or suspended and a new permit is not specifically required to be obtained under the provisions of this ordinance."

Swine—Keeping of. (Ord. 27,881 N. S., July 9, 1913.)

SECTION 1. That section 7 of ordinance No. 23,660 (new series), entitled "An ordinance regulating the keeping of cows and other animals within certain limits of the city of Los Angeles," approved November 3, 1911, be, and the same is hereby, amended so as to read as follows:

"SEC. 7. It shall be unlawful for any person, firm, or corporation to keep, or to cause or permit to be kept, any swine upon any premises in the city of Los Angeles unless such premises shall be comprised of an area of 1 acre or more: *Provided, however*, That the provisions of this section shall not apply to those certain districts set apart as slaughterhouse districts as set forth in ordinance No. 10,909 (new series), and to that portion of the city of Los Angeles lying south of Manchester Avenue. Every person, firm, or corporation may keep one additional swine for each additional acre owned or controlled by such person, firm, or corporation: *Provided, however*, That the number of swine that shall be kept upon any premises in said city shall not exceed five in number. No swine shall be kept upon any premises in said city within a distance of 100 feet of any public building, church, school, or dwelling. Every pen constructed or intended to be constructed and in which swine are kept is hereby required to be floored with cement or concrete, or plank of not less than 2 inches in thickness. All floor joints shall be tightly calked and filled with tar or asphaltum, and every such cement, concrete, or plank flooring is hereby required to be so placed and connected as to be properly and easily drained, and the same shall be drained, into some accepted sewer or cesspool. The owner, lessee, or person, firm, or corporation having charge of or in control of any such pen is hereby required to keep any such pen in a cleanly and sanitary manner and condition."

Fertilizer Factories—Establishment and Maintenance—Permit Required. (Ord. 28,411 N. S., Oct. 6, 1913.)

SECTION 1. That section 66 of ordinance No. 24,979 (new series), entitled "An ordinance providing health, sanitary, and quarantine regulations," approved May 1, 1912, be, and the same is hereby, amended so as to read as follows:

"SEC. 66. It shall be unlawful for any person, firm, or corporation to establish, conduct, maintain, or operate, or to cause or permit to be established, conducted, maintained, or operated, within the city of Los Angeles any fertilizer factory: *Provided, however*, That the provisions of this section shall not apply to any fertilizer factory in operation upon the date of the passage of this ordinance: *And provided further*, That the health commissioner may issue a permit, for a period not exceeding six months, to any person, firm, or corporation to maintain and operate, for experimental purposes, in any industrial district, a mechanical drier for producing chemical fertilizer. Any such permit may be revoked in the discretion of the health commissioner.

"A fertilizer factory, within the meaning of this section, is hereby declared to be a factory or place where fertilizer, fertilizing material, or any ingredient used in the preparation of fertilizer is manufactured, produced, or prepared, in whole or in part, from offal or refuse or from animal or vegetable matters."

LOUISVILLE, KY.

Eggs—Sale of—Candling—Cold Storage Eggs. (Ord. Apr. 23, 1913.)

SECTION 1. That it shall be unlawful for any person or persons, firm or corporation, to sell, expose for sale, or have in their possession for sale in the city, eggs that are not properly labeled and which have not been candled and found to be in good condition, within four days previous to the time of sale by a licensed egg candler to be licensed by the health officer of the city of Louisville.

SEC. 2. Storage eggs to be properly labeled and candled must have attached to the container from which they are sold a printed label bearing the words "Cold storage eggs," and the name of the month in which they were placed in cold storage, said label to be not less than 10 inches square with letters not less than 2 inches in height, and said eggs to be free from rots and spots and badly shrunken eggs.

SEC. 3. That it shall be the duty of the health officer of the city of Louisville, without charge, to grant license to every person qualified to candle eggs, who shall apply for same, giving him a registered number, which number shall be stamped, together with the date and time of candling, on every package of eggs candled by said person.

SEC. 4. That it shall be the duty of the health officer to suspend the license of any candler for a period of six months who shall misrepresent in any way the quality, kind, or condition of eggs candled by him and to cause a notice of such suspension of his or her permit to be published.

SEC. 5. That it shall be unlawful for any person or persons, firm, or corporation, to sell eggs in cases, boxes, or other container, bearing the name of another person or persons, firm, or corporation, unless he or they be true and lawful agents of same.

SEC. 6. That it shall be unlawful for any person or persons, firm, or corporation, to transfer eggs from properly labeled case, box, or package to another, except to one bearing their own name and label, thereby assuming entire responsibility for the condition of said eggs.

SEC. 7. Any person, firm, company, or corporation which shall violate any of the provisions of this ordinance shall be fined not less than $5 nor more than $50 for each separate offense.

LOWELL, MASS.

Morbidity Reports—Quarantine of Communicable Diseases. (Ord. May 13, 1913.)

RULE 1. When a physician knows that a person whom he is called to visit is infected with actinomycosis, Asiatic cholera, cerebrospinal meningitis, diphtheria, glanders, leprosy, malignant pustule, measles, scarlet fever, smallpox, tetanus, trichinosis, tuberculosis, typhoid fever, typhus fever, varicella, whooping cough, yellow fever, ophthalmia neonatorum, trachoma, anterior poliomyelitis, or any other disease dangerous to public health, he shall immediately give notice to the office of the board of health.

RULE 2. When a householder knows that a person within his family is sick with smallpox, varioloid, diphtheria, membranous croup, scarlet fever, measles, typhoid fever, cerebrospinal meningitis, infantile paralysis, pulmonary tuberculosis, or any other disease dangerous to the public health, he shall immediately give notice to the office of the board of health, and upon the death, recovery, or removal of such person, the rooms occupied, and the articles used by him, shall be fumigated by the board of health, in all cases wherein they deem it necessary.

RULE 3. No pupil shall be allowed to attend either the public or private schools while any member of the household to which said pupil belongs is sick with smallpox, varioloid, diphtheria, membranous croup, scarlet fever, measles, cerebrospinal meningitis, or infantile paralysis, and any pupil coming from such household shall be required to present to the teacher of the school the pupil desires to attend a certificate

from the board of health through the superintendent of schools of the facts necessary to entitle him to admission in accordance with the above regulations.

RULE 4. No person sick with any of the diseases mentioned in rule 3 shall be removed from the house except in a conveyance furnished by the health department, nor shall any person, sick with any of said diseases be allowed to leave the house until the placard has been removed, unless permission has been obtained from the board of health.

RULE 5. In case of any of the diseases mentioned in rule 3, the patient, must as far as possible, be nursed by only one person, and no member of the family coming in daily contact with the patient shall be allowed in public. No member of another household shall be allowed to enter the sick room, except in the capacity of nurse or physician.

RULE 6. In diphtheria no patient will be considered well and freed from isolation until a culture has been taken from the throat of the patient by the attending physician, and pronounced negative as the result of a bacteriological examination.

RULE 7. The school children in family shall be kept from school one additional week from release of patient.

RULE 8. A report of a case of diphtheria will be received from physicians upon clinical evidence, but the additional culture testimony is advised and desired.

RULE 9. No patient will be taken to the hospital at the expense of the department without a positive culture.

Cultures and antitoxin may be had at the office of the board of health from 8.30 a. m. to 5 p. m., daily; Sundays, 11 to 12; and antitoxin can be procured at the police station whenever the board of health office is closed.

RULE 10. In scarlet fever, no patient will be considered well and freed from isolation until the attending physician or the physician employed by the board of health certifies that he has personally inspected the patient, found that the period of desquamation has ceased, and that the patient is no longer a source of danger. No such certificate will be received by the board of health until at least four weeks from the beginning of the illness.

RULE 11. No person living in a house or apartment upon which a placard has been placed shall attend or visit any school or public assembly in the city without a permit from the board of health.

RULE 12. No person working in a bakery, confectionery, or as a handler of fruit, milk, or other food shall continue his residence in any dwelling so long as the same remains placarded without a permit from the board of health.

RULE 13. The board of health may give a special permit to return to school to a child not infected in a household in which there is or has been a case of contagious disease, if it is considered safe for the child to return to school.

RULE 14. A minimum quarantine of 21 days shall be established in cases of infantile paralysis, and all school children of such families shall be excluded from school until one week after the reported recovery of the case.

RULE 15. The foregoing rules relative to contagious diseases shall be in force until the board of health removes from the premises where the illness has occurred, the placards which notify the public of the existence of the disease. Such placards shall not be removed except by the agent or inspector of the board of health.

Foodstuffs—Protection, Care, and Sale. (Ord. May 13, 1913.)

SECTION 1. *Regulation for the covering of foodstuffs.*—It is hereby ordered that, except during the process of sale or while in the act of loading or unloading vehicles, no cut meat, fish, shucked shellfish, dried or preserved fruits, dates, figs, cut fruits, cut melons, cracked nuts, nut meats, popped corn, candies, confectionery, or bakers' products, which are intended for sale for human food, shall be conveyed from place to place, or kept in an open window or doorway, or kept outside of a building or in any

public or private way of the city of Lowell, unless so covered with clean material and so placed as to be protected from dust, flies, and animals.

SEC. 2. Every person being the occupant or lessee of any room, stall, building, or other place, and every person being the owner or person in charge of any stand, case, rack, bench, pushcart, or other vehicles, where or from which human food is kept, stored, sold, or offered for sale, shall maintain such room, stall, building, or other place, stand, case, rack, bench, pushcart or other vehicle and its appurtenances in a clean and wholesome condition.

SEC. 3. All persons while engaged in the handling of articles of food in such room, stall, building, or other place shall wear clean outer garments, and shall be free from contagious or infectious disease.

SEC. 4. No room in which articles of food are prepared, kept, stored, sold, or offered for sale, shall be used for domestic purposes or open directly into any room so used, unless the conditions of such room are approved by the board of health. In no such room shall there be a water-closet unless the same is approved by the board of health All shops or stores used for sale of articles of food shall be equipped with such lavatory accommodations as the board of health may order and approve.

SEC. 5. The use of unclean paper as an inside or outside wrapping of articles of food is prohibited.

SEC. 6. Every peddler of foodstuffs from wagons or carts in addition to the clean covering provided for in this regulation, shall keep in his wagon or cart a water-tight and sufficient receptacle for the waste of his business, and such wastes shall be so disposed of as not to cause a nuisance.

RULE 1. *Unwholesome food.*—No person shall sell or offer for sale or have in his possession with intent to sell, in this city, any unwholesome, decayed, or stale fruit, vegetables, or provisions of any kind whatever, nor any veal of a calf killed under four weeks old, or any tainted, diseased, corrupted, decayed, or unwholesome meat or fish. No poultry, except it be alive, shall be sold or exposed for sale until it has been properly dressed by the removal of the crop and entrails when containing food.

Ice Cream—Manufacture, Care, and Sale. (Ord. May 13, 1913.)

RULE 1. No ice cream shall be manufactured or stored in any portion of a building which is used for the stabling of horses or other animals, or in any room used in whole or in part for domestic or sleeping purposes unless the manufacturing or storage room for ice cream is separated from other parts of the building to the satisfaction of the board of health.

RULE 2. All rooms in which ice cream is manufactured or stored shall be provided with tight walls and floors and kept constantly clean. The floors and walls of said rooms shall be of such construction as to permit rapid and thorough cleansing. The room or rooms aforesaid shall be equipped with appliances for washing or sterilizing all utensils employed in the mixing, freezing, storage, sale, or distribution of ice cream, and all such utensils after use shall be thoroughly washed with boiling water or sterilized by steam.

RULE 3. No person shall employ as a container for other substances than ice cream any vessel used in the manufacture and sale of ice cream.

RULE 4. No person shall use a utensil of any kind or description in the service or sale of ice cream the use of which has been disapproved by the board of health; and no person shall use any utensil in the service or sale of ice cream unless said utensil is washed in boiling water or sterilized at least once a day or oftener if necessary; and no person shall use his fingers or hands to remove particles of ice from inside any vessel containing ice cream intended for sale.

RULE 5. All establishments in which ice cream is manufactured shall be equipped with facilities for the proper cleansing of the hands of operatives; and all persons immediately before engaging in the mixing of the ingredients entering into the com-

position of ice cream, or its subsequent freezing and handling, shall thoroughly wash his or her hands and keep them clean during such manufacture and handling.

All persons shall be dressed in clean outer garments while engaged in the manufacture and handling of ice cream.

RULE 6. No urinal, water-closet, or privy shall be located in the rooms mentioned in the preceding article, or so situated as to pollute the atmosphere of said rooms.

RULE 7. All vehicles used in the conveyance of ice cream for sale or distribution shall be kept in a cleanly condition and free from offensive odors.

RULE 8. Ice cream kept for sale in any shop, restaurant, or other establishment shall be stored in a covered box or refrigerator. Such box or refrigerator shall be drained to the satisfaction of the board of health, and shall be kept clean and tightly closed, except during such intervals as are necessary for the introduction or removal of ice cream or ice. Said box or refrigerator shall be kept only in such locations and under such conditions as shall be approved by the board of health.

RULE 9. Every person engaged in the manufacture, storage, transportation, sale, or distribution of ice cream, immediately upon the occurrence of any case or cases of infectious disease, either in himself or in his family, or amongst his employees, or within the building or premises where ice cream is manufactured, stored, sold, or distributed, shall notify the Lowell Board of Health, and at the same time shall suspend the sale and distribution of ice cream until authorized to resume the same by the said board of health.

RULE 10. No person shall use to hold or convey ice cream any vessel which has been handled by a person suffering from contagious disease until said vessel has been thoroughly sterilized.

RULE 11. All cream, milk, or skimmed milk employed in the manufacture of ice cream shall before use be kept at a temperature not higher than 50° F.

RULE 12. No person, by himself, or by his servants or agents, or as the servant or agent of any other person, firm, or corporation, shall in the city of Lowell sell, exchange, or deliver any ice cream which contains more than 500,000 bacteria per cubic centimeter.

RULE 13. No old or melted ice cream or ice cream returned to a manufacturer from whatever cause shall again be used in the preparation of ice cream.

Domestic Animals—Keeping of—Communicable Diseases of. (Ord. May 13, 1913.)

RULE 1. *Keeping of swine and other animals.*—Within city lines no swine or goats shall be kept without permission of the board of health.

RULE 2. All persons keeping hens or other fowls upon their premises shall remove them when ordered by the board of health.

RULE 1. *Contagious diseases in animals.*—Whoever has knowledge of or has good reason to suspect the existence of glanders, farcy, contagious pleuropneumonia, tuberculosis, Texas fever, foot-and-mouth disease, rinderpest, hog cholera, and rabies, or any other contagious disease among any species of domestic animals, whether such knowledge is obtained by personal examination or otherwise, shall forthwith give notice thereof to the board of health.

RULE 2. No animal suffering with a contagious disease shall be removed from any stable, barn, pasture, or other inclosure in which it may be, until permission has been obtained from the board of health. The premises where such an animal has been kept shall be disinfected by its owner, or by the owner of the property, in such manner as the board of health may direct.

Smallpox—Vaccination Required. (Ord. May 13, 1913.)

RULE 1. Every parent or guardian having legal custody and control of a minor child shall cause and procure such minor to be promptly and effectively vaccinated, that such minor may not be liable to take the smallpox.

RULE 2. Incorporated manufacturing companies; superintendents of almshouses, lunatic hospitals, and other places where the poor and sick are received; and jailors and keepers of prisons shall, at the expense of their respective establishments or institutions, cause all inmates thereof to be vaccinated immediately upon their entrance thereto, unless they produce sufficient evidence of previous successful vaccination within five years.

RULE 3. The school committee shall not allow a child who has not been duly vaccinated to be admitted to or connected with the public schools.

RULE 4. Revaccination shall be performed whenever in the opinion of the board of health it may be required.

Burial—Permit Required—Communicable Diseases—Funerals—Cemeteries. (Ord. May 13, 1913.)

RULE 1. No undertaker shall inter any dead body or remove it from the city limit without first procuring a permit from the board of health.

RULE 2. When an undertaker is called to a house where a person has died of smallpox, varioloid, diphtheria, membranous croup, scarlet fever, cerebrospinal meningitis, infantile paralysis, or measles, he shall give immediate notice thereof to the board of health.

RULE 3. After the death of a person from one of the foregoing diseases, a private funeral shall be held, at such times as the board of health may direct. At such funerals none but the immediate adult relatives shall be present. The body shall in nowise be carried to the grave in a hack or public conveyance.

RULE 4. No person having in charge any cemetery or burial ground within the city of Lowell shall permit a body to be interred therein unless he receives a written permit from the board of health for such burial.

RULE 5. Superintendents of cemeteries and persons having charge of burial shall cause to be deposited at the office of the board of health a plan of such cemetery or burial place, setting forth the arrangement and distribution of lots and the method of drainage.

RULE 6. Hereafter, all cemeteries and places of burial shall be laid out in definite and regular order, with distinguishing marks for the ranges and for the lots therein.

RULE 7. New territory shall not be opened for burial purposes without the permission of the board of health.

RULE 8. Superintendents shall cause to be entered, in a book kept for that purpose, a correct record of every burial, giving the name, age, and birthplace of every decedent, and they shall make written report of the same to the board of health office.

RULE 9. Not more than two bodies shall be buried in one grave, unless permission is obtained from the board of health to increase the number.

RULE 10. No body shall lie within less than three feet of the surface of the ground surrounding the grave.

RULE 11. It is forbidden to disinter bones or fragments of coffins or to reopen sections formerly used as burial places. The remains of the dead shall not be disturbed without permission of the board of health.

RULE 12. When a burial is made, the grave must be instantly filled.

RULE 13. In cases of death from infectious diseases, no religious services shall be held in the cemetery until after the grave has been filled.

RULE 14. The use of wall draperies in any room or place used for a funeral or for the preparation or retention of any human body, before or in connection with such funeral, is forbidden.

RULE 15. Caskets or coffins containing the bodies of persons having died of typhoid fever or tuberculosis shall remain permanently closed after the funeral cortege has left the house.

Privies—Construction—Care and Disposal of Contents. (May 13, 1913.)

RULE 1. Hereafter all privy vaults shall be made of brick and cement, and contain at least 80 cubic feet and shall be so constructed that the inside of the same shall be at least 2 feet distant from the line of every adjoining lot, unless the owner of such lot shall consent and agree otherwise, and also 2 feet from every street, lane, passage-way, or public place; and every vault shall be made tight, and its contents never shall be within 2 feet of the surface of the ground above the same. And, whenever any privy or vault shall become offensive, the same shall be cleansed. And in case the condition or construction of any vault or privy shall be different from the requirements of this section, the board of health may cause the same to be cleansed, repaired, amended, altered, or removed, at the expense of the owner or party occupying the estate in which such privy or vault may be: *Provided*, They shall first give such owner or party occupying a legal notice and allow the space of at least 48 hours for such owner or occupant to comply with such notice.

RULE 2. No person or persons shall hereafter construct a privy vault or cesspool within the limits of the city on any lot or premises where there is a sewer in any street or alley adjoining such lot or premises.

RULE 3. Privy vaults located on any lot or premises within the city shall be removed by the owner, agent, or occupant of such lot or premises within such reasonable time after notice to that effect, given by the board of health, as shall be expressed in such notice.

RULE 4. Whenever the use of any privy vault is discontinued, such vault shall be cleaned to the bottom and filled with earth or other suitable material.

RULE 5. All vaults within the city must be cleaned by the odorless process, unless written permission to cleanse otherwise has been obtained from the board of health.

RULE 6. In no case shall the contents of any privy vault be removed unless the same is properly disinfected before the work is commenced, and also during the progress of the cleaning and after the completion of the cleaning, by such disinfectants as shall be approved by the board of health.

RULE 7. No privy vault shall be opened without permission of the board of health, and then only in such manner and at such times as the board of health may direct. Whenever a privy vault is cleaned the entire contents thereof shall be removed.

RULE 8. The licensee shall not open or work at vaults before 7 a. m. nor between the hours of 11 a. m. and 1.30 p. m., nor after 6 p. m.; he shall keep his tanks and barrels well painted, clean, and air-tight, and free from any leakage; he shall remove the contents of vaults outside of city limits and avoid, as far as possible, traveling in the principal streets when crowded.

RULE 9. No wagon or apparatus used in the cleaning out of vaults shall be allowed to stand in the streets at any time except when being loaded.

RULE 10. These prices are fixed as a limit: $3 for a tank load of 60 cubic feet and 20 cents for each barrel filled with solid material, provided that no vault measuring 60 cubic feet or less shall cost more than $3 for cleaning.

RULE 11. One or more vaults in the same inclosure, the property of one owner, and cleansed on the same order, shall be considered as one vault and charged for by the total number of loads and fractions of a load taken at the rate above specified.

RULE 12. Where several vaults belong to one estate, or are in care of an agent, or connected with a corporation, such deduction may be made as the parties may agree upon.

RULE 13. Whenever the contents of a vault are less than 60 cubic feet it shall be considered as one load and paid for accordingly.

RULE 14. No person shall engage in vault cleaning without a permit from the board of health, and any person holding such permit shall forfeit the same by failing to comply fully with the foregoing rules and regulations, and such other rules as the board of health may hereafter adopt.

Garbage, Ashes, and Refuse—Care and Disposal of—Junk. (Ord. May 13, 1913.)

RULE 1. *House offal, ashes, and other refuse.*—All house offal, whether consisting of animal or vegetable substances, shall be kept in suitable vessels, properly covered, and they shall be kept in some convenient place, to be taken away by the swill collector, which shall be done as often as twice each week. In these vessels shall be placed all kitchen refuse. If ashes and other noncombustible matter is mixed with the house offal, said offal will not be removed by the health department, but must be removed by the owner of the vessel at his own expense.

RULE 2. Ashes and house dirt kept for removal by the health department shall not be mixed with swill, or with mortar, brick, gravel, or stone, and shall be kept in suitable vessels, which shall be placed on the outside edge of the sidewalk upon such days as the collections are made in each ward. After collection the empty vessels or barrels shall be taken care of by the owners. All waste material of building construction or repair, trade or manufacturing refuse, garden sweepings and cuttings, must be removed by the owner at his own expense.

RULE 3. No person shall, without a permit from the board of health, collect, remove, or carry through any street, alley, or public place in the city any swill, offal, or grease from any dwelling house or other place, and no permit for such work shall be granted until the places from which collection is made and the receptacles used to convey the refuse are approved by the board of health.

RULE 4. All persons holding licenses for the collection of swill and offal shall register with the board of health and shall give the names of the people from whom they collect, and also the streets and numbers; but in no instance shall licensees be permitted to collect from otherwise than restaurants, hotels, saloons, and boarding houses, the latter to contain at least six boarders, not including members of the immediate family.

The name of the owner, business, and license number shall be placed on each side of the cart or wagon in letters and figures not less than 1½ inches in size.

Every licensee shall be provided with a water-tight covered box or barrel, to be used in the removal of swill or offal; said box or barrel to be approved by the board of health and at all times subject to its examination.

Every licensee shall at least twice each week, from October 1 to May 1, and at least three times a week from May 1 to October 1, collect swill or offal from his respective customers.

Every licensee shall exhibit his license to any police officer or member of the board of health whenever such license is demanded.

RULE 5. No person shall place or cast any vegetable or dead animal substance, or any house offal or ashes, into any street, lane, passageway, cesspool, catch basin, sewer, water-closet, or privy vault. Nor shall any person place, sweep, or deposit any dirt, sawdust, soot, ashes, cinders, shreds, shavings, hair, manure, oyster or lobster shells, or any rubbish, offal, or filth of any kind, in or upon any public place, without a written license from the board of health.

RULE 6. No person shall throw any dead animal or fowl into any reservoir, pool, canal, river, or water within the city, nor cause any animal to be drowned in said waters.

RULE 7. No person shall transport fat, bones, manure, or decayed, putrid, or vile-smelling animal or vegetable substances through any of the public streets, lanes, alleys, or public grounds of the city, except in water-tight, securely covered vessels, from which no odors can escape.

RULE 8. Every owner or occupant of any building in this city shall keep such building and the yard belonging thereto free from all filth and substances liable to produce offensive odors, and shall remove at his own expense all accumulations of offal, manure, or other putrescible material.

RULE 1. *Junk.*—No person collecting or buying junk shall keep or store the same in any room or cellar in any living house, or shall have it exposed without cover in any yard.

Stables and Manure—License—Care of. (Ord. May 13, 1913.)

RULE 1. No person shall erect, occupy, or use any building for a stable without a license from the board of health. Such license shall not be granted until after careful inspection the board of health is satisfied that the stable is in every way suitable for that purpose.

RULE 2. All stables shall be lighted, ventilated, and drained in a manner approved by the board of health. Nor shall any license be granted to any person who fails to comply with the demands of the board in this respect.

RULE 3. No person owning a stable shall throw manure from the stable into any yard, court, or alleyway that abuts upon property not in the possession of the owner of the stable; nor shall any manure from said stable be exposed without cover in any yard, or court, or alleyway.

Spitting—Prohibited in Public Places. (Ord. May 13, 1913.)

Spitting on any floor, any street car, street, side or foot walk, floor or stairway of any public hall, theater, church, or public building is hereby prohibited. Whoever violates this regulation shall be subject to a penalty of not less than $5 or more than $20.

Barbers and Barber Shops—Sanitary Regulation. (Ord. May 13, 1913.)

The place of business, together with all the furniture, shall be kept at all times in a cleanly condition.

Mugs, shaving brushes, and razors shall be sterilized by immersion in boiling water after each separate use thereof.

A separate clean towel shall be used for each person.

Alum or other material used to stop the flow of blood shall be used only in powdered form, and applied on a towel.

The use of powder puffs is prohibited.

The use of sponges is prohibited.

Every barber shop shall be provided with running hot and cold water, said hot water to be furnished through a pressure boiler.

Every barber shall cleanse his hands thoroughly immediately after serving each customer.

Street Cars—Ventilation, Airing, and Disinfection. (Ord. May 13, 1913.)

Every street railway passenger car (closed) operated in Lowell shall, while so operated, be properly ventilated.

Such cars shall be thoroughly aired at the end of each round trip.

Every such car shall be thoroughly cleansed at the end of each day's service, and shall be disinfected once each week.

These regulations shall be posted in a conspicuous place in every such car and in all car houses in Lowell.

Rummage Sales—Permit Required. (Ord. May 13, 1913.)

No person or persons shall conduct a "rummage sale" in any dwelling or any other building in this city without a permit from the board of health.

Samples of Medicine—Distribution of—Permit Required. (Ord. May 13, 1913.)

No person, firm, or corporation, by himself, or by any agent or employee, shall distribute or leave from house to house in this city any sample of medicine or other substance containing any drug without a permit from the board of health.

Regulations—Penalties. (Ord. May 13, 1913.)

Any person who shall violate any of the within rules and regulations, where the penalty is not prescribed by statute, shall forfeit a sum not exceeding $20.