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MOTTLED ENAMEL AND BROWN STAIN.

A CONDITION AFFECTING THE TEETH IN CERTAIN LOCALITIES.

By F. C. SMITH, Surgeon, United States Public Health Service.

This condition is confined to certain geographical areas, of which the following are known: The Salt River and the Gila Valleys in Arizona, the territory affected extending also into old Mexico; an important section in Colorado, including the city of Colorado Springs and rural districts above and below this city on Fountain Creek; small regions in Texas, Virginia, California, South Dakota, and South Carolina, respectively; and probably areas in Oregon, Washington, Idaho, Montana, Alaska, and near Port Henry on Lake Champlain.

It seems that the first mention of this condition was made by Surg. J. M. Eager, of the United States Public Health Service, his report, *Denti di Chiaie* (chiaie teeth), being published in the Public Health Reports November 1, 1901. Surg. Eager had observed the condition at Naples, Italy, and at Pozzuoli, a suburb of that place. While his descriptions differ somewhat from those of the Colorado State Dental Association recently published, it seems very probable that the condition occurring in the United States is identical with, although of a somewhat milder type than, that which Surg. Eager describes as occurring in Italy.

The study made for the Colorado State Dental Society, published by Dr. Frederick S. McKay and Dr. G. V. Black, of Colorado Springs, Colo., is a valuable contribution to science and is the only careful study of the condition to be found in the literature. Their collaborated articles were published in the *Dental Cosmos*, February, May, June, July, and August, 1916, under the following titles, respectively: "Mottled Teeth: An Endemic Developmental Imperfection of the Enamel of the Teeth Heretofore Unknown in the Literature of Dentistry." "An Investigation of Mottled Teeth: An Endemic Developmental Imperfection of the Enamel of the Teeth Heretofore Unknown in the Literature of Dentistry."

The following is a brief abstract of these articles:

In the endemic areas, mottled enamel and brown stain occur in the permanent teeth after their eruption, and are due to a defect in the formation of the enamel caused by the absence of cementing

substance occurring normally between the enamel rods in the outer third of the enamel layer. The outer glazed enamel surface, Nasmyth's membrane, is however always normal. When there is a simple lack of the cementing substance, the portions affected contain only air and show through Nasmyth's membrane as a dead opaque white, but when deposits of coloring matter, called brownin by Dr. Black, occur, the teeth appear to be stained yellowish, brownish, or even black, in varying degrees according to the amount of the stain present in the spaces between the enamel rods. Dental caries is apparently not more frequent in teeth so affected, although repairs are made by the dentist with more difficulty when caries occurs.

The disease or defect occurs among all races in the endemic areas, Indians, Negroes, Mexicans, and native Americans being impartially affected. It occurs without distinction among those who have been breast fed and bottle fed, without regard to degree of physical robustness, and independently of the occurrence of diseases of childhood. Its occurrence appears not to be dependent upon the degree of personal hygiene observed. It is found among both the rich and the poor, and appears to be independent of the food supply. The consensus of opinion among observers is that it is due, in some unknown manner, to the drinking water. The relation of the water supply is not plain, since Drs. McKay and Black have found the condition among people consuming water low in mineral content derived from melting snows in the upper reaches of Fountain Creek and also among people consuming water high in mineral content in other places. Analyses of representative waters from the various areas follow.

Table of analyses of water from endemic districts (McKay).

[Given in parts per million.]

Constituents (ions).	Mine water at V—.	Lawson ranch well water.	Scholes's well.	Mine water at E—.	Sigle ranch spring.	City water at L—.
Sodium.....	276.77	207.80	242.70	37.12	} 11.05	3.20
Potassium.....		3.35	6.44			
Calcium.....	89.75	31.80	33.31	74.40	21.32	5.70
Magnesium.....	27.36	37.75	33.60	16.71	5.41	1.70
Iron.....	Nil.		3.35	} Trace.		.49
Aluminum.....	2.74					
Chlorin.....	47.37	31.00	51.00	14.17	8.31	7.29
Sulphuric acid.....	651.49	142.40	250.00	104.66	46.80	7.10
Carbonic acid.....	216.78	615.00	530.00	239.60	22.80	15.30
Silicic acid.....	16.68	21.65	18.12			7.50

The condition, while it does not affect the general health of the people, is one to be not lightly regarded. The deformity once present persists throughout life, resisting all bleaching processes. It is so disfiguring that relief is frequently sought and resort sometimes had to the cutting away of the crowns of affected teeth and the substitution of artificial crowns therefor.

Since the defect results from exposure to the deleterious influence during the enamel-forming periods, it happens that children brought into the endemic area after infancy will show varying degrees of involvement according to the age at which exposure began; thus, if a child is first brought into the endemic area after the age of seven, the incisors, cuspids, and first molars escape injury; if after the age of eleven, the bicuspids and second molars also escape; and if after the age of fifteen, none of the teeth will show the defect even though the remainder of life is spent in the endemic region. Conversely, if a child is removed from an endemic focus at an early age, only portions of certain teeth may show the involvement in varying degrees, but such deformity as is acquired persists throughout life regardless of the subsequent place of residence.

The natural occurrence of the defect in the teeth of lower animals has not been observed. Its experimental production appears not to have been attempted. Nor has a careful chemical examination been made of brownin or other substance which may be responsible for the stain itself.

Dr. Joseph A. Murphy, medical superintendent, United States Indian Service, and Drs. C. E. Sims and F. E. Rodriguez, also of the Indian Service, are quoted in observations made on this mysterious affection. All seem of the opinion that it is due in some way to water, either to alkaline material or to ferruginous or sulphurous matters contained therein. Rodriguez states that "people living in the neighborhood of hot springs have the discoloration to the greatest extent." Eager makes a somewhat similar observation: "The etiology seems to be connected with volcanic fumes or the emanations of subterranean fires, either fouling the atmosphere or forming a solution in drinking water." It should be recalled, however, that the most extensive endemic areas yet described are in desert regions far from the neighborhood of active volcanoes. More than a casual interest in the influence of water has been taken by the writers, who call attention to the fact that, whereas the mine water at V ——— and the city water at L ———, described in the first and last columns, respectively, of the above table, are entirely different in their analyses, the endemic percentage was very high in both: Namely, 100 and 87½, respectively. Prof. Strieby, of Colorado Springs, is quoted in the belief that in future chemical examinations the "standard" analyses of waters should be abandoned and search made for traces of rarer elements which might be responsible.

Concluding, Black states: "Future work on this problem, then, must be in the more critical examination of the endemic areas already located, and the writer believes that with the collection and presentation of the mass of evidence in this article the subject has passed beyond the strictly dental realm, and must now be examined

from the standpoint of some collateral branch of science. That the problem is a chemical one, there seems to be little doubt, but that it is also physiological is just as certain."

DESTROYING LICE ON TYPHUS FEVER SUSPECTS.

By S. B. GRUBBS, Surgeon, United States Public Health Service.

The importance of efficient and rapid methods of killing lice in clothing and on the human body is recognized by those charged with the exclusion of typhus fever from the United States. This disease, endemic in Mexico, requires energetic measures to prevent its spread northward, while the European War is so distributing it through southern Europe that renewed immigration may be expected to carry it across the Atlantic.

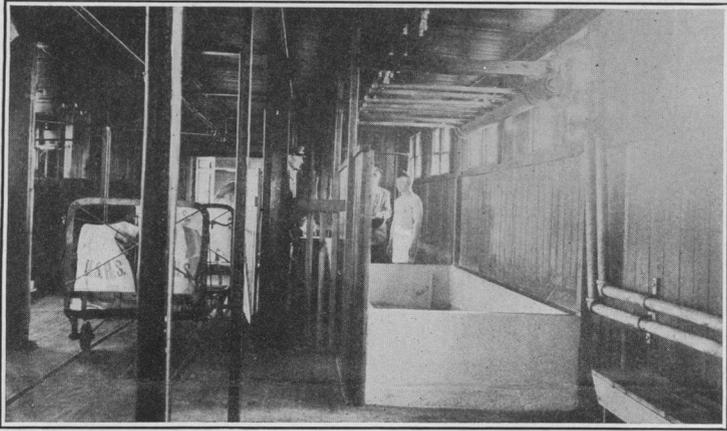
Studies that have been made during the past year at the Boston quarantine station, under the United States Public Health Service, have resulted in the adoption of a method of treating persons by means of a gasoline soap spray and shower bath and of treating clothing and baggage with a vacuum hydrocyanic acid gas process.

Equipment.—The bath house is an oblong building with a large steam chamber at one end, from which tracks extend the length of the building. A fence, with gate for the carriage from the steam chamber, has been built across the building, so that the only passage from one end of the building to the other is through a shower tank, 15 feet long. This tank is built of concrete, is 4 feet wide and holds 20 inches of water. At the entrance of the shower is a barrel with a spray pump with mechanical agitator. This pump, intended for spraying trees and plants, is especially adapted for emulsions, as it constantly agitates the solution. It operates by means of a pump handle and delivers with considerable force a fine or coarse spray as desired. Many soap combinations have been tried, all based on the kerosene emulsion spray used for plant lice and other insects. Gasoline has been substituted for kerosene, as reports from the English army in the trenches state that this was found to be a better remedy for lice. The formula adopted incorporates as much gasoline as possible without preventing the soap from lathering freely. For this the stock is made as follows:

Soap chips or laundry soap.....	Part 1.
Soft water.....	Parts 4.
Gasoline.....	Parts 4.

Dissolve the soap by boiling in the water, remove from the fire and add the gasoline. Stir the mixture until it becomes a creamy mass of even texture without signs of either gasoline or soap. This hardens in a few hours to the consistency of stiff jelly.

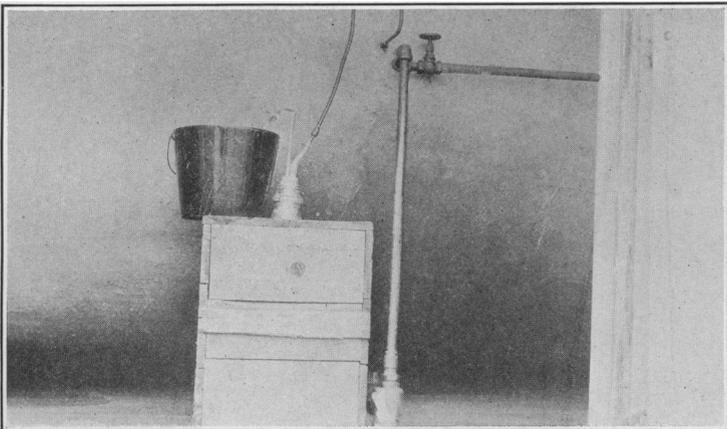
For spraying, this stock is mixed with five to ten parts of hot water and used while warm in order to lessen the chilling effects of the spray on the body.



MANNER OF APPLYING GASOLINE SOAP SPRAY. SHOWER AND TANK, WATER NOT TURNED ON. CAR WITH CLOTHING READY TO BE CYANIDED.



SPRAY FOR GASOLINE SOAP SOLUTION, TANK AND SHOWER.



CYANIDE GENERATOR ATTACHED TO STEAM CHAMBER FOR USE WITH VACUUM PROCESS. SIMPLE AND AUTOMATIC.

For the bather's clothing, large canvas bags, 26 by 46 inches, and duplicate metal checks are provided, to be used as will be described.

Bathing.—Men to be treated are put into one group and women and children into another. Each man entering the bathroom is given a number which is entered opposite his name. He undresses and puts all his effects into the canvas bag on which is pinned one metal check. The duplicate is fastened about his neck. Each piece of his hand baggage is marked with the same number and all of these articles are placed on the carriage of the steam chamber. These disposed of, he steps to the entrance of the shower tub and while turning slowly is sprayed from head to foot with the gasoline soap solution. The force of the spray causes it to penetrate the hairy parts and body creases, but extremely hairy persons and those with matted heads may need extra treatment. The spray may be used on the face, for even if its full force is received in the open eyes they will not suffer any injury nor more discomfort than from strong soap. A drain in the floor takes care of the excess soap solution.

The man now steps over the end of the tank—2 feet—and walks through to the other end, a distance of 15 feet. Ten feet of this is under the shower. He can go slowly and enjoy the shower or get down into the water, but he can not walk very fast as the water is knee-deep. Once well soaped, he is sure to be well washed before arriving at the "clean" end, where he is given two towels and a blanket and awaits his clothes.

Treatment of clothing and baggage.—Of the various methods considered for the treatment of lousy clothing and baggage, cyanide has many advantages. The first arrangement for its application was an air-tight room about 8 by 8 feet, built at the end of the bathhouse. Into this, hydrocyanic acid gas was injected from a small generator situated in the open air. After exposure the gas was entirely removed by an electric fan and two ports opening outside, all operated from without. It was seen, however, that hydrocyanic acid gas could not be relied upon to penetrate either baggage or canvas bags if tightly packed. It was then decided to adopt the method of the United States Department of Agriculture for cyaniding cotton bales to kill the pink bollworm. This method consists of creating a vacuum in a metal chamber holding the bales, liberating cyanide gas in the chamber and then allowing air to enter, which forces the gas into the cotton. The instructions given by the Federal Horticultural Board are briefly as follows:¹

A vacuum of 25 inches of mercury is first generated; then cyanide from 6 ounces of sodium cyanide per 100 cubic feet is introduced slowly. The vacuum is then reduced to 5 inches and this held for 1 hour and 25 minutes. The entire process requires 1 hour and 45 minutes, including the time consumed in introducing the gas.

¹ Federal Horticultural Board. Fed. Hort. Bd. 21. Dec. 4, 1915. Also Federal Horticultural Board circular dated Mar. 16, 1916.

As it is easier to force gas into the center of a tightly packed and closed trunk than into a bale of cotton, and still easier to so treat the ordinary baggage of immigrants, a number of experiments were made to determine what amounts of vacuum, hydrocyanic gas, and time were necessary for this purpose. As the time element is of particular value in quarantine work, it was especially desirable to reduce this as much as possible. In these experiments potato bugs were used instead of lice, as they were available, easily handled, and were shown to be approximately as resistant to cyanide as body lice.

Their resistance may be shown by comparison with the experiments with body lice made by Creel and Faget,¹ as follows:

Number of experiment.	Number of lice.	Container.	Cheesecloth protection to container.	Strength of gas.	Duration of exposure.	Primary inspection.	Final inspection, 24 hours.
13	6	Glass jar, 6 oz. capacity.	1 layer.....	7.5 oz. NaCN per 1,000 cu. ft.	<i>Hrs.</i> 1	All insects stupefied.	All insects dead.
14	6	.....do.....	6 layers.....	.....do.....	1	.....do.....	4 insects dead, 2 alive.
15	6	.....do.....	1 layer, container packed with gauze.	.....do.....	1	.....do.....	1 insect alive, 5 dead.
16	6	.....do.....	1 layer.....	.....do.....	1	.....do.....	4 insects dead, 2 alive.
17	6	.....do.....	6 layers.....	.....do.....	1	.....do.....	Do.
18	6	.....do.....	1 layer, container packed with gauze.	.....do.....	1	.....do.....	2 insects dead, 4 alive.

POTATO BUGS SUBSTITUTED FOR LICE.

13a	6	Glass jar, 5 oz. capacity; mouth 1½ inches.	1 layer.....	7.5 oz. NaCN per 1,000 cu. ft.	1	All insects stupefied.	All insects dead.
14a	6	.....do.....	6 layers.....	.....do.....	1	.....do.....	2 insects alive, 4 dead.
15a	6	.....do.....	1 layer, container packed with gauze.	.....do.....	1	.....do.....	5 insects alive, 1 dead.
16a	6	.....do.....	1 layer.....	.....do.....	1	.....do.....	All insects dead.
17a	6	.....do.....	6 layers.....	.....do.....	1	.....do.....	1 insect alive, 5 dead.
18a	6	.....do.....	1 layer, container packed with gauze.	.....do.....	1	.....do.....	All alive.

Under similar conditions, number of lice killed 25, alive 11; number of potato bugs killed 22, alive 14.

In the experiments made with the vacuum-cyanide process potato bugs were put into ordinary test tubes closed with cotton plugs. These were rolled in old clothes, blankets, or sheepskin coats, in every case making a roll as tight as possible. These packages were put into canvas bags which were tied or the rolls or bags were put into a trunk with tight-fitting lid which was closed and strapped. In every case the protection given the insects was greater than would be expected in the various types of baggage imitated.

¹ United States Public Health Reports, June 9, 1916.

The following experiments may be cited:

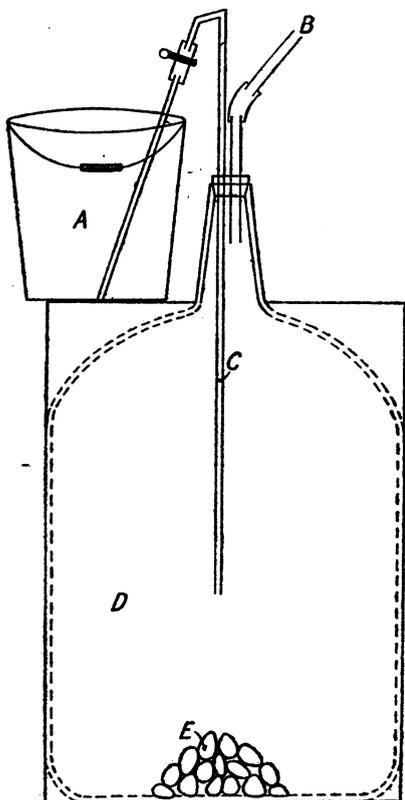
No.	No. of bugs.	Container.	Protection to container.	Vacuum.	Strength of gas.	Exposure.	Primary inspection.	Inspection after 24 hours.
1	2	Plugged test tube.	Wrapped in coat, 10 layers and this in canvas bag.	<i>In.</i> 15	1 ounce NaCN per 100 cubic feet.	<i>Min.</i> 30	Dead..	Dead.
2	2	do.....	2 pairs overalls and coat, 11 layers, in bag.	15	do.....	30	Dead..	Dead.
3	2	do.....	2 pairs overalls, coat, and blanket, 26 layers, in canvas bag.	15	do.....	30	Alive..	Aliye.
4	2	do.....	do.....	15	2 ounces NaCN per 100 cubic feet.	30	Dead..	Dead.
5	2	do.....	Wrapped in white coat, 8 layers, and in trunk.	15	do.....	30	Dead..	Dead.
6	2	do.....	2 pairs overalls and white coat, 10 layers, in trunk.	15	do.....	30	Dead..	Dead.
7	2	do.....	Same, with 10 layers of blanket and bag in trunk.	15	do.....	30	Alive..	Alive.
8	2	Test tube 2 cotton plugs.	Wrapped in sheepskin coat, 2 layers, in bag in trunk.	17	3 ounces NaCN per 100 cubic feet.	30	Alive..	Alive.
9	2	Plugged test tube.	16 layers cloth and 10 of blanket in trunk.	17	do.....	30	1 alive, 1 dead.	1 alive, 1 dead.
10	2	As in No. 8.....	As in No. 8.....	20	4 ounces NaCN per 100 cubic feet.	30	Alive..	Alive.
11	2	Plugged test tube.	Overalls and cloth, 15 layers, in trunk.	20	do.....	30	Dead..	Dead.
12	2	do.....	16 layers cloth and 10 of blanket in trunk.	20	do.....	30	Dead..	Dead.

From these and other tests it is believed that lice in ordinary hand baggage will be killed by this vacuum-cyanide method with 15 inches vacuum and 30 minutes exposure to hydrocyanic acid gas from 3 ounces of NaCN per 100 cubic feet and in tightly closed trunks by increasing the vacuum to 20 inches and the NaCN to 4 ounces. The conditions created in the experiments were unusually severe. Where the test tube was half filled with a tight cotton plug (experiments 8 and 10) and other unnatural protection given, negative results were not unexpected. In using this method at the Boston quarantine station 15 to 17 inches vacuum with 4 ounces sodium cyanide and 30 minutes exposure will be used, and if trunks are to be treated the lids will be opened.

This is because our apparatus is crude and the vacuum must be produced by the air pump on the quarantine steamer lying 150 feet away and connected by a pipe. When, as planned, the steam chamber is equipped with an electric or gasoline air pump which will produce a vacuum of 20 to 25 inches, it will not be necessary to open even the largest trunks and a reduction of exposure to 20 minutes is contemplated, but at present to create a vacuum of over 15 inches requires too much time.

Several types of cyanide generators, all made at the station, have been tried. The one now in use is very simple and can be made with practically no expense and attached to any steam chamber.

It consists of a 10-gallon carboy fitted with a rubber stopper through which pass two glass tubes, one extending about half way to the bottom of the carboy. The shorter and larger tube is connected to the steam chamber by a short rubber pipe. The longer and smaller tube has a short length of rubber tubing with pinch cock and then a second piece of glass tubing which goes to the bottom of a bucket containing the acid solution.



Cyanide generator, Boston quarantine station, Gallops Island, Boston, Mass. A. Fiber bucket containing acid solution. B. Gas conducted into the chamber by the creation of a vacuum in chamber. C. Glass tube extending halfway to bottom of carboy through which acid solution is drawn. D. Ten-gallon carboy in wooden box. E. Cyanide of soda in form of eggs dropped in carboy before placing the cork.

The eggs of sodium cyanide are dropped into the carboy, the cork is inserted, and the pinch cock closed on the rubber connection of the acid tube. When the proper vacuum is established in the steam chamber and the carboy, the pinch cock is opened and the negative pressure draws the acid solution into the carboy and into contact with the sodium cyanide. The rate of generation of the gas is thus regulated automatically by the pressure in the carboy, and the operation is complete in less than two minutes. Air enters the acid tube when all the solution has passed over, and after this has continued for two minutes more the valves of the chamber are opened and atmospheric pressure is restored, which requires another five minutes. Time is reckoned from the first injection of cyanide gas, and when this period has elapsed the air pump is run a few minutes to draw out the cyanide and avoid disagreeable effects when the door is opened.

Once the chamber is opened the carriage is pushed to the clean side of the bathhouse and all baggage and clothes are returned to the owners, free from vermin but otherwise in the exact condition in which they were surrendered by them.

For the vacuum an electric or gasoline-driven air pump will not only work rapidly but will make the process entirely independent of steam. It is believed that a further improvement is possible by

using a reversible pump that will establish a vacuum, and after the gas has been admitted will pump in air, creating a pressure that will force the fumigant further into the clothing.

Hydrocyanic acid gas has but slight power to kill bacteria and should not be used if this is desired. If the destruction of vermin alone is required, the above method presents the great advantage of not requiring baggage to be opened or even unlocked. As every piece must be unpacked and the contents sorted if steam or dry heat is used and besides this must be dried if immersed in insecticide solution, the advantage in handling large quantities of baggage is striking. As the process is entirely safe, its application need not be limited to typhus suspects, but may be used in lodging houses and similar institutions where it is necessary, on account of vermin, to regularly disinfect the bedding and the clothing of the inmates.

PLAGUE-PREVENTION WORK.

CALIFORNIA.

The following report of plague-prevention work in California for the week ended September 23, 1916, was received from Passed Asst. Surg. Williams, of the United States Public Health Service, in temporary charge of the work:

FEDERAL AND COUNTY INSPECTION SERVICE.

[For the enforcement of the law of June 7, 1913.]

Counties.	Number in-spected.	Number rein-spected.	Acres in-spected.	Acres rein-spected.	Acres treated.		Holes treated.
					Waste balls.	Grain.	
Alameda.....		108		28,978	17	2,588	3,500
Contra Costa.....	1	78	600	26,707		6,403	
Stanislaus.....	38	83	21,529	30,752		14,250	
Santa Cruz.....		36		6,339		3,753	
Merced.....	32	22	14,270	10,890		10,280	
Monterey.....	18	16	11,540	12,865		16,955	
San Benito.....	30	54	37,075	22,638		34,764	
Santa Clara.....	41	12	13,930	2,353		1,280	
San Mateo.....	9		376				
Total.....	169	409	99,320	141,522	17	90,273	3,500

RATS COLLECTED AND EXAMINED FOR PLAGUE.

Cities.	Collected.	Ex-aminated.	Infected.
Oakland.....	31	31	None.
Richmond.....	32	32	Do.
Antioch.....	81	81	Do.
Total.....	144	144	None.

RECORD OF PLAGUE INFECTION.

Places in California.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number rodents found infected since May, 1907.
Cities:				
San Francisco.....	Jan. 30, 1908	Oct. 23, 1908	(1)	398 rats.
Oakland.....	Aug. 9, 1911	Dec. 1, 1908	(1)	126 rats.
Berkeley.....	Aug. 28, 1907	(1)	(1)	(1)
Los Angeles.....	Aug. 11, 1908	(1)	Aug. 21, 1908	1 squirrel.
Counties:				
Alameda (exclusive of Oakland and Berkeley).....	Sept. 24, 1909	Oct. 17, 1909	June 23, 1916	293 squirrels. ²
Contra Costa.....	July 13, 1915	(1)	June 28, 1916	1,629 squirrels.
Fresno.....	(1)	(1)	Oct. 27, 1911	1 squirrel.
Merced.....	(1)	(1)	May 12, 1916	7 squirrels.
Monterey.....	(1)	(1)	May 27, 1916	38 squirrels.
San Benito.....	June 4, 1913	(1)	July 1, 1916	72 squirrels.
San Joaquin.....	Sept. 18, 1911	(1)	Aug. 26, 1911	18 squirrels.
Santa Clara.....	Aug. 31, 1910	(1)	June 21, 1916	32 squirrels.
San Luis Obispo.....	(1)	(1)	Jan. 29, 1910	1 squirrel.
Santa Cruz.....	(1)	(1)	May 30, 1916	5 squirrels.
Stanislaus.....	(1)	(1)	June 2, 1911	18 squirrels.
San Mateo.....	(1)	(1)	June 21, 1916	1 squirrel.

¹ None.

² Wood rat.

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

OPERATIONS ON THE WATER FRONT.

Number of vessels inspected for rat guards..	20
Number of reinspections made on vessels...	5
Number of new rat guards procured.....	6
Rats trapped on wharves and water front..	55
Rats trapped on vessels.....	23
Number of traps set on wharves and water front.....	277
Number of traps set on vessels.....	84
Number of vessels trapped on.....	18
Poisons placed on water front (pieces).....	3,600
Bait used on water front and vessels, bacon (pounds).....	6
Amount of bread used in poisoning water front (loaves).....	12
Number of pounds of poison used on water front.....	4
Poisons placed within the Panama-Pacific International Exposition grounds.....	36,000

The following is a record of municipal work performed under the supervision of the Public Health Service:

COOPERATIVE MUNICIPAL WORK.

Number of premises inspected.....	807
Number of nuisances abated.....	119

COOPERATIVE MUNICIPAL WORK—continued.

Number of rats trapped.....	78
Number of rats sent to laboratory.....	78
Number of rats examined.....	72
Number of poisons placed.....	51,900
Number of garbage cans stamped approved.....	560
Rats identified:	
Mus norvegicus.....	23
Mus rattus.....	11
Mus alexandrinus.....	44

WORK DONE ON OLD BUILDINGS.

Wooded floors removed.....	5
Number yards and passageways, planking removed.....	1
Cubic feet new foundation walls installed...	4,800
Concrete floors installed (square feet, 7,970).....	11
Number of basements concreted (square feet, 9,700).....	13
Yards and passageways, etc., concreted (square feet, 3,850).....	19
Total area concrete laid (square feet).....	21,520
Number floors rat proofed with wire cloth (square feet, 1,875).....	2
Buildings razed.....	2

LOUISIANA—NEW ORLEANS—PLAGUE ERADICATION.

The following report of plague-eradication work at New Orleans for the week ended September 30, 1916, was received from Passed Assist. Surg. Simpson of the United States Public Health Service, in charge of the work:

OUTGOING QUARANTINE.

Number of vessels fumigated with sulphur.....	3
Number of vessels fumigated with cyanide gas.....	13
Pounds of sulphur used.....	120

OUTGOING QUARANTINE—continued.

Pounds of cyanide used in cyanide gas fumigation.....	682
Pints of sulphuric acid used in cyanide gas fumigation.....	1,024
Clean bills of health issued.....	36

FIELD OPERATIONS.	
Number of rodents trapped.....	9,501
Number of premises inspected.....	7,337
Notices served.....	370
Number of garbage cans installed.....	24

BUILDINGS RAT PROOFED.	
By elevation.....	105
By marginal concrete wall.....	128
By concrete floor and wall.....	150
By minor repairs.....	252
Total buildings rat proofed.....	635
Square yards of concrete laid.....	4,091
Number of premises, planking, and shed flooring removed.....	40
Number of buildings demolished.....	112
Total buildings rat proofed to date (abated)	127,798

LABORATORY OPERATIONS.	
Rodents received by species:	
Mus rattus.....	242
Mus norvegicus.....	736
Mus alexandrinus.....	159
Mus musculus.....	7,968
Wood rats.....	115
Putrid.....	251
Total rodents received at laboratory.....	9,471

LABORATORY OPERATIONS—continued.	
Rodents examined.....	1,684
Number of rats suspected of plague ¹	29
Plague rats confirmed.....	2

PLAGUE RATS.	
Case No. 336:	
Found at 924 Teche Street, Algiers, La.	
Captured Sept. 2, 1916.	
Diagnosis confirmed Sept. 25, 1916.	
Case No. 337:	
Found at No. 628 Canal Street.	
Captured Sept. 5, 1916.	
Diagnosis confirmed Sept. 29, 1916.	

PLAGUE STATUS TO SEPTEMBER 30, 1916.	
Total number of rodents captured to Sept. 30.....	862,918
Total number of rodents examined to Sept. 30.....	385,460
Total cases of rodent plague to Sept. 30, by species:	
Mus musculus.....	6
Mus rattus.....	21
Mus alexandrinus.....	16
Mus norvegicus.....	294
Total rodent cases to Sept. 30, 1916.....	337

WASHINGTON—SEATTLE—PLAGUE ERADICATION.

The following report of plague-eradication work at Seattle for the week ended September 23, 1916, was received from Surg. Lloyd, of the United States Public Health Service, in charge of the work:

RAT PROOFING.	
New buildings inspected.....	15
New buildings reinspected.....	27
Basements concreted, new buildings (7,250 square feet).....	11
Floors concreted, new buildings (17,460 square feet).....	9
Yards, etc., concreted, new structures (2,180 square feet).....	7
Sidewalks concreted (square feet).....	9,470
Total concrete laid, new structures (square feet).....	36,360
New buildings elevated.....	2
New premises rat proofed, concrete.....	20
Old buildings inspected.....	4
Premises rat proofed, concrete, old buildings.....	3
Floors concreted, old buildings (4,275 square feet).....	3
Premises otherwise rat proofed, old buildings.....	1
Openings screened, old buildings.....	9
Rat holes cemented, old buildings.....	10
Wooden floors removed, old buildings.....	3
Wire screening used (square feet).....	650
Buildings razed.....	2

LABORATORY AND RODENT OPERATIONS.	
Dead rodents received.....	12
Rodents trapped and killed.....	239
Rodents recovered after fumigation.....	4
Total.....	255
Rodents examined for plague infection.....	181
Rodents proved plague infected.....	None.
Poison distributed (pounds).....	16
Bodies examined for plague infection.....	4
Bodies found plague infected.....	None.

CLASSIFICATION OF RODENTS.	
Mus rattus.....	17
Mus alexandrinus.....	63
Mus norvegicus.....	122
Mus musculus.....	53

WATER FRONT.	
Vessels inspected and histories recorded....	12
Vessels fumigated.....	1
Sulphur used (pounds).....	100
New rat guards installed.....	9
Defective rat guards repaired.....	16
Fumigation certificates issued.....	1
Canal Zone certificates issued.....	2
Port sanitary statements issued.....	46
The usual day and night patrol was maintained to enforce rat guarding and fending.	

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

MISCELLANEOUS WORK.		RAT-PROOFING OPERATIONS IN EVERETT—con.	
Rat-proofing notices sent contractors, new buildings.....	11	New buildings, concrete foundations.....	3
Letters sent in re rat complaints.....	5	New buildings elevated.....	3
RODENTS EXAMINED IN EVERETT.		New buildings, floor concreted (280 square feet).....	1
Mus norvegicus trapped.....	82	New buildings, yards concreted (832 square feet).....	2
Mus norvegicus found dead.....	2	Total concrete laid (square feet).....	1,112
Mus musculus trapped.....	4	RODENTS EXAMINED IN TACOMA.	
Total.....	88	Mus norvegicus trapped.....	39
Rodents examined for plague infection.....	83	Mus rattus trapped.....	4
Rodents proved plague infected.....	0	Mus alexandrinus trapped.....	3
RAT-PROOFING OPERATIONS IN EVERETT.		Total.....	46
New buildings inspected.....	6	Rodents examined for plague infection.....	43
New buildings reinspected.....	4	Rodents proved plague infected.....	0

HAWAII—HONOLULU—PLAGUE PREVENTION.

The following report of plague-prevention work at Honolulu for the week ended September 23, 1916, was received from Surg. Trotter, of the United States Public Health Service:

Total rats and mongoose taken.....	389	Classification of rats trapped—Continued.	
Rats trapped.....	387	Mus norvegicus.....	54
Mongoose trapped.....	2	Mus rattus.....	12
Examined microscopically.....	308	Average number of traps set daily.....	984
Examined macroscopically.....	81	Cost per rat destroyed.....	20 cents.
Showing plague infection.....	None.	Last case rat plague Aiea, 9 miles from Honolulu, Apr. 12, 1910.	
Classification of rats trapped:		Last case human plague Honolulu, July 12, 1910.	
Mus alexandrinus.....	187		
Mus musculus.....	131		

PREVALENCE OF DISEASE.

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

UNITED STATES.

CEREBROSPINAL MENINGITIS.

State Reports for September, 1916.

Place.	New cases reported.	Place.	New cases reported.
Maryland:		Wisconsin—Continued.	
Baltimore County—		Milwaukee County.....	3
Arlington.....	1	Washington County.....	1
Wisconsin:		Total.....	5
Marathon County.....	1		

City Reports for Week Ended Sept. 30, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....		1	Lowell, Mass.....	2	
Boston, Mass.....		1	Madison, Wis.....		1
Bridgeport, Conn.....		1	New York, N. Y.....		2
Butte, Mont.....		1	Philadelphia, Pa.....	1	1
Chicago, Ill.....	2	2	Pittsburgh, Pa.....		1
Cleveland, Ohio.....		2	St. Louis, Mo.....	1	2
Dubuque, Iowa.....	2	2	Watertown, N. Y.....		1

DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2937.

ERYSIPELAS.

City Reports for Week Ended Sept. 30, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Beaver Falls, Pa.....	1		Lancaster, Pa.....	1	
Berkeley, Cal.....	1	1	Lexington, Ky.....	1	
Binghamton, N. Y.....	1		Los Angeles, Cal.....	1	
Braddock, Pa.....	1		Milwaukee, Wis.....	2	
Bridgeport, Conn.....	1		Newark, N. J.....	1	
Buffalo, N. Y.....	2		New York, N. Y.....		1
Chicago, Ill.....	7	1	Philadelphia, Pa.....	2	1
Cincinnati, Ohio.....	1		Pittsburgh, Pa.....	5	2
Cleveland, Ohio.....	1		St. Joseph, Mo.....	1	
Denver, Colo.....	2		Salt Lake City, Utah.....		1
Detroit, Mich.....	3		San Francisco, Cal.....	3	
Duluth, Minn.....	1		Springfield, Mass.....		1
Erie, Pa.....	1		Stockton, Cal.....	1	
Flint, Mich.....	1		Wichita, Kans.....	1	
Kalamazoo, Mich.....	1				

LEPROSY.

City Reports for Week Ended September 30, 1916.

During the week ended September 30, 1916, one case of leprosy was notified at New Orleans, La., and two cases at San Francisco, Cal.

MALARIA.

Maryland Report for September, 1916.

Place.	New cases reported.	Place.	New cases reported.
Maryland:		Maryland—Continued.	
Caroline County—		Howard County—	
North Wales.....	27	Killicott City, R. F. D.....	1
Preston.....	1	Prince Georges County—	
Hog Island.....	5	White Station.....	2
Charles County—		Brentwood.....	1
Marshall Hall.....	3	Wicomico County—	
Indianhead.....	1	Wetipquin.....	1
Pisgah.....	1	Salisbury.....	1
Dorchester County—		Rock a Walking.....	1
Crapo.....	2	Total.....	49
Frederick County—			
Le Gore.....	1		
Burkittsville.....	1		

City Reports for Week Ended Sept. 30, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Berkeley, Cal.....	2		New York, N. Y.....		1
Charleston, S. C.....		1	Orange, N. J.....	1	
Everett, Mass.....	1		Portsmouth, Va.....		2
Newark, N. J.....	1		Sacramento, Cal.....	1	1
New Orleans, La.....	6	1			

MEASLES.

See Diphtheria, measles, scarlet fever, and tuberculosis, p. 2937.

PELLAGRA.

City Reports for Week Ended Sept. 30, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala.....	1	2	New Orleans, La.....	1	1
Columbia, S. C.....		1	Norfolk, Va.....	1	1
Mobile, Ala.....		2	Worcester, Mass.....	2	1

PLAGUE.

Louisiana—New Orleans—Plague-Infected Rat Found.

Passed Asst. Surg. Simpson reported that a rat which was found September 18, 1916, at the corner of Banks and Hennessey Streets, New Orleans, La., was proved positive for plague infection October 8.

PNEUMONIA.

City Reports for Week Ended Sept. 30, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Binghamton, N. Y.	1	1	Kalamazoo, Mich.	3	1
Birmingham, Ala.	1		Los Angeles, Cal.	1	2
Braddock, Pa.	2	4	Manchester, N. H.	1	1
Chicago, Ill.	55	38	Newark, N. J.	7	1
Cleveland, Ohio	7	12	Philadelphia, Pa.	28	13
Columbia, S. C.	1		Pittsburgh, Pa.	14	10
Columbus, Ohio	2	2	Reading, Pa.	1	
Detroit, Mich.	5	7	Rochester, N. Y.	1	
Evansville, Ind.	1		San Francisco, Cal.	5	3
Grand Rapids, Mich.	1	1	Stockton, Cal.	3	3
Johnstown, Pa.	2		Wheeling, W. Va.	1	1

POLIOMYELITIS (INFANTILE PARALYSIS).

Cases Reported by States.

The following tabular statement shows the number of cases of poliomyelitis reported to the United States Public Health Service by State health authorities during the periods shown:

	Total cases reported.		Total cases reported.
Alabama:		Florida:	
July 1 to 31.....	77	July 1 to 31.....	4
Aug. 1 to 31.....	62	Aug. 1 to 31.....	3
Sept. 1 to 25.....	12	Sept. 1 to 25.....	1
	151		8
Arizona:		Georgia:	(1)
July 1 to 31.....	2	Idaho:	
Aug. 1 to 31.....	2	Aug. 1 to 31.....	4
Sept. 1 to 25.....	2	Sept. 1 to 30.....	3
	6	Oct. 1 to 7.....	2
Arkansas:			9
July 1 to 31.....	5	Illinois:	
Aug. 1 to 31.....	1	July 1 to 31.....	76
Sept. 1 to 25.....	0	Aug. 1 to 31.....	339
	6	Sept. 1 to 30.....	257
California:		Oct. 1 to 14.....	77
July 1 to 31.....	12		749
Aug. 1 to 31.....	18	Indiana:	
Sept. 1 to 30.....	13	July 1 to 31.....	27
Oct. 1 to 14.....	7	Aug. 1 to 31.....	38
	50	Sept. 1 to 30.....	65
Colorado:		Oct. 1 to 14.....	20
July 1 to 31.....	1		150
Aug. 1 to 31.....	2	Iowa:	
Sept. 1 to 30.....	4	July 1 to 31.....	30
Oct. 1 to 14.....	2	Aug. 1 to 31.....	82
	9	Sept. 1 to 30.....	70
Connecticut:		Oct. 1 to 14.....	16
July 1 to 31.....	165		198
Aug. 1 to 31.....	367	Kansas:	
Sept. 1 to 30.....	241	July 1 to 31.....	14
Oct. 1 to 14.....	39	Aug. 1 to 31.....	31
	812	Sept. 1 to 30.....	21
Delaware:		Oct. 1 to 14.....	10
July 1 to 31.....	1		76
Aug. 1 to 31.....	11	Kentucky:	
Sept. 1 to 30.....	36	July 1 to 31.....	15
Oct. 1 to 14.....	9	Aug. 1 to 31.....	19
	57	Sept. 1 to 28.....	1
District of Columbia:			35
July 1 to 31.....	8	Louisiana:	
Aug. 1 to 31.....	18	July 1 to 31.....	19
Sept. 1 to 30.....	6	Aug. 1 to 31.....	6
Oct. 1 to 17.....	5	Sept. 1 to 30.....	5
	37	Oct. 1 to 14.....	1
			31

¹ Disease present, but the number of cases is not known.

² Corrected figures. Later report than figures previously published.

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

	Total cases reported.		Total cases reported.
Maine:		Ohio:	
July 1 to 31.....	0	July 1 to 31.....	94
Aug. 1 to 31.....	26	Aug. 1 to 31.....	168
Sept. 1 to 30.....	46	Sept. 1 to 30.....	138
Oct. 1 to 14.....	32		
	104	Oklahoma:	400
Maryland:		July 1 to 31.....	12
July 1 to 31.....	10	Aug. 1 to 31.....	10
Aug. 1 to 31.....	64	Sept. 1 to 25.....	2
Sept. 1 to 30.....	100		24
Oct. 1 to 17.....	80	Oregon:	
	254	Sept. 1 to 30.....	3
Massachusetts:		Oct. 1 to 14.....	11
July 1 to 31.....	107		14
Aug. 1 to 31.....	253	Pennsylvania:	
Sept. 1 to 30.....	626	July 1 to 31.....	107
Oct. 1 to 17.....	441	Aug. 1 to 31.....	711
	1,427	Sept. 1 to 30.....	743
Michigan:			1,561
July 1 to 31.....	51	Rhode Island:	
Aug. 1 to 31.....	163	July 1 to 31.....	26
Sept. 1 to 30.....	166	Aug. 1 to 31.....	57
Oct. 1 to 14.....	48	Sept. 1 to 30.....	70
	428	Oct. 1 to 14.....	26
Minnesota:			179
July 1 to 31.....	142	South Carolina:	
Aug. 1 to 31.....	373	July 1 to 31.....	20
Sept. 1 to 30.....	186	Aug. 1 to 31.....	58
Oct. 1 to 14.....	83	Sept. 1 to 30.....	25
	784	Oct. 1 to 17.....	10
Mississippi:			113
July 1 to 31.....	57	South Dakota:	
Aug. 1 to 31.....	31	July 1 to 31.....	5
Sept. 1 to Oct. 14.....	17	Aug. 1 to 31.....	19
	105	Sept. 1 to 25.....	14
Missouri:			38
July 1 to 31.....	4	Tennessee:	
Aug. 1 to 31.....	3	July 1 to 31.....	18
Sept. 1 to 25.....	4	Aug. 1 to 31.....	21
	11	Sept. 1 to 25.....	0
Montana:			39
July 1 to 31.....	11	Texas:	
Aug. 1 to 31.....	28	July 1 to 31.....	22
Sept. 1 to 25.....	15	Aug. 1 to 31.....	25
Oct. 1 to 14.....	7	Sept. 1 to 30.....	16
	61		63
Nebraska:		Utah:	
July 1 to 31.....	1	Aug. 1 to 31.....	5
Aug. 1 to 31.....	7		
Sept. 1 to 28.....	6	Vermont:	
	14	July 1 to 31.....	1
Nevada:		Aug. 1 to 31.....	8
July 1 to Sept. 21.....	0	Sept. 1 to 30.....	23
		Oct. 1 to 7.....	3
New Hampshire:			55
July 1 to 31.....	7	Virginia:	
Aug. 1 to 31.....	16	July 1 to 31.....	24
Sept. 1 to 30.....	29	Aug. 1 to 31.....	44
Oct. 3.....	1	Sept. 1 to 30.....	45
	53	Oct. 1 to 11.....	8
New Jersey:			121
July 1 to 31.....	640	Washington:	
Aug. 1 to 31.....	2,114	July 1 to 31.....	5
Sept. 1 to 30.....	911	Aug. 1 to 31.....	2
Oct. 1 to 18.....	252	Sept. 1 to 30.....	10
	3,917	Oct. 1 to 14.....	3
New Mexico:			20
July 1 to Sept. 25.....	0	West Virginia:	
New York (exclusive of New York City):		July 1 to 31.....	5
July 1 to 31.....	430	Aug. 1 to 31.....	10
Aug. 1 to 31.....	1,700	Sept. 1 to 30.....	118
Sept. 1 to Oct. 9.....	1,367	Oct. 1 to 11.....	8
	3,497		41
North Carolina:		Wisconsin:	
	(3)	July 1 to 31.....	20
North Dakota:		Aug. 1 to 31.....	173
July 1 to 31.....	0	Sept. 1 to 30.....	15
Aug. 1 to 31.....	2		251
Sept. 1 to 25.....	6	Wyoming:	
	8	July 1 to 31.....	0
		Aug. 1 to 31.....	1
		Sept. 1 to 30.....	3
			4

¹ Corrected figures. Later report than figures previously published.

² Not including cases on Crow Reservation.

³ Disease present, but the number of cases is not known.

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

City Reports—July 16 to October 14, 1916.

The following table shows the number of cases of poliomyelitis reported to the United States Public Health Service by the health departments of cities which reported five or more cases in any one week during July, August, and September, 1916:

City.	Cases reported for week ended—												
	July 22.	July 29.	Aug. 5.	Aug. 12.	Aug. 19.	Aug. 26.	Sept. 2.	Sept. 9.	Sept. 16.	Sept. 23.	Sept. 30.	Oct. 7.	Oct. 14.
Akron, Ohio.....		1					1	3	5	5	1		
Atlantic City, N. J.....				7	2	5	5	5	2	2			
Baltimore, Md.....	2	1	1	5	4	9	16	12	13	10	29	20	23
Bayonne, N. J.....			4	12	14	4	1	5	1				
Birmingham, Ala.....	1	3	6	1			2						
Boston, Mass.....	3	4	4	8	4	8	13	22	38	55	52	77	
Bridgeport, Conn.....	4	5	6	6			3	3	7	2	1	3	
Cambridge, Mass.....			1		2	2	1	2	5	4	5	11	
Camden, N. J.....		2	5	11	13	6	9	5	7	2	1	3	
Chicago, Ill.....	10	13	15	23	25	22	24	25	21	20	13	10	8
Cincinnati, Ohio.....	1	1	2	2	4	5	2	3	6	3	4	5	1
Cleveland, Ohio.....	2	1	1		1	2	5	2	3	1	1	2	
Detroit, Mich.....	1	3	4	1		6	1	4	3	3	11	3	1
East Orange, N. J.....	1	3	7	2	8	10	6	10	3	2	2	2	
Flint, Mich.....		4	1	3	3	8		4		4	2	2	
Grand Rapids, Mich.....	2		1		3	1	1	2	1	6	1		1
Harrison, N. J.....	1			10	10	6							
Hartford, Conn.....	1	3	3			4	6	7	5	5	4	4	
Haverhill, Mass.....					1	5		1		1	2		
Indianapolis, Ind.....	1		2					5	4	2	4	1	
Jersey City, N. J.....	8	17	27	22	27	16	22	9	6	8	11	2	5
Kearny, N. J.....		3	6	7	4	5			3				
Long Branch, N. J.....		1	1	1	1	2	8			1	1		
Malden, Mass.....	1				2				2	6	10	3	
Manchester, N. H.....			1				3	5	1	5			
Minneapolis, Minn.....			8	8	12	14	12	4	5		3		
Montclair, N. J.....	1	1		5	5	2	1	2	1		4	1	
Newark, N. J.....		137	247	260	230	150	89	45	38	30	12		
Newburyport, Mass.....						1	2	5	1	7	2	1	3
New York, N. Y.....	741	912	1,117	1,151	865	707	441	352	252	156	142	96	72
North Adams, Mass.....			1			5	2	2	1	4	1		
Northampton, Mass.....			1		5	2	1	1	1	1	1	1	1
Orange, N. J.....	2	10	15	9	8	10	15	4	1	2	1		
Perth Amboy, N. J.....	2	4	5	4	2	3	1	3	2				
Philadelphia, Pa.....	9	16	31	86	106	132	120	125	85	70	47	59	27
Pittsburgh, Pa.....	1	3	1	5	1	3	5	5	2	1	1	1	
Pittsfield, Mass.....	1			1	2	7	2	10	8	6	4	4	5
Plainfield, N. J.....	2	3		2	6	10	1	6	4	2	3	1	3
Providence, R. I.....	1	3	3	4	3	2	10	7	10	17	9	9	7
Quincy, Mass.....									4	5	4		
St. Louis, Mo.....		2				5	2						
St. Paul, Minn.....		5	13	6	9	6	8	7	2	3	2	4	
Somerville, Mass.....		1			6	1	2	1	7	1		5	3
Springfield, Mass.....		2	2	2		5	5	9	12	8	9		
Syracuse, N. Y.....			9	3	23	34	33	49	29	20	12	11	5
Toledo, Ohio.....	8	11	11	16	10	10	7	11	1	2	3	1	2
Trenton, N. J.....	1	1		4	7	11	7	11	14	23	34	20	8
Washington, D. C.....	3	2	2	3	5	7	2	4			1	1	5
West Hoboken, N. J.....	3	3	5	9	3	7							
Wilmington, Del.....						3	3	3	2	3	8	7	6

New York City.

Surg. Lavinder reported that cases of poliomyelitis were notified in New York City as follows: October 12, 7 cases; October 13, 3 cases; October 14, 15 cases; October 15, 2 cases; October 16, 5 cases; October 17, 7 cases. Approximate corrected totals to October 17, 1916, 9,216 cases; 2,373 deaths.

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

State Reports for September, 1916.

Place.	New cases reported.	Place.	New cases reported.
Maryland:		Wisconsin:	
Baltimore City.....	68	Adams County.....	3
Allegany County—		Barron County.....	1
Cumberland.....	1	Brown County.....	3
Anne Arundel County—		Buffalo County.....	7
Pumphreys Station.....	3	Calumet County.....	3
Baltimore County—		Chippewa County.....	1
Mount Winans.....	1	Clark County.....	3
Catonsville.....	1	Dane County.....	2
English Consul Estate.....	1	Dodge County.....	2
Hamilton.....	2	Door County.....	4
Morrell Park.....	1	Douglas County.....	1
Holbrook.....	1	Dunn County.....	1
Carroll County—		Eau Claire County.....	1
Westminster.....	2	Fond du Lac County.....	2
Harney.....	1	Iowa County.....	1
Pinksburg, R. F. D.....	1	Jackson County.....	6
Charles County—		Jefferson County.....	1
Dentsville.....	1	Kenosha County.....	5
Dorchester County—		Kewaunee County.....	1
Eldorado, R. F. D.....	1	La Crosse County.....	4
Frederick County—		Lincoln County.....	2
Brunswick.....	1	Manitowoc County.....	1
Cascade, R. F. D.....	1	Marathon County.....	6
Myersville.....	1	Milwaukee County.....	8
Garrett County—		Monroe County.....	5
Jennings, R. F. D.....	1	Oconto County.....	4
Accident.....	1	Outagamie County.....	2
McHenry, R. F. D.....	2	Ozaukee County.....	2
Accident, R. F. D.....	2	Pepin County.....	2
Howard County—		Pierce County.....	7
Glenwood.....	1	Polk County.....	4
Woodstock.....	1	Portage County.....	3
Montgomery County—		Racine County.....	5
Bethesda.....	1	Richland County.....	1
Washington Grove.....	1	Rock County.....	2
Delacarla Reservoir.....	1	St. Croix County.....	2
Washington County—		Sauk County.....	1
Trego.....	1	Sawyer County.....	1
Total.....	100	Shawano County.....	9
		Sheboygan County.....	9
		Taylor County.....	1
		Trempealeau County.....	1
		Vernon County.....	1
		Walworth County.....	2
		Washburn County.....	2
		Washington County.....	2
		Waukesha County.....	1
		Waupaca County.....	9
		Winnebago County.....	3
		Wood County.....	5
		Total.....	158
Vermont:			
Bennington County.....	3		
Caledonia County.....	2		
Chittenden County.....	2		
Grand Isle County.....	5		
Lamoille County.....	1		
Orange County.....	3		
Rutland County.....	6		
Windham County.....	1		
Total.....	23		

City Reports for Week Ended Sept. 30, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....	29	8	Everett, Mass.....	4	
Binghamton, N. Y.....	2	1	Fall River, Mass.....		1
Boston, Mass.....	52	16	Fitchburg, Mass.....	1	1
Bridgeport, Conn.....	2	1	Flint, Mich.....	2	1
Cambridge, Mass.....	5		Galesburg, Ill.....	1	
Camden, N. J.....	1		Grand Rapids, Mich.....	1	
Chelsea, Mass.....	1		Harrisburg, Pa.....	4	1
Chicago, Ill.....	13	1	Hartford, Conn.....	1	
Chicopee, Mass.....	2		Haverhill, Mass.....	2	
Cincinnati, Ohio.....	4		Indianapolis, Ind.....	4	
Cleveland, Ohio.....	1		Jersey City, N. J.....	11	2
Columbus, Ohio.....	2	1	Kansas City, Kans.....	1	
Danville, Ill.....	1	1	Kenosha, Wis.....		1
Denver, Colo.....	1		Kokomo, Ind.....	1	
Detroit, Mich.....	11	1	La Crosse, Wis.....	1	
Duluth, Minn.....	2		Lancaster, Pa.....	3	
East Orange, N. J.....	2		Long Branch, N. J.....	1	1

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.**City Reports for Week Ended Sept. 30, 1916—Continued.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Lowell, Mass.....	2	.....	Plainfield, N. J.....	3	1
Lynchburg, Va.....	4	1	Portland, Oreg.....	1	.....
Lynn, Mass.....	2	.....	Portsmouth, Va.....	1	.....
Malden, Mass.....	10	4	Providence, R. I.....	9	1
Medford, Mass.....	4	1	Quincy, Ill.....	1	.....
Melrose, Mass.....	3	.....	Quincy, Mass.....	4	1
Milwaukee, Wis.....	1	.....	Richmond, Va.....	1	.....
Minneapolis, Minn.....	3	.....	Roanoke, Va.....	3	.....
Mobile, Ala.....	1	.....	St. Paul, Minn.....	2	.....
Newark, N. J.....	12	1	San Francisco, Cal.....	1	.....
New Britain, Conn.....	4	.....	Schenectady, N. Y.....	2	.....
Newburyport, Mass.....	2	.....	Seattle, Wash.....	3	.....
New London, Conn.....	2	2	South Bend, Ind.....	1	.....
New Orleans, La.....	1	.....	Springfield, Mass.....	9	5
Newton, Mass.....	2	.....	Syracuse, N. Y.....	12	4
New York, N. Y.....	142	54	Toledo, Ohio.....	3	1
Norristown, Pa.....	1	.....	Trenton, N. J.....	34	9
North Adams, Mass.....	1	.....	Troy, N. Y.....	1	.....
Orange, N. J.....	1	.....	Washington, D. C.....	1	.....
Philadelphia, Pa.....	47	12	Williamsport, Pa.....	3	.....
Pittsburgh, Pa.....	1	2	Wilmingon, Del.....	8	6
Pittsfield, Mass.....	4	.....		

RABIES IN ANIMALS.**City Report for Week Ended Sept. 30, 1916.**

During the week ended September 30, 1916, three cases of rabies in animals were reported at Buffalo, N. Y.

ROCKY MOUNTAIN SPOTTED FEVER.**Oregon Report for July, 1916.**

During the month of July, 1916, a case of Rocky Mountain spotted fever was reported in Grant County, Oreg.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2937.

SMALLPOX.**Miscellaneous State Reports.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Oregon (July 1 to 31):			Wisconsin (Sept. 1 to 30):		
Clackamas County.....	1	.....	Dane County.....	3	.....
Douglas County.....	1	.....	Outagamie County.....	1	.....
Hood River County.....	1	.....	Pierce County.....	1	.....
Marion County.....	2	.....	Total.....	5	.....
Multnomah County—					
Portland.....	1	.....		
Total.....	6	.....		

City Reports for Week Ended Sept. 30, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Butte, Mont.....	1	.....	Portland, Oreg.....	2	.....
Detroit, Mich.....	2	.....	St. Joseph, Mo.....	1	.....
New Orleans, La.....	1	.....	Seattle, Wash.....	1	.....

TETANUS.

City Reports for Week Ended Sept. 30, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....		1	Evansville, Ind.....	1	1
Chicago, Ill.....		1	New Orleans, La.....		1
Cincinnati, Ohio.....	3	4	Philadelphia, Pa.....	1	1
Cleveland, Ohio.....		1			

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2937.

TYPHOID FEVER.

Pennsylvania—Harrisburg.

During the week ended October 14, 1916, 72 cases of typhoid fever were notified in Harrisburg, Pa., making a total of 303 cases with 12 deaths since August 16, 1916.

State Reports for September, 1916.

Place.	New cases reported.	Place.	New cases reported.
Maryland:		Maryland—Continued.	
Allegany County—		Baltimore County—Continued.	
Cumberland.....	9	Quaker Bottom.....	1
Oldtown, R. F. D.....	4	Bare Hills.....	1
Frostburg.....	4	St. Mary's Ind. School.....	1
Cumberland, R. F. D.....	2	Calvert County—	
Corrigansville.....	2	Wallville.....	9
Lintnersville.....	1	St. Leonards.....	1
Oldtown.....	1	Huntingtown.....	1
Lonaconing.....	1	Owings.....	1
Westernport.....	1	Caroline County—	
Spring Gap.....	1	Federalsburg.....	2
Midland, R. F. D.....	1	Ridgely, R. F. D.....	6
Western Maryland Hospital.....	1	Marydel.....	2
Allegany Hospital.....	3	Denton.....	1
Anne Arundel County—		Goldsboro.....	3
Annapolis.....	1	Greensboro, R. F. D.....	2
Elvaton, R. F. D.....	1	Federalsburg, R. F. D.....	5
Eastport.....	2	Burrsville, R. F. D.....	1
Churchton.....	1	Nichols, R. F. D.....	1
Curtis Bay.....	1	Williston.....	1
Deale, R. F. D.....	1	Bethlehem, R. F. D.....	1
Solley.....	1	Hobbs.....	1
Pindell.....	6	Greensboro.....	2
Baltimore County—		Carroll County—	
Walbrook.....	1	Ridgeville.....	1
Parkton, R. F. D.....	4	Westminster.....	1
Arlington.....	3	Woodbine.....	2
Grays, R. F. D.....	1	Cecil County—	
Roguel Heights.....	1	Childs, R. F. D.....	1
Freeland, R. F. D.....	1	Cherry Hill.....	1
Mount Washington.....	1	Perryville.....	1
Warren.....	1	Elkton.....	2
Sparks, R. F. D.....	1	Elkton, R. F. D.....	1
Parkton.....	1	North East.....	1
Sparrows Point.....	3	Rising Sun.....	1
Woodlawn.....	3	Union Hospital.....	1
Randallstown.....	1	Charles County—	
Highlandtown.....	1	Waldorf.....	1
St. Agnes Hospital.....	1	Waldorf, R. F. D.....	1
Govans.....	1	Faulkner, R. F. D.....	1
Catonsville.....	2	Bryantown.....	2
Melvale.....	1	Hughesville.....	2
Canton.....	1	Berry, R. F. D.....	2
Franklinville.....	1	La Plata.....	1
Hullsville.....	1	White Plains, R. F. D.....	2
Glenarm, R. F. D.....	1	Marshall Hall.....	1
Roland Park.....	1	Bel Alton.....	1

TYPHOID FEVER—Continued.

State Reports for September, 1916—Continued.

Place.	New cases reported.	Place.	New cases reported.
Maryland—Continued.		Maryland—Continued.	
Charles County—Continued.		Prince Georges County—Continued.	
Hughesville, R. F. D.	1	Camp Springs	1
Newburg	1	Meadows	1
Pomfret	6	Brentwood	1
Dorchester County—		Queen Annes County—	
Cambridge	9	Sudlersville, R. F. D.	1
Cambridge, R. F. D.	1	Queens Town, R. F. D.	1
Vienna, R. F. D.	1	Winchester	1
Salem, R. F. D.	1	Crumpton, R. F. D.	1
Hoopersville	1	Ruthsburg	1
Church Creek, R. F. D.	1	Ingleside, R. F. D.	2
Rhodesdale	3	Stevensville	1
Crocheron	2	Pries	2
Williamsburg	2	Barclay, R. F. D.	1
Holland Island	1	Templeville, R. F. D.	1
Hurlock	1	Ford's Store	1
Frederick County—		St. Marys County—	
Utica Mills	1	St. Marys City	1
Brunswick	3	Leonardtown	1
Frederick	4	Charlotte Hall	1
Fountain Mills	1	Beachville	1
Knoxville, R. F. D.	1	Somerset County—	
Middletown	1	Crisfield	4
Adamstown	1	Princess Anne	6
New Market	1	Princess Anne, R. F. D.	4
Centerville	5	Jacksonville	1
Ridgeville, R. F. D.	1	Hopewell	1
Urbana, R. F. D.	1	Marion	1
Knoxville	1	Kingston	2
Emmitsburg	1	Pocomoke City, R. F. D.	1
Mount Ephraim	1	Eden, R. F. D.	3
Garrett County—		Marion Station	1
Crellin	4	General and Marine Hospital	1
Kitzmiller	5	Talbot County—	
Bond	1	Tilghman	1
Bond, R. F. D.	1	Sherwood	1
Bloomington	1	Wittman	1
Grantsville, R. F. D.	1	St. Michaels	3
Deer Park, R. F. D.	2	Easton	2
Oakland	1	Trappe Station, R. F. D.	3
McHenry	1	Bo-man	1
Jennings	1	Washington County—	
Harford County—		Halfway	1
Havre de Grace	5	Hagerstown	8
Churchville	2	Pearre	1
Perryman	1	Dargan	1
Forest Hill	2	Yarrowsburg	3
Aberdeen	1	Trego	1
Aberdeen, R. F. D.	1	Williamsport	1
Howard County—		Downsville, R. F. D.	1
Poplar Springs	1	Hagerstown, R. F. D.	2
Woodbine, R. F. D.	1	Boonsboro	1
Ellicott City	2	Tilghmanton	1
Kent County—		Cascade	1
Chestertown	1	Security	1
Rock Hall	4	Hancock, R. F. D.	1
Chestertown, R. F. D.	1	Sharpsburg, R. F. D.	1
Galea	1	Lake Royer	1
Worton, R. F. D.	1	Washington County Hospital	2
Belferton	2	Wicomico County—	
Fairlee	1	Salisbury	16
Still Pond, R. F. D.	1	Fruitland, R. F. D.	2
Piney Neck	1	Pittsville	1
Montgomery County—		Nanticoke	1
Dickerson, R. F. D.	1	Fruitland	1
Kensington, R. F. D.	1	Sharptown	1
Takoma Park	1	Salisbury, R. F. D.	2
Brookville	1	Hebron	1
Prince Georges County—		Peninsula General Hospital	2
Aquasco	6	Worcester County—	
Laurel	1	Pocomoke City	6
Greater Capitol Heights	1	Whaleysville	1
Capitol Heights	2	Berlin, R. F. D.	2
White Marsh	1	Ccean City	3
Clinton	1	Baltimore City	182
Hyattsville	1		
Ritchie	1		
Bowie	1		
		Total	575

TYPHOID FEVER—Continued.

State Reports for September, 1916—Continued.

Place.	New cases reported.	Place.	New cases reported.
Vermont:		Wisconsin—Continued.	
Bennington County.....	2	Kenosha County.....	5
Chittenden County.....	3	Kewaunee County.....	6
Lamoille County.....	2	La Crosse County.....	2
Orange County.....	2	Manitowoc County.....	9
Orleans County.....	1	Marathon County.....	2
Rutland County.....	3	Marinette County.....	3
Washington County.....	2	Milwaukee County.....	14
Windham County.....	2	Oconto County.....	1
Windsor County.....	2	Ozaukee County.....	1
Total.....	19	Racine County.....	2
Wisconsin:		Rock County.....	3
Barron County.....	1	Rusk County.....	1
Bayfield County.....	1	Shawano County.....	1
Clark County.....	3	Sheboygan County.....	1
Dodge County.....	1	Waupaca County.....	1
Douglas County.....	4	Waushara County.....	1
Eau Claire County.....	1	Winnebago County.....	15
Iron County.....	1	Total.....	80

Oregon Report for July, 1916.

Place.	New cases reported.	Place.	New cases reported.
Oregon:		Oregon—continued:	
Hood River County.....	1	Umatilla County.....	1
Jackson County.....	2	Wallowa County.....	3
Klamath County.....	8	Yamhill County.....	2
Linn County.....	2	Total.....	23
Marion County.....	2		
Multnomah County— Portland.....	2		

City Reports for Week Ended Sept. 30, 1916.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio.....	3		East Orange, N. J.....	1	
Alameda, Cal.....	2		Elgin, Ill.....	12	5
Ann Arbor, Mich.....	2	1	El Paso, Tex.....	2	
Baltimore, Md.....	40	7	Erie, Pa.....	2	
Berkeley, Cal.....	1		Evansville, Ind.....	3	1
Binghamton, N. Y.....	1		Everett, Mass.....	2	
Birmingham, Ala.....	5	1	Fall River, Mass.....		1
Boston, Mass.....	1	1	Flint, Mich.....	12	2
Bridgesport, Conn.....	1	1	Fort Worth, Tex.....	1	1
Brockton, Mass.....	1		Grand Rapids, Mich.....		2
Buffalo, N. Y.....	14	2	Harrisburg, Pa.....	47	1
Butler, Pa.....	2		Hartford, Conn.....	4	1
Butte, Mont.....		1	Haverhill, Mass.....	2	
Cambridge, Mass.....	1		Indianapolis, Ind.....	19	
Camden, N. J.....	8		Jersey City, N. J.....	1	
Canton, Ohio.....	3		Johnstown, Pa.....		5
Chicago, Ill.....	29		Kalamazoo, Mich.....	1	
Chicopee, Mass.....	1		Kansas City, Kans.....	2	
Cincinnati, Ohio.....	4		Kansas City, Mo.....	2	1
Cleveland, Ohio.....	11	4	Kenosha, Wis.....	1	
Coffeyville, Kan.....	1		Knoxville, Tenn.....	1	
Columbus, Ohio.....	12		Kokomo, Ind.....	1	
Covington, Ky.....	2		Lancaster, Pa.....	5	
Cumberland, Md.....	2		Lawrence, Mass.....	1	1
Denver, Colo.....	23		Lexington, Ky.....	1	
Detroit, Mich.....	12	5	Lincoln, Neb.....	1	
Dubuque, Iowa.....	1	1	Little Rock, Ark.....	7	
Duluth, Minn.....	2		Long Beach, Cal.....	1	

TYPHOID FEVER—Continued.**City Reports for Week Ended Sept. 30, 1916—Continued.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Lorain, Ohio.....	1		Portland, Me.....	5	
Los Angeles, Cal.....	2		Portland, Ore.....	2	
Lynchburg, Va.....	2	1	Providence, R. I.....	3	
Lynn, Mass.....	7		Reading, Pa.....	37	
Malden, Mass.....	1		Richmond, Va.....	4	
Milwaukee, Wis.....	4	2	Roanoke, Va.....	2	
Minneapolis, Minn.....	5		Rochester, N. Y.....	3	
Mobile, Ala.....	1		St. Joseph, Mo.....	2	
Morristown, N. J.....	2		St. Louis, Mo.....	25	3
Newark, N. J.....	9		St. Paul, Minn.....	2	
New Bedford, Mass.....	3		Salt Lake City, Utah.....	11	2
New Britain, Conn.....	1		San Francisco, Cal.....	5	2
New Castle, Pa.....	5		Saratoga Springs, N. Y.....	2	1
New Haven, Conn.....	4		Schenectady, N. Y.....	1	
New London, Conn.....	1		Springfield, Ill.....	6	
New Orleans, La.....	8	3	Springfield, Ohio.....	8	1
Newton, Mass.....	1		Steelton, Pa.....	11	
New York, N. Y.....	48	3	Syracuse, N. Y.....	2	
Niagara Falls, N. Y.....	1		Tacoma, Wash.....	1	
Norfolk, Va.....	5		Taunton, Mass.....	1	
Norristown, Pa.....	2		Toledo, Ohio.....	11	2
North Adams, Mass.....	2		Topeka, Kans.....	3	
Northampton, Mass.....	1	1	Trenton, N. J.....	3	
Omaha, Neb.....	5		Washington, D. C.....	11	1
Passaic, N. J.....	1		Wheeling, W. Va.....	4	
Perth Amboy, N. J.....	1		Wichita, Kans.....	4	
Philadelphia, Pa.....	22	1	Wilmington, Del.....	5	
Pittsburgh, Pa.....	10	1	Worcester, Mass.....	1	1
Pittsfield, Mass.....	1		York, Pa.....	8	

TYPHUS FEVER.**Texas—Laredo.**

Acting Asst. Surg. Hamilton reported that a case of typhus fever was notified at Laredo, Tex., October 17, 1916.

DIPHThERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.**State Reports for September, 1916.**

During the month of September, 1916, 180 cases of diphtheria, 154 cases of measles, and 72 cases of scarlet fever were reported in Maryland; 27 cases of diphtheria, 60 cases of measles, and 31 cases of scarlet fever were reported in Vermont; and 158 cases of diphtheria, 42 cases of measles, and 147 cases of scarlet fever were reported in Wisconsin.

Oregon Report for July, 1916.

During the month of July, 1916, 12 cases of diphtheria, 62 cases of measles, and 45 cases of scarlet fever were notified in Oregon.

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

City Reports for Week Ended Sept. 30, 1916.

City.	Population as of July 1, 1915 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.	584,605	160	18	2			5		30	21
Boston, Mass.	745,139	238	24	2	4	1	4		48	40
Chicago, Ill.	2,447,045		160	18	17		56		187	73
Cleveland, Ohio.	656,975	211	45	2			6		32	24
Detroit, Mich.	554,717	189	80	4			44		25	7
New York, N. Y.	5,468,190	1,281	92	7	19	1	16		279	166
Philadelphia, Pa.	1,683,664	472	41	5	4	1	10		143	61
Pittsburgh, Pa.	571,984	203	31	2	5	1	6		33	16
St. Louis, Mo.	745,988	211	42	2	2		24		39	12
From 300,000 to 500,000 inhabitants:										
Buffalo, N. Y.	461,335	88	8		1		6		20	4
Cincinnati, Ohio.	406,706	116	39	2			9		21	17
Jersey City, N. J.	300,133	78	6		2				16	10
Los Angeles, Cal.	465,367		3		5		7		56	19
Milwaukee, Wis.	428,062	112	13	2	1		16		14	7
Minneapolis, Minn.	353,460		21		1		6			
Newark, N. J.	399,000		9	2	1		2		25	9
New Orleans, La.	366,484		13		8				28	16
San Francisco, Cal.	1,416,912	112	12	3			7		6	10
Seattle, Wash.	330,834	52	1	1	3		2		14	4
Washington, D. C.	358,679	112	15	2	1		13		24	18
From 200,000 to 300,000 inhabitants:										
Columbus, Ohio.	209,722	70	12		3		3		6	4
Denver, Colo.	253,161	60	4		3		2			6
Indianapolis, Ind.	265,378		23		2		4		20	7
Kansas City, Mo.	289,879	63	11	2			3		4	7
Portland, Oreg.	272,833	44		1	7		5		3	3
Providence, R. I.	250,025	80	6	2	2		6		1	13
Rochester, N. Y.	230,747	76	7		1		3		3	5
St. Paul, Minn.	241,999	41	11		1		1		8	4
From 100,000 to 200,000 inhabitants:										
Birmingham, Ala.	174,108	45	10		2		4		2	8
Bridgeport, Conn.	118,434	34	7		1		2		6	3
Cambridge, Mass.	111,609	22	10	1	5		1		4	1
Camden, N. J.	101,349		1							
Fall River, Mass.	126,904	45	6		4	1	1		7	6
Grand Rapids, Mich.	125,759	29	1				6		1	2
Hartford, Conn.	108,969	33	3				4		8	4
Lowell, Mass.	112,124	33	6		10				3	4
Lynn, Mass.	100,316	20	3	1			2		2	2
New Bedford, Mass.	114,694	45	7	1	4		1		9	1
New Haven, Conn.	147,095		2		1		1		10	1
Oakland, Cal.	190,893		5	1	8		6		4	2
Omaha, Nebr.	135,455	52	16	1			2		1	6
Reading, Pa.	105,094	31							1	
Richmond, Va.	154,674	58	14		1		6	1	8	4
Salt Lake City, Utah.	113,567	29	1		15		10			
Springfield, Mass.	103,216	28	1		2		1		2	1
Syracuse, N. Y.	152,534	36	1						5	4
Tacoma, Wash.	108,094	18			6					
Toledo, Ohio.	187,840	76					3		8	7
Trenton, N. J.	109,212	58	2	1					4	4
Worcester, Mass.	160,523	46	7		2		5		4	3
From 50,000 to 100,000 inhabitants:										
Akron, Ohio.	82,958		20		1		3			
Atlantic City, N. J.	55,806				2				2	
Bayonne, N. J.	67,582		1				1		2	
Berkeley, Cal.	54,879	9	1						1	
Binghamton, N. Y.	53,082	21	9				1		1	
Brockton, Mass.	65,746	15			1				3	
Canton, Ohio.	59,139	10	2	1			2			
Charleston, S. C.	60,427	24					1			4
Covington, Ky.	56,520	15	2				2		1	1
Duluth, Minn.	91,913		5		2					
El Paso, Tex.	51,936	35			1					3
Eric, Pa.	73,798		2				1		6	20
Evansville, Ind.	72,125	19	9				2		1	2

1 Population Apr. 15, 1910; no estimate made.

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

City Reports for Week Ended Sept. 30, 1916—Continued.

City.	Population as of July 1, 1915 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 50,000 to 100,000 inhabitants—Continued.										
Flint, Mich.	52,159	17	8				2		1	
Fort Worth, Tex.	99,528	19	2		1		5		1	
Harrisburg, Pa.	70,754	24							3	2
Hoboken, N. J.	76,104	12							1	1
Johnstown, Pa.	66,585	29					3		4	
Kansas City, Kans.	96,854		8	2			3		2	1
Lancaster, Pa.	50,269		2							
Lawrence, Mass.	98,197	26	6				2		5	1
Little Rock, Ark.	55,158	21					1			
Malden, Mass.	50,067	12	1		1		1		2	
Manchester, N. H.	76,959	25	1	1			1		1	1
Mobile, Ala.	56,536	13	1				1		1	
New Britain, Conn.	52,203								12	2
Norfolk, Va.	88,076	31							4	4
Oklahoma City, Okla.	88,158	7		1		2		7		
Passaic, N. J.	69,010	14	2						6	
Pawtucket, R. I.	58,156	12	6							
Portland, Me.	63,014	26	2						1	
Rockford, Ill.	53,761	8								
Sacramento, Cal.	64,806	20	2		1					1
St. Joseph, Mo.	83,974	15							1	1
San Diego, Cal.	51,115	17	4	1			4		4	1
Schenectady, N. Y.	95,265	19	1	1	7		3		1	2
Sioux City, Iowa.	55,588		1							
Somerville, Mass.	85,460	18	5				1		2	4
South Bend, Ind.	67,030	10	3				1			1
Springfield, Ill.	59,468	14	3				3			2
Springfield, Ohio.	50,804	14	2				2		2	
Troy, N. Y.	77,738				1		1		5	4
Wichita, Kans.	67,847		1	1			1		3	
Wilkes Barre, Pa.	73,218								7	2
Wilmington, Del.	93,161	12					1			
York, Pa.	50,543	25					1		2	
From 25,000 to 50,000 inhabitants:										
Alameda, Cal.	27,031	5								
Austin, Tex.	34,016	21	2				1			4
Brookline, Mass.	31,934	6							1	
Butler, Pa.	26,587	10					2			
Butte, Mont.	42,918	35	2						2	4
Chelsea, Mass.	32,452	13					2		1	2
Chicopee, Mass.	28,688	7	1		1		1		1	1
Columbia, S. C.	34,058	15	2				1		1	
Cumberland, Md.	25,564	9	6		1		1		3	2
Danville, Ill.	31,554	12	1							1
Davenport, Iowa.	47,127						2			
Dubuque, Iowa.	39,650								1	1
East Orange, N. J.	41,155	3							1	
Elgin, Ill.	27,844	11							1	
Everett, Mass.	38,307	10	1						1	1
Everett, Wash.	33,767	1			1					
Fitchburg, Mass.	41,144	8	2						1	
Galveston, Tex.	41,076	11					1		1	1
Haverhill, Mass.	47,774		2						1	2
Jackson, Mich.	34,730	14					2		3	3
Kalamazoo, Mich.	47,364	13			1		1			1
Kenosha, Wis.	30,319	13	5	1					1	1
Knoxville, Tenn.	38,300		1				1			
La Crosse, Wis.	31,522	10	2	1			2			
Lexington, Ky.	39,703	19	13				6		2	2
Lincoln, Nebr.	46,028	12	5						1	1
Long Beach, Cal.	26,012	7								
Lorain, Ohio.	35,662						4		1	
Lynchburg, Va.	32,485	12	2				2		2	
Madison, Wis.	30,084	2								1
Medford, Mass.	25,737						1		1	
Montclair, N. J.	25,550	3	1						1	
New Castle, Pa.	40,351		1				1			
Newport, Ky.	31,722	5	2							
Newport, R. I.	29,631	7					1			1
Newton, Mass.	43,085	7	2						1	1

* Population Apr. 15, 1910; no estimate made.

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

City Reports for Week Ended Sept. 30, 1916—Continued.

City.	Population as of July 1, 1915 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabitants—Continued.										
Niagara Falls, N. Y.	36,240	18	2	1					1	
Norristown, Pa.	30,833	8	3							
Ogden, Utah.	30,466	7	2		2		2			
Orange, N. J.	32,524	11								1
Pasadena, Cal.	43,859	8	1		1				3	
Perth Amboy, N. J.	39,725								1	
Pittsfield, Mass.	37,580	12	1	1						1
Portsmouth, Va.	38,610	10	7				1			2
Quincy, Ill.	36,764	8	2							
Quincy, Mass.	37,251	9								
Racine, Wis.	45,507	9					2			1
Roanoke, Va.	41,929	13	4						1	2
San Jose, Cal.	37,994	13	1						2	1
Steubenville, Ohio.	26,631	10	1				1			
Stockton, Cal.	34,508	13								
Superior, Wis.	45,285	7	1							1
Taunton, Mass.	35,957	14							1	
Topeka, Kans.	47,914	15	3	1	1		1			1
Waltham, Mass.	30,129	4	1				1		3	
West Hoboken, N. J.	41,893	4	2							
Wheeling, W. Va.	43,097	9	3							1
Williamsport, Pa.	33,465		2							
Wilmington, N. C.	28,264	10	1							1
Zanesville, Ohio.	30,406	10								1
From 10,000 to 25,000 inhabitants:										
Ann Arbor, Mich.	14,979	10								
Beaver Falls, Pa.	13,316		1							
Braddock, Pa.	21,310	14	2							
Cairo, Ill.	15,593	4								
Clinton, Mass.	13,075	3								
Coffeyville, Kans.	16,765		1						2	
Concord, N. H.	22,480	10	1							
Galesburg, Ill.	23,923	3								
Kearney, N. J.	22,753	7							2	1
Kokomo, Ind.	20,312	8	2		2					
Long Branch, N. J.	15,057	2								
Melrose, Mass.	17,166	3	6							
Morristown, N. J.	13,158	5								
Nanticoke, Pa.	22,441	6	1							
Newburyport, Mass.	15,195	6								
New London, Conn.	20,771	8							1	
North Adams, Mass.	22,019	8			3		1			
Northampton, Mass.	19,846	2	1		4		1			
Plainfield, N. J.	23,280	7					2		2	
Rutland, Vt.	14,624	3			1					
Sandusky, Ohio.	20,160		3		1				1	1
Saratoga Springs, N. Y.	12,842	12								
Steelton, Pa.	15,337	1	2	1			1		2	5
Woburn, Mass.	15,862	2								

1 Population Apr. 15, 1910; no estimate made.

FOREIGN.

CUBA.

Quarantine Measures.

The Cuban quarantine service on October 9, 1916, established quarantine against the island of Barbados on account of yellow fever.

Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Disease.	Sept. 11-20, 1916.		Remaining under treatment Sept. 20, 1916.
	New cases.	Deaths.	
Diphtheria.....	6	.....	4
Leprosy.....	.....	1	243
Malaria.....	5	.....	7
Measles.....	14	.....	9
Paratyphoid fever.....	1	.....	7
Scarlet fever.....	2	.....	3
Typhoid fever.....	8	.....	41
Varicella.....	2	.....	1

GREAT BRITAIN.

Examination of Rats—Liverpool.

During the 2 weeks period ended September 25, 1916, 422 rats were examined at Liverpool. No plague infection was found.

During the period from September 11, 1915, to September 9, 1916, 10,221 rats were examined in Liverpool ("port and town") and no plague infection was found.

VENEZUELA.

Poliomyelitis—Caracas.

A fatal case of poliomyelitis was reported at Caracas, Venezuela, September 18, 1916, no previous death from this disease having been reported during a period of several years.

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

Reports Received During Week Ended Oct. 20, 1916.¹

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay.....	Aug. 28-Sept. 2....	16	8	
Karachi.....	.....do.....	2	1	
Madura District.....	.....do.....	1	1	
Japan:				
Nagasaki.....	Sept. 4-10.....	17	11	
Yokohama.....	.....do.....	12	3	Total to Sept. 10, 1916: Cases, 29; deaths, 15.
Districts.....	.....do.....	21	8	Total to Sept. 10, 1916: Cases, 82; deaths, 45.
Korea:				
Fusan.....	Aug. 1-31.....	1	1	
Straits Settlements:				
Singapore.....	Aug. 13-19.....	1	1	

PLAGUE.

Egypt:				
Alexandria.....	Sept. 3-9.....	2	1	
India:				
Bombay.....	Aug. 28-Sept. 2....	9	7	
Madras Presidency.....	.....do.....	262	177	

SMALLPOX.

Austria-Hungary:				
Austria—				
Prague.....	Sept. 3-9.....	1		
Hungary—				
Budapest.....	.....do.....	1		
China:				
Harbin.....	Aug. 7-13.....	2		
India:				
Bombay.....	Aug. 28-Sept. 2....	3	1	
Karachi.....	.....do.....	3	3	
Madras.....	.....do.....	13	4	
Mexico:				
Aguascalientes.....	Sept. 11-24.....		7	
Mexico City.....	Aug. 28-Sept. 23....	39		
Russia:				
Petrograd.....	Aug. 13-19.....	17	2	
Spain:				
Madrid.....	Aug. 1-31.....		17	
Seville.....	May 1-31.....		2	
Do.....	Aug. 1-31.....		4	
Valencia.....	Aug. 28-Sept. 2....	1		
Straits Settlements:				
Singapore.....	Aug. 13-19.....	1		
Venezuela:				
Maracaibo.....	Sept. 16-22.....		1	

TYPHUS FEVER.

Austria-Hungary:				
Hungary—				
Budapest.....	Aug. 20-Sept. 9....	2	1	
Egypt:				
Alexandria.....	Sept. 3-9.....	7		
Greece:				
Athens.....	July 24-Aug. 21....		2	
Saloniki.....	Aug. 15-21.....		8	
Mexico:				
Aguascalientes.....	Sept. 11-24.....		28	
Mexico City.....	Aug. 28-Sept. 23....	699		
Vera Cruz.....	Sept. 18-24.....		1	
Russia:				
Petrograd.....	Aug. 13-19.....	8	1	
Spain:				
Madrid.....	Aug. 1-31.....		1	

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

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

Reports Received from July 1 to Oct. 13, 1916.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary.....				Mar. 12-May 6, 1916: Cases, 425; deaths, 155.
Austria.....	Mar. 26-Apr. 8.....	2		
Do.....	July 9-15.....	1		
Bosnia-Herzegovina.....	Mar. 12-May 20.....	398	147	
Hungary.....	Mar. 20-Apr. 2.....	2		
Ceylon:				
Colombo.....	June 25-July 1.....	1	1	May 7-20, 1916: Cases, 43; deaths, 5, from s. s. Hong Kheng from Halfong; total to June 1: Cases, 61; deaths, 37. May 28-June 10, 1916: Cases, 19, from the port.
China:				
Dairen.....	Aug. 6-12.....	1		On s. s. Taihei Maru from Hongkong and Chefoo.
Hongkong.....	Aug. 19-Sept. 2.....	9	9	
Macao.....	Aug. 17.....			
Shanghai.....	Aug. 20-26.....		2	Present. Chinese.
Egypt:				
Suez.....	May 18-20.....	5	2	From s. s. Pei-ho from Bombay.
Tor, quarantine station.....	May 22-June 3.....	112	42	
Greece:				
Moschopolis.....	July 25-31.....	15	8	
India:				
Akyab.....	June 11-July 8.....		2	
Bassein.....	Apr. 23-June 10.....		3	
Bombay.....	May 14-July 1.....	21	9	
Do.....	July 2-Aug. 26.....	113	76	
Calcutta.....	May 7-July 1.....		259	
Do.....	July 2-Aug. 12.....		59	
Heuzada.....	Apr. 23-July 22.....		7	
Madras.....	June 25-July 1.....	1	1	
Do.....	July 2-22.....	5	3	
Mandalay.....	July 23-29.....		1	
Pakokku.....	July 2-8.....		1	
Pegu.....	June 4-10.....		1	
Rangoon.....	May 24-July 29.....	13	9	
Do.....	July 1-31.....	1	1	
Indo-China.....				Dec. 1-31, 1915: Cases, 510; deaths, 395. Jan. 1-Mar. 31, 1916: Cases, 2,018; deaths, 1,100.
Provinces—				
Anam.....	Dec. 1-31.....	493	388	
Do.....	Jan. 1-Mar. 31.....	1,753	1,024	
Cambodia.....	Jan. 1-Feb. 29.....	11	10	
Cochin-China.....	Jan. 1-Mar. 31.....	10	4	
Tonkin.....	Dec. 1-31.....	17	7	
Do.....	Jan. 1-Mar. 31.....	244	62	
Saigon.....	May 1-July 2.....	162	74	
Do.....	July 3-Aug. 5.....	45	28	
Japan:				
Kobe.....	Aug. 30.....	46		55 cases, with 9 deaths in quarantine, from s. s. Hawaii Maru from Hongkong via ports. East Java, Apr. 8-June 30, 1916: Cases, 50; deaths, 35. July 1-24: Cases, 6; deaths, 2. Mid Java, June 3-30, 1916: Cases, 30; deaths, 26. July 1-24: Cases, 20; deaths, 18. West Java, Apr. 3-June 29, 1916: Cases, 661; deaths, 409. July 7-27: Cases, 334; deaths, 218.
Nagasaki.....	Aug. 8-18.....	262	107	
Osaka.....	Aug. 30.....	353		
Yokohama.....	Aug. 15.....	6	5	
Suburbs of city.....	Aug. 14-20.....	8	4	
Java:				
Batavia.....	Apr. 13-June 29.....		89	
Do.....	July 7-13.....	16	12	
Malang.....	Apr. 8-14.....	2	2	
Malang and Djombank.....	Apr. 28-May 5.....	2	2	
Surabaya residency.....	May 6-19.....	5	2	Including Malang, 2 cases, and Sidoardjo and Malang, 3 cases, with 2 deaths.
Korea.....				Sept. 23, 1916: In southern and central Korea, 108 cases.
Chemulpo.....	Sept. 18.....	2		
Fusan.....	Sept. 2.....	1		
Persia:				
Asterabad.....	June 10.....			Present, with 4 or 5 deaths daily.
Enzeli.....	July 1-31.....	7	4	
Foumen.....	May 9.....	3	2	Previously erroneously included in cases at Recht.
Ghazian.....	June 13.....	2	1	

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

Reports Received from July 1 to Oct. 13, 1916—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Persia—Continued.				
Kazvin.....	July 1-31.....	22	15	Present.
Mohammerah.....	June 12.....			
Recht.....	July 1-31.....	19	2	
Teheran.....	Sept. 1.....			
Urumiah.....	July 1-31.....	25		Do.
Philippine Islands:				
Manila.....	May 14-July 1.....	36	25	Not previously reported: Cases, 16; deaths, 1.
Do.....	Aug. 6-26.....	174	94		July 16-Aug. 26, 1916: Cases, 1,675; deaths, 943.
Provinces.....				
Albay.....	July 2-Aug. 26.....	218	109	
Bataan.....	do.....	5	2	
Batanzas.....	July 30-Aug. 26.....	18	9	
Bulacan.....	June 18-July 1.....	17	4	
Do.....	July 2-Aug. 26.....	618	302	
Cagayan.....	June 25-July 1.....	2	1	
Do.....	July 2-8.....	2		
Camarines.....	June 18-July 1.....	69	32	
Do.....	July 2-Aug. 26.....	843	528	
Cavite.....	June 11-July 1.....	14	11	
Do.....	July 2-Aug. 26.....	25	19	
Iloilo.....	Aug. 20-26.....	23	17	
Laguna.....	May 21-July 1.....	31	20	
Do.....	July 2-Aug. 26.....	121	91	
Mindanao.....	July 16-Aug. 5.....	19	11	
Misamis.....	July 16-Aug. 26.....	176	94	
Pampanga.....	July 9-Aug. 5.....	61	52	
Do.....	Aug. 6-26.....	43	35	
Rizal.....	May 24-July 1.....	11	9	
Do.....	July 2-Aug. 26.....	153	89	
Romblon.....	June 18-July 1.....	68	39	
Do.....	July 9-Aug. 26.....	19	16	
Tayabas.....	June 10-24.....	11	8	
Do.....	Aug. 6-12.....	1	1	
Zambales.....	Aug. 20-26.....	13	7	
Siam:				
Bangkok.....	May 15-27.....	22	21	
Do.....	July 16-29.....	4	4	
Straits Settlements:				
Singapore.....	May 27-June 24.....	8	3	
Turkey in Europe:				
Constantinople.....	May 19-July 6.....	118	63	Present among soldiers June 14.
Turkey in Asia:				
Adana.....	June 16-July 9.....	106	60	
Aleppo.....	June 15-25.....	47	16	
Bagdad.....	June 15-July 5.....	78	18	
Beirut.....	July 14-19.....	39	17	
Damascus.....	June 16-July 3.....	77	50	
Jaffa.....	June 17-25.....	67	39	
Do.....	July 1-26.....	99	28	July 9-15: Cases, 39; deaths, 25.
Smyrna.....	June 15-28.....	22	13	Epidemic. Estimated number cases daily, 50.
Trebizond.....	Aug. 6-Sept. 2.....	37	7	
At sea:				
Steamship Hong-Kheng.....	Apr. 27-May 9.....	17	14	En route from Haifong, Indo-China, to Colombo.
Steamship Pei-ho.....	Apr. 19-30.....	1	1	From Saigon, Indo-China, for Colombo.
Do.....	May 5-17.....	8	8	From Colombo for Suez.

PLAGUE.

Brazil:				
Pernambuco, State.....	Jan. 1-Mar. 31.....			Several cases.
Ceylon:				
Colombo.....	Apr. 30-July 1.....	49	46	
Do.....	July 2-Aug. 19.....	42	39	
Chile:				
McJillones.....	May 25-June 3.....	1		
Antofagasta.....	June 4-July 22.....	2		
China:				
Amoy.....	July 16-Aug. 5.....			Present. Present in vicinity Aug. 12.
Hongkong.....	May 28-June 30.....	7	7	
Do.....	July 23, Sept. 2.....	3	3	

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

Reports Received from July 1 to Oct. 13, 1916—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Ecuador:				
Ambato.....	May 1-31.....			Epidemic.
Bahia.....	do.....			Country district, vicinity of Bahia.
Daule.....	June 1-30.....	4	2	
Guayaquil.....	May 1-June 30.....	10	3	
Manta.....	May 1-31.....			Country district, vicinity of Manta.
Egypt:				
Alexandria.....	May 26-Aug. 24.....	44	27	Jan. 1-Aug. 31, 1916: Cases, 1,690; deaths, 823. Jan. 1-June 29, 1916: Cases, 1,634; deaths, 792.
Cairo.....	July 10.....	1		Imported.
Port Said.....	May 7-June 28.....	11	10	
Do.....	July 23-Aug. 3.....		4	
Provinces—				
Assiout.....	May 27-June 29.....	9	8	
Beni-Souef.....	May 26-June 25.....	34	15	
Do.....	July 1-10.....		2	
Fayoum.....	May 26-June 30.....	112	45	
Do.....	July 1-Aug. 3.....		2	
Galloubeh.....	June 7.....	1		
Gergeh.....	June 9-21.....	3	1	
Do.....	July 7-10.....	7	7	
Menoufieh.....	June 12-30.....	9	4	
Do.....	July 1-31.....	5	3	
Minieh.....	May 29-June 30.....	37	14	
Do.....	July 3-10.....	5	2	
Great Britain:				
Bristol.....	Aug. 18-31.....	3		
Hull.....	Aug. 19-31.....	2	1	
Liverpool.....	Sept. 22-29.....	5	3	
Greece:				
Island of Chios—				Present.
Mitylene.....	Sept. 29.....			Slight epidemic.
Volo.....	do.....			May 7-Aug. 12, 1916: Cases, 12,118; deaths, 8,810.
India:				
Bassein.....	Apr. 23-July 29.....		242	
Bombay.....	May 14-July 1.....	290	264	
Do.....	July 2-Aug. 26.....	99	86	
Calcutta.....	May 7-July 1.....		14	
Henzada.....	Apr. 23-July 1.....		14	
Do.....	July 9-22.....		4	
Karachi.....	May 14-July 1.....	72	61	
Do.....	July 2-Aug. 26.....	3	5	
Madras Presidency.....	May 14-June 24.....	139	94	
Do.....	July 9-Aug. 26.....	830	549	
Mandalay.....	May 14-June 3.....		1	
Moulmein.....	Apr. 23-June 10.....		37	
Do.....	July 2-29.....		69	
Pegu.....	June 11-July 15.....		3	
Prome.....	Apr. 23-May 20.....		1	
Do.....	July 2-29.....		39	
Rangoon.....	Apr. 23-July 1.....	467	440	Apr. 16-22, 1916; Cases, 54; deaths, 52.
Do.....	July 2-Aug. 19.....	209	192	
Toungoo.....	June 25-July 1.....		2	
Do.....	July 9-29.....		9	
Indo-China:				
				Dec. 1-31, 1915: Cases, 90; deaths, 70. Jan. 1-Mar. 31, 1916: Cases, 290; deaths, 191.
Provinces—				
Anam.....	Dec. 1-31.....	36	20	
Do.....	Jan. 1-Mar. 31.....	131	93	
Cambodia.....	Dec. 1-31.....	27	36	
Do.....	Jan. 1-Feb. 29.....	77	71	
Cochin China.....	Dec. 1-31.....	4	1	
Do.....	Jan. 1-Mar. 31.....	82	27	
Tonkin.....	Dec. 1-31.....	23	23	
Saigon.....	May 15-July 2.....	55	30	
Do.....	July 24-Aug. 12.....	7	3	
Java:				
Residences—				
Kediri.....	Apr. 9-May 19.....	18	18	
Paseroean.....	Apr. 9-June 30.....	13	12	
Do.....	July 1-14.....	1	1	
Surabaya.....	Apr. 9-June 30.....	28	25	
Do.....	July 1-14.....	8	7	
Surakarta.....	Apr. 9-June 30.....	15	24	

¹ Reports for week ended May 20 and 27, 1916, not received.

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

Reports Received from July 1 to Oct. 13, 1916—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Japan:				
Taiwan—				
Tamsuii.....	July 15-22.....	2	2	17 miles from capital city.
Mauritius.....	Apr. 15-June 21.....	6	8	
Persia:				
Recht.....	May 2-19.....	20	14	
Siam:				
Bangkok.....	Apr. 30-July 1.....	66	59	
Do.....	July 2-29.....	29	23	
Straits Settlements:				
Singapore.....	Apr. 30-July 1.....	5	1	
Do.....	July 2-Aug. 5.....	1	4	
Union of South Africa:				
Orange Free State.....	Jan. 23-Mar. 26.....	36	23	Remaining under treatment Mar. 26, 6 cases.

SMALLPOX.

Australia:						
New South Wales.....					Aug. 4-17, 1916: Cases, 6.	
Angledool.....	July 21-Aug. 3.....	1				
Guildford.....	June 9-22.....	2				
Lake Macquarie.....	Aug. 4-17.....	2				
Narrabri.....	May 26-June 7.....	8				
Do.....	July 7-Aug. 17.....	19				
Swansea.....	Aug. 4-17.....	1				
Sydney.....	June 23-30.....	1				
Do.....	July 1-Aug. 3.....	4				
Tamworth.....	June 9-22.....	1				
Do.....	July 7-20.....	1				
Walgett.....	July 21-Aug. 3.....	6				
Austria-Hungary:						
Austria.....					Feb. 13-May 20, 1916: Cases, 2,175.	
Galicia, Province.....	Apr. 23-May 20.....	464				
Prague.....	July 2-Sept. 2.....	5	2			
Vienna.....	May 27-July 1.....	4	1			
Do.....	July 9-Aug. 5.....	3				
Hungary—						
Budapest.....	May 21-July 1.....	38	15			
Do.....	July 2-8.....	1	1			
Brazil:						
Bahia.....	July 2-Aug. 26.....	8	8			
Para.....	July 2-8.....		4			
Rio de Janeiro.....	Apr. 9-June 17.....	94	18			
Do.....	July 9-Aug. 19.....	55	8			
Santos.....	May 8-14.....		1			
British East Africa:						
Mombasa.....	Apr. 24-May 31.....	4	2			
Do.....	July 1-31.....		1			
Canada:						
Ontario—						
Fort William and Port Arthur.....	July 9-15.....	1				
Niagara Falls.....	July 2-8.....	1				
Toronto.....	June 25-July 29.....	3				
Ceylon:						
Colombo.....	May 7-June 3.....	4				
China:						
Antung.....	May 22-June 18.....	2	1			
Chungking.....	May 7-June 24.....			Present.		
Do.....	July 2-Aug. 21.....				Do.	
Dairen.....	May 21-July 1.....	2	1		Do.	
Do.....	July 16-Aug. 26.....	3	2		Do.	
Foochow.....	May 7-27.....				Do.	
Do.....	July 2-Aug. 5.....				Do.	
Harbin.....	May 2-June 18.....	3	1			
Do.....	July 9-Aug. 6.....	1	2			
Hongkong.....	May 7-June 24.....	68	30			
Do.....	July 2-Sept. 2.....	14	13			
Nanking.....	June 11-Aug. 19.....			Do.		
Tientsin.....	May 11-July 1.....	45	11			
Do.....	July 2-29.....	3	1			
Egypt:						
Alexandria.....	May 28-June 17.....	4	2			
Cairo.....	Jan. 22-May 27.....	184	57			
Port Said.....	Mar. 12-May 27.....	6	6			

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

Reports Received from July 1 to Oct. 13, 1916—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
France:				
Paris.....	May 14-July 1.....	9		
Do.....	July 2-8.....	1		
Germany:				
Breslau.....	May 21-27.....	1		
Hamburg.....	June 11-17.....	1		
Königsberg.....	July 2-Sept. 2.....	4		
Great Britain:				
Cardiff.....	June 4-17.....	1	1	
London.....	.....do.....	1		
Southampton.....	July 31-Aug. 5.....	1		
Greece:				
Athens.....	Apr. 1-June 13.....	178	37	
Do.....	July 9-23.....			Present. Estimated occurrence, 10 cases weekly.
India:				
Bassein.....	May 7-June 10.....		2	
Bombay.....	May 14-July 1.....	153	79	
Do.....	July 2-Aug. 26.....	44	31	
Calcutta.....	May 7-June 3.....		3	
Do.....	July 2-Aug. 5.....		2	
Karachi.....	Aug. 6-26.....	2	1	
Madras.....	May 14-July 1.....	139	42	
Do.....	July 2-Aug. 19.....	81	43	
Rangoon.....	Apr. 23-July 1.....	260	135	
Do.....	July 2-29.....	10	5	
Indo-China:				
Provinces—				
Anam.....	Dec. 1-31.....	48		
Do.....	Jan. 1-Mar. 31.....	68	5	
Cambodia.....	Dec. 1-31.....	19	13	
Do.....	Jan. 1-Mar. 31.....	38	14	
Cochin China.....	Dec. 1-31.....	1	1	
Do.....	Feb. 1-Mar. 31.....	23	2	
Tonkin.....	Dec. 1-31.....	6		
Do.....	Jan. 1-Mar. 31.....	270	6	
Saigon.....	July 24-Aug. 13.....	4	4	
Japan:				
Kobe.....	May 29-June 25.....	24	4	
Do.....	July 24-Sept. 3.....	11	2	
Nagasaki.....	June 26-July 2.....	1	1	
Java:				
Batavia.....	Apr. 13-June 29.....	31	9	
Do.....	June 30-July 13.....	6	4	
Samarang.....	May 13-19.....	2	2	
Surabaya.....	May 9-June 16.....	2	1	
				East Java, Apr. 8-June 30, 1916: Cases, 88; deaths, 11. July 1-21: Cases, 27; deaths, 1. Mid Java, Apr. 1-June 30, 1916: Cases, 233; deaths, 47. July 1-21: Cases, 23; deaths, 7. West Java, Apr. 13-June 29: Cases, 278; deaths, 59. June 30-July 27: Cases, 144; deaths, 21.
Malta:	Apr. 1-30.....	7	1	
Mexico:				
Agascalientas.....	June 12-July 2.....		33	
Do.....	July 3-Sept. 10.....		33	
Frontera.....	May 28-June 10.....	4	1	
Guadalajara.....	June 11-17.....	35	9	
Mazatlan.....	May 31-June 6.....		4	
Tenosique.....	June 14.....			
Vera Cruz.....	June 4-July 2.....		9	
Do.....	July 3-sept. 3.....		4	175 miles south of Frontera: Epidemic among troops.
Netherlands:				
Amsterdam.....	May 28-June 3.....	1		
Philippine Islands:				
Manila.....	.....do.....	1		
Do.....	July 1-8.....	3		
Porto Rico:				
Aguas Buenas.....	June 19-25.....	5		
Arecibo.....	.....do.....	2		
Do.....	Aug. 7-13.....	1		
Bayamon.....	June 19-July 2.....	2		
Naranjito.....	June 26-July 2.....	4		
Rio Piedras.....	.....do.....	1		
San Juan.....	.....do.....	24		
Toa Alta.....	.....do.....	12		
Portugal:				
Lisbon.....	May 21-July 1.....	15		
Do.....	July 9-Aug. 26.....	9		

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

Reports Received from July 1 to Oct. 13, 1916—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Moscow	Apr. 30-July 1....	222	59	
Do.	July 2-Aug. 26....	72	142	
Riga	Apr. 6-May 31....	1	1	
Do.	July 1-22.....	2	.....	Apr. 1-30; 1916; 1 case.
Petrograd.....	Apr. 23-July 1....	162	35	
Do.	July 2-Aug. 12....	53	15	
Siam:				
Bangkok.....	May 24-30.....	2	.....
Spain:				
Cadiz	July 1-31.....	.....	1	
Madrid.....	May 1-31.....	.....	13	June 1-30, 1916: Cases, 10.
Do.	July 1-31.....	.....	17	
Malaga.....	May 1-31.....	.....	7	
Seville.....	June 1-30.....	.....	3	
Valencia.....	May 21-July 1....	12	4	
Do.	July 8-Aug. 19....	7	.....
Straits Settlements:				
Penang	May 14-20.....	3	.....
Singapore.....	Apr. 30-July 1....	5	3	
Do.	July 16-Aug. 12....	3	2	
Switzerland:				
Basel.....	May 13-July 1....	29	.....
Do.	July 2-15.....	9	.....
Union of South Africa:				
Durban	June 1-30.....	1	.....
Johannesburg.....	May 28-June 3....	1	.....
Venezuela:				
Maracaibo.....	Sept. 2-8.....	.....	2	
Zanzibar:				
Zanzibar.....	May 12.....	1	.....	From s. s. Dilmara.
At sea:				
Steamship Katuna.....				Case of smallpox landed at Colombo, Ceylon, May 12, 1916. Vessel arrived May 27 at Fremantle, Australia, was ordered to quarantine, and proceeded to Melbourne direct for disinfection.

TYPHUS FEVER.

Austria-Hungary:				
Austria:				
Galicia, province.....	Apr. 22-May 20....	1,311	.....	Feb. 13-May 20, 1916: Cases, 2,407.
Vienna.....	July 2-15.....	3	.....
Hungary:				
Budapest.....	May 21-June 24....	14	2	Feb. 21-Mar. 5, 1916: Cases, 35; deaths, 7.
Do.	July 2-Aug. 12....	3	.....
Belgium:				
Liege	Aug. 12-19.....	.....	1	
Canada:				
New Brunswick—				
St. John	July 29.....	4	.....
Canary Islands:				
Santa Cruz de Tenerife.....	July 31-Aug. 5....	.....	1	
China:				
Antung	June 19-25.....	1	1	
Do.	July 22-Aug. 27....	3	.....
Harbin.....	May 2-8.....	1	.....
Do.	July 3-16.....	1	.....
Tientsin.....	May 14-20.....	.....	1	
Egypt:				
Alexandria.....	May 21-July 1....	235	93	
Do.	July 2-Aug. 26....	143	66	
Cairo.....	Jan. 8-May 27....	900	400	
Port Said.....	Mar. 18-May 27....	41	21	
Germany:				
Aix la Chapelle.....	July 2-Aug. 12....	.....	2	
Barmen.....	Aug. 13-19.....	.....	1	
Berlin.....	June 18-24.....	.....	1	
Do.	July 16-Aug. 19....	.....	8	
Bremen.....	July 16-Aug. 12....	6	.....
Breslau.....	Aug. 15-21.....	3	.....
Chemnitz.....	May 28-June 3....	.....	1	
Frankfort on Main.....	June 11-17.....	.....	1	

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

Reports Received from July 1 to Oct. 13, 1916—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Germany—Continued.				
Hanover.....	May 7-27.....	4	1	
Do.....	July 1-29.....	3		
Konigsberg.....	June 4-10.....	1		
Do.....	July 9-Aug. 26.....	13		
Leipzig.....	June 4-10.....		1	
Stettin.....	July 16-Aug. 19.....		3	
Great Britain:				
Belfast.....	July 16-Sept. 9.....	12	4	
Glasgow.....	July 9-Aug. 12.....	8	6	
Greece:				
Saloniki.....	May 1-July 2.....		61	
Do.....	July 3-Aug. 14.....		41	
Italy:				
Palermo.....	June 29-July 5.....	1	1	
Japan:				
Hiakodate.....	July 16-22.....	2		
Tokyo.....	May 22-July 25.....	114		Jan. 1-July 25, 1916: Cases, 468.
Java:				
Batavia.....	Apr. 13-June 29.....	46	13	East Java, Apr. 8-June 30, 1916:
Do.....	July 7-27.....	24	4	Cases, 24; deaths, 9. Mid-Java,
Samarang.....	Apr. 1-June 30.....	20	8	Apr. 1-June 30, 1916: Cases, 76;
Surabaya.....	Apr. 8-May 12.....	6	6	deaths, 18. July 1-14: Cases, 12;
Do.....	July 1-7.....	1		deaths, 2. West Java, Apr. 13-June 29, 1916: Cases, 118;
Mexico:				
Agascalientes.....	June 12-July 2.....		32	
Do.....	July 3-Sept. 10.....		139	
Chihuahua.....	Sept. 7.....	40		Sept. 20: Estimated number of
Durango.....	Sept. 1.....			cases, 100.
Juarez.....	Sept. 7-20.....	18		Present.
Guadalajara.....	June 11-17.....	4	1	
Vera Cruz.....	June 4-9.....		2	
Do.....	July 24-Aug. 6.....		7	
Zacatecas, State.....				Sept. 7: Prevalent.
Netherlands:				
Rotterdam.....	July 30-Aug. 5.....		1	
Norway:				
Bergen.....	.....do.....		1	
Russia:				
Moscow.....	Apr. 30-July 1.....	909	72	
Do.....	July 9-Aug. 26.....	254	12	
Petrograd.....	Apr. 23-July 1.....	59	13	
Do.....	July 3-Aug. 12.....	14	4	
Sweden:				
Stockholm.....	June 21-27.....	1		
Do.....	July 9-29.....		5	
Switzerland:				
Basel.....	July 24-Aug. 13.....	5		
Geneva.....	May 21-27.....	1		
Zurich.....	July 23-Sept. 2.....	5		
Turkey in Asia:				
Adana.....	May 13-June 25.....			Present.
Do.....	July 2-8.....			Do.
Bagdad.....	June 27.....			Do.
Haifa.....	Apr. 24-June 11.....	35	13	
Do.....	July 10-23.....	53	24	
Jaffa.....	Apr. 23-June 25.....		47	Mar. 19-Apr. 1, 1916: Present.
Mersina.....	May 7-June 25.....	9		Apr. 2-8, 1916: Cases, 3. May 6-
Do.....	July 2-8.....			20: Many cases.
Tarsus.....	May 13-27.....			Do.
Do.....	July 2-8.....			Present.
Trebizond.....	Aug. 6-12.....	3	1	Do.

YELLOW FEVER.

Barbados.....	Sept. 17-23.....	3	2	
Ecuador:				
Babahoyo.....	June 1-30.....	2		
Guayaquil.....	May 1-June 30.....	76	51	
Milagro.....	June 1-30.....	1	1	
Mexico:				
Merida.....	July 1-Sept. 23.....	25	7	
Progreso.....	Aug. 13-Sept. 2.....	2	1	

SANITARY LEGISLATION.

COURT DECISIONS.

NEW YORK SUPREME COURT, SPECIAL TERM, ERIE COUNTY.

“Dispensing” Habit-Forming Drugs—Physician who Writes Prescription not Required by the New York Law to Keep Record.

PEOPLE v. COHEN. (Mar. 3, 1916.)

A physician who issues a prescription for narcotic drugs does not “dispense” the drugs within the meaning of the New York public-health law.

The New York public-health law requires persons who “sell, administer, prescribe, dispense, or dispose of” habit-forming drugs to keep a record of “the name and address of each person to whom such drug is dispensed.” A physician issued prescriptions for habit-forming drugs and failed to keep records. The court held that he did not “dispense” them and that he was not required to keep records of such prescriptions.

The defendant was a physician. He was charged with violating section 248 of the New York public-health law as amended by the laws of 1915 (Public Health Reports, Dec. 17, 1915, p. 3724), by issuing prescriptions for habit-forming drugs and failing to keep records of the names of the persons to whom the prescriptions were issued.

[157 New York Supplement, 591.]

WHEELER, J.:

* * * * *

The section of the public-health law which the defendant is charged with violating reads as follows:

SEC. 248. *Physicians, etc., to keep records.*—All persons authorized by law to sell, administer, prescribe, dispense, or dispose of any of the drugs enumerated in section 245 of this chapter shall forthwith keep on record the name and address of each person to whom such drug is dispensed, given away, or in any manner delivered, and the quantity so dispensed, given, or delivered, and shall likewise keep a record of any disposition made of any quantity of such drug referred to, whether such disposition is in preparation of compounds or otherwise, and if used in the preparation of compounds the quantity so used in each compound and where placed. Such record shall be preserved for two years, and shall always be open for inspection by the proper authorities, and violation of this section is hereby declared to be a misdemeanor. [Laws 1915, c. 327.]

The point of law raised by the defendant on this demurrer is that section 248 of the public health law does not require physicians simply writing prescriptions to make any record of the name and address of persons to whom the prescription may be given, that the statute only requires this to be done where the physician administers or disposes of the drugs themselves, and that writing and delivering a prescription for such drugs is not dispensing or delivering them, within the provision of the statute.

It is conceded that if the defendant had delivered to the parties named the drugs prescribed then it would have been a violation of the statute to have failed to have kept a record as required by the section quoted; but it is urged that there is a broad distinction between administering and the dispensing of the drug itself and the mere

writing of a prescription which on presentation to a druggist or pharmacist would enable the holder to obtain the drug prescribed.

The validity of the indictment would seem to turn on the meaning to be given the word "dispense," as employed in section 248 of the act. In giving a construction to this section we must bear in mind the statute makes penal the doing of something not before forbidden by law. While the language employed should be given a reasonable construction for the purpose of carrying into effect the purpose of the legislature in framing the statute, it can not be enlarged so as to make penal what is not plainly written in the statute itself. Words employed in such a statute should be given that ordinary and usual meaning, and should not be so construed as to make out a crime by implication.

"To 'dispense' is to deal out; to distribute; to give." *Johnson v. City of Chattanooga* (97 Tenn. 247, 36 S. W., 1092); words and phrases judicially defined. A "prescription" is a mere formula for the preparation of a drug and medicine. It may be filled or not, as the person to whom it is given elects; but until it has been filled, and the substance delivered, we think there is no "dispensing" of the drug itself. A "dispensary" is a place where the drug is prepared or distributed. We therefore are of the opinion that a physician, who merely writes a prescription and does nothing more, can not be said to "dispense" the drug or article described in the prescription. It is well known that many physicians do in fact keep on hand and deliver to their patients medicines which they prescribe. Others do no more than write the prescription and give it to the patient, to have it prepared and filled by the druggist or pharmacist.

Where the physician not only writes the prescription, but himself delivers the drug to the patient, he undoubtedly brings himself within the requirements of the act requiring him to "keep on record the name and address of each person to whom such drug is dispensed." We do not think this is required, however, where the drug itself is not delivered by the physician. When we examine the other provisions of the health law relating to the handling and sale of noxious drugs, it will be seen that all the real objects and purposes of the act are accomplished without requiring the physician simply writing the prescription to keep the record prescribed in the act.

Section 246 of the health law makes it unlawful for any person to sell or give away any of the drugs mentioned in section 245 without first receiving a written prescription, signed by a duly licensed physician, veterinarian, or dentist. The prescription must contain the name of the physician issuing such prescription, his office address, his office hours and telephone number, and the name, age, and address of the person to whom and the date on which such prescription is issued. Before selling or retailing any such drugs the seller must first verify the authority of any such prescription, such verification to be made by telephone or otherwise. Such prescription shall be retained "by the person who 'dispenses' the same," and shall be kept on the general prescription file, and given a regular consecutive number on such file. He must "at the time of 'dispensing' the same" place on the package a label, or deliver a certificate stating the name and address of the person furnishing the same, the name and address of the physician upon whose prescription such sale is made, the date of sale, and the name of the person to whom such sale is made. The section then provides that any person who shall possess any such drugs other than licensed druggists "shall be guilty of a misdemeanor, unless said possession is authorized by the certificate described in this section."

It will thus be seen that the law carefully provides that the prescribed drugs can only be sold or dispensed on a physician's prescription, but also provides for the filing and preservation of the prescription itself, so that any user of these noxious drugs can quickly and readily show by what right or authority he has them in his possession, by referring to the records and files of the druggist or pharmacist from whom he procured them. It is difficult to discover how any useful or practical purpose would be

served by requiring physicians, who do not themselves sell and dispense these drugs, to keep a record of such prescriptions, for in such cases the identical record is preserved for public use by those who dispense the drug.

The argument is that, inasmuch as the substantial purposes of the act are met by the preservation of prescriptions, by keeping them on file at the druggist's or pharmacist's, the words "dispense" and "give," as used in the statute, should be given their ordinary and natural meaning, and not the forced meaning contended for by the district attorney. And in this connection it is well to note that section 246 seems to define the meaning of the "dispenser" of the drug as those who prepare, sell, or give away the drug itself, as distinguished from the physician who writes the prescription.

The view which we take of the matter as to its main features makes it unnecessary for the court to discuss the other objections raised by counsel for the defendant as to the sufficiency of the indictment. We think the demurrer to the indictment good, and that the indictment should be dismissed.

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

BURLINGTON, IOWA.

Nuisances—Prevention—Cleaning of Rugs, Mattresses, etc. (Reg. Bd. of H., June 1, 1916.)

SECTION 1. No one shall operate any wheel, apparatus, or other machine within the city of Burlington, Iowa, whereon or whereby carpets, rugs, mats, mattresses, curtains, bedding, or tapestries are cleaned, renovated, shaken, or beaten unless such wheel, apparatus, or device is so inclosed and constructed as to prevent the dust, lint, or other matters or substances from being discharged into the open air and by it carried upon the public streets, avenues, or alleys, or the property of others, and to prevent the creation of a nuisance.

SEC. 2. That anyone violating this regulation shall incur the penalty provided by statute in cases of neglect or refusal to comply with and obey any order, rule, or regulation of the board of health.

LORAIN, OHIO.

Milk and Milk Products—Sale—Milk Plants—Pasteurization. (Ord. 1912, May 4, 1916.)

SECTION 1. That section 27 of council ordinance entitled "Ordinance No. 1770¹ approving and adopting ordinance passed by the board of health, regulating the production, care, and sale of milk, cream, and meat in the city of Lorain, Ohio, and repealing all ordinances or parts of ordinances in conflict therewith," passed June 15, 1914, be and the same is hereby amended so as to read as follows:

SEC. 27. (a) No person or dealer shall give, furnish, sell, or offer for sale or deliver any milk, buttermilk, whey, sour milk, skimmed milk, or cream in quantities less than 1 gallon, except in sanitary bottles, sealed with tight fitting cap or stopper, and when sold or delivered in quantities of 1 gallon or more, such packages or receptacles shall be securely closed and sealed.

(b) No person, firm, or corporation shall serve any milk to be drunk on the premises when served, unless such milk is contained in individual sealed receptacles containing only the quantity of milk intended for the use of the person served.

SEC. 2. That section 29 of council ordinance entitled "Ordinance No. 1770, approving and adopting ordinance passed by the board of health, regulating the production, care, and sale of milk, cream, and meat in the city of Lorain, Ohio, and repealing all ordinances or parts of ordinances in conflict therewith," passed June 15, 1914, be and the same is hereby amended so as to read as follows:

SEC. 29. *Milk plants.* (a) *Construction.*—Floors must be made of asphalt, cement, or other smooth vitrified substances laid so as to allow ready drainage. Walls and ceilings shall be smooth, tight, and kept painted in some light color; window space shall be equivalent to 10 per cent floor space.

(b) Equipment must be arranged and constructed so it can be easily and efficiently cleaned; all piping used to convey milk must be of a sanitary, taken-down form.

¹Pub. Health Reports Reprint 273, p. 279.

Windows and doors from May 1 to October 1 must be provided with sound screens of mesh sufficiently fine to keep out flies and other insects. Buildings and equipment must be kept clean at all times and free from odors.

(c) *Handling milk.*—If milk is sold as pasteurized milk, it shall be pasteurized as soon as received by dealer while fresh, and same shall be labeled "pasteurized milk." Same shall be pasteurized at the following temperatures:

110° [sic] F., uniform heating, 20 minutes; 150° F., uniform heating, 15 minutes; 155° F., uniform heating, 10 minutes; 160° F., uniform heating, 5 minutes; 165° F., uniform heating, 1 minute.

The time shall be calculated from the time the entire quantity reaches the required temperature. The milk shall be promptly cooled after pasteurization to a temperature of 59° F., or less, and stored at a similar temperature.

(d) No person, firm, or corporation shall bring into the city of Lorain, or shall within said city sell or offer for sale, expose for sale, dispose of, exchange, or deliver, or have in his or its possession, with intent to do as aforesaid, any milk, skimmed milk, cream, or the milk or cream contained in the buttermilk or milk prepared by fermentation or other process unless same be pasteurized before delivered for consumption as food, between May 1 and October 1.

The pasteurization to be according to rules and regulations prescribed in this section.

The above paragraphs relating to pasteurization shall not apply to bona fide dealers in milk, skimmed milk, cream, or the milk or cream contained in buttermilk, all milk prepared by fermentation or other process, at wholesale, who shall sell at any time a quantity of not less than 1 gallon of skimmed milk, milk, buttermilk, and milk prepared by fermentation or other process, or 2 quarts of cream; nor to owners of cows who sell milk on their premises only, in which case the milk or milk product shall be placed in receptacles supplied by the buyer.

SEC. 3. That section 27 and section 29 of council ordinance No. 1770 be and the same are hereby repealed.

LOS ANGELES, CAL.

Fish Canneries—Sanitary Regulation. (Ord. 34452, N. S., July 8, 1916.)

SECTION 1. It shall be unlawful for any person, firm, or corporation to conduct or operate any fish cannery within the city of Los Angeles without first applying for and receiving a permit from the health commissioner of the city of Los Angeles so to do.

SEC. 2. Every applicant for such permit shall file with the health commissioner of the city of Los Angeles a written application, which shall state the name and address of the applicant and, if he is not a permanent resident of the city of Los Angeles, the name and address of his duly authorized agent or representative residing in the city of Los Angeles. Such application shall also contain a description of the property by street and number wherein or whereon it is proposed to conduct or operate such cannery, and if the same has no street number, then such description as will enable the same easily to be found.

SEC. 3. If after investigating and considering such application it shall appear to the health commissioner that the statements made therein are true and that the existing sanitary conditions in such place comply with the provisions of this ordinance, and of the laws and ordinances in force at the time such application is made, and conform to the rules and regulations of the health department regulating the sanitary conditions of such places, the said health commissioner shall grant the permit applied for: *Provided, however,* That such permit shall be granted only on the express condition that it shall be subject to suspension by the health commissioner, in his discretion, upon proof to the satisfaction of the said health commissioner of a violation by the holder thereof, his employee, servant, agent, or representative, or any person acting with his consent, or under his authority, of any of the provisions of any law of the State of California, or of any ordinance of the city of Los Angeles, or any rule

of the health department regulating canneries, such suspension to remain in effect only during a continuance of any such violation as aforesaid: *Provided, further,* That no permit shall be suspended until a hearing shall have been had by the health commissioner in the matter of the suspension of such permit, notice of which hearing shall be given in writing, and served at least five days prior to the date of hearing upon the holder of such permit, his manager, agent, or representative, which notice shall state the ground of complaint against the holder of such permit, or against such cannery, and shall also state the time and place where such hearing will be had. Such notice shall be served on the holder of such permit by delivering the same to such person, or to his manager, agent, or representative, or to any person in charge of or employed in such place, or by leaving such notice at the place of business or residence of such person. If the holder of such permit can not be found, and personal service, or service other than personal service, as specified in this ordinance, of such notice can not be made upon him, then a copy of such notice shall be mailed, postage fully prepaid, addressed to such holder of such permit at such place of business at least five days prior to the date of such hearing.

SEC. 4. It shall be unlawful for any fish cannery to receive any fish into their establishment or upon their premises which are decomposed, tainted, corrupt, diseased, or unwholesome from any cause, or to which the head is not attached and all viscera, all the contents of the abdominal cavity, removed; or to have kept or stored in such establishment any canned or cooked fish which for any reason is unwholesome or unfit for human food: *Provided, however,* That this provision shall not be construed to apply to the necessary accumulation of unedible products or refuse resulting from the ordinary methods of food preparation.

SEC. 5. It shall be unlawful for any fish cannery to allow any fish offal or oil or residue from cooking of soup to be dumped or discharged into the harbor of Los Angeles.

SEC. 6. All fish canneries operating in the city of Los Angeles shall be provided with metal receptacles for the keeping of refuse or offal from their establishments, which metal receptacles shall be approved by the health commissioner of the city of Los Angeles and must be kept in sanitary condition and not used as receptacles for edible products.

SEC. 7. It shall be unlawful to smoke or use tobacco in any form in any fish cannery operating within the city of Los Angeles while the fish is being prepared and canned.

SEC. 8. All fish canneries located within the city of Los Angeles shall be provided with convenient and adequate toilet and lavatory facilities, and all employees shall wear clean outer garments of washable material.

SEC. 9. Every place or building used as a fish cannery in the city of Los Angeles shall be of good workmanship and shall be provided with means to exclude flies and rodents therefrom; and all utensils, receptacles, and appurtenances shall be kept clean and in a sanitary condition.

SEC. 10. It shall be the duty of the health commissioner or any officer delegated by him, and he is hereby empowered, to enter any fish cannery located within the city of Los Angeles with the view of ascertaining that the provisions of this and other ordinances are being complied with.

SEC. 11. Any fish received, kept, or stored in any fish cannery within the city of Los Angeles in violation of section 4 of this ordinance shall be condemned, whereupon the health commissioner, or officer delegated by him, shall mark or mutilate said fish and make the fact of such condemnation apparent, and shall immediately, by a written order, direct that the same be removed from the premises, and every such person so ordered to dispose of condemned fish shall furnish a receipt on such notice stating the time and manner of the removal and disposal of said condemned fish. The expense of such removal shall be paid by the person in whose possession such fish are found, and copies of all condemnations and receipts of removal shall be filed with the health commissioner within 24 hours.

SEC. 12. Whenever the words "fish cannery" are used in this ordinance it is understood to be any establishment where fish is prepared and canned for human consumption.

SEC. 13. That 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 less than \$10 nor more than \$500, or by imprisonment in the city jail for a period of not less than five days nor more than six months, or by both such fine and imprisonment. Each such person, firm, or corporation shall be deemed guilty of a separate offense for any 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 in this ordinance.

NEW YORK, N. Y.

Births, Deaths, and Marriages—Reporting—Penalty for Failure. (Ch. 515, Act N. Y. Leg., May 11, 1916.)

SECTION 1. Section 1239 of the Greater New York charter as reenacted by chapter 466 of the laws of 1901, as amended by chapter 532 of the laws of 1905, is hereby amended to read as follows:

SEC. 1239. For every omission of any person to make and keep the registry of marriages and births required by the preceding sections, and for every omission to file a written copy of the same with said department of health, within 10 days after any birth or marriage provided to be registered, and for every omission to or failure, after the expiration of the said 10 days, to comply with an order of the board of health requiring that any such report of a death, birth, or marriage be filed with the department of health, the person guilty of such omission shall be guilty of a misdemeanor; and in addition thereto, the offender shall also be liable to pay a fine of \$100, to be recovered in the name of the department of health of the city of New York, before any justice or tribunal in said city having jurisdiction of civil actions. But no person shall be liable for such fine or subject to arrest and imprisonment for not filing the report herein required, if such report has been filed by any other person, or if an excuse is presented to the commissioner of health for such omission which the said commissioner shall decide to be sufficient, in which event the said commissioner of health is hereby empowered to excuse the said omission. In any action hereunder such excuse shall be proved by the party claiming the benefit of the same.

RUTLAND, VT.

Poliomyelitis—Prevention—Quarantine of Children from Infected Localities. (Reg. Bd. of H., Aug. 21, 1916.)

1. No child under the age of 15 years shall reside in this city for a period of more than 24 hours without being reported by an attendant, parent, or guardian to the city health officer, provided such child has been in a place or locality where infantile paralysis exists since July 1, 1916.

2. It shall be the duty of every housekeeper, manager or proprietor of every hotel, boarding house, or private dwelling where such child is domiciled to immediately report such child, giving the name and age to the city health officer.

3. Every such child shall be subject to quarantine for a period of two weeks from the time such child arrives in this city.

4. The city health officer is hereby given full power to regulate and enforce such quarantine measures as he deems necessary for the proper isolation of such children for the protection of the municipality.

5. No child under 15 years of age shall enter any house so quarantined.

6. A placard containing the word "Quarantine" shall be posted on the premises where there is a child as above described.

7. Premises will be released from quarantine at the end of two weeks, provided a certificate signed by a legal practitioner of medicine is delivered to the health officer certifying that the child is in good health and that a spray of normal salt solution has been used in the nose and throat once a day for three consecutive days prior to release.

Nothing in the above regulations shall be construed to prevent other members of a household in which there is a child as above described from attending to their usual occupations.

A copy of these regulations shall be posted in three or more public places in the city. The above regulations are effective until further notice.

WATERBURY, CONN.

Milk—Sale in Stores—Bottling Required. (Reg. Bd. of H., Jan. 31, 1916.)

On and after April 1, 1916, it shall be unlawful to vend milk in any store, bakery, or butcher shop within the limits of the city of Waterbury unless said milk shall be contained and kept in bottles tightly sealed. Any violation of this section shall be deemed a misdemeanor and punished by a fine not to exceed \$100.

WEST NEW YORK, N. J.

Slaughterhouses—Permit Required—Sanitary Regulation. (Reg. Bd. of H., Mar. 27, 1916.)

The establishment for operating or operation of a poultry or any other slaughterhouse shall not be allowed within the jurisdiction of this town without first having obtained a permit from this board, said permit to cost \$25 for each place of business, and such building not to be occupied for a dwelling or other business. All such places to be under the supervision and the direction of the board of health.

The following rules and regulations to be observed: Cleanliness of all persons operating therein, cleanliness of all walls, floors, ceilings, toilets and sinks, drainage and ventilation; must have running hot and cold water supply; have hose connection for flushing and extra killing department with cement floor; killing trough of nonabsorbent material, discharging over a properly trapped sewer connection. All cages to be constructed of galvanized iron so they can be flushed, and must be kept away from the walls; proper refuse receptacles and covered. Under no conditions will empty crates be allowed to remain on the premises.

WICHITA, KANS.

Nuisances—Abatement of. (Ord. May 1, 1916.)

SECTION 1. That from and after the taking effect of this ordinance any person, firm, or corporation, either as principal, agent, servant, or employee, within the city of Wichita, who shall own, lease, or control any lot, or lots, piece or tract of ground, whereon is kept or located any hog pens, slaughterhouses, stockyards, warehouses, stables, privy vaults, cesspools, or any alley, yard, private ways, and grounds, or other places where offensive matter prejudicial to the health of the citizens of Wichita is kept or allowed to accumulate, and the same is not removed and the nuisance entirely abated to the satisfaction of the board of health, after reasonable notice has been given the owner, lessee, or party having same under their control, the board of health shall have full power to entirely abate such nuisance and levy, certify, and collect the cost of the same, as a special assessment according to law, against the property whereon the nuisance is located.

SEC. 2. That the board of health at its own motion, or where complaint is filed of a nuisance, shall give the owner, lessee or party having control of the premises whereon the nuisance complained of is located a written notice to abate the nuisance within five days; in case of failure to so abate the nuisance the board of health may abate the same and collect the cost therefor by levying and certifying the amount of said cost against the lot or lots, piece or tract of ground whereon the nuisance was located.

WILLIAMSPORT, PA.

Health Officer—Appointment, Powers, Duties, and Salary. (Ord. Jan. 21, 1916.)

SECTION 1. That on the first Monday in January in each year the council shall elect one person to serve as health officer for the ensuing year, or until his successor is elected and qualified: *Provided*, That at the first meeting of council after this ordinance becomes effective the council shall elect a health officer to serve until the first Monday in January, 1917, or until his successor is qualified.

SEC. 2. The health officer elected under this ordinance shall have all of the powers conferred upon such officers by the laws of this Commonwealth, the ordinances of the city, and rules and regulations of the State board of health and of the department of health of this city. He shall likewise perform all of the duties required to be performed by him under the laws, ordinances, and rules and regulations mentioned in this section, as well as perform all of the duties mentioned in this ordinance. He shall receive a salary of \$1,200 per year, payable monthly out of the fund appropriated for the payment of salaries.

SEC. 3. The health officer shall frequently visit the markets and all other places where food is kept for sale or handled, including restaurants, hotels, market vans and vehicles in which food is transported to or from the markets and stores, and shall see that all such places are kept in a proper sanitary condition. He shall also placard all premises where contagious disease is reported to exist, establish a quarantine when necessary, and fumigate all such places in accordance with the rules of the State board of health and the health department of the city. He shall also do and perform all other duties which may hereafter be prescribed by the council or the rules and regulations of State and city health departments.

SEC. 4. The health officer shall keep his office in the city hall in such place as the council shall direct, and all reports and complaints required or desired to be made to the health officer or to the department of health shall be addressed to and delivered at the city hall office of the health officer. All reports or complaints shall be kept on file and a permanent statistical record shall be made thereof and a report made to council monthly of all reports and complaints received, inspections made, deaths and births, the cause of death in each instance, and make such other reports as have heretofore been made by the health officer or which may be required by law or ordinance.

City Dentist—Appointment, Duties, and Salary. (Ord. Apr. 13, 1916.)

SECTION 1. That the position of city dentist is hereby created, and council shall on the first Monday in January in each even numbered year elect a city dentist, who shall serve for a period of two years, or until his successor is duly elected, and he shall receive a salary of \$600 per year, payable as other salaries of the city are paid: *Provided, however*, The council shall, as soon as this ordinance becomes effective, elect a competent person to serve as city dentist until the first Monday in January, 1918.

SEC. 2. No person shall be elected to the position of city dentist unless he be a graduate of a recognized dental school and duly licensed to practice dentistry in the city of Williamsport.

SEC. 3. Said dentist shall spend at least three hours of every day in the year, except Sundays and holidays, at the office fitted up for him in the city hall, during which time he shall treat all children who come to him with a certificate signed by the teacher of the school which said pupil attends, certifying that in the judgment of said teacher the parents of said child are unable to pay for the necessary dental work required by such child. The city dentist shall also render such dental treatment or surgery to all poor persons of the city who procure from the overseers of the poor a certificate to the effect that said persons are unable to pay for the required treatment.

SEC. 4. The city dentist shall furnish the superintendent of parks and public property with a list of the necessary supplies required by him, whereupon the superintendent of parks and public property shall advertise for bids for the furnishing of such supplies; and such additional supplies shall be purchased thereafter as are necessary to carry this ordinance into effect, and enable the city dentist to do and perform the work required to be done by him.

SEC. 4. [sic] The sum of \$500 is hereby appropriated from the general fund to carry this ordinance into effect and for the payment of the salary of the city dentist for the current fiscal year, and council shall annually appropriate necessary money to pay the salary herein provided for and for the purchase of the necessary supplies herein provided for.

City Physician—Appointment, Duties, and Salary. (Ord. Jan 21, 1916.)

SECTION 1. That the position of city physician is hereby created, and the council shall, immediately after this ordinance becomes effective, elect one person who shall serve as city physician until the first Monday in January, 1917, unless sooner removed by council. Annually thereafter on the first Monday in January the council shall elect a city physician to serve for one year, unless sooner removed: *Provided, however*, That no person shall be elected to the office of city physician who is not duly licensed to practice medicine in the county of Lycoming.

SEC. 2. It shall be the duty of the city physician to at all times render such advice and assistance to the health officer as to enable him to properly perform his duties whenever he shall request such advice or assistance. The city physician shall, whenever directed so to do by the superintendent of any department of the city, render such medical services to any employee of the city in case of sickness or accident as the particular case may require. He shall also, immediately after his election and qualification, examine all employees of the city who work under the supervision of the superintendent of any department, and annually thereafter, and make a record thereof, and the same shall become a permanent city record. If as the result of any such examination any employee is found physically unfit to perform the duties or work required of him that fact, together with full particulars thereof, shall be reported to the superintendent of the proper department, who shall notify such employee of the result of such examination, and the council shall take such action thereon as may be to the best interests of the city service. The city physician shall also, upon request of the police department, render medical or surgical treatment to all persons who may be detained by the police department or who may be taken suddenly ill or meet with accident while in the city.

SEC. 3. The city physician shall spend at least one hour every day at the city hall after a free dispensary shall have been established, and shall examine such persons as shall present themselves who may be ill or suffering from injury, and dispense such medicines as the case may require, and render such surgical attention as may be necessary, provided the surgical attention required can be given at the place where the examination is made. He shall, if requested so to do, give medical and surgical attention and dispense such drugs as may be furnished to him to all poor persons of the city when requested so to do by the overseers of the poor of the city, and receive

from them such compensation as the overseers of the poor have heretofore paid for such service.

SEC. 4. The city physician shall receive a salary from the city of \$550 per annum, payable monthly, and the council shall annually hereafter appropriate sufficient money to the fund for the payment of salaries to pay the salary herein provided for. The sum of \$500, or so much thereof as is necessary, is hereby appropriated out of the general fund to pay said salary for the current fiscal year.

City Dispensary—Establishment of. (Ord. Apr. 13, 1916.)

SECTION 1. That the city establish and maintain in the city hall a free dispensary, to be in charge of a city physician, who shall, under such rules and regulations as council may from time to time prescribe, dispense drugs to the poor people of the city who are unable to pay for the same.

SEC. 2. The city physician shall, immediately after this ordinance becomes effective, furnish the council with a list of the drugs which in his judgment should be supplied to the said dispensary, whereupon the superintendent of parks and public property shall advertise for bids for furnishing said drugs in the first instance and for a period of one year thereafter.

SEC. 3. The sum of \$200 is hereby appropriated from the general fund for the current fiscal year, and the council shall annually appropriate sufficient money to enable the city to maintain the dispensary herein provided for.

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