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## CERTAIN MILITARY ASPECTS OF HOOKWORM DISEASE.

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A newly formed militia unit, recently mobilized for war service, was quartered temporarily at a Government reservation where the writer was conducting some experiments. Within less than two days after reaching their quarters one of the recruits was suspected of trying to shirk his duty and the commanding officer planned to place him in confinement for discipline. The man claimed that he was not feeling well, and the lieutenant, as a matter of justice to the recruit and of protection to himself, requested me to pass upon the case medically. The diagnosis of light hookworm infection was made upon the basis of symptoms and was immediately confirmed microscopically. Treatment was instituted, and the patient promptly gained about 8 pounds in weight.

On the third day after reaching quarters a second recruit was brought for examination. He had stood guard the night before, was unable to sleep later, and complained that without sleep he was unable to drill. He gave a history of insomnia, for which he had been under treatment that had not given satisfactory results. The writer again diagnosed light hookworm infection from general symptoms and confirmed the diagnosis microscopically. After treatment this man recovered completely from his insomnia, changed remarkably in appearance and disposition, and became one of the leading spirits in the unit.

A tentative diagnosis of hookworm infection was then made of ten or more other men from their general appearance, as noticed on the most casual observation, and specimens were collected for microscopic examination.

In a total of 75 militia recruits recently examined by the writer at a Government reservation, 47 men (63 per cent) showed hookworm infection, 3 *Ascaris lumbricoides*, 1 *Hymenolepis nana*, and 1 a heavy infection with *Strongyloides*;<sup>1</sup> two recruits had double infections; 25 examinations were negative.

<sup>1</sup> Recommendation was made that the recruit (who was in the galley) with the *Strongyloides* infection be discharged, on the grounds that: (a) No satisfactory treatment is known for this condition; and (b) the risks of an early breakdown and resulting pension were so great as not to be justified.

Treatment of the infected men was instituted, and although the writer left the reservation for another station before this was completed, the physical improvement and the gain in weight and efficiency among the recruits were so marked as to produce comment even from the nonmedical men.

One of the hookworm patients was an ex-cadet from West Point, who had been "found" by a very narrow margin in his midyear examinations. Theoretically his infection was ample to account for his failure and the financial loss incurred thereby by the Government.

The foregoing experience has its lessons in the present war conditions, and the following important points in particular should be noticed:

(1) These recruits represent an unselected instance of what may be expected in certain portions of the country among average enlistments.

(2) Two volunteers were rejected because of remediable conditions clearly due to hookworm infection, and these men represent instances of a very large number of cases that will probably soon be noticed in many counties in both the Gulf-Atlantic and the southern Pacific regions.

(3) Several recruits were rejected because of underweight, and in the forthcoming selective draft there will undoubtedly be hundreds of similar cases. If the regulations permit, numerous cases of this type might justifiably be accepted provisionally, subject to the results of treatment as respects probable increase in weight.

(4) A failure to treat the hookworm cases and to eliminate at least the severe infections of *Strongyloides* will undoubtedly result in unjust and preventable punishment for offenses due to remediable conditions, considerable physical and mental inefficiency, an unnecessarily high daily "sick call," and premature and preventable pensions.

(5) If even light cases of infection with hookworms are sent to the trenches in Europe the danger is present of causing a widespread epidemic similar to the St. Gothard Tunnel epidemic, or even to the Andersonville stockade epidemic.

(6) The danger is also present that our military forces may cause a widespread infection in France and Belgium that it will take years of work and large expenditures of money to control and eradicate after the war.

(7) The dangers referred to (inefficiency, sickness, epidemics, etc.) can be prevented to a very great extent if all the recruits (or at least those from certain States) are systematically examined for intestinal parasites and either treated in the American training camps or discharged, as necessity indicates.

(8) The examination can best be a "3-slide" ("10-cover glass") test, preferably by the centrifuge method. If an examination for hookworms only is made the work will be materially lessened.

(9) This examination could be made more economically, more efficiently, and more rapidly at a central laboratory than at the separate concentration camps. The specimens could be collected at the camps and sent by parcel post, under proper precautions, to the central laboratory. This plan is evidently not free from objection from certain administrative points of view, but if adopted it would save the duplication of equipment and unnecessary training of many assistants and it would make for uniform examination.

10. As a preliminary and tentative estimate, subject to revision if necessary, it may be said that the examinations suggested would cost somewhere between 20 cents (possibly 15 cents) and 30 cents (possibly 40 cents) each. Certain factors in the expense can not, however, be definitely foreseen at present.

11. The writer's experience indicates that girls are better for this work than men, but existing circumstances make it more feasible to train men enlisted in the hospital corps to make the examinations. It takes about 1 to 3 weeks to train a person to be trustworthy in the examination. The best results are obtained if the microscopist does not have to work more than half a day at a time.

12. It would be wise to begin promptly with all units at present organized.

13. While the hookworm and *Strongyloides* examinations are the most important ones involved, the other parasites should be considered. Accordingly, the examination of recruits from the warmer portions of the country is at present more pressing than the examination of men from colder localities. The question of extending the inspection to all recruits is, however, an important one to be considered and it would be wise to extend it if time permit.

14. It seems highly probable that, even leaving out of consideration the money value of increased efficiency, the entire expenditure involved in the examination would be saved in the reduced pension roll.

15. It would be well to consider the question whether it would not be wise to combine the examination with a newspaper campaign to induce prospective recruits to take the initiative to have themselves examined and treated.

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## MALARIA IN EASTERN TEXAS.

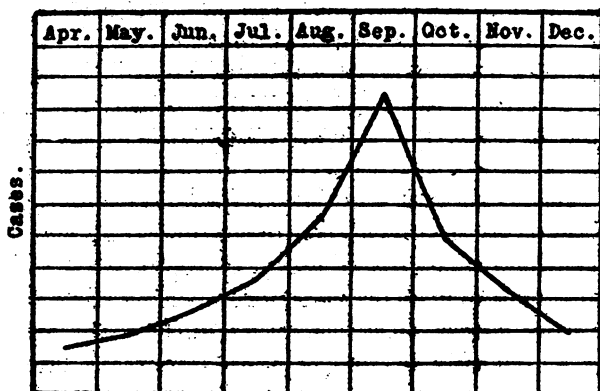
### PREVALENCE AND GEOGRAPHIC DISTRIBUTION.

The periodical circularization of the physicians of eastern Texas to determine the prevalence and geographic distribution of malarial infection in the eastern part of the State was carried on during the last nine months of 1915, and the first, second, and fourth quarters of

1916. At regular intervals reply postal cards were sent to the practicing physicians. These cards were sent out quarterly.<sup>1</sup> A reproduction of the card used during 1915 and 1916 will be found on page 1128 of the Public Health Reports of the issue of July 20, 1917.

Of the cards sent to physicians an average of less than 14 per cent were returned. Those returning the cards with the requested data filled in undoubtedly constituted the better class of practitioners, those who understood most clearly what was wanted and the value of the work. The number of cards sent out, the number of schedules returned, and the counties represented at each circularization are shown in Table No. 1.

It is to be borne in mind that the number of cases reported by the physicians by no means shows the number of cases that occurred, for an average of less than 14 per cent of the physicians returned the schedules.



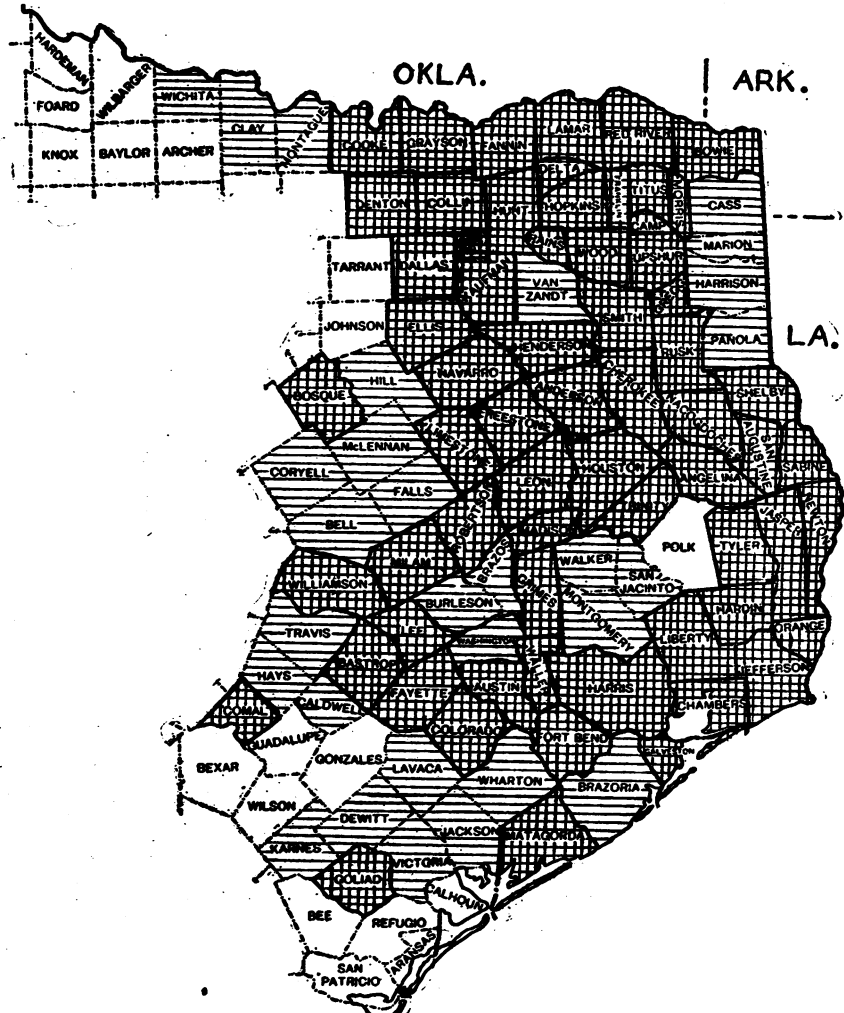
Relative prevalence of malaria in eastern Texas, by months, as indicated by the numbers of cases reported.

The return of the schedules by the physicians being a matter of voluntary cooperation, the data are undoubtedly reliable to an unusual degree as regards the experience of the physicians who cooperated and the number of cases seen by them. It is to be borne in mind, however, that the cases reported represent only those occurring in the practices of the physicians who cooperated. The total number of cases of malaria occurring in the practices of all the physicians of the State must have been many times greater, also the number of cases that occurred in which no physician was in attendance or consulted was probably much greater than the number coming under medical care.

<sup>1</sup> The work of circularization and of compilation of the data on the return cards was carried on by the late Surg. R. H. von Ezdorf up to the time of his death in September, 1916. Since then it has been carried on by Asst. Surg. E. C. Derivaux and Asst. Surg. Gen. H. R. Carter.

The physicians who cooperated were distributed as to locality throughout all sections of the State, so that the data of the occurrence of malaria furnished by them show the geographic distribution of the disease and reasonably accurately its relative prevalence in the various localities.

The cases reported by months are shown in Table No. 2. The relative numbers of cases reported by months are also shown in the chart herewith.



Relative prevalence of malaria in eastern Texas, by counties, in proportion to the population, as indicated by the numbers of cases reported.

The number of cases reported from the several counties are given by race and year in Table No. 3.

The map on page 1303 shows the relative prevalence of the disease in the several counties, the heavier shaded counties being those in

which the infection is heaviest, the unshaded counties those in which the infection is lightest, as indicated by the numbers of cases reported. The relative density of infection was determined by ascertaining the number of cases reported in each county during the entire period for which reports were received per 1,000 population. The population used was that of the 1910 census, it being impracticable to estimate populations for the period of the circularization.

By Table No. 4 it will be noted that hemoglobinuric fever was reported in seven counties.

TABLE 1.—Results of circularization of practicing physicians.

Period.	Inquiry cards sent to physicians.	Replies received.	Percentage of replies.	Counties represented in replies.	Counties not heard from.	Cases of malaria reported.
1915.						
April to June .....	3,450	584	16.93	93	17	6,773
July to September .....	3,450	576	16.70	96	14	21,259
October to December .....	3,450	492	14.26	92	19	11,576
1916.						
January to March .....	3,450	450	13.04	91	20	2,445
April to June .....	3,450	363	10.67	87	23	5,908
October to December .....	3,590	403	11.49	90	20	3,529

TABLE 2.—Cases of malaria reported by months.

Year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1915.....				1,606	2,161	3,006	4,129	6,455	10,675	5,525	3,771	2,280
1916.....	748	700	997	1,179	1,753	2,977				1,515	1,233	781

TABLE 3.—Cases reported by counties, by years, and by color.

County.	Apr. 1 to Dec. 31, 1915.			Jan. 1 to June 30 and Oct. 1 to Dec. 31, 1916.		
	White.	Colored.	Combined.	White.	Colored.	Combined.
Anderson.....	228	103	329	106	15	121
Angelina.....	90		90	52		52
Aransas.....						
Archer.....	1		1			
Austin.....	380	367	747	187	52	239
Bastrop.....	671	99	770	97	58	155
Baylor.....	5		5	3	1	4
Bee.....						
Bell.....	118		118	57	1	58
Bexar.....	71	7	78	31	15	46
Bosque.....	206	10	216	65	2	67
Bowie.....	384	104	488	137	62	199
Brazoria.....	38	35	73			
Brazos.....	100	4	104	25		25
Burleson.....	22	34	56	19	48	67
Caldwell.....	12	2	14	14	11	25
Calhoun.....						
Camp.....	74	44	118			
Cass.....	121	28	149	8	4	12
Chambers.....				56	38	94
Cherokee.....	259	180	439	6		6
Clay.....	34	3	37	46	4	50

TABLE 3.—Cases reported by counties, by years, and by color—Continued.

County.	Apr. 1 to Dec. 31, 1915.			Jan. 1 to June 30 and Oct. 1 to Dec. 31, 1916.		
	White.	Colored.	Com-bined.	White.	Colored.	Com-bined.
Collin.....	402	60	462	180	11	191
Colorado.....	87	38	125	21	33	54
Comal.....	104	6	110	43	8	51
Cooke.....	204	10	214	14	.....	14
Coryell.....	41	2	43	7	.....	7
Dallas.....	548	113	661	418	56	474
Delta.....	352	58	410	110	22	132
Denton.....	301	25	326	138	3	141
De Witt.....	64	47	111	11	5	16
Eastland.....	.....	.....	.....	.....	.....	.....
Ellis.....	350	171	521	255	40	295
Falls.....	63	37	100	52	37	89
Fannin.....	233	54	287	46	11	57
Fayette.....	352	172	524	109	47	156
Foard.....	.....	.....	.....	13	.....	13
Fort Bend.....	98	126	224	6	18	24
Franklin.....	.....	.....	.....	64	19	83
Fresstone.....	1,504	217	1,721	266	60	326
Goliad.....	20	17	37	24	16	40
Gonzales.....	14	1	15	2	.....	2
Grayson.....	565	106	671	338	24	362
Gregg.....	149	96	245	173	128	301
Grimes.....	102	168	270	87	116	203
Guadalupe.....	.....	.....	.....	.....	.....	.....
Hardeman.....	11	.....	11	3	.....	3
Hardin.....	167	44	211	4	2	6
Harris.....	1,519	508	2,027	298	29	327
Harrison.....	38	29	67	22	35	57
Hays.....	16	1	17	11	10	21
Henderson.....	169	42	211	350	133	683
Hill.....	238	49	287	3	.....	3
Hopkins.....	463	181	644	91	45	136
Houston.....	624	488	1,112	103	71	174
Hunt.....	614	48	662	152	29	181
Jackson.....	25	5	30	7	.....	7
Jasper.....	192	71	263	29	25	54
Jefferson.....	286	414	700	85	9	94
Johnson.....	28	8	36	11	.....	11
Karnes.....	55	8	63	28	1	29
Kaufman.....	733	123	856	88	31	119
Kleberg.....	.....	.....	.....	14	1	15
Knox.....	12	.....	12	.....	.....	.....
Lamar.....	509	169	1,378	119	44	163
Lavaca.....	99	20	119	33	1	34
Lee.....	326	70	396	101	28	129
Leon.....	1,745	691	2,436	235	177	412
Liberty.....	110	30	140	325	73	398
Limestone.....	1,731	282	2,013	28	7	35
McLennan.....	270	51	321	111	52	163
Madison.....	1,012	81	1,093	92	14	106
Marion.....	.....	.....	.....	62	.....	62
Matagorda.....	115	133	248	39	22	61
MHau.....	343	148	491	82	53	135
Montague.....	18	.....	18	24	.....	24
Montgomery.....	.....	.....	.....	.....	.....	.....
Morris.....	1,493	800	2,293	90	70	160
Nacogdoches.....	474	308	782	234	92	326
Navarro.....	235	56	291	86	45	131
Newton.....	176	.....	176	.....	.....	.....
Orange.....	168	24	192	.....	.....	.....
Panola.....	5	1	6	67	49	116
Polk.....	7	.....	7	13	.....	13
Rains.....	.....	.....	.....	100	.....	100
Red River.....	877	210	1,087	209	34	243
Refugio.....	.....	.....	.....	.....	.....	.....
Robertson.....	280	337	617	238	66	304
Rockwall.....	186	59	245	7	3	10
Rusk.....	754	283	1,037	136	68	204
Sabine.....	182	22	204	199	19	218
San Augustine.....	189	28	217	575	26	601
San Jacinto.....	26	27	53	.....	.....	.....
San Patricio.....	2	.....	2	3	.....	3
Shelby.....	340	10	350	63	20	83
Smith.....	456	128	584	197	116	313
Tarrant.....	220	76	296	53	10	63
Titus.....	372	10	382	51	3	54
Travis.....	79	5	84	30	19	49

TABLE 3.—Cases reported by counties, by years, and by color—Continued.

County.	Apr. 1 to Dec. 31, 1915.			Jan. 1 to June 30 and Oct. 1 to Dec. 31, 1916.		
	White.	Colored.	Com-bined.	White.	Colored.	Com-bined.
Trinity.....	180	215	395	60	24	84
Tyler.....	179	16	195	54	28	82
Upshur.....	624	458	1,082	83	30	113
Van Zandt.....	64	16	80	78	7	85
Victoria.....	34	4	38	4	.....	4
Walker.....	26	25	51	14	18	32
Waller.....	96	119	215	.....	.....	.....
Washington.....	112	29	141	6	.....	6
Wharton.....	6	2	8	25	19	44
Wichita.....	37	19	56	11	1	12
Willbarger.....	9	.....	9	.....	.....	.....
Williamson.....	477	57	534	159	78	237
Wilson.....	37	5	42	2	1	3
Wood.....	859	217	1,076	190	106	296
Total.....	29,504	10,104	39,608	9,073	2,809	11,882

TABLE 4.—Hemoglobinuric fever reported, 1916.

County.	Period.	Cases.
Denton.....	First quarter.....	1
Hopkins.....	do.....	1
Wood.....	do.....	2
Delta.....	Second quarter.....	2
Henderson.....	Fourth quarter.....	5
Morris.....	do.....	1
Titus.....	do.....	1

## TYPHOID FEVER.

### EPIDEMIC AT CHARLESTON, W. VA., APRIL-JUNE, 1917.

By A. W. FREEMAN, Epidemiologist, United States Public Health Service.

During the month of May, 1917, an unusually large number of cases of a fever, diagnosed by the local physicians as typhoid, began to be reported to the health commissioner of the city of Charleston. The dates of report of these cases are given in Table 1.

During the months of May and June, 127 cases were reported, and early in May the matter attracted the attention of the West Virginia State board of health. An investigation was immediately begun by the board. Shortly afterwards request was made of the Surgeon General of the Public Health Service that an investigation be made into the causes of the epidemic. This investigation, of which the following is a report, was begun on the evening of June 16, and completed on the evening of June 26. It was conducted in cooperation with the city and State boards of health, and much of the information used in this report was obtained from these authorities.



### Scope of the Investigation.

The investigation included the collection of the usual epidemiological evidence regarding all reported cases, and regarding also a number of unreported cases which were discovered during the investigation. In addition, investigation was made of the public water supply, the milk supply, and the general sanitary environment of the community. Associated with the writer were Prof. Earl B. Phelps, professor of chemistry in the Hygienic Laboratory, and Sanitary Bacteriologist E. E. Smith. Prof. Phelps conducted the investigations into the public water supply and sewerage systems, and Mr. Smith made bacteriological examinations of the raw and treated water from the public supply.

TABLE 1.—Date of report of cases, typhoid fever, Charleston, May 1–June 25, 1917.

Date.		Cases.	Date.		Cases.
May 1.....		2	June 1.....		4
8.....		1	2.....		1
9.....		1	4.....		9
11.....		2	7.....		12
14.....		1	8.....		12
15.....		8	9.....		4
16.....		2	11.....		2
17.....		1	12.....		7
18.....		4	13.....		8
20.....		1	14.....		1
22.....		7	16.....		6
23.....		1	17.....		3
25.....		1	18.....		2
27.....		4	19.....		1
28.....		1	20.....		3
29.....		2	21.....		2
30.....		3	22.....		1
31.....		1	23.....		3
			25.....		2
Total.....		43	Total.....		83
May.....					43
June.....					83
Unknown.....					1
Total.....					127

### Epidemiological Investigations.

Epidemiological investigations were made of 141 cases of reported and probable typhoid fever. Of these, 113 were cases reported to the health commissioner by physicians, and 28 were cases occurring in the neighborhood of reported cases, which were not reported, but were discovered during the course of the investigation. The homes of these 141 patients were visited and the data collected at first hand. For the detailed work of investigation of these cases, the writer is indebted to Dr. Harold B. Wood, Assistant Commissioner of Health for West Virginia, who personally visited most of the cases and supervised the visiting of the remainder.

### Diagnosis.

Of the 127 reported cases, 120 were diagnosed as typhoid fever by the attending physician. The remaining seven were diagnosed "paratyphoid" or "probable paratyphoid." The diagnoses of

“paratyphoid” and “probable paratyphoid” were all made by two physicians. The remainder of the physicians who reported cases agreed that the disease was true typhoid fever. Positive Widal's were obtained on numerous cases by the city chemist and by other physicians who made laboratory tests, and the cases seen by the writer were apparently true typhoid fever. There seems, therefore, no reason to doubt the fact that the epidemic was one of typhoid fever.

**Clinical Course.**

The clinical course of the disease was apparently unusually mild. Many cases had fever for only a few days, and severe cases were apparently rare. In at least one instance, however, three cases in children, members of one family, who were attacked at the same time had strikingly different courses. One child had fever for one day only, another had fever for three or four days, while the third went into a typical course of prolonged fever with the usual picture of severe typhoid infection. Only three fatalities had occurred at the time of closing the investigation.

**Age Distribution of Cases.**

The age distribution of the cases was quite striking, by reason of the preponderance of children among those attacked. Of the 141 cases investigated, 4 were under 1 year of age, and 29 were under 5 years of age, while 37 were between 5 and 9 years, 30 were between 10 and 14 years, and 16 were between 15 and 19 years of age. Of the 141 cases, only 29 were 20 years of age and over. The age distribution of the cases is shown in detail in Table 2.

**Sex Distribution.**

As is usual in typhoid outbreaks, the males were attacked in marked excess as compared with the females, 80 males being comprised in the present series as against 61 females. The preponderance of males is found at all ages, except for the group between the ages of 15 and 19, in which there were 5 males as against 11 females.

TABLE 2.—Typhoid fever, Charleston, W. Va., April-June, 1917—Age and sex distribution of cases.

Age in years.	Number of males.	Number of females.	Both sexes.	Age in years.	Number of males.	Number of females.	Both sexes.
Under 1.....	4	0	4	25 to 29.....	1	3	4
1 to 4.....	14	11	25	30 to 34.....	3	3	6
Total under 5.....	18	11	29	35 to 39.....	2	1	3
5 to 9.....	23	14	37	40 to 44.....	1	0	1
10 to 14.....	18	12	30	45 and over.....	2	1	3
15 to 19.....	5	11	16	Total.....	80	61	141
20 to 24.....	7	5	12				

TABLE 3.—Occupation of patients.

School.....	57	Park manager.....	1
None <sup>1</sup> .....	45	Waiter.....	1
Housewife.....	10	Bank clerk.....	1
Bookkeeper.....	4	Telephone operator.....	1
Nurse.....	1	Machinist.....	1
Clerk.....	1	Collector.....	1
Tailor.....	1	Soldier.....	1
Real estate.....	1	Grocer.....	2
Coal dealer.....	1	Street car conductor.....	1
Teacher.....	2	Unknown.....	5
Ax grinder.....	1		
Restaurant.....	1	<b>Total.....</b>	<b>141</b>
Servant.....	1		

TABLE 4.—Onset of cases, by days.

Date.	Cases.	Date.	Cases.	Date.	Cases.
Apr. 14.....	1	May 16.....	3	June 1.....	1
20.....	1	17.....	1	2.....	8
29.....	1	18.....	1	3.....	8
	3	19.....	3	4.....	1
		20.....	5	5.....	6
May 1.....	4	21.....	1	6.....	1
2.....	4	22.....	2	7.....	3
3.....	1	23.....	2	8.....	6
4.....	4	24.....	4	9.....	3
5.....	3	25.....	5	10.....	6
6.....	7	26.....	5	14.....	1
7.....	1	27.....	5	15.....	1
8.....	3	28.....	4	18.....	1
10.....	2	29.....	5		
11.....	6	30.....	3		46
12.....	1	31.....	5		
15.....	1		91	Date unknown.....	1

## SUMMARY.

April cases.....	3
May cases.....	91
June cases.....	46
Unknown date.....	1
<b>Total.....</b>	<b>141</b>

## Occupation.

As might be expected from a study of the age distribution, a large number of cases occurred in school children, and in children without occupation. The occupations of the remainder of the patients, however, were widely diversified, and included practically all grades and classes of society in Charleston. The occupations of the various cases are given in detail in Table 3.

## Chronology.

The chronology of the cases is given in detail in Table 4. The first cases appeared on April 14, 20, and 29, while the epidemic proper may be said to have begun on May 1. Between May 1 and 15 occurred

<sup>1</sup> Mostly children under school age.

a group of cases, 36 in number. This period was succeeded by a period of four days in which only a few cases occurred, and this in turn by a period, lasting from May 19 to June 10, which was the most severe of the entire epidemic, and in which 93 cases occurred.

#### Location of the Cases.

The location of the cases was quite striking, in that the best residential districts of the city were most severely attacked, the outlying territory being almost free from the disease. In particular, cases occurred mainly in those portions of the city covered by the public water and sewerage systems. That portion of the city in which are found the majority of wells and privies had but few cases. The major portion of the cases were in the thickly built up sections, where general sanitary conditions are best.

#### Food.

Careful investigation was made into the sources of the water used regularly and of other water used occasionally for drinking by the patients, and into the source of ice, butter, ice cream, shellfish and fresh vegetables used by the patients. The results of this inquiry are summarized in the following paragraphs.

#### Water Supply.

There are available as sources of water supply in the city of Charleston, the public water supply, which is said to be used by approximately 90 per cent of the population, 172 private wells which serve approximately 600 families, or 10 per cent of the population, and several spring waters which are vended in the city for drinking.

Of the 141 cases, all occurred on premises supplied with the public water supply. One case, an infant of six months, was said to have drunk only boiled water, the remaining 140 having used the city water regularly for drinking. Eleven cases had been out of town during the period of probable infection and had drunk other waters at that time. Of the 141 cases investigated, however, 129 had drunk no water other than the city supply. No cases occurred in a family which used well water for domestic purposes, and no cases occurred in the users of the vended spring waters.

#### Milk.

There are 135 dealers supplying milk in the city of Charleston. Most of these are located in or near the city and furnish only a few gallons of milk a day. A small amount of milk is shipped in from a distance, but is pasteurized before delivery. The local milk is supplied without pasteurization. There are no large dealers, the largest dealer supplying only about 5 per cent of the population of the city.

Of the 141 cases investigated, the source of milk supply could be determined accurately in 129 cases. In 10 cases the source of the supply was not known, and in 2 cases the supply came from various sources. Of the 129 cases whose source of supply was accurately determined, 14 used no milk whatever, 16 used only condensed milk, 9 kept a cow on the premises and 7 purchased milk from a neighbor who kept a cow.

Of the 129 cases, therefore, 46, or 35.6 per cent, did not use milk from the general supply. The 83 cases using milk from the general supply were distributed among 41 different dealers, and not more than 7 cases bought milk from any one dealer.

#### Ice.

Of the 141 cases, the source of supply of ice was determined in 103 cases. The supply in these cases was as follows:

	Cases
Manufacturer "A".....	46
Manufacturer "B".....	23
No ice prior to illness.....	34

"A" and "B" are the only two manufacturers of ice for domestic purposes in the city. Their daily capacity is as follows:

	Tons.
Plant "A".....	42
Plant "B".....	25

The ice supplied by these manufacturers is all made from distilled water under the conditions usual in such plants.

#### Ice Cream.

There are no large manufacturers of ice cream in the city, and most of the cream manufactured is made from pasteurized milk or cream. Of the 141 cases of typhoid, 25 stated positively that they had not eaten any ice cream other than that made at home during the probable period of infection. The history of the remainder was doubtful as to having eaten any cream, and no evidence pointing to the use of any common source of supply could be obtained.

#### Shellfish.

The epidemic came at a time of the year when little or no shellfish was on the market at Charleston, and no history of having eaten any raw shellfish could be obtained from the cases.

#### Fresh Vegetables.

The fresh vegetables used in Charleston are almost entirely shipped in from a distance. At the time of the outbreak practically no fresh vegetables of local origin were on the market. The sources of supply

of the cases were distributed through the various dealers of the city, the large majority purchasing at the nearest greengrocery. There was no evidence of any common source of supply.

#### **Public Entertainments.**

The extent of the epidemic, lasting over a period of nearly two months, in itself precluded the possibility that the outbreak might have arisen from infection received from any single public gathering. Early in the epidemic the suspicion was aroused that the coming of two circuses, on April 28 and 30, respectively, might have given rise to the epidemic. The outbreak came too soon after the coming of these circuses, however, and lasted too long after their departure to make this supposition tenable.

#### **Absences from Home.**

Of the 141 cases, only 11 had been away from Charleston during the probable period of infection. The infection of the majority of the cases, therefore, was undoubtedly received in Charleston.

#### **Summary of the Evidence.**

The evidence presented above may be summarized as follows: The infection was evidently contracted in Charleston. The chronology and distribution of the cases would indicate that the infection was present in repeated instances in some medium of food or drink of general distribution throughout the city.

The infection was confined to those parts of the city which are supplied by the public water supply, and the sections of the city supplied by wells were markedly free from disease. The sections of the city which are unsewered, and in which surface privies are common, were also spared to a marked degree.

The infection was confined to the habitual users of the public water supply.

Milk, ice, ice cream, shellfish and fresh vegetables could be definitely excluded as possible causes of such an outbreak.

The absence of the disease in the unsewered sections of the city, the absence of flies at the beginning of the outbreak, and the general chronology of the outbreak would tend to exclude spread from insanitary privies by flies and other mechanical means as possible causes of the epidemic.

#### **Conclusion from Epidemiological Evidence.**

The conclusion to be drawn from a study of the epidemiological evidence, is that the outbreak was caused by infection conveyed by the public water supply.

**Recommendations Made.**

Recommendations were made to the water plant regarding the proper operation of the plant to cover the immediate emergency, and further recommendations were made that a competent bacteriologist be at once employed, and that the operation of the plant be placed in his hands with daily bacteriological controls of the raw and filtered water, continuous application of coagulants and a dose of chlorine approximately 0.5 parts per million. It is believed that these recommendations, if faithfully carried out, will prevent a similar outbreak in the future.

In view of the large number of surface privies in the city, recommendations were made to the acting health commissioner that the effort be at once made to secure the fly proofing of all privies in the city, the immediate removal of all accumulations of manure, and the general cleaning up of the community, for the purpose of preventing the access of flies to potentially infected feces and also, as far as possible, to prevent the breeding of flies. Unless these precautions are taken, a secondary outbreak of typhoid fever, caused by fly transmission, is possible.

In view of the large number of dairies supplying the city the danger of a secondary milk outbreak of large proportions is not as great as it might be. Small outbreaks may be expected, however, and can be prevented only by the installation of a pasteurizing plant for the pasteurization of all milk sold in the city.

# 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.

### CURRENT STATE SUMMARIES.

#### California Report for the Week Ended August 11, 1917.

The California State Board of Health reported concerning the status of preventable diseases in California for the week ended August 11, 1917, as follows: Two cases of anthrax in man, one fatal, were notified in San Francisco, contracted near Sonoma, Sonoma County, where there is an outbreak on ranches. Of cerebrospinal meningitis, four cases were notified, one each at Oakland, San Diego, San Francisco, and Stockton. One case of poliomyelitis was reported at Oakland and one case at Pasadena. Cases of typhoid fever were notified as follows: Sacramento, 5; Modesto, 5; San Francisco, 3; Oakland, 3; Turlock, 2; San Diego, 2; Long Beach, 2; Colusa, 2; Pinole, 1; Richmond, 1; Los Angeles, 1; Stockton, 1; Rio Vista, 1. Slight increases were noted in measles, mumps, chicken pox, and whooping cough.

The details of notifiable disease cases reported during the week ended August 4, are as follows:

	Cases.		Cases.
Anthrax.....	2	Pneumonia.....	10
Cerebrospinal meningitis.....	2	Poliomyelitis.....	1
Chicken pox.....	11	Scarlet fever.....	28
Diphtheria.....	17	Smallpox.....	4
Erysipelas.....	3	Syphilis.....	30
German measles.....	17	Tetanus.....	1
Gonococcus infection.....	61	Trachoma.....	1
Malaria.....	14	Tuberculosis.....	95
Measles.....	48	Typhoid fever.....	33
Mumps.....	47	Whooping cough.....	15
Pellagra.....	2		

### ANTHRAX.

#### Mississippi—Harrison County.

On August 10, 1917, 4 cases of anthrax were reported from Harrison County, Miss., 2 cases having occurred on June 25 and 2 cases on July 12.



**ANTHRAX—Continued.****New York—Endicott.**

On August 1, 1917, a case of anthrax was reported at Endicott, Broome County, N. Y. The patient contracted the disease on June 25, probably in handling India hides.

**South Dakota—Mitchell.**

On August 9, 1917, a case of anthrax was notified at Mitchell, S. Dak.

**Texas.**

On July 20, 1917, a case of anthrax was notified on a ranch in Refugio County, Tex. The patient contracted the disease on July 18 while skinning dead animals.

**CEREBROSPINAL MENINGITIS.****Kansas.**

During the two weeks ended August 11, 1917, new cases of cerebrospinal meningitis were notified in Kansas, as follows: Kansas City, 1; Newton, 1; Waverly, 1; Wellington, 1.

**Louisiana—Jackson.**

On August 7, 1917, one case of cerebrospinal meningitis was reported in Jackson, East Feliciana Parish, La.

**Massachusetts.**

During the week ended August 11, 1917, new cases of cerebrospinal meningitis were notified in Massachusetts as follows: Boston, 1; Pittsfield, 1.

**State Reports for July, 1917.**

Place.	New cases reported.	Place.	New cases reported.
District of Columbia.....	2	Massachusetts—Continued.	
Massachusetts:		Plymouth County—	
Berkshire County—		Brockton.....	1
Pittsfield.....	3	Suffolk County—	
Bristol County—		Boston.....	4
Attleborough.....	1	Total.....	16
New Bedford.....	2	West Virginia:	
Essex County—		Kanawha County.....	1
Haverhill.....	2	Ohio County—	
Hampshire County—		Wheeling.....	2
Northampton.....	1	Roane County—	
Middlesex County—		Reedy.....	2
Everett.....	1	Total.....	5
Malden.....	1		

**CEREBROSPINAL MENINGITIS—Continued.**

**State Reports for June, 1917.**

Place.	New cases reported.	Place.	New cases reported.
Montana:		Virginia—Continued.	
Cascade County.....	2	Montgomery County.....	1
Virginia:		Rappahannock County.....	1
Alleghany County.....	1	Russell County.....	2
Amherst County.....	1	Smyth County.....	1
Carroll County.....	1	Stafford County.....	1
Lunenburg County.....	1	Total.....	10

**City Reports for Week Ended July 28, 1917.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....	1	2	Newark, N. J.....	2	1
Bridgeport, Conn.....	1		New Bedford, Mass.....	1	
Chicago, Ill.....	6	4	Newport, R. I.....		1
Cleveland, Ohio.....	2		New York, N. Y.....	5	2
Detroit, Mich.....		1	Omaha, Nebr.....	1	2
Duluth, Minn.....		1	Philadelphia, Pa.....	6	2
Elizabeth, N. J.....	2		Pittsburgh, Pa.....	1	2
Everett, Mass.....	1		Pittsfield, Mass.....		1
Haverhill, Mass.....		1	Providence, R. I.....	1	
Kenosha, Wis.....		1	San Francisco, Cal.....	2	1
McKeesport, Pa.....		1	Saginaw, Mich.....		2
Memphis, Tenn.....	1		Syracuse, N. Y.....	1	
Milwaukee, Wis.....	1	1	Washington, D. C.....	1	

**DIPHTHERIA.**

**Rhode Island—Newport.**

An outbreak of diphtheria began at Newport, R. I., July 24, 1917, reaching its climax between August 1 and 5. Surgeon McCoy, of the United States Public Health Service, reports that indications point to contaminated dairy products, principally ice cream, as the means of distribution. A large proportion of the patients are adults. There have been no deaths reported. Since the beginning of the outbreak, 281 cases have been notified in Newport, 50 cases in Portsmouth, and 21 cases in Jamestown.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1327.

**ERYSIPELAS.**

**City Reports for Week Ended July 28, 1917.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....	1	1	Kalamazoo, Mich.....		1
Boston, Mass.....	1	1	Long Beach, Cal.....	1	
Bridgeport, Conn.....	1		Los Angeles, Cal.....	2	
Buffalo, N. Y.....	2		Malden, Mass.....		1
Cambridge, Mass.....		1	Milwaukee, Wis.....	3	
Chicago, Ill.....	9	1	Philadelphia, Pa.....	2	2
Cincinnati, Ohio.....	2		Pittsburgh, Pa.....	4	
Denver, Colo.....	1		St. Louis, Mo.....	1	
Detroit, Mich.....	3	1	Springfield, Ill.....	1	
Harrisburg, Pa.....	1		Wichita, Kans.....	1	

## GLANDERS.

## Massachusetts—Human Case.

Collaborating Epidemiologist Kelley reported the occurrence, during the month of July, 1917, in Massachusetts, of a case of glanders in the person of a stableman.

## LEPROSY.

## Nevada—White Pine County.

On August 13, 1917, a case of leprosy was reported in White Pine County, Nevada.

## MALARIA.

## Massachusetts Report for July, 1917.

Place.	New cases reported.	Place.	New cases reported.
<b>Massachusetts:</b>		<b>Massachusetts—Continued:</b>	
Hampden County—		Suffolk County—	
Chicopee.....	2	Boston.....	6
Middlesex County—		Total.....	11
Natick (town).....	1		
Norfolk County—			
Dedham (Town).....	2		

## Virginia Report for June, 1917.

Place.	New cases reported.	Place.	New cases reported.
<b>Virginia:</b>		<b>Virginia—Continued.</b>	
Accomac County.....	11	Hanover County.....	17
Chincoteague Island.....	7	Henrico County.....	33
Greenbackville.....	6	Henry County.....	3
Albemarle County.....	2	Martinsville.....	1
Alexandria County—		Isle of Wight County.....	11
Alexandria.....	7	Smithfield.....	10
Amherst County—		James City County.....	13
Amherst.....	2	King and Queen County.....	57
Appomattox County.....	2	King George County.....	1
Bedford County.....	4	King William County.....	7
Brunswick County.....	36	West Point.....	13
Lawrenceville.....	5	Lancaster County.....	13
Buckingham County.....	4	Loudoun County.....	1
Campbell County.....	8	Leesburg.....	2
Altavista.....	4	Louisa County.....	3
Brookneal.....	2	Lunenburg County.....	3
Caroline County.....	25	Victoria.....	3
Charles City County.....	1	Mathews County.....	3
Charlotte County.....	4	Mecklenburg County.....	16
Drakes Branch.....	2	Clarksville.....	5
Chesterfield County.....	10	South Hill.....	1
Winterpock.....	2	Middlesex County.....	10
Cumberland County.....	13	Urbanna.....	2
Dickenson County.....	8	Nansemond County.....	17
Dinwiddie County.....	12	Suffolk.....	25
Elizabeth City County—		Nelson County.....	3
Hampton.....	2	Norfolk County—	
Essex County.....	9	Norfolk.....	20
Fairfax County.....	2	Northampton County.....	18
Fluvanna County.....	1	Cape Charles.....	1
Gloucester County.....	8	Northumberland County.....	23
Greensville County.....	27	Reedville.....	6
Emporia.....	10	Nottoway County.....	10
North Emporia.....	16	Burkeville.....	2
Halifax County.....	19	Orange County.....	1
Houston.....	1	Page County.....	10
South Boston.....	9	Luray.....	8

**MALARIA—Continued.**

**Virginia Report for June, 1917—Continued.**

Place.	New cases reported.	Place.	New cases reported.
Virginia—Continued.		Virginia—Continued.	
Patrick County—		Shenandoah County.....	1
Stuart.....	1	Southampton County.....	26
Pittsylvania County.....	32	Franklin.....	11
Chatham.....	2	Spotsylvania County.....	3
Powhatan County.....	11	Stafford County.....	9
Princess Anne County.....	30	Surry County.....	8
Prince Edward County.....	5	Claremont.....	2
Farmville.....	1	Sussex County.....	22
Prince George County.....	15	Warwick County.....	30
Hopewell.....	22	Westmoreland County.....	10
Richmond County.....	1	Colonial Beach.....	2
Rockbridge County.....	3	York County.....	11
Scott County.....	1		
Gate City.....	1	<b>Total.....</b>	<b>911</b>

**Colorado Report for May, 1917.**

During the month of May, 1917, 1 case of malaria was reported in Montezuma County, Colo.

**City Reports for Week Ended July 28, 1917.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....		1	Memphis, Tenn.....		1
Birmingham, Ala.....		5	Newark, N. J.....	1	
Boston, Mass.....	4		New Orleans, La.....	1	1
Charleston, S. C.....	1	1	New York, N. Y.....		1
Columbia, S. C.....	5	1	Portsmouth, Va.....		1
East Orange, N. J.....	1		Richmond, Va.....	2	
Little Rock, Ark.....	3		Savannah, Ga.....	2	

**MEASLES.**

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1327.

**PELLAGRA.**

**State Reports for July, 1917.**

Place.	New cases reported.	Place.	New cases reported.
District of Columbia.....	2	Vermont:	
Massachusetts:		Rutland County.....	1
Middlesex County—		West Virginia:	
Natick (town).....	1	Randolph County—	
Worcester County—		Mill Creek.....	1
Milford (town).....	1		
<b>Total.....</b>	<b>2</b>		

**PELLAGRA—Continued.**  
**Virginia Report for June, 1917.**

Place.	New cases reported.	Place.	New cases reported.
<b>Virginia:</b>		<b>Virginia—Continued.</b>	
Alexandria County.....	1	Henry County.....	2
Amelia County.....	1	James City County.....	4
Amherst County.....	1	Williamsburg.....	4
Amherst.....	2	King and Queen County.....	2
Augusta County.....	1	Lee County.....	2
Bedford County—		Mecklenburg County.....	2
Bedford City.....	1	Middlesex County—	1
Brunswick County—		Urbans.....	1
Lawrenceville.....	1	Nottoway County—	
Buckingham County—		Burkeville.....	1
Buckingham.....	1	Patrick County.....	4
Campbell County.....	1	Stuart.....	1
Caroline County.....	1	Pittsylvania County.....	2
Chesterfield County—		Powhatan County.....	1
Winterpock.....	3	Richmond County.....	1
Dinwiddle County.....	4	Roanoke County.....	2
Fairfax County.....	1	Rockbridge County.....	1
Fluvanna County.....	1	Buena Vista.....	1
Greensville County.....	4	Spotsylvania County—	
Emporia.....	1	Fredericksburg.....	1
North Emporia.....	2	Tazewell County.....	1
Halifax County.....	2	Washington County.....	8
South Boston.....	1		
Hanover County.....	1	Total.....	69

**City Reports for Week Ended July 28, 1917.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala.....	19		New Orleans, La.....	1	1
Charleston, S. C.....		3	New York, N. Y.....		1
Columbia, S. C.....		1	Philadelphia, Pa.....	1	
Kalamazoo, Mich.....	1	1	Richmond, Va.....		1
Knoxville, Tenn.....	1		Rocky Mount, N. C.....	1	
Lynchburg, Va.....		1	Rutland, Vt.....	1	
Mobile, Ala.....		2	Savannah, Ga.....		2
Nashville, Tenn.....	1		Wilmington, N. C.....		1

<sup>1</sup> The reason that Birmingham had so many more cases of pellagra reported than any other city is not that the disease is more prevalent in Birmingham than in other cities of Alabama and neighboring States, but undoubtedly because of the successful efforts the health department has made in securing the cooperation of the practicing physicians in reporting cases.

**PLAGUE.**

**Washington—Seattle—Plague-Infected Rats Found.**

During the period from March 16 to 28, 1917, 3 plague-infected rats were found at the Pike Place Market, Seattle, Wash.

**PNEUMONIA.**

**City Reports for Week Ended July 28, 1917.**

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlantic City, N. J.....	1		Lynn, Mass.....	2	
Auburn, N. Y.....	1	1	Malden, Mass.....	1	1
Berkeley, Cal.....	1	1	Manchester, N. H.....	1	1
Boston, Mass.....	5	7	McKeesport, Pa.....	1	
Canton, Ohio.....	1	1	Newark, N. J.....	12	
Chelsea, Mass.....	1	1	Newport, Ky.....	1	1
Chicago, Ill.....	56	39	Philadelphia, Pa.....	21	9
Cleveland, Ohio.....	7	9	Pittsburgh, Pa.....	3	3
Detroit, Mich.....	7	18	Pontiac, Mich.....	2	2
Flint, Mich.....	3	2	Rochester, N. Y.....	4	1
Kansas City, Mo.....	1	7	San Francisco, Cal.....	6	8
Lawrence, Mass.....	1		Worcester, Mass.....	1	1

POLIOMYELITIS (INFANTILE PARALYSIS).

Cases Reported, August 9 to 15, 1917.

The following table shows the number of cases of poliomyelitis reported to the United States Public Health Service from August 9 to 15, 1917. This is an addition to and continuation of the table published in the Public Health Reports, August 10, 1917, pages 1283 to 1285.

Place.	Period.	Cases.	Place.	Period.	Cases.
California:			Ohio—Continued.		
Alameda County—			Montgomery County—		
Oakland.....	Aug. 5 to 11..	1	Dayton.....	July.....	2
Los Angeles County—			Monroe County—	do.....	1
Pasadena.....	do.....	1	Jerusalem.....	do.....	1
Connecticut:			Perry County—	do.....	1
Middlesex County.....	do.....	1	New Lexington.....	do.....	1
Delaware:			Pickaway County—	do.....	1
New Castle County—			Deercreek Township.....	do.....	1
McClellandsville.....	Aug. 6 to 12..	1	Portage County—	do.....	1
Illinois:			Kent.....	do.....	1
Cook County.....	Aug. 5 to 11..	8	Stark County—	do.....	2
Hancock County.....	do.....	2	Canton.....	do.....	2
McLean County.....	do.....	1	Summit County—	do.....	2
Will County.....	do.....	1	Cuyahoga Falls.....	do.....	2
Kansas:			Tuscarawas County—	do.....	2
Allen County—			Uhrichsville.....	do.....	2
Elsmore.....	July 29 to	1	Wood County—	do.....	1
Moran.....	Aug. 4.....	1	Plain Township.....	do.....	1
Riley County—			Troy Township.....	do.....	1
Randolph.....	Aug. 5 to 11..	1	Virginia:		
Shawnee County—			Alexandria County—		
Topeka.....	July 29 to	1	Alexandria.....	Aug. 12 to 14..	1
Sumner County—	Aug. 4.....	1	Amherst County.....	do.....	1
Milan.....	Aug. 5 to 11..	1	Augusta County—		
Kentucky:			Fishersville.....	do.....	1
Jefferson County—			Mount Meridian.....	Aug. 1 to 11..	1
Louisville.....	Aug. 3 to 9..	2	Fauquier County—		
Maryland:			Hume.....	do.....	1
Alleghany County.....	Aug. 6 to 11..	3	Greene County—		
Baltimore County.....	do.....	2	Ruckersville.....	do.....	5
Prince George County.....	do.....	1	Standardsville.....	do.....	5
Massachusetts:			Middlesex County—		
Essex County—			Saluda.....	Aug. 12 to 14..	1
Haverhill.....	Aug. 5 to 15..	6	Page County.....	do.....	3
Saugus.....	Aug. 14.....	1	Roanoke County.....	do.....	1
Middlesex County—			Rockingham County.....	Aug. 1 to 11..	3
Lovell.....	Aug. 5 to 11..	1	Dayton.....	Aug. 12 to 14..	1
Marlboro.....	do.....	1	Shenandoah County—		
Natick (town).....	do.....	1	Conleville.....	do.....	1
Stoneham (town).....	do.....	1	Quicksburg.....	Aug. 1 to 11..	1
Plymouth County—			Warren County.....	Aug. 12 to 14..	1
East Bridgewater			Front Royal.....	Aug. 1 to 11..	5
(town).....	do.....	1	West Virginia:		
Ohio:			Gilmer County—		
Belmont County—			Duck Run.....	Aug. 5 to 11..	1
Martins Ferry.....	July.....	10	Harrison County—		
Bridgeport.....	do.....	1	Bristol.....	do.....	1
Morristown.....	do.....	2	Clarksburg.....	do.....	2
Pultney Township.....	do.....	1	Lewis County—		
Wayne Township.....	do.....	1	Weston.....	do.....	1
Cuyahoga County—			Marion County—		
Cleveland.....	do.....	7	Middleton.....	do.....	1
Middleburg Town-			Monongah.....	do.....	3
ship.....	do.....	1	Near Monongah.....	do.....	1
Defiance County—			Mineral County—		
Delaware Township.....	July.....	1	Keyser.....	do.....	1
Franklin County—			Monroe County—		
Grandview Heights.....	do.....	1	Laurel Branch.....	do.....	1
Guernsey County—			Tucker County—		
Cambridge.....	do.....	1	Davis.....	do.....	1
Jefferson County—			Upshur County—		
Stenbenville.....	do.....	1	Crawford.....	do.....	1
Mahoning County—			Wetzel County—		
Youngstown.....	do.....	2	Kodal.....	do.....	1
			Wood County—		
			Parkersburg.....	do.....	1

## POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

## State Reports for July, 1917.

Place.	New cases reported.	Place.	New cases reported.
<b>Massachusetts:</b>		<b>West Virginia:</b>	
Essex County—		Braxton County.....	10
Beverly.....	2	Glimer County.....	2
Groveland.....	3	Harrison County—	
Haverhill.....	10	Stealy Heights.....	1
Lawrence.....	2	Jackson County.....	5
Lynn.....	5	Kanawha County.....	1
Salem.....	1	Marion County—	
Saugus (Town).....	2	Monongah.....	14
Hampden County—		Fairmont.....	2
Springfield.....	2	Annabell.....	1
Hampshire County—		White Rock.....	1
Hadley.....	1	Mineral County—	
Middlesex County—		Keyser.....	1
Lowell.....	3	Ohio County.....	1
Medford.....	1	Wheeling.....	1
Malden.....	1	Patterson.....	2
Groton (Town).....	1	Preston County.....	1
Norfolk County—		Tucker County.....	2
Quincy.....	1	Thomas.....	1
Weymouth.....	1	Davis.....	3
Plymouth County—		Parsons.....	2
Brookton.....	1	Upshur County—	
Worcester County—		Buckhannon.....	2
Worcester.....	1	Wetzel County.....	1
Total.....	38	Total.....	54
<b>Vermont:</b>			
Chittenden County.....	1		
Orange County—			
Washington.....	1		
Washington County.....	22		
Windsor County.....	2		
Total.....	26		

## State Reports for June, 1917.

Place.	New cases reported.	Place.	New cases reported.
<b>Montana:</b>		<b>Virginia—Continued.</b>	
Carbon County.....	1	Halifax County—	
Cascade County.....	2	Houston.....	1
Custer County.....	1	Nelson County.....	4
Granite County.....	2	Orange County.....	2
Total.....	6	Page County.....	1
<b>Virginia:</b>		Shenandoah.....	1
Bedford County—		Pittsylvania County.....	1
Bedford City.....	1	Princess Anne County.....	1
Charles City County.....	2	Rockingham County.....	1
Dickenson County.....	1	Total.....	16

## City Reports for Week Ended July 28, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md.....	2		Haverhill, Mass.....	4	
Berkeley, Cal.....	1		Kansas City, Kans.....	2	
Birmingham, Ala.....	1		Lawrence, Mass.....	2	
Brookton, Mass.....	1		Lowell, Mass.....	1	
Buffalo, N. Y.....	2		Lynn, Mass.....	3	
Canton, Ohio.....	1		New Britain, Conn.....	1	
Chicago, Ill.....	5	2	New Castle, Pa.....	2	1
Cleveland, Ohio.....	1		New York, N. Y.....	8	1
Cumberland, Md.....	1		Omaha, Nebr.....	1	
Dayton, Ohio.....	1		Pittsburgh, Pa.....	2	
Dubuque, Iowa.....	1		Seattle, Wash.....	2	
East Chicago, Ind.....	3	2	Syracuse, N. Y.....	1	1
Elizabeth, N. J.....	1				

**RABIES IN MAN.**

**City Report for Week Ended July 28, 1917.**

During the week ended July 28, 1917, one death from rabies in man was reported at Kansas City, Mo.

**RABIES IN ANIMALS.**

**City Report for Week Ended July 28, 1917.**

During the week ended July 28, 1917, two cases of rabies in animals were reported at Detroit, Mich.

**ROCKY MOUNTAIN SPOTTED FEVER.**

**Montana Report for June, 1917.**

During the month of June, 1917, cases of Rocky Mountain spotted fever were reported in Montana as follows: Carbon County, 2; Fergus County, 1; Musselshell County, 2; and Stillwater County, 1.

**Nevada—Humboldt County.**

On August 13, 1917, a case of Rocky Mountain spotted fever was reported in Humboldt County, Nev.

**SCARLET FEVER.**

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1327.

**SMALLPOX.**

**Minnesota.**

During the week ended August 11, 1917, a new focus of smallpox infection was reported at Galena, Martin County, Minn., two cases having been notified.

**Arkansas—Pulaski County.**

On August 11, 1917, 11 cases of smallpox were reported near McAlmont, Pulaski County, Ark.



## SMALLPOX—Continued.

## Colorado Reports for May and June, 1917.

Place.	New cases reported.	Deaths.	Vaccination history of cases,			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
<b>Colorado (May 1-31):</b>						
Denver County—						
Denver.....	1				1	
El Paso County—						
Colorado Springs.....	1		1			
Kit Carson County.....	1				1	
Mesa County.....	1				1	
Otero County—						
La Junta.....	5				5	
Sedwick County.....	9				9	
<b>Total.....</b>	<b>18</b>		<b>1</b>		<b>17</b>	
<b>Colorado (June 1-30):</b>						
Arapahoe County.....	1				1	
Denver County—						
Denver.....	6		4		2	
El Paso County—						
Colorado Springs.....	1					1
Fremont County.....	2				1	1
Jefferson County.....	1				1	1
Larimer County.....	1				1	
Sedwick County.....	1		1			
Weld County.....	2					2
<b>Total.....</b>	<b>15</b>		<b>5</b>		<b>5</b>	<b>5</b>

## Miscellaneous State Reports.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
<b>Montana (June 1-30):</b>			<b>Virginia (June 1-30):</b>		
Beaverhead County.....	1		Carroll County.....	21	
Blaine County.....	3		Haliax County.....	1	
Cascade County—			Houston.....	3	
Great Falls.....	3		South Boston.....	1	
Custer County.....	2		Isle of Wight County.....	1	
Dawson County.....	2		Page County—		
Fergus County.....	1		Shenandoah.....	1	
Hill County.....	2		Prince George County.....	1	
Lincoln County.....	1		Pulaski County—		
Missoula County.....	8		Fulaski.....	1	
Ravalli County.....	1		Roanoke County—		
Sanders County.....	1		Roanoke.....	2	
Yellowstone County—			<b>Total.....</b>	<b>32</b>	
Billings.....	2				
<b>Total.....</b>	<b>28</b>		<b>West Virginia (July 1-31):</b>		
<b>Oregon (June 1-30):</b>			Fayette County.....	10	
Clackamas County.....	1		Hancock County.....	1	
Clatsop County.....	6		Kanawha County—		
Harney County.....	1		Charleston.....	7	
Multnomah County—			Lincoln County.....	2	
Portland.....	2		Marion County.....	1	
<b>Total.....</b>	<b>10</b>		Mingo County.....	4	
<b>Vermont (July 1-31):</b>			Ohio County—		
Franklin County.....	4		Wheeling.....	4	
			Putnam County.....	3	
			Mercer County.....	5	
			<b>Total.....</b>	<b>37</b>	

SMALLPOX—Continued.

City Reports for Week Ended July 28, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Butte, Mont.	4		Milwaukee, Wis.	1	
Chicago, Ill.	10		Minneapolis, Minn.	9	
Cleveland, Ohio	8		Ogden, Utah	1	
Dayton, Ohio	10		Oklahoma City, Okla.	4	1
Detroit, Mich.	5		Philadelphia, Pa.	1	
Dubuque, Iowa	2		Pontiac, Mich.	4	
Duluth, Minn.	1	2	Portland, Oreg.	2	
Evansville, Ind.	1		Quincy, Ill.	1	
Flint, Mich.	6		St. Joseph, Mo.	5	
Fort Wayne, Ind.	1		St. Louis, Mo.	3	
Galesburg, Ill.	1		Salt Lake City, Utah	1	
Indianapolis, Ind.	1		Seattle, Wash.	2	
Kansas City, Kans.	4		Sioux City, Iowa	8	
Kansas City, Mo.	4		Springfield, Ill.	5	
Lima, Ohio	8		Springfield, Ohio	2	
Lincoln, Nebr.	2		Tacoma, Wash.	1	
Little Rock, Ark.	1		Zanesville, Ohio	22	

TETANUS.

City Reports for Week Ended July 28, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Boston, Mass.	1	1	Detroit, Mich.		1
Buffalo, N. Y.		1	Mobile, Ala.		1
Chicago, Ill.	1		New York, N. Y.		1
Columbus, Ohio		1	Philadelphia, Pa.	1	1

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1327.

TYPHOID FEVER.

State Reports for July, 1917.

Place.	New cases reported.	Place.	New cases reported.
District of Columbia	26	Massachusetts—Continued.	
Massachusetts:		Hampshire County—	
Berkshire County—		Williamsburg (Town)	2
North Adams	1	Middlesex County—	
Bristol County—		Arlington (Town)	1
Fall River	14	Cambridge	3
Dighton (Town)	1	Everett	3
New Bedford	3	Hudson (Town)	2
North Attleboro (Town)	1	Lowell	4
Somerset (Town)	1	Medford	1
Taunton	2	Melrose	1
Westport (Town)	1	Newton	4
Essex County—		Somerville	2
Amesbury (Town)	1	Norfolk County—	
Beverly	1	Dedham (Town)	1
Gloucester	2	Milton (Town)	1
Haverhill	2	Norfolk (Town)	1
Lawrence	1	Quincy	1
Lynn	8	Plymouth County—	
Newburyport	1	Plymouth (Town)	2
North Andover (Town)	1	Rockland (Town)	2
Peabody (Town)	1	Suffolk County—	
Franklin County—		Boston	13
Colram (Town)	1	Chelsea	2
Montague (Town)	3	Beverly	1
Hampden County—		Worcester County—	
Chicopee	1	Athol (Town)	1
Springfield	4	Fitchburg	1
		Gardner (Town)	8

## TYPHOID FEVER—Continued.

## State Reports for July, 1917—Continued.

Place.	New cases reported.	Place.	New cases reported.
<b>Massachusetts—Continued.</b>		<b>West Virginia—Continued.</b>	
<b>Worcester County—Continued.</b>		Kanawha County.....	9
Upton (Town).....	1	Charleston.....	16
Webster (Town).....	1	Dunbar.....	13
Worcester.....	4	McDowell County.....	2
<b>Total.....</b>	<b>109</b>	Marshall County.....	1
<b>Vermont:</b>		Marion County—	
Caledonia County.....	2	Dakota Mines.....	14
Chittenden County.....	2	Mercer County.....	1
Orange County.....	2	Mineral County.....	1
Rutland County.....	7	Mingo County.....	3
<b>Total.....</b>	<b>13</b>	Monongalia County.....	3
<b>West Virginia:</b>		Ohio County—	
Berkeley County.....	3	Wheeling.....	65
Brooke County.....	4	Preston County.....	1
Greenbrier County.....	6	Putnam County.....	4
Hancock County.....	6	Raleigh County.....	2
Hardy County.....	1	Randolph County.....	2
Jackson County.....	1	Roane County.....	4
		Tyler County.....	2
		<b>Total.....</b>	<b>164</b>

## State Reports for June, 1917.

Place.	New cases reported.	Place.	New cases reported.
<b>Colorado:</b>		<b>Oregon—Continued.</b>	
Boulder County—		Linn County.....	1
Boulder.....	2	Marion County.....	1
Chaffee County.....	2	Multnomah County—	
Denver County—		Portland.....	1
Denver.....	5	<b>Total.....</b>	<b>9</b>
Eagle County.....	2	<b>Virginia:</b>	
El Paso County.....	2	Accomac County.....	3
Colorado Springs.....	1	Parkley.....	1
Fremont County.....	1	Albemarle County—	
Larimer County.....	1	Charlottesville.....	1
Otero County—		Alleghany County—	
Rocky Ford.....	6	Clifton Forge.....	1
Pueblo County—		Amherst County.....	6
Pueblo.....	3	Augusta County.....	1
Weld County.....	2	Basic City.....	1
<b>Total.....</b>	<b>27</b>	Bedford County.....	8
<b>Montana:</b>		Bedford City.....	1
Cascade County.....	1	Botetourt County.....	1
Great Falls.....	4	Brunswick County.....	6
Choteau County.....	1	Buckingham County.....	1
Custer County.....	1	Campbell County.....	3
Fergus County.....	2	Lynchburg.....	32
Flathead County.....	1	Chesterfield County.....	1
Kalispell.....	1	Culpeper County.....	1
Gallatin County—		Cumberland County.....	1
Bozeman.....	1	Dinwiddie County—	
Lewis and Clark County.....	1	Petersburg.....	3
Helena.....	3	Elizabeth City County.....	1
Madison County.....	1	Phebus.....	1
Musselshell County.....	1	Fauquier County.....	2
Park County.....	2	Warrenton.....	2
Ravalli County.....	1	Floyd County.....	3
Silver Bow County.....	1	Franklin County.....	5
Yellowstone County.....	4	Frederick County.....	1
Billings.....	1	Grayson County.....	4
<b>Total.....</b>	<b>27</b>	Greene County.....	1
<b>Oregon:</b>		Greensville County.....	1
Benton County.....	2	North Emporia.....	1
Clatsop County.....	3	Halifax County.....	5
		Houston.....	2
		South Boston.....	1

TYPHOID FEVER—Continued.

State Reports for June, 1917—Continued.

Place.	New cases reported.	Place.	New cases reported.
Virginia—Continued.		Virginia—Continued.	
Hanover County.....	6	Rockbridge County.....	2
Henry County.....	3	Lexington.....	1
Martinsville.....	1	Rockingham County.....	1
Isle of Wight County.....	2	Elkton.....	1
James City County.....	1	Russell County.....	7
Lancaster County.....	2	Scott County.....	1
Lee County.....	2	Gate City.....	2
Loudeun County.....	2	Smyth County.....	5
Mathews County.....	1	Marion.....	1
Mecklenburg County.....	4	Southampton County.....	3
Chase City.....	1	Franklin.....	1
Middlesex County.....	3	Spotsylvania County.....	1
Montgomery County.....	1	Fredericksburg.....	1
Christiansburg.....	1	Stafford County.....	1
Nansemond County—		Surry County.....	2
Suffolk.....	1	Sussex County.....	2
Nelson County.....	2	Tazewell County.....	1
Norfolk County—		Pocahontas.....	1
Portsmouth.....	2	Richlands.....	1
Orange County.....	3	Washington County.....	1
Page County.....	1	Westmereland County.....	1
Patrick County.....	1	Wise County.....	1
Pittsylvania County.....	2	Wythe County.....	3
Princess Anne County.....	1	York County.....	1
Prince Edward County.....	3		
Prince George County.....	4	Total.....	190
Pulaski County.....	1		
Richmond County.....	1		
Roanoke County.....	1		
Roanoke.....	2		

Colorado Report for May, 1917.

Place.	New cases reported.	Place.	New cases reported.
Colorado:		Colorado—Continued.	
Alamosa County.....	3	Logan County.....	2
Denver County—		Mesa County.....	1
Denver.....	10	Montrose County.....	1
Fremont County.....	2	Total.....	21
Huerfano County.....	1		
Jackson County.....	1		

City Reports for Week Ended July 28, 1917.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Albany, N. Y.....	1	.....	Columbia, S. C.....	5	.....
Alton, Ill.....	1	.....	Columbus, Ohio.....	3	.....
Altoona, Pa.....	6	.....	Covington, Ky.....	1	.....
Atlantic City, N. J.....	4	.....	Cumberland, Md.....	1	.....
Baltimore, Md.....	7	2	Dayton, Ohio.....	1	.....
Birmingham, Ala.....	25	4	Denver, Colo.....	.....	1
Boston, Mass.....	7	.....	Detroit, Mich.....	22	2
Braddock, Pa.....	3	.....	Duluth, Minn.....	1	.....
Bridgeport, Conn.....	1	.....	East Chicago, Ind.....	.....	1
Buffalo, N. Y.....	2	.....	El Paso, Tex.....	.....	2
Butte, Mont.....	1	.....	Evansville, Ind.....	1	.....
Cairo, Ill.....	1	.....	Fall River, Mass.....	3	.....
Camden, N. J.....	2	.....	Fitchburg, Mass.....	1	.....
Canton, Ohio.....	3	.....	Fort Wayne, Ind.....	1	.....
Charleston, S. C.....	7	.....	Fort Worth, Tex.....	11	.....
Chelsea, Mass.....	1	.....	Galveston, Tex.....	2	.....
Chicago, Ill.....	3	.....	Hagerstown, Md.....	3	.....
Cincinnati, Ohio.....	1	.....	Harrisburg, Pa.....	3	.....
Cleveland, Ohio.....	5	2	Haverhill, Mass.....	.....	1
Coffeyville, Kans.....	1	.....	Hoboken, N. J.....	.....	1

**TYPHOID FEVER—Continued.**

City Reports for Week Ended July 28, 1917—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Indianapolis, Ind.....	1		Pittsburgh, Pa.....	1	
Johnstown, Pa.....	1		Portland, Me.....	4	
Kalamazoo, Mich.....	3		Portland, Ore.....	3	
Kansas City, Kans.....	2		Portsmouth, Va.....	1	
Kansas City, Mo.....	3	1	Providence, R. I.....	3	
Kenosha, Wis.....	2		Reading, Pa.....	1	
Knoxville, Tenn.....	7		Richmond, Va.....	5	
Kokomo, Ind.....	1		Roanoke, Va.....	1	
Lancaster, Pa.....	1		Rochester, N. Y.....	1	
Lexington, Ky.....	1	2	Rockford, Ill.....	2	1
Little Rock, Ark.....	5		Rock Island, Ill.....	1	
Los Angeles, Cal.....	3	1	St. Joseph, Mo.....	1	
Lowell, Mass.....	1		St. Louis, Mo.....	6	1
Lynchburg, Va.....	8		Salt Lake City, Utah.....	3	
Lynn, Mass.....	2		San Francisco, Cal.....	5	2
McKeesport, Pa.....	1		Saginaw, Mich.....	1	
Memphis, Tenn.....		2	Saratoga Springs, N. Y.....	1	1
Minneapolis, Minn.....	2		Seattle, Wash.....	1	1
Mobile, Ala.....		1	Somerville, Mass.....	1	
Montclair, N. J.....	1		South Bend, Ind.....		1
Nashville, Tenn.....	24	1	South Bethlehem, Pa.....	2	
Newark, N. J.....	1		Springfield, Ill.....	3	1
New Castle, Pa.....	1		Springfield, Mass.....	1	
New Haven, Conn.....	3		Tledo, Ohio.....	1	1
New Orleans, La.....	20	6	Trenton, N. J.....	1	
Newton, Mass.....	1		Washington, D. C.....	8	
New York, N. Y.....	31	7	Watertown, N. Y.....	1	
Niagara Falls, N. Y.....	1		Wheeling, W. Va.....	7	
Norfolk, Va.....	8	1	Wichita, Kans.....	3	
North Adams, Mass.....	1	1	Williamsport, Pa.....	1	
Oakland, Cal.....	1		Wilmington, N. C.....	1	
Oklahoma City, Okla.....	2		Winston-Salem, N. C.....	9	
Philadelphia, Pa.....	8	1	York, Pa.....	1	

**TYPHUS FEVER.**

Colorado.

During the month of June, 1917, 1 case of typhus fever was reported in Colorado.

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

State Reports for July, 1917.

State.	Cases reported.			State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
District of Columbia.....	16	192	15	Vermont.....	20	321	59
Massachusetts.....	597	1,347	241	West Virginia.....	18	59	19

State Reports for June, 1917.

State.	Cases reported.			State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
Colorado.....	36	419	37	Oregon.....	24	139	58
Montana.....	19	207	78	Virginia.....	52	1,119	73

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

**Colorado Report for May, 1917.**

During the month of May, 1917, 53 cases of diphtheria, 1,355 cases of measles, and 52 cases of scarlet fever were reported in Colorado.

**City Reports for Week Ended July 28, 1917.**

City.	Popula- tion as of July 1, 1916 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<b>Over 500,000 inhabitants:</b>										
Baltimore, Md.....	589,621	200	5	1	42	1	3		109	19
Boston, Mass.....	756,476	188	49	4	52	2	12	1	63	19
Chicago, Ill.....	2,497,722	585	125	12	108	2	76	3	253	71
Cleveland, Ohio.....	674,073	186	16	1	19		4		34	23
Detroit, Mich.....	571,784	206	62	4	12		29	2	17	12
Los Angeles, Cal.....	503,812		1		10		10		50	18
New York, N. Y.....	5,602,841	1,216	152	12	242	9	39		442	143
Philadelphia, Pa.....	1,709,518	469	33	7	47	1		1		63
Pittsburgh, Pa.....	579,090	167	5	1	38	1	2		30	15
St. Louis, Mo.....	757,309	225	54	7	8	1	29		29	17
<b>From 300,000 to 500,000 inhabit- ants:</b>										
Buffalo, N. Y.....	468,558	133	4	2	8		7		35	12
Cincinnati, Ohio.....	410,476	126	5	2	2		4		24	18
Jersey City, N. J.....	306,345	60	2		2		5		20	5
Milwaukee, Wis.....	436,555	92	9	2	27		16	1	33	8
Minneapolis, Minn.....	363,454		11		5		3			
Newark, N. J.....	408,894	103	12	2	19		6	1	54	17
New Orleans, La.....	371,747	150	10		4				49	19
San Francisco, Cal.....	463,516	123	4		9	1	8		37	13
Seattle, Wash.....	348,639	38	1		3		2		7	8
Washington, D. C.....	363,980	121	7	1	31		4		23	9
<b>From 200,000 to 300,000 inhabit- ants:</b>										
Columbus, Ohio.....	214,878	61	3	1			2		6	3
Denver, Colo.....	280,800	65	2		6		3			13
Indianapolis, Ind.....	271,708		8		6		5		40	
Kansas City, Mo.....	297,847		4	1	3		1		4	7
Portland, Oreg.....	295,463	33			2		4		5	
Providence, R. I.....	254,990	71	4	1	2		6	1		6
Rochester, N. Y.....	256,417	68	15		32		12		11	4
<b>From 100,000 to 200,000 inhabit- ants:</b>										
Albany, N. Y.....	104,199				15		5			
Birmingham, Ala.....	181,782	71			6	1	2		20	6
Bridgeport, Conn.....	121,579	30	2		3		2		6	3
Cambridge, Mass.....	112,981		6		6				3	4
Camden, N. J.....	106,233		2		2				4	
Dayton, Ohio.....	127,224	26	4		5		3		3	2
Fall River, Mass.....	128,366	29			6	1	1		6	6
Fort Worth, Tex.....	104,562	22			6				2	2
Grand Rapids, Mich.....	128,291	26	1		2		1		2	2
Lawrence, Mass.....	100,560	9	2						6	2
Lowell, Mass.....	113,245	21	2				1		6	
Lynn, Mass.....	102,425	11	2		10		4		3	
Memphis, Tenn.....	148,995									7
Nashville, Tenn.....	117,057	33	2				1		8	2
New Bedford, Mass.....	118,158	20	1		5		1		4	6
New Haven, Conn.....	149,685		1	1	5		1		8	5
Oakland, Cal.....	198,604	34	3		5				10	2
Omaha, Neb.....	165,470	69		1	4	1	4		1	6
Reading, Pa.....	109,331	31	2		2		4			1
Richmond, Va.....	156,667		5				3		14	6
Salt Lake City, Utah.....	117,399	22	1		4		7	1		
Springfield, Mass.....	105,942	29		1	5	1	3		10	7
Syracuse, N. Y.....	155,624	35	4		14		2		7	1
Tacoma, Wash.....	112,770						1			
Toledo, Ohio.....	191,554	60	2		10		12		3	6
Trenton, N. J.....	111,593	41	4		2				8	1
Worcester, Mass.....	163,314	52	4	1	2		2		12	6
<b>From 50,000 to 100,000 inhabit- ants:</b>										
Allentown, Pa.....	63,505	15	3						3	
Altoona, Pa.....	58,659		4							
Atlantic City, N. J.....	57,660				3				1	
Bayonne, N. J.....	69,863						2		2	

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS

Continued.

City Reports for Week Ended July 28, 1917—Continued.

City.	Population as of July 1, 1916 (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.										
Berkeley, Cal.	57,653	9			2					1
Brockton, Mass.	67,449	14	2					1		
Canton, Ohio.	60,852	17	1		1			1		
Charleston, S. C.	60,734	24								2
Covington, Ky.	57,144	15					1	1		5
Duluth, Minn.	94,495	11	1		2					6
Elizabeth, N. J.	86,660	20	2		5		4	7		4
El Paso, Tex.	63,705	35				1	1			8
Evansville, Ind.	76,078	19								1
Flint, Mich.	54,772	14	3		2		4			
Fert Wayne, Ind.	78,183	15	4						1	
Harrisburg, Pa.	72,015	17	3				1			1
Hoboken, N. J.	77,214	12	1		3				5	1
Johnstown, Pa.	65,529	26	1		4		1		1	1
Kansas City, Kans.	99,437								4	
Leicester, Pa.	50,353				1				1	
Little Rock, Ark.	57,343	31	1					1		
Malden, Mass.	51,155	8	4					4		
Manchester, N. H.	78,283	20	1					2		2
Mobile, Ala.	58,221	20	1		4					3
New Britain, Conn.	53,794	17						9		2
Norfolk, Va.	89,612						1			12
Oklahoma City, Okla.	92,943	24			1					
Passaic, N. J.	71,744	19	11	1				3		2
Pawtucket, R. I.	50,411	18	3				3			3
Portland, Me.	63,867	10	3		12					1
Rockford, Ill.	55,185	14			4		2			
Sacramento, Cal.	66,895	23	5		2		4			
Saginaw, Mich.	55,642	11	1							
St. Joseph, Mo.	35,236	26								
San Diego, Cal.	53,330	19			11		1	3		2
Savannah, Ga.	68,805	32						1		4
Schenectady, N. Y.	99,519	23			10			6		
Somerville, Mass.	87,039	12	3		2		1	3		2
South Bend, Ind.	68,946	10								
Springfield, Ill.	61,120	19	1		1		1			1
Springfield, Ohio.	51,559	11			5			1		
Terre Haute, Ind.	66,083	14	1		2					1
Troy, N. Y.	77,916				1				3	3
Wichita, Kans.	70,722				1		2			
Wilkes-Barre, Pa.	76,776	25	2		8					
Wilmington, Del.	94,255	33						1		1
York, Pa.	51,656		2					1		
From 25,000 to 50,000 inhabitants:										
Alameda, Cal.	27,732	6			1					
Albany, N. Y.	37,385	14			2		1		2	2
Bellingham, Wash.	32,985	7						2		2
Brookline, Mass.	32,739	4			2			2		
Builer, Pa.	27,632	4			1					
Butte, Mont.	43,425	1	3				3	2		
Chelsea, Mass.	46,192	7	3		4			5		
Chicopee, Mass.	29,319	15	1		2			2		1
Columbia, S. C.	34,641	10	1					1		1
Cumberland, Md.	26,074	1						1		
Danville, Ill.	32,261	7								1
Davenport, Iowa.	48,811				1		1			
Dubuque, Iowa.	39,873									3
East Chicago, Ind.	28,743								1	
East Orange, N. J.	42,458	4			10			2		1
Elgin, Ill.	26,203	9	1		1					
Everett, Mass.	39,233	6			3					
Fitchburg, Mass.	41,781	5			4			1		
Galveston, Tex.	41,863	13			3			2		
Green Bay, Wis.	29,353	8								1
Hamilton, Ohio.	49,496	6						1		1
Haverhill, Mass.	48,477							2		
Jackson, Mich.	35,363	10			4			2		1
Kalamazoo, Mich.	48,886	22			12			4		
Kanawha, W. Va.	31,576	10			7		1			1
Knoxville, Tenn.	38,676				3			1		
La Crosse, Wis.	31,677	11	5	1					1	1
Lexington, Ky.	41,097	12			1					1
Lima, Ohio.	35,394	15	2					1		1
Lincoln, Nebr.	49,975	13					2	2		1

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

City Reports for Week Ended July 23, 1917—Continued.

City.	Population as of July 1, 1916 (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.										
Long Beach, Cal.	27,587	8			1				1	
Lorain, Ohio	36,864		1		1		4			
Lynchburg, Va.	32,940	14							1	1
Madison, Wis.	30,699				1		2			
McKeesport, Pa.	47,521	13	5				1			
Medford, Mass.	26,234	5	1		1				2	
Montclair, N. J.	26,318	3			1				2	
Nashua, N. H.	27,327	6								
Newport, Ky.	31,927	7							2	2
Newport, R. I.	30,108	4	1				1			
Newton, Mass.	43,715	11	1		7					1
Niagara Falls, N. Y.	37,353	10	2						4	2
Norristown, Pa.	31,461	8								
Ogden, Utah	31,404	3					1			
Orange, N. J.	33,080	10	1						5	1
Pasadena, Cal.	46,450	8			2		1		2	3
Perth Amboy, N. J.	41,185	12	2							
Pittsfield, Mass.	38,629	10			13				1	1
Portsmouth, Va.	39,651	17					5			2
Quincy, Ill.	36,798	16								
Quincy, Mass.	38,136				1				5	
Racine, Wis.	46,486	9								2
Roanoke, Va.	43,284	10	1							1
Rock Island, Ill.	23,926	7	2				1			
San Jose, Cal.	38,902						1		3	
Steuenville, Ohio	27,445	10								
Superior, Wis.	46,226	3	1							
Taunton, Mass.	36,283	10		1						1
Topeka, Kans.	48,726	7	1		1		2			
Waltham, Mass.	30,570		8						1	1
Watertown, N. Y.	29,894				4					4
West Hoboken, N. J.	43,189	5							3	1
Wheeling, W. Va.	43,377	16	1						1	1
Williamsport, Pa.	33,809	1	4	1	2		1			
Wilmington, N. C.	29,892	11								2
Winston-Salem, N. C.	31,155	17					1		3	
Zanesville, Ohio.	30,863	7			1					
From 10,000 to 25,000 inhabitants:										
Alton, Ill.	22,874	8								2
Ann Arbor, Mich.	15,010	15	1	1	4					
Beaver Falls, Pa.	13,532	1	1	1						
Berlin, N. H.	13,599	2					1			
Braddock, Pa.	21,685						1			
Cairo, Ill.	15,794	3								1
Canton, Mass.	13,075		1		1					
Coffeyville, Kans.	17,548								1	
Concord, N. H.	22,669	6	1		2					
Galesburg, Ill.	24,276	5	2		4					
Harriston, N. J.	16,950				1		1			
Kearny, N. J.	23,539	5			3				2	
Kokomo, Ind.	20,930	7							1	
Long Branch, N. J.	15,395				3					
Marinette, Wis.	14,610	1								
Melrose, Mass.	17,445	7	1							
Morristown, N. J.	13,284	6	1		1					
Nanticoke, Pa.	23,126	5								
Newburyport, Mass.	15,243	5			1					
New London, Conn.	20,965	2			1					
North Adams, Mass.	22,019	6			3				3	3
Northampton, Mass.	19,926	9			2		2		3	2
Plainfield, N. J.	23,905	8		1						
Pontiac, Mich.	17,524				1		2			
Portsmouth, N. H.	11,666		2							
Rocky Mount, N. C.	12,067	3								
Rutland, Vt.	14,831	3								
Sandusky, Ohio.	20,193	4					1			
Saratoga Springs, N. Y.	13,821	4							1	
South Bethlehem, Pa.	24,204		1				1		7	1
Steelton, Pa.	15,548		2							
Wilkinsburg, Pa.	23,228	7			1					
Woburn, Mass.	15,969	5								

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



# FOREIGN.

## CUBA.

### Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Disease.	July 11-20, 1917.		Remain- ing under treat- ment July 20, 1917.
	New cases.	Deaths.	
Diphtheria.....	1	1	4
Leprosy.....			10
Malaria.....	11		23
Measles.....	8		6
Paratyphoid fever.....	4	1	2
Typhoid fever.....	23	6	48

## UNION OF SOUTH AFRICA.

### Plague—Cape of Good Hope State.

A fatal case of plague occurred May 28, 1917, in Tarka district. State of Cape of Good Hope.

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

Reports Received During the Week Ended Aug. 17, 1917.<sup>1</sup>

### CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
<b>India:</b>				
Calcutta.....	May 27-June 2.....		30	
Moulmein.....	do.....		1	
Pegu.....	do.....		1	
Rangoon.....	June 3-9.....		1	
<b>Philippine Islands:</b>				
<b>Provinces:</b>				June 24-30, 1917: Cases, 261;
Albay.....	June 24-30.....	9	6	deaths, 166.
Bohol.....	do.....	88	62	
Capiz.....	do.....	23	17	
Cebu.....	do.....	58	41	
Leyte.....	do.....	8	3	
Rizal.....	do.....	1		
Sorsogon.....	do.....	70	33	
Tayabas.....	do.....	4	4	

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

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

**Reports Received During the Week Ended Aug. 17, 1917—Continued.**
**PLAGUE.**

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Bahia.....	June 10-30.....	6	3	
Ceylon:				
Colombo.....	June 3-9.....	1	1	
India:				
Bassein.....	May 27-June 2.....		3	May 27-June 2, 1917: Cases, 3,705; deaths, 3,056.
Bombay.....	June 10-16.....	27	26	
Calcutta.....	May 27-June 2.....		1	
Madras Presidency.....	June 10-16.....	28	20	
Moulmein.....	May 27-June 2.....		7	
Pegu.....	do.....		2	
Rangoon.....	June 3-9.....	25	24	
Union of South Africa:				
Cape of Good Hope State— Tarka district.....	May 28.....	1	1	At Summerhill Farm.

**SMALLPOX.**

Brazil:				
Bahia.....	June 10-30.....	3		
Rio de Janeiro.....	June 17-30.....	48	15	
Egypt:				
Alexandria.....	June 18-July 1....	6	2	
India:				
Bombay.....	June 10-16.....	25	16	
Madras.....	do.....	3	1	
Rangoon.....	June 3-9.....	2		
Japan:				
Kobe.....	July 2-8.....	3	1	
Osaka.....	July 1-5.....	8		
Mexico:				
Vera Cruz.....	July 1-7.....	1		
Portuguese East Africa:				
Lourenço Marquez.....	Apr. 1-30.....		1	
Russia:				
Archangel.....	June 15-28.....	16		
Petrograd.....	May 20-June 2.....	120		
Riga.....	May 27-June 2.....	1		Mar. 1-31, 1917: 2 cases.
Spain:				
Madrid.....	June 13-19.....		1	
Valencia.....	June 24-July 7....	4		
Sweden:				
Stockholm.....	June 17-23.....	1		

**TYPHUS FEVER.**

Egypt:				
Alexandria.....	June 24-July 1....	227	65	
Greece:				
Saloniki.....	June 17-30.....		6	
Russia:				
Archangel.....	June 15-28.....	2		
Petrograd.....	May 20-June 2.....	15		
Riga.....	May 27-June 2.....	1		Mar. 1-31, 1917: 1 case.
Spain:				
Almeria.....	May 1-31.....		5	
Trinidad.....	June 4-9.....	2		

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

**Reports Received from June 30 to Aug. 10, 1917.**

**CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>India:</b>				
Bassein.....	Apr. 1-May 5.....		8	
Calcutta.....	Apr. 29-May 26.....		273	
Madras.....	Apr. 22-June 2.....	2	2	
Mandalay.....	May 6-12.....		1	
Moulmein.....	May 13-19.....		2	
Pakokku.....	Apr. 29-May 5.....		1	
Rangoon.....	Apr. 21-May 19.....	30	15	
<b>Indo-China:</b>				
Provinces.....				Feb. 1-28, 1917: Cases, 20; deaths, 12.
Anam.....	Feb. 1-28.....	3		
Cambodia.....	do.....	8	6	
Cochin-China.....	do.....	8	6	
Tonkin.....	do.....	1		
Saigon.....	Apr. 23-May 27.....	163	108	
<b>Java:</b>				
East Java.....	Apr. 2-8.....	1		
West Java.....				Apr. 13-19, 1917: 1 case.
Batavia.....	Apr. 13-19.....	1		
<b>Persia:</b>				
<b>Mazanderan Province—</b>				
Amir Kela.....	Feb. 3.....	1		
Barfourouche.....	Jan. 15-17.....	4		
Hamze Kela.....	Jan. 17.....	1		
Mechidessar.....	Jan. 31.....	3		
<b>Philippine Islands:</b>				
Manila.....	June 17-23.....	1		
Provinces.....				May 29-June 23, 1917: Cases, 795; deaths, 506.
Albay.....	May 20-June 23.....	104	70	
Ambos Camarines.....	June 3-9.....	2	1	
Batangas.....	June 17-23.....	1	1	
Bohol.....	May 20-June 23.....	280	189	
Capiz.....	June 3-23.....	39	23	
Cebu.....	do.....	173	109	
Leyte.....	June 19-16.....	6	2	
Sorsogon.....	June 3-23.....	136	65	
Tayabas.....	June 3-16.....	3	3	

**PLAGUE.**

<b>Arabia:</b>				
Aden.....	May 3-June 11.....		38	Apr. 8-May 14, 1917: Cases, 69; deaths, 51.
<b>Ceylon:</b>				
Colombo.....	Apr. 8-May 19.....	39	32	
<b>China:</b>				
Amoy.....	Apr. 29-May 5.....			Present and in vicinity.
Kongkong.....	May 13-June 9.....	13	8	
<b>Kwangtung Province—</b>				
Pa-pu district.....	June 2.....			Present.
<b>Egypt:</b>				
Suez.....	May 12-17.....	4	2	Jan. 1-May 17, 1917: Cases, 231; deaths, 115.
<b>Provinces—</b>				
Fayoum.....	May 11-17.....	12	6	
Girgeh.....	May 17.....		1	
Mimieh.....	May 12-15.....	2	2	
Siout.....	May 12.....	3	1	
<b>Great Britain:</b>				
London.....	May 3-8.....	2		2 in hospital at port. From s. s. Sardinia from Australian and oriental ports.
<b>India:</b>				
Bassein.....	Apr. 1-May 19.....		39	Apr. 15-May 26, 1917: Cases, 34,545; deaths, 23,036.
Bombay.....	Apr. 22-June 9.....	379	306	
Calcutta.....	Apr. 29-May 26.....		37	
Henzada.....	Apr. 1-May 19.....		33	
Karachi.....	Apr. 22-June 9.....	467	411	
Madras Presidency.....	Apr. 22-June 2.....	219	183	
Mandalay.....	Apr. 8-May 12.....		9	
Moulmein.....	Apr. 1-May 12.....		52	
Myingyan.....	Apr. 1-7.....		1	
Rangoon.....	Apr. 15-June 2.....	118	110	
Toungoo.....	Apr. 8-14.....		2	

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

Reports Received from June 30 to Aug. 10, 1917—Continued.

### PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China:				
Provinces.....				Feb. 1-28, 1917: Cases, 102; deaths, 71.
Anam.....	Feb. 1-28.....	31	15	
Cambodia.....	do.....	57	47	
Cochin-China.....	do.....	13	9	
Saigon.....	Apr. 23-June 3.....	47	26	
Java:				
East Java.....				Apr. 2-22, 1917: Cases, 18; deaths, 18.
Surabaya.....	Apr. 2-22.....	13	13	
Surakarta.....	do.....	5	5	
Peru.....				May 16-31, 1917: Cases, 15.
Departments—				
Arequipa.....	May 16-31.....	4		At Mollendo.
Callao.....	do.....	1		At Callao.
Lambayeque.....	do.....	2		At Chiclayo.
Libertad.....	do.....	7		At Salaverry, San Pedro, and Trujillo.
Lima.....	do.....	1		At Lima.
Siam:				
Bangkok.....	Apr. 22-June 1.....	12	11	
Straits Settlements:				
Singapore.....	June 3-9.....	1		
Union of South Africa:				
Cape of Good Hope State—				
Queenstown.....	June 6.....	1		
Orange Free State.....				Apr. 16-22, 1917: 1 case; Apr. 9-22, 1917: Cases, 26; deaths, 17.
Winburg district.....	May 28.....		1	

### SMALLPOX.

Australia:				
New South Wales.....				Apr. 27-June 21, 1917: Cases, 20.
Brewarrina.....	Apr. 27-June 21.....	6		
Coonabarabran.....	May 25-June 7.....	12		
Quambone.....	Apr. 27-June 21.....	2		
Queensland—				
Thursday Island Quarantine Station.....	May 9.....	1		From s. s. St. Albans from Kobe via Hongkong. Vessel proceeded to Townsville, Brisbane, and Sydney, in quarantine.
Brazil:				
Bahia.....	May 6-12.....	1		
Rio de Janeiro.....	May 6-June 16.....	78	16	
Canada:				
Manitoba—				
Winnipeg.....	June 10-16.....	1		
Nova Scotia—				
Halifax.....	June 13-July 7.....	3		
Port Hawkesbury.....	June 17-30.....			Present in district.
Ceylon:				
Colombo.....	May 6-12.....	1		
China:				
Amoy.....	Apr. 29-May 26.....			Present and in vicinity
Antung.....	May 21-June 28.....	4		
Chungking.....	May 6-June 23.....			Present.
Changsha.....	May 27-June 2.....	5		
Dairen.....	May 13-June 30.....	30	4	
Harbin.....	Apr. 23-May 6.....	7		On Chinese Eastern Ry
Hongkong.....	May 6-June 16.....	8	7	
Manchuria Station.....	Apr. 23-29.....	1		Do.
Mukden.....	May 27-June 2.....			Present.
Shanghai.....	May 21-July 1.....	13	32	Cases foreign; deaths among natives.
Tientsin.....	May 13-June 9.....	12		
Tsitsihar Station.....	Apr. 16-22.....	1		On Chinese Eastern Ry.
Tsingtao.....	May 22-July 7.....	36	7	At another station on railway, 1 case.
Egypt:				
Alexandria.....	Apr. 20-June 16.....	33	7	
France:				
Paris.....	May 6-12.....	1		
Germany.....				Mar. 12-Apr. 28, 1917: Cases, 715 in cities and 32 States and districts.
Berlin.....	Mar. 19-Apr. 28.....	106		
Bremen.....	do.....	16		
Charlottenburg.....	do.....	18		

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

Reports Received from June 30 to Aug. 10, 1917—Continued.

**SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Germany—Continued.</b>				
Hamburg.....	Mar. 18-Apr. 28...	50		
Leipzig.....	do.....	20		
Lübeck.....	do.....	2		
Munich.....	do.....	10		
Stuttgart.....	do.....	1		
<b>India:</b>				
Bombay.....	Apr. 22-June 9.....	124	43	
Calcutta.....	Apr. 23-May 26.....		12	
Karachi.....	Apr. 22-June 9.....	28	5	
Madras.....	Apr. 22-June 2.....	69	38	
Rangoon.....	Apr. 15-June 2.....	28	4	
<b>Indo-China:</b>				
Provinces.....				
Anam.....	Feb. 1-28.....	297	7	Feb. 1-28, 1917: Cases, 593; deaths, 62.
Cambodia.....	do.....	36	1	
Cochin-China.....	do.....	193	58	
Tonkin.....	do.....	67	1	
Saigon.....	Apr. 27-June 10.....	199	63	
<b>Italy:</b>				
Turin.....	May 21-June 24.....	32	12	
<b>Japan:</b>				
Kobe.....	May 27-July 1.....	53	15	
Nagasaki.....	May 23-June 3.....	1		
Osaka.....	May 16-June 30.....	169	55	
Yokohama.....	May 27-July 1.....	1	1	
<b>Java:</b>				
East Java.....	Apr. 2-29.....	11	1	
Mid-Java.....	Apr. 1-21.....	16		
West Java.....				Apr. 13-May 10, 1917: Cases, 46; deaths, 7.
Batavia.....	Apr. 13-May 3.....	11	2	
<b>Mexico:</b>				
Mazatlan.....	July 11-17.....		2	
Mexico City.....	June 3-30.....	162		
Monterey.....	June 18-24.....		24	
<b>Philippine Islands:</b>				
Manila.....	May 13-June 9.....	6		Varioloid.
<b>Portugal:</b>				
Lisbon.....	May 13-June 30.....	14		
<b>Portuguese East Africa:</b>				
Lourenço Marques.....	Mar. 1-31.....		1	
<b>Russia:</b>				
Archangel.....	May 1-14.....	7	2	
Petrograd.....	Feb. 18-May 19.....	359		
Riga.....	Mar. 11-May 19.....	4		Jan. 1-31, 1917: Cases, 7.
Vladivostok.....	Mar. 15-21.....	23	7	
<b>Spain:</b>				
Madrid.....	May 1-31.....		3	
Seville.....	do.....		5	
Valencia.....	June 3-23.....	3		
<b>Straits Settlements:</b>				
Penang.....	Mar. 18-May 12.....	5	2	
<b>Sweden:</b>				
Malmö.....	Apr. 22-28.....	1		
Stockholm.....	May 20-June 2.....	1	1	
<b>Tunisia:</b>				
Tunis.....	June 2-8.....	2		
<b>Turkey in Asia:</b>				
Trebizond.....	Feb. 25-Apr. 13.....		15	
<b>Union of South Africa:</b>				
Johannesburg.....	Mar. 12-24.....	4		
<b>Venezuela:</b>				
Maracaibo.....	June 18-July 8.....		8	

**TYPHUS FEVER.**

<b>Algeria:</b>				
Algiers.....	June 1-30.....	5	3	
<b>Austria-Hungary:</b>				
Austria.....				
Bohemia.....	Oct. 22-Dec. 17.....	634		Oct. 22-Dec. 17, 1916: Cases, 2,371.
Gallia.....	do.....	809		
Lower Austria.....	do.....	47		
Moravia.....	do.....	617		

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

**Reports Received from June 30 to Aug. 10, 1917—Continued.**

**TYPHUS FEVER—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
<b>Austria-Hungary—Continued.</b>				
<b>Austria—Continued.</b>				
Silesia.....	Oct. 22-Dec. 17...	16		
Styria.....	do.....	243		
Upper Austria.....	do.....	5		
<b>Hungary.....</b>				
Budapest.....	Feb. 19-Mar. 25...	83		Feb. 19-Mar. 25, 1917: Cases, 1,381.
<b>China:</b>				
Antung.....	June 25-July 1....	3		
Hankow.....	June 9-16.....	1		
Tsingtao.....	May 30-July 7....	4		
<b>Egypt:</b>				
Alexandria.....	Apr. 30-June 10...	1,421	413	
<b>Great Britain:</b>				
Cork.....	June 17-23.....		1	
<b>Greece:</b>				
Saloniki.....	May 13-16.....		26	
<b>Japan:</b>				
Nagasaki.....	June 11-24.....	4		
<b>Java:</b>				
Mid-Java.....	Apr. 1-30.....	7	2	
West Java.....				Apr. 13-May 10, 1917: Cases, 86.
Batavia.....	Apr. 13-May 10...	22		
<b>Mexico:</b>				
Mexico City.....	June 3-30.....	431		
<b>Netherlands:</b>				
Rotterdam.....	June 9-23.....	3	2	
<b>Portuguese East Africa:</b>				
Lourenço Marquez.....	Mar. 1-31.....	1		
<b>Russia:</b>				
Archangel.....	May 1-14.....	2		
Petrograd.....	Feb. 18-May 19...	98	3	
Riga.....	May 6-12.....	1		Jan. 1-31, 1917: 1 case.
Vladivostok.....	Mar. 29-May 21...	5		
<b>Spain:</b>				
Madrid.....	May 1-31.....		2	
<b>Switzerland:</b>				
Basel.....	June 17-23.....	1		
<b>Tunisia:</b>				
Tunis.....	June 30-July 6....		1	

**YELLOW FEVER.**

<b>Mexico:</b>				
Yucatan, State—				
Peto.....	June 23.....	1	1	In person recently arrived from Mexico City.

X